

CITIZENS' ELECTRIC COMPANY

1775 INDUSTRIAL BLVD • P.O. BOX 551 • LEWISBURG, PA 17837-0551 • (570) 524-2231 • FAX: (570) 524-5887

January 24, 2006

Mr. James J. McNulty Bureau of Fixed Utility Services () Pennsylvania Public Utility Commission () PO Box 3265 Harrisburg, PA 17105-3265 A Dure

PA PUBLIC UTILITY COMMISSION BEGRETARY'S BUREAU

1-00030161 Dear Secretary McNulty:

Enclosed please find an original and six copies of the 4th quarter, 2005 Electric Reliability Report for Citizens' Electric Company.

Please contact me at 570-522-6143 or <u>kelchnerj@citizenselectric.com</u> if I can answer any questions.

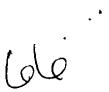
Sincerely,

Jeh A Kehl

John A. Kelchner, PE Sr. Director of Engineering & Operations

cc: Pennsylvania Office of Consumer Advocate Pennsylvania Office of Small Business Advocate





Citizens' Electric Company Quarterly Service Reliability Report Fourth Quarter, 2005 Prepared by John A. Kelchner, PE Sr. Director of Engineering & Operations 570-522-6143 <u>kelchnerj@citizenselectric.com</u> January 24, 2006

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PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU

§ 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.

We experienced two Major Events during the preceding quarter, as detailed below. Both events were approved for exclusion.

Date	Time Outage Occurred	Duration of Outage (Minutes)	# of Customers Affected	Cause
11/6/2005	5:11 PM	16	1,252	Weather
11/10/2005	8:14 AM	50	1,252	Weather

During high winds on November 6th, a circuit locked out of service. The line was immediately patrolled for problems. With none found, the circuit was returned to service successfully 16 minutes after the interruption. Since no problem was found, crews were instructed to patrol the line again the following morning. Again, no problems were found.

On November 10th, high winds returned and the problem recurred. With information from a passerby who witnessed arcing, crews discovered a span of wire with increased sag which allowed the conductors to slap together in strong wind gusts. This problem apparently first occurred on November 6th during high wind, but was not readily detectable in the darkness or when the line was again patrolled for problems during calm weather the following morning. The line section was repaired and we expect no further problems.

§ 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.

Index	Rolling 12-Month Value for Quarter	Benchmark	D Standard	DCUMENT FOLDER
SAIFI	0.10	0.21	0.27	
SAIDI	12	21	38]
CAIDI	116	105	141]

Total # of Customers Served	# of Interruptions	# of Customers Affected	Customer Minutes		
6,657	33	667	77,100		

The following outages were approved for exclusion as Major Events during the 12-month period and are not included in the above calculations:

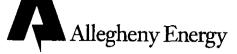
Date	# of Customers Affected	Customer Minutes
4/30/2005	1,153	106,076
5/14/2005	1,252	63,852
11/6/2005	1,252	20,032
11/10/2005	1,252	62,600

§ 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.

Outage Cause	Number of Interruptions	% of Interruptions	Number of Customers Affected	Customer Interruption Minutes
On R/W Trees	0	0	0	0
Animals	11	33	223	12,772
Equipment	15	46	267	31,746
Off R/W Trees	4	12	101	25,106
Weather	2	6	47	2,082
Vehicle	1	3	29	5,394
Other	0	0	0	0
Total	33	100	667	77,100

Discussion

We again experienced mild weather during the preceding quarter. While equipment related outages continue to be our most common cause of service interruption, we are beginning to see benefits from our aggressive inspection programs. In the third quarter, 2005 report, equipment failure accounted for 53% of the outages. That number is now at 46% and we are working to lower it further through continued attention to inspection and maintenance activities.



800 Cabin Hill Drive Greensburg, PA 15601-1689 Phone: (724) 837-3000 FAX: (724) 838-6464 Writer's Direct Dial No. (724) 838-6210 E-mail: jmunsch@alleghenyenergy.com

January 30, 2006

VIA FEDERAL EXPRESS

James J. McNulty, Secretary Pennsylvania Public Utility Commission Commonwealth Keystone Building 400 North Street Harrisburg, PA 17120

Re: Fourth Quarter 2005 Reliability Report of Allegheny Power

Dear Secretary McNulty:

Enclosed please find an original and six (6) copies of the Fourth Quarter 2005 Annual Reliability Report of Allegheny Power. This report is filed by Federal Express and is deemed filed today, January 30, 2006. Copies have been served on the Office of Consumer Advocate and the Office of Small Business Advocate.

Very truly yours,

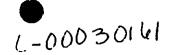
John J. Munsch John L. Munsch Senior Attorney F.ECEWET

cc: Thomas Sheets-PAPUC- Bureau of Audits

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Allegheny Power Quarterly Report for Fourth Quarter 2005

This quarterly report is being submitted in accordance with <u>Title 52.</u> <u>Public Utilities -</u> <u>Part I. Public Utility Commission -Subpart C. Fixed Services Utilities - Chapter</u> <u>57. Electric Service Subchapter N. Electric Reliability Standards.</u>

§ 57.195 (e) (2) The name, title, telephone number and e-mail address of the persons who have knowledge of the matters, and can respond to inquiries, shall be included.

James D. Cormack Manager, Distribution reliability (724) 838-6540 jcormac@alleghenypower.com



§ 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.

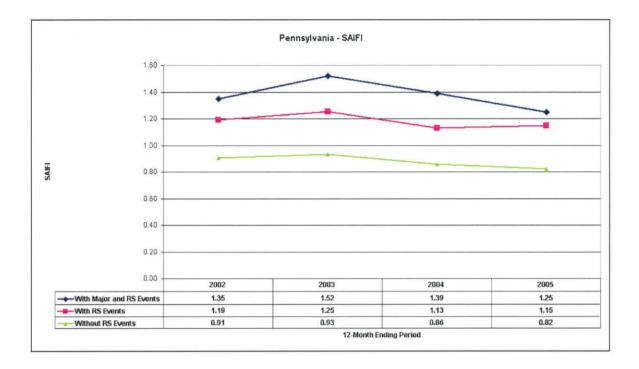
- a. The following Major Event occurred during the fourth quarter of 2005. A description of the event is attached as Appendix VI.
 - 1. There was one Major Event in the fourth quarter a wet snow event that occurred before trees had dropped their leaves.
 - a. Dates: October 24, 2005 9:20 PM October 30, 2005
 6:01 PM
 - b. Customers affected: 69,737
- b. Allegheny Power's Restore Service Process Management Team constantly monitors the process and conducts post-event meetings in an attempt to enhance the restoration process for future events.
- c. Although not excluded from statistics, AP's Pennsylvania service territory experiences several minor events ('RS Events') over the course of the year. A Restore Service Event is characterized by having received a severe weather alert accompanied by at least 5,000 Allegheny Power Company customers interrupted. The following chart indicates the extent of these RS Events affecting Pennsylvania customers on SAIFI:



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§ 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.

> a. The following table provides Pennsylvania's 12-month ending reliability statistics for month ending December 2005. MAIFI statistics are not recorded nor readily available at Allegheny Power. As disclosed in prior filings, sufficient field equipment is not available to provide meaningful data for momentary interruptions.

		Rolling	Rolling	Current Quarter
Reliability	Recomputed	12-Month	3-Yr Avg.	Performance
Indices	Benchmark	Standard	Standard	(rolling 12-month)
SAIFI	0.67	0.8	0.74	1.15
CAIDI	178	214	196	195
SAIDI	119	172	144	224

Data supporting indices:

Zone	Incidents	Interrupted Customers	Avg Cust Served	CMI	SAIDI	ASAI	CAIDI	SAIFI
Pennsylvania	16,990	797,656	694,739	155,683,034	224	0.999574	195	1.15

Note: Allegheny Power has a petition pending with the Commission to modify its benchmarks due to incomplete and inaccurate outage data utilized during establishment of the benchmarks.

§ 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.

c. This report provides a listing of all Pennsylvania circuits ranking in the 2005 lowest five percent as ranked by the Distribution Circuit Interruption Index (DCII). The data is ranked by DCII and includes all of the standard indices. The report is attached as Appendix I.

Distribution Circuit Interruption Index is a composite index based on the SAIFI, CAIDI, SAIFI, and ASAI (see the description of the calculation of this index in Appendix V).

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

Allegheny's current process for addressing poor performing circuits and line segments is outlined in the Reliability Improvement Program (RIP). The details of which have been previously submitted to the Commission staff. In summary, the RIP program addresses all circuits experiencing two or more lockouts as well as any other protective device experiencing three or more lockouts/operations. Field personnel review outages on these circuits or line segments and corrective action is taken as necessary to address any immediate reliability concerns.

Remedial work for the 5% circuits is shown in Appendix II. Field personnel review these circuits quarterly. After the third quarter reporting is complete, outage causes are evaluated and action plans are developed for circuits requiring more comprehensive maintenance and these plans are incorporated in the next year's budgets and work plans.

AP also continued a Reliability Improvement Initiative (RIPInit) for 2005 to review over-current protection on poor performing and high-density distribution circuits. This initiative focuses on installing additional sectionalizing equipment to reduce main line exposure and to minimize the number of customers impacted by forced interruptions. Many of these RIPInit circuits are also on the worst performing circuit list.

d. AP has initiated a circuit improvement initiative whereby AP's recent 100 worst performing circuits are identified, studied, and targeted for further possible improvements based on the review of outage causes.

§ 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.

- a. A summary of outage causes by incidents, customers interrupted, and by customer minutes interrupted follows. Note that Allegheny Power's Outage Management System (OMS) tracks the number of incidents recorded for a circuit. This number does not necessarily reflect the number of outages on a circuit. One outage may be recorded as multiple incidents on different phases or grouped to different sectionalizing devices. It should be noted that the number of incidents on a circuit may be overstated due to the way similar incidents may not have grouped together in OMS.
- b. Note that 72% of all customer interruptions are caused by non-equipmentrelated causes. Also note that 98% of customers interrupted by trees are a result of trees falling from outside of the right-of-way.
- c. AP's definition of tree-related outages includes those cases where trees have fallen as a result of severe weather conditions.

not includ	e tree-related	outages.					
Outage Cause	Incident 12 Month ending		Customers Inte 12 Month endin	•	Customers Minutes Interrupted 12 Month ending Dec 05		
	Number	Percent	Number	Percent	Number	Percent	
Animals	1,074	6.3%	36,921	4.6%	4,228,323	2.7%	
Overhead Equipment Failure		ľ					
Overhead Line Equipment	1,229	7.2%	24,288	3.0%	3,766,895	2.4%	
Overhead Line Material	1,869	11.0%	107 ₍ 87 8	13.5%	12,924,528	8.3%	
Dverhead Wire	1,259	7.4%	57,585	7.2%	8,005,957	5.1%	
Underground Equipment							
Underground Line Material	44	0.3%	908	D.1%	228,945	0.1%	
Underground Line Equipment	76	0.4%	904	0.1%	478,513	0.3%	
Underground Cable	463	2.7%	13,000	1.6%	3,770,315	2.4%	
Service Equipment	70	0.4%	96	0.0%	18,027	0.0%	
Substation Equipment	62	0.4%	18,087	2 3%	2,534,011	1.6%	
Other	183	1.1%	16,793	2.1%	1,484,561	1.0%	
Public/Customer	1,974	11.6%	135,009	16.9%	21,858,250	14.0%	
Trees							
On Right of Way	105	06%	6,614	0.8%	1,042,297	0.7%	
Off Right of Way	4,005	23.6%	190,048	23.8%	57,061,762	36.7%	
Slide into Line from off ROW	8	0.0%	82	0.0%	18,600	0.0%	
Unknown	1,619	9.5%	72,953	9.1%	9,661,541	6.2%	
Weather	2,950	17.4%	116,490	14.6%	28,600,507	18.4%	
Total	16,990	100%	797,656	100%	155,683,032	100%	

d. 'Weather' definition includes weather-related outages involving lightning damage, severe snow/ice loading, extreme wind, flooding, etc. and **does not** include tree-related outages.

§ 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).

Note: Not required for fourth quarter report

§ 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.)

Note: Not required for fourth quarter report

§ 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.)

Note: Not required for fourth quarter report

§ 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).

Position Name .	Count
Lead Lineman	110
Lineman A	68
Linemen B	1
Lineman C	2
SS Crew Leader Construction	1
SS Crew Leader Maintenance	14
SS Electrician A	33
SS Electrician Apprentice	5
SS Electrician B	3
SS Electrician C	8
Serviceman A	91
Serviceman Apprentice	17
Serviceman Apprentice 102	2
Serviceman B	1
Serviceman C	2
Utilityman A	7
Utilityman B	2
	367

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

a. Contract dollars include capital as well as O&M work as available from AP financial reporting system. Note that much of AP's contracted work involves firm price contracts for which no man-hours are documented.

Quarter	Contract Dollars - Qtr	Contract Dollars - YTD
1 st qtr	\$3,994,606	\$3,994,606
2 nd qtr	· \$3,945,957	\$7,940,563
_ 3 rd qtr	\$3,724,337	\$11,664,900
4 th qtr	\$7,462,575	\$19,127,475

Some numbers may differ from previous reports due to post-quarter adjustments.

§ 57.195 (e) (11) Monthly call-out acceptance rate for transmission and distribution maintenance workers PRESENTED IN TERMS OF BOTH THE PERCENTAGE OF ACCEPTED CALL-OUTS 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.

- a. Attached as Appendix IV is a report indicating call out acceptance for the each service center in AP Pennsylvania service territory.
- b. The average response time per worker per list called was 11.04 minutes in the fourth quarter. This number represents the elapsed time per callout list divided by the number of people that accepted. If the callout list was run and no one accepted, the elapsed time per worker equals the actual callout list elapsed time. This time includes ready response, which has an elapsed time of 0 minutes. The data is only for linemen and electrician callouts. Allegheny Power is investigating its Automated Resource Call Out System (ARCOS) to determine if the capability exists to obtain callout time per crew.

Appendix I -	- 5%	Distribution	Circuit Statistics

SCName	SSName	CktName	CustServed	DCII	SAIFI	SAIDI	<u>ÇAIDI</u>	ASAI	<u>CMI</u>	CustIntrup	Circuit Lockouts	Incidents	Miles
Arnold	MATEER	DIME RD	1174	72	2	180	95	0.99966	210,791	2,228	1	56	103
Arnold	MATEER	SOUTH BEND	1193	75	1	225	270	0.99957	268,753	994	-	50	94
Arnold	MURRYSVILLE	RUBRIGHT	750	88	0	63	175	0.99988	47,861	273	1	11	33
Arnold	MURRYSVILLE	WALLACE LANE	957	56	2	428	181	0.99919	408,772	2,262	1	49	41
Arnold	TUNNELTON	TUNNELTON_DIST	97	34	2	906	451	0.99828	87,553	194	2	2	6
Butler	BRANCHTON	FORESTVILLE	1121	65	2	348	230	0.99934	389,028	1,695	1	34	68
Butler	BUTLER	CENTER AVE	1676	89	0	53	160	0.99990	88,853	495	-	35	45
Butler	HERMAN	HERMAN	797	28) Э	869	255	0.99835	691,279	2,708	2	46	39
Butler	HILLIARDS	HILLIARDS	690	46	2	616	250	0.99883	549,569	2,198	1	48	63
Butler	PARKER	PARKER	988	68	2	290	178	0.99945	285,567	1,608		24	37
Butler	SAXONBURG	BUTLER RD	758	87	1	67	90	0.99987	50,235	557	_	11	
Butler	SHERMIN	WEST SUNBURY	787	36	4	669	190	0.99873	527,100	2,779	2	19	44
Charleroi	CHARLEROI	N. CHARLEROI	1136	65	2	269	122	0.99949	305,954	2,507	-	34	15
Charleroi	SMITHTON	HUTCHINSON	860	87	0	54	261	0.99990	46,409	178	-	16	·
Charleroi	WESTRAVER	WEST NEWTON	1735	81	0	132	307	0,99975	229,344	746	-	22	39
Clarion	NEW BETHLEHEM	CLIMAX	1116	90	0	30	223	0.99994	33,401	150	-	13	77
Clarion	SLIGO	REIDSBURG	670	64	1	376	283	0.99928	250,399	884	-	37	77
Clarion	SLIGO	SLIGO	486	91	0	8	247	0.99999	3,699	15	•	6	18
Clarion	WIDNOON	TIDAL	325	75	1	217	185	0.99959	70,410	381		11	31
Jeannette	HUNTINGDON	SCOTCH HILL	751	47	2	668	366	0.99873	500,861	1,367	1	48	23
Jeannette	LEVELGREEN	CONTOWN	1343	74	1	214	365	0.99959	286,832	785	-	26	42
Jeannette	MURRYCREST	SARDIS ROAD	1281	83	0	108	261	0.99979	138,468	530		29	31
Jeannette	ROBBINS	BRADDOCKS TRAIL	1316	27	4	866	244	0.99835	1,145,832	4,699	2	28	27
Jeannette	WHITE VALLEY	BORLANDS RD	644	87	1	48	46	0.99991	30,876	668	1	11	26
Jefferson	BRAVE	SPRAGO	673	65	1	436	352	0.99917	170,890	485	1	9	49
Jefferson	FRANKLIN	ROGERSVILLE	844	21	<u>:</u> 3	1,129	442	0.99785	950,368	2,149	-	36	115
Jefferson	MARIANNA	TEN MILE	333	46	1	558	826	0,99894	185,961	225		54	43
Jefferson	RUTAN	BRISTORIA	1142	(97)	7	3,230	431	0.99386	3,679,134	8,531	3	138	189
Kittanning	TROY HILL	IRON BRIDGE	634	78	1	164	138	0.99969	104,109	752	1	30	39
Latrobe	STAHLSTOWN	KREAGER	276	72	1	244	187	0.99954	67 199	360	1	10	24
Latrobe	STAHLSTOWN	MANSVILLE	484	61	2	388	198	0.99926	187,576	945	1	24	41
Latrobe	STAHLSTOWN	ROUTE 711 NORTH	269	25	3	973	303	0.99815	261,534	863	1		31
Latrobe	STAHLSTOWN	ROUTE 711 SOUTH	421	61	2	413	229	0.99921	171,937	752	1	35	31
McConnellsburg	WARFORDSBURG	BUCK VALLEY	766	85	1	95	181	0.99982	72,454	400	-	32	89
McConnellsburg	WHITETAIL	RESORT	287	65	2	330	163	0.99937	96,801	593	-	21	29
McDonald	PARIS	PARIS	767	88	0	51	219	0.99990	38,817	177	-	11	34
McDonaid	SMITH	FLORENCE	775	67	1	337	282	0.99936	265,619	942		35	83
State College	WATERVILLE	WATERVILLE	338	(51)	9	1,759	203	0.99666	593,918	2,928	-	31	20
Uniontown	LAKE LYNN	FANCY HILL	942	87	0	59	232	0.99989	55,445	239		26	54
Uniontown	MERRITTSTOWN	REPUBLIC	1685	90	0	47	163	0.99991	78,873	485		20	46
Washington	AMITY	AMITY	502	38	2	791	329	0,99850	397,857	1,208		43	57
Washington	LAGONDA	CLUB FORTY	884	59	0	264	840	0.99950	233,547	278		22	36
Waynesboro	CHAMBERS 5	EAST	0		0.00				-	<u>_</u> ,o	· · · · · · · · · · · · · · · · · · ·		2
		lit into the Kreager/Mans				11 5				÷ • • • • • •			<u> </u>

Appendix II – 5% Distribution Circuit Remedial Actions

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SCName	SSName	i <u>CktName</u>	2004 RIPInit 2	2005 RIPInit	Actions Taken or Planned	Status
Amold	MATEER	DIME RD	63	-	Trees trimmed and sectionalizers added in 2004.	Installation complete.
Arnold	MATEER	SOUTH BEND	24	-	Trees Irimmed and sectionalizers added in 2004.	Installation complete.
Arnold	MURRYSVILLE	RUBRIGHT		15	Sectionalizers planned for addition in 2005.	Installation complete.
Amold	MURRYSVILLE	WALLACE LANE		12	Sectionalizers planned for addition in 2005.	Installation complete.
Arnold	TUNNELTON	TUNNELTON_DIST			Fuse added to tap to isolate customer-caused outages.	Monitor results.
Guller	BRANCHTON	FORESTVILLE	- 1	55	Sectionalizers planned for addition in 2005. Tree turmming planned in 2005.	Work complete.
Butler	BUTLER	CENTER AVE	43 :	-	Trees trimmed and sectionalizers added in 2004.	Installation complete.
Butler	HERMAN	HERMAN	50	-	Trees trimmed and sectionalizers added in 2004.	Installation complete
Butler	HILLIARDS	HILLIARDS	·	43	Sectionalizers planned for addition in 2005. Automate substation	Wark completed in 1st gtr 2005.
Butler	PARKER	PARKER	<u> </u>	43	Sectionalizers planned for addition in 2005,	Work completed in 1st gtr 2006
Buller	SAXONBURG	BUTLER RD			Sectionalizers planned for addition in 2005.	Installation complete
Butler	SHERWIN	WEST SUNBURY		•	Inspect line. Complete any noted work by 12/1/05.	Complete,
Charleroi	CHARLEROI	N CHARLEROI	. 21		Sectionalizers added in 2004. Tree trimming planned for 2005.	Installation complete.
Charleroi	SMITHTON	HUTCHINSON	22		Sectionalizers added in 2004. Tree trimming planned for 2005.	Installation complete.
Charleroi	WESTRAVER	WEST NEWTON	: 21		Sectionalizers added in 2004. Tree trimming planned for 2005.	Installation complete.
Clarion	NEW BETHLEHEM	CLIMAX	32		Trees trimmed and sectionalizers added in 2004.	Installation complete
Clarion	SLIGO	REIDSBURG		45	Sectionalizers and tree trimming planned for addition in 2005. Install automated 25kV transfer switch at substation.	Trimming done. Automation completed in 1st gtr 200
Clarion	SLIGO	ISUGO	<u> </u>		Install automated 25kV transfer switch at substation by 12/1/05. Tree trimming planned in 2006.	Automation completed in 1st gtr 2006.
Clarion	WIDNOON	TIDAL			Sectionalizers and tree trimming planned for addition in 2005.	Installation complete.
Jeannette	HUNTINGDON	SCOTCH HILL	<u>i .</u> j	7	Sectionalizers planned for addition in 2005. Tree trimming planned in 2006.	Installation complete.
Jeanneite	LEVELGREEN	COWTOWN			Trees trimmed in 2004. Sectionalizers planned for 2005.	Installation complete
Jeannette	MURRYCREST	SARDIS ROAD		4	Trees trimmed in 2004. Sectionalizers planned for 2005.	Installation complete.
Jeannette	ROBBINS	BRADDOCKS TRAIL	5	•	Sectionalizers added in 2004. Plan for a portion of underground replacement. Trim trees in 2006	Installation complete.
Jeanneite	WHITE VALLEY	BORLANDS RD	• 4	-	Sectionalizers added in 2004. The point added to another circuit to pick up customers during outages.	Installation complete
Jefferson	BRAVE	SPRAGG			High winds caused circuit outage (70% of CMI) in Nov. 2003 Tree trimming planned in 2006	Work complete. Circuit now off 5% list.
Jefferson	FRANKLIN	ROGERSVILLE	•	14	Sectionalizers planned for addition in 2005. Tree trimming planned in 2005.	Installation complete
Jefferson	MARIANNA	TEN MILE		12	Sectionalizers planned for addition in 2005.	Installation complete.
Jefferson	RUTAN	IBRISTORIA	19	-	Sectionalizers added in 2004. Trees trimmed in 2004.	Installation complete.
Kittanning	Troy Hill	IRON BRIDGE	<u>' 11</u>		Sectionalizers added in 2004.	Installation complete.
Latrobe	STAHLSTOWN	STAHLSTOWN	<u>, 2</u> i		Sectionalizers added in 2004.	Installation complete.
McConnellsburg	WARFORDSBURG	BUCK VALLEY			Sectionalizers planned for addition in 2005	Installation complete.
McConnellsburg	WHITETAIL	RESORT			Repairs made for conductor slap problem. Tree trimming planned in 2006	Work complete. Circuit now off 5% list.
McDonald	PARIS	PARIS	10 :		Sectionalizers added in 2004.	Installation complete.
McDonald	SMITH	FLORENCE		22	Sectionalizers planned for addition in 2005.	Installation complete.
State College	WATERVILLE	WATERVILLE			Sectionalizers planned for addition in 2005.	Installation complete.
Uniontown	LAKE LYNN	FANCY HILL			2004 outages were due to a severs thunderstorm, Recloser replaced due to miscoordination, Tree trimming in 2006.	2005 work complete.
Uniontown	MERRITTSTOWN	REPUBLIC	19		Sectionalizers added in 2004. Tree trimming planned for 2005.	Installation complete.
Washington	AMITY	AMITY			Sectionalizers planned for addition in 2005. Tree trimming planned in 2005	Installation complete,
Washington	LAGONDA	ICLUB FORTY	12		Trees trimmed and sectionalizers added in 2004,	Monitor results.
Waynesboro	CHAMBERS 5	(EAST			Circuil inspected in 2004 (mostly underground). Faulty MOV lightning arrestor found as cause of outages.	Monitor results

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<u>Appendix III – Goals Progress</u>

Note: Not required for fourth quarter report

<u> Appendix IV – Callout Acceptance</u>

Linemen		Ine Eak N	<u> </u>								Dat Nav Da			YTD	
	· · · ·	Jan,Feb,Ma	r	*	Apr, May, Jui No.	n I	·`	Jul Aug Ser No			Oct.Nov,Dei No	2		N0.	<u> </u>
Service Center	No. of Calls	Accepted	Average	No. of Calls	Accepted	Average	No. of Calls	Accepted	Average	No. o1 Calis	Accepted	Average	No. of Calls	Accepted	Aver
			<u> </u>		<u> </u>					· ;					†
Araold	705	174	25%	1272	211	17%	1655	179	11%	1155	138	12%	4768	702	15
воусе	286	128	45%	654	191	29%	851	138	16%	516	120	23%	2307	577	2
Butler	527	223	42%	920	282	31%	967	255	26%	940	193	21%	3354	953	2
Charleroi	244	103	42%	649	177	27%	1137	195	17%	919	160	17%	2949	636	2
Clarion	73	32	44%	114	42	37%	130	45	35%	154	47	31%	471	166	3
Jeannette	1067	161	15%	1570	196	12%	2030	198	10%	2351	175	7%	7018	730	11
Jetterson	325	83	26%	461	118	26%	448	82	18%	574	80	14%	1808	363	X
Kittanning	109	60	55%	169	71	42%	268	89	33%	188	49	26%	734	269	37
Latrobe	298	125	42%	511	172	34%	1011	185	18%	893	152	17%	2713	634	2
McConnellsburg	129	72	56%	124	72	58%	157	83	53%	226	104	46%	636	331	52
McDonald	111	20	18%	370	82	22%	348	43	12%	209	27	13%	1038	172	1
Pleasant Valley	289	119	41%	352	129	37%	637	128	20%	666	112	17%	1944	488	2
St.Mary's	138	85	62%	267	144	54%	281	132	47%	242	109	45%	928	470	5
State College	472	153	32%	782	224	29%	689	182	26%	798	148	19%	2741	707	28
Uniontown	506	151	30%	431	148	34%	770	162	21%	713	122	17%	2420	583	2
Washington	460	115	25%	854	168	20%	1021	126	12%	905	103	_ 11%	3240	512	10
Waynesboro	415	114	27%	872	178	20%	1242	182	15%	1139	155	14%	3668	629	17
Total AP Average	6154	1918	31%	10372	2605	25%	13643	2404	18%	12588	1994	16%	42757	8921	2
													·		
Electricians															
		Jan,Feb,Ma	r	ļ	Apr.May.Ju	ņ	, ,	Jul Aug Se)	(Oct,Nov,De	c		YTD	1
Service Center	No of Calls	No. Accepted	Average	No. of Calls	No. Accepted	Average	No. of Calls	No Accepted	Average	No.cfCalls	No. Accepted	Average	No. of Calls	No. Accepted	Ave
 =					<u> </u>	1					l	1			
Arnold	40	25	63%	89	43	48%	68	48	71%	74	43	58%	271	159	- 59
Boyce	8	7	88%	10	10	100%	19	14	74%	21	11	52%	58	42	7.
Butler	24	14	58%	55	33	60%	52	27	44%	7	5	71%	148	79	53
Charleroi	20	12	60%	43	21	49%	61	24	39%	45	23	51%	169	80	4
Jeannette	17	4	24%	5 3	12	23%	79	17	22%	61	11	18%	210	44	2
Jetterson	45	19	42%	34	12	35%	60	17	28%	40	8	20%	179	56	3
Kittanning	7	7	100%	14	9	64%	27	20	74%	22	12	55%	70	48	6
Latrobe	20	7	35%	50	16	32%	62	16	20%	44	14	32%	196	53	2
Pleasant Valley	39	6	21%	54	16	30%	64	12	19%	54	15	28%	211	51	2
St,Mary's	13	6	46%	22	17	77%	19	11	58%	27	14	5 2%	81	48	59
State College	0	0		13	5	38%	22	7	32%	49	13	27%	B4	25	30
Washington		Э	19%	27	8	30%	29	10	34%	29	5	17%	101	26	26
Waynesboro	_ 28	13	45%	71	24	34%	72	15	21%	83	21	25%	254	73	2
Total AP Average	277	125	45%	535	226	42%	664	238	36%	556	195	35%	2032	784	3
							*							_	
_	-			-									•		
- al Combined AP Average	6431	2043	32%	10907	2831	26%	14307	2642	18%	13144	2189	17%	44789	9705	22

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ppendix V – Sample DCII Calculatio

AP calculates the DCII to provide a single index for ranking circuits. The DCII compares the SAIFI, SAIDI, CAIDI and ASAI for each circuit to the 5-year system averages of each index and combines them into a single index. An example of this calculation is shown below:

Index	System Average	Sample Circuit
		Index
SAIFI	0.66	2.32
SAIDI	181.95	258.8
CAIDI	275.71	176.23
ASAI	0.999654	0.999769

1) The SAIFI, SAIDI and CAIDI are compared to the system average indexes.

Actual SAIFI / System Average SAIFI	= 2.32 / 0.66	=	3.52
Actual SAIDI / System Average SAIDI	= 258.8 / 181.95	=	1.42
Actual CAIDI / System Average CAIDI	= 176.23 / 275.71	=	0.64

2) To permit the average to equal 70 percent this ratio is then inversely proportioned:

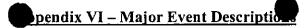
 $SF = 1 - (0.3 \times (Actual SAIFI / Average SAIFI)) = 1 - (0.3 \times 3.52) = -0.0560$ $SD = 1 - (0.3 \times (Actual SAIDI / Average SAIDI)) = 1 - (0.3 \times 1.42) = 0.5740$ $CD = 1 - (0.3 \times (Actual CAIDI / Average CAIDI)) = 1 - (0.3 \times 0.64) = 0.8080$

3) The sum of the values is then divided by 3 to assign each index an equal weight in the calculation.

(SF + SD + CD) / 3 = (-0.0560 + 0.5740 + 0.8080) / 3 = 0.4420

4) The Actual ASAI is then multiplied directly to this value to get the interruption factor which when multiplied by 100 provides the DCII.

((SF + SD + CD) / 3) * ASAI x 100 = DCII = 0.4420 * 0.999769 *100 = 44.19



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The Request for Major Event Exclusion and Commission approval follow for the wet snow event in Allegheny Power's territory.

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REQUEST FOR EXCLUSION OF MAJOR OUTAGE FOR RELIABILITY REPORTING PURPOSES TO PENNSYLVANIA PUBLIC UTILITY COMMISSION P O BOX 3265 HARRISBURG, PA 17105-3265

Reports require an original and one copy to be filed with the Secretary's Bureau.

Information Required:

- 1.
 Requesting Utility:
 Allegheny Power

 Address:
 800 Cabin Hill Drive

 Greensburg, PA 15601
- 2. Name and title of person making request:

James E. Barrell (Name)

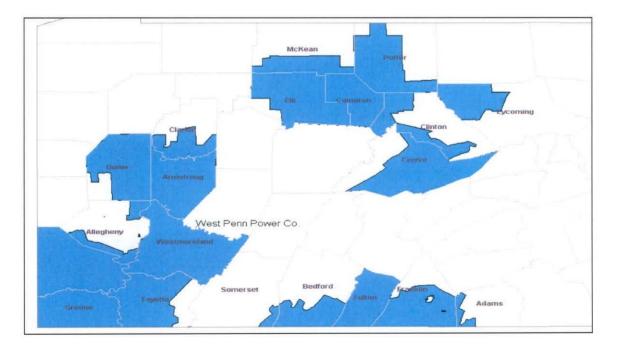
- 3. Telephone number: (724) 838-6113
- 4. Interruption or Outage:
 - (a) Number of customers affected: <u>69,737 customers</u> Total number of customers in service territory: <u>695,780 customers</u>
 - (b) Number of troubled locations in each geographic area affected listed by county and local political subdivision: 578 incidents in the Allegheny Power Pennsylvania service territory affected Allegheny, Armstrong, Butler, Centre, Elk, Fayette, Greene, Washington, and Westmoreland

Engineer, Reliability

(Title)

e-mail: jbarrel@alleghenypower.com

Counties.



(c) Reason for interruption or outage, including weather data where applicable: Heavy, wet snow impacted Allegheny Power's service territory. See Appendix I for a Severe Weather Alert Allegheny received for the event. The wet snow greatly impacted trees because leaves had not yet fallen off. The leaves collected the wet snow and branches became heavy and broke, impacting power lines in the process.

(d) The number of utility workers and others assigned specifically to the repair work: Company and Support Tree Total other Repairmen Personnel Trimmers Workers 474 218 110 146 The above numbers exclude the Corporate Centers' staffing that supports a restoration of service event of this size. These groups include the Customer Call Center, Centralized Dispatching, Operations Center, and Restore Service Process Team who support restoration across all AP.

- (e) The date and time of the first notification of a service interruption: <u>October 24, 2005 9:20 PM</u>
- (f) The actual time that service was restored to the last affected customer: <u>October 30, 2005 6:01 PM</u>

Remarks: On October 24, 2005, Allegheny Power experienced a severe weather event that impacted 10% of its customers in Pennsylvania. Heavy, wet snow fell throughout the night of Monday October 24th and continued into Tuesday October 25th. Allegheny Power opened eight service centers for storm restoration in southwestern Pennsylvania and State College area.

System-wide, Allegheny Power experienced its largest storm restoration in company history. Outside assistance for system restoration was received from contractors as well as from utilities such as American Electric Power, Baltimore Gas and Electric, Duquesne Light, Dominion, First Energy, Philadelphia Electric, Potomac Electric, Vectren, Indianapolis Power and Light, Orange and Rockland, and Duke.

<u>Note</u>: The number of customers interrupted in this report is from the outage management system after data is reviewed for duplicate outages, etc. This number may differ from the estimated number of customers interrupted in the previous Report of Outage (PUC Order 75PRMD9) submitted by Allegheny Power to PA PUC during the event.



COMMONWEALTH OF PENNSYLVANIA PENNSYLVANIA PUBLIC UTILITY COMMISSION P.O. BOX 3265, HARRISBURG, PA 17105-3265

IN REPLY PLEASE REFER TO OUR FILE

December 8, 2005

Docket No. M-00991220F2005

ALLEGHENY POWER ATTN JAMES E BARRELL 800 CABIN HILL DRIVE GREENSBURG PA 15601

Re: Request for Exclusion of Major Outage for Reliability Reporting Purposes to the Pennsylvania Public Utility Commission

Dear Mr. Barrell:

On December 1, 2005, Allegheny Power ("Allegheny") filed a request for exclusion of major outage for reliability reporting purposes in accordance with the requirements of the Commission's Order entered May 11, 2004, at M-00991220.

The request relates to a weather event that Allegheny states caused service interruptions first reported on October 24, 2005, at 9:20 p.m., with full customer service restoration on October 30, 2005, at 6:01 p.m.

Upon review of the company's filing, it appears that the service interruptions described by Allegheny qualify as a major event, as defined in 52 Pa. Code §57.192. Therefore, the request for exclusion of service interruptions for reporting purposes is hereby approved. However, the Commission's approval is contingent upon the possibility that subsequent audits, reviews, and inquiry, in any Commission proceeding, may be conducted, pursuant to 52 Pa. Code §57.197 (relating to Reliability investigations and enforcement).

In addition, this approval will apply only to the matters and parties specifically and clearly defined under this instant filing.

If you are dissatisfied with the resolution of this matter, you may, as set forth in 52 Pa. Code §5.44, file a petition with the Commission within 10 days of the date of this letter.

Sincerely,

James J. McNulty Secretary

cc: Tom Sheets, Audits Blaine Loper, CEEP Wayne Williams, CEEP Kerry Klinefelter, FUS George Dorow, Audits Betsy Barnes, Law Bureau Kathleen Aunkst, Secretary's Bureau Re: Allegheny Power Fourth Quarter 2005 Reliability Report

CERTIFICATE OF SERVICE

I certify that this 30th day of January 2006, I have served a true and correct copy

of the Fourth Quarter 2005 Annual Reliability Report of Allegheny Power, by first-class mail,

postage prepaid, upon the following:

VIA FIRST-CLASS MAIL

Office of Consumer Advocate 555 Walnut Street Forum Place, 5th Floor Harrisburg, PA 17101-1921

Office of Small Business Advocate Suite 1102, 300 North 2nd Street Harrisburg, PA 17101

John L. Munsch

John L. Munsch Attorney for ALLEGHENY POWER

RECEIVED

JAN 3 0 2006

PA PUPLIG UTILITY COMMONS SUCCESSION



Paul E. Russell Associate General Counsel

PPL orth Nijoth Stroot

Two North Ninth Street Allentown, PA 18101-1179 Tel. 610.774.4254 Fax 610.774.6726 perussell@pplweb.com



FEDERAL EXPRESS

January 30, 2006

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James J. McNulty, Esquire Pennsylvania Public Utility Commission Commonwealth Keystone Building 400 North Street Harrisburg, Pennsylvania 17120

DOCUMENT FOLDER

RECEIVED

JAN 3 0 2006

PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU

Re: PPL Electric Utilities Corporation Quarterly Reliability Report for the Period Ended December 31, 200^r Docket No. L-00030161

Dear Mr. McNulty:

Enclosed for filing on behalf of PPL Electric Utilities Corporation ("PPL Electric") are an original and five (5) copies of PPL Electric's Quarterly Reliability Report for the Period Ended December 31, 2005. The report is being filed pursuant to the Commission's Final Rulemaking Order adopted May 7, 2004 in the above-captioned docket.

Pursuant to 52 Pa. Code § 1.11, the enclosed document is to be deemed filed on January 30, 2006, which is the date it was deposited with an overnight express delivery service as shown on the delivery receipt attached to the mailing envelope.

In addition, please date and time-stamp the enclosed extra copy of this letter and return it to me in the envelope provided.

If you have any questions regarding this document, please call me or Joseph M. Kleha, PPL Electric's Manager-Regulatory Projects at (610) 774-4486.

Very truly yours,

Paul E. Russell



Enclosures

* cc: Elizabeth H. Barnes, Esquire





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JAN 3 0 2006

PPL Electric Utilities

PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU

PPL Electric Utilities Corporation Quarterly Reliability Report to the Pennsylvania Public Utility Commission

January 2006

(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.

There were no major events during this quarter.

(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.

SAIFI (Benchmark = 0.98; Rolling 12-month Std. = 1.18)	0.966
CAIDI (Benchmark = 145; Rolling 12-month Std. = 174)	125
SAIDI (Benchmark = 142; Rolling 12-month Std. = 205)	121
MAIFI	4.859
Average Number of Customers Served ²	1,347,786
Number of Sustained Customer Interruptions (Trouble Cases)	18,697
Number of Customers Affected ³	1,301,623
Customer Minutes of Interruptions	162,534,588
Number of Customer Momentary Interruptions	6,549,189

The following table provides data for the 12 months ended December 31, 2005.

¹ MAIFI data is obtained at the substation breaker and does not include momentary interruptions at lower level devices.

² PPL Electric calculates the indices using customers served at the end of the period. This is consistent with the method used to calculate PPL Electric's benchmarks.

³ The data reflects the number of customers interrupted for each interruption event summed for all events, also known as customer interruptions. If a customer is affected by three separate cases of trouble, that customer represents three customer interruptions, but only one customer interrupted.

(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

The following table provides reliability index values for the worst performing 5% of the circuits in the system for the 12 months ended at the current quarter. An explanation of how PPL Electric defines its worst performing circuits is included in Appendix A.

WPC Rank	Feeder ID	SAIFI	CAIDI	SAIDI	MAIFI ⁴	Customers	Cases of Trouble ⁵	Customer Minutes Interrupted	СРІ
1	16402	8.73	69	605	8.00	845	55	511,127	477
2	15601	5.81	155	899	9.67	2,390	83	2,149,715	457
3	63601	8.02	61	489	7.00	465	31	227,404	387
4	28301	3.19	98	313	4.00	2,785	95	870,655	381
5	45402	4.58	164	751	6.00	1,568	67	1,178,329	372
6	53901	4.36	142	618	7.00	2,674	65	1,651,687	355
7	15701	3.67	125	458	7.00	2,199	73	1,006,073	347
8	46301	2.49	592	1,475	6.00	835	54	1,231,524	343
9	16101	3.43	88	303	4.00	2,490	76	753,343	339
10	46302	2.67	245	655	6.00	1,753	75	1,147,927	338
11	43401	3.71	224	831	9.00	1,500	61	1,246,131	336
12	40502	3.68	116	429	3.00	1,802	69	772,479	335
13	26002	3.12	343	1,067	3.00	956	60	1,020,444	334
14	28102	2.28	150	341	0.00	1,641	86	560,066	334
15	28801	1.21	201	243	11.00	2,554	97	620,201	332
16	55001	2.59	151	392	5.04	2,705	79	1,060,228	328
17	52401	4.42	178	786	14.00	1,697	49	1,333,299	323
18	45702	2.82	394	1,109	7.00	1,601	55	1,775,407	320
19	46602	1.45	369	535	2.00	1,496	76	800,587	319
20	23002	2.27	478	1,087	10.00	2,341	56	2,545,112	319
21	44505	1.96	245	479	17.06	2,320	77	1,112,307	317
22	17802	2.44	192	468	5.00	2,313	73	1,082,587	314
23	12301	2.65	191	506	0.00	1,714	70	868,068	314
24	52402	3.82	112	427	13.00	1,594	58	679,935	311
25	40301	5.15	189	975	5.00	602	32	587,138	308

⁴ MAIFI data is obtained at the substation breaker and does not include momentary interruptions at lower level devices.

⁵ Cases of trouble are the number of sustained customer service interruptions.

WPC Rank	Feeder ID	SAIFI	CAIDI	SAIDI	MAIFI⁴	Customers	Cases of Trouble ⁵	Customer Minutes Interrupted	СРІ
26	53501	4.14	109	450	9.00	2,104	52	947,514	307
27	10108	0.50	1,490	745	0.00	2	1	1,490	303
28	44202	4.19	178	748	12.00	1,489	44	1,114,240	302
29	28402	4.52	113	511	14.00	1,540	44	787,407	301
30	26602	0.53	356	189	5.00	2,935	82	554,504	298
31	16401	4.65	96	446	10.00	666	42	296,919	298
32	10903	4.04	61	249	2.00	2,020	53	502,358	297
33	20403	2.22	136	302	1.00	3,018	73	912,616	296
34	28302	1.84	124	229	9.00	2,747	79	628,895	295
35	26001	1.65	179	296	3.00	1,419	77	419,683	293
36	26702	1.93	75	145	1.00	2,381	80	344,846	291
37	53602	2.33	73	170	3.00	2,721	74	462,138	290
38	59401	2.38	188	448	4.02	2,487	64	1,114,808	288
39	16802	3.62	122	440	17.00	1,709	51	751,424	288
40	43202	1.58	287	453	10.00	2,045	68	927,368	288
41	42201	3.66	340	1,244	3.00	1,757	34	2,185,218	287
42	18502	1.78	136	241	0.00	1,760	72	424,893	277
43	11001	3.82	131	502	6.00	855	43	429,265	277
44	64802	4.31	112	483	1.00	1,250	36	604,369	273
45	17801	2.94	120	353	2.00	2,058	54	727,377	270
46	26401	1.46	136	198	3.00	3,129	74	619,150	270
47	41901	4.64	154	715	4.00	665	27	475,635	270
48	67703	3.48	127	444	4.00	2,129	45	945,083	268
49	16801	3.77	109	413	13.01	1,567	40	647,226	263
50	11506	2.65	116	308	2.00	1,260	55	388,508	261
51	28601	2.73	188	514	1.00	2,037	47	1,047,183	257
52	46903	4.75	76	360	5.00	1,397	26	503,445	256
53	21901	3.93	70	275	7.00	2,128	38	585,985	256
54	22002	2.39	218	522	3.01	1,326	49	691,653	256

PPL Electric's Circuit Performance Index ("CPI") is derived from the frequency and duration of service interruptions that occurred during the specified time period. Improving a circuit's CPI depends upon reducing either the service interruption frequency or the duration of interruptions, or both. When a new circuit appears among the 5% worst performing, the first step undertaken is to perform a "circuit outage data analysis." This consists of analyzing the actual service interruptions that occurred during the time span to determine if there are causal patterns, or geographic patterns, for which corrective actions are feasible, which would improve the circuit's CPI.

Rank	Action	Status	Due/Complet	te Result
1 Circ	cuit ID: 16402 MOUNT POCONO 64-02			CPI: 477
Circu	it outage data analysis - WPC not on preceding qtr. kst.	Completed	11/11/2004	Most of the problems were trees outside of the right of way, but there were some trimming related problems. This circuit did have some hotspot trimming completed earlier in 2004
Tree	trimming. Hot spotted in April and May	Completed	5/31/2005	
Tre e engir	trimming. Overgrown areas will be identified by field neer for hot spol trimming.	Completed	8/31/2005	
	2005: Circuit outage data analysis - WPC not on eding qtr. list.	Completed	8/31/2005	
11/22	2/2005: Tree trimming.	Scheduled for	12/31/2006	
Moni	lor future performance	Ongoing		A dig-in contributed significantly to the CPI. This is not expected to occur again.
2 Circ	cuit ID: 15601 NO STROUDSBURG 56-	01		CPI: 457
1/13/	2006: Install fuse(s). WR 224008	Scheduled for	4/30/2006	
Circu	it outage data analysis.	Completed	6/23/ 2004	Major contributor to CPI was the number of cases. There were several burned loops on the line and quite a few animal contacts.
Line i	inspection-equipment.	Completed	3/31/2005	
Perfo	rm line maintenance identified by line inspection.	Completed	5/30/2005	
Circu	it outage data analysis - WPC not on preceding qtr. list	Completed	6/6/2005	
	inspection-vegetation. Forester will perform a vegetation nspection and perform hot spot trimming as required.	Completed	7/28/2005	Results sent to field for review. Hot spotting will be scheduled as needed.
	engineer has identified several tap fuses that can be lled to help minimize the impact of potential faults on taps.	Completed	7/28/2005	WR 224423, WR 224423, and WR 224008 were initiated to add sectionalizing devices along this line
	II fuse(s). WR# 218967, WR# 224357, WR# 224423: and fuse installation;	Completed	12/30/2005	Fuses and OCRs were installed to reduce the number of customers experiencing an outage
	circuit will be thermovisioned to help identify failed oment.	Scheduled for	3/30/2006	
11/22	2/2005: Tree trimming.	Scheduled for	12/31/2006	
Moni	tor Performance	Ongoing		

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

Rank Action

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----Status Due/Complete Result

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3 Circuit ID: 63601 LETORT 36-01

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CPI: 387

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Circuit outage data analysis.	Completed	10/15/2003	Pattern of Tree Related Outages and Equipment Failure (Lightning Arrestors).
Line inspection-vegetation.	Completed	11/30/2003	Trimming Recommendations on Supervisory Road Tap
Line inspection-equipment.	Completed	11/30/2003	Identified Failed Lightning Arrestors
Tree trimming.	Completed	3/15/2004	Reduced Outage Risk
Replace Failed Lightning Arrestors	Completed	3/15/2004	Reduced Outage Risk
Circuit outage data analysis.	Completed	8/13/2004	Recent tree trimming and equipment replacement is expected to improve the performance of the circuit.
Continue to monitor performance	Ongoing		
7/13/2005: Circuit outage data analysis - WPC n preceding qtr. list.	ot on Completed	9/1/2005	All of the minor maintenance items on this circuit idenitified through the line maintenance inspection have been fixed. Also, the circuit was split into two separate lines in May 2005 which should reduce the outage exposure on this circuit.

nk Action	Status	Due/Complet	e Result
Circuit ID: 28301 NEWFOUNDLAND 83-01	L		CPI: 381
Circuit outage data analysis.	Completed		Major contributor to CPI was the number of cases (30%). The contributin outages (mostly trees) did not fall into a discernable pattern. No outages were trimming related.
Circuit outage data analysis.	Completed		Review of circuit outages indicated there were two poor performing sing phase taps.
Improve sectionalizing capability. Increase sectionalizing on two poor performing single phase taps beyond OCR 66696N44669.	Completed		Field review of the poor performing section of line indicated that additional sectionalizing will not greatly improve reliability on that part of the circuit. Tap fusing in the area already adheres to PPL's policy of fusing all single phase taps.
Tree trimming. Hot spot trimming on two poor performing single phase taps.	Completed	3/30/2005	Reduced outage risk.
	Completed		Trees and animals accounted for over 70% of the outages seen in the past year. This is a heavily forrested area where trees outside of the rig of way contribute to 50% of the total CPI. Even if all other outages were removed this circuit would still be among the worst performers due to trees outside of the R/W.
Improve sectionalizing capability. Field engineer will install additional single phase and three phase OCRs on the circuit pending additional review	Scheduled for	3/30/2006	
Line inspection-equipment.	Completed	11/30/2005	Field Engineer determined that line inspection was unnecessary becaus line was inspected in 2004.
Tree trimming. Trimming and hot spotling will be done in 2006.	Scheduled for	12/31/2006	
11/23/2005: Betterment project to split one phase tap by sectionalizing. Additional OCR's will be installed.	Scheduled for	12/31/2006	
11/23/2005: Monitor future performance.	Ongoing		

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k _ /	Action	Status D	ue/Comple	te Result
Circui	t ID: 45402 WEST BLOOMSBU	J RG 54-02		CPI: 372
Circuit ou	utage data analysis.	Completed	8/22/2005	CPI was driven by SAIFI (3.338; 39% of the CPI) and number of cases (54; 44% of CPI). The major outages in the third quarter of 2004 were because of Hurricane IVAN on 9/18/04. 108 customers were interrupted for approximately 33 hours because of IVAN. While no major outages in Q4, 2004, a snow storm in the first quarter of 2005 caused long outages because of flood and closed bridges. Nothing major in the Q2, 2005 except the not trimming related outage on 4/28/2005. The WPC team noticed that animals caused some outages in the second quarter of 2005, and the field will be looking to install an animal guards where needed to avoid those outages in the future.
Line insp	ection-equipment.	Completed	7/31/2005	The line was inspected in the winter of 2004. Some items were identified by inspection including broken tie wires, cracked insulators, bad TFC's, blown LA's. Some of the work requests were done in the first quarter of 2005, and the rest were completed in June/ July 2005. All single phase and three phase fuses were installed on this circuit.
Tree trim	ming.	Scheduled for	6/30/2006	The line is 100 miles long, 4 miles urban were trimmed in 2003, and the rest (95miles rural) are scheduled to be trimmed in 2006. The circuit is being reviewed for hot spot trimming. Some hot spot rimming was done in September, 2005, and was completed on the whole circuit by the end of December, 2005.
11/2/200	5; Circuit outage data analysis.	Completed	11/2/2005	Major contribution to the CPI was due to SAIFI (46% of total CPI) and the number of cases (46% of total CPI). A vehicle hit on 8/8/2005, and a storm in July caused major outages in the third quarter of 2005.
Line insp	pection-equipment.	Completed	9/30/2005	A line inspection was performed in September 2005. Different items were identified by the inspection including broken tie wires, cracked insulators, bad transformer fuse cutouts, brown lightning arresters. 6 work requests were written due to the inspection. WR's 208868, 208701, 208487, 208428, 208357, and 208306 were done by September 2005.
11 /2/ 200	15: Improve sectionalizing capability.	Completed	11/2/2005	The circuit was reviewed for additional sectionalizing in 2005 to improve load transfer capabilities. No locations were identified to install sectionalizing devices.
11/2/200	95: Monitor future performance.	Ongoing		Tree hot spotting in 2005, and the completion of all work requests identified by inspection are expected to improve the circuit's performance. Major outages occurred on the circuit in the third quarter were due to events that are not expected to occur again such as the vehicle hit in August. PPL will continue to monitor the circuit's performance.

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ank Action	Status	Due/Complete	e Result
Circuit ID: 53901 HALIFAX 39-01		(CPI: 355
Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	3/18/2005 T	Free trim the West Shore portion of the circuit scheduled for summer 2005.
Circuit outage data analysis.	Completed	5/27/2005 C	CPI has improved. Pole top fire on 2/14/2005 outaged the line.
Circuit outage data analysis.	Completed	p	On 6/29/05 during a period of rain the CB operated due to a tree on a 3 ohase tap-inadequate trimming. Tree was trimmed. Tree trimming the West Shore portion of circuit to be completed by end of 2005.
Circuit outage data analysis.	Completed		Outage on 8/6/05 due to trees - not trimming related. Trees trimmed to restore service.
Monitor future performance.	Ongoing		
Circuit ID: 15701 TANNERSVILLE 57-01		(CPI: 347
Circuit outage data analysis.	Completed		Major contributor to CPI was the number of cases (approximately 52% of CPI), CAIDI and SAIFI are low. Most contacts were tree related.
Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/11/2004 N	Many tree related outages, some were trimming related.
Field engineer will review the circuit for additional tap fuses.	Completed		The main three phase line was analyzed, and no additional locations for fuses were determined.
Tree trimming. This circuit was scheduled to be trimmed in support of reconductor work.	In progress		Approximately 1.5 miles of the main three phase line was trimmed in support of the upcoming USF work.
1.5 miles of the main line will be reconductored under SP 51216.	Scheduled for	r 3/30/2006	
Monitor future performance	Ongoing		USF work being completed ont his circuit. In addition, the circuit is being trimmed.

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Rank	Action	Status	Due/Comple	te Result
8 C	ircuit ID: 46301 ROHRSBURG 63-01			CPI: 343
Ci	rcuit outage data analysis.	Completed	12/30/2004	The Rohrsburg 63-1 line was reported as having a high CPI during the 1st and 2nd quarter of 2004. However, significant customers experiencing outages, of short or long durations, did not occur on 63-1 during the first or second quarters of 2004. There were a few isolated incidences, for example, one customer on 6/17/2004 experienced a 11 hr. outage due to trees learing his secondary.
de	0/24/2004: Improve sectionalizing capability. Review line to elermine if additional sectronalizing can be added to minimize e number of customers affected by emergency outages.	Completed	12/31/2004	The line was reviewed for sectionalizing in 2004, and no locations were identified for additional sectionalizing devices.
	0/10/2005: Circuit outage data anatysis - WPC not on eceding qtr. list.	Completed	11/2/2005	Major contributions to the CPI were due to SAIFI and the number of trouble cases. A big storm on July 14, 2005 causes long duration outages in the third quarter of 2005.
1	1/2/2005: Tree trimming	Completed	12/31/2005	The line is 75 miles long, and it is all rural. The line was last trimmed in 2002, and is scheduled to be trimmed next in 2008. The forester crew performed hotspot trimming on this line by the end of December, 2005.
	1/2/2005: Perform line maintenance identified by line spection.	Scheduled for	12/31/2005	A line inspection was performed in September 2005. Seven WR's were written and scheduled in 2005. All work requests were completed in 2005. The work identified and completed includes replacing transformers, transformer fused-cutouts, lightining arrestors, dead-end insulators, etc.
lr	istall fuse(s).	Completed	9/30/2005	The line was reviewed for fusing in September, 2005. No locations were identified for additional fusing.
1	1/2/2005: Monitor future performance.	Ongoing		In progress work is expected to improve this circuit's performance. PPL will continue to monitor the circuit's performance.

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Rank	Action	Status	Due/Complet	e Result
9 Cir	cuit ID: 16101 BINGEN 61-01	, ·		CPI: 339
Тгее	trimming, Spot trimming,	Completed	3/31/2004	Reduced outage risk.
Circu	uit outage deta analysis.	Completed	6/11/2004	Number of cases and SAIFI are the two biggest factors in the CPI. There is no detectable pattern of causes. Cases alone contribute 60% of this circuit's performance issues, with SAIFI contributing just under 30%.
insta secti	Sectionalizing : Replace 1 fused cutout with an OCR and all 2 fused cutouts to reduce the length of line on a ionalizing device. Install a 3 phase loadbreak airswitch to ble customers to be restored quicker during an outage.	Completed	7/19/2004	Reduced customer count affected by each outage.
•	lace cracked porcelain fused cutouts and lightning sters.	Completed	6/30/2004	Reduced outage risk.
Insta	all fault indicators on line to locate momentary problems.	Completed	8/16/2004	This was done to locate momentary problems that occur on the line. The installation is complete and the indicators are being used to find the fault faster
	ove sectionalizing capability. Investigating splitting the line low back feeding from other half.	Completed	2/28/2005	Majority of performance problems occur on fused taps. Load pick up is not the primary performance issue.
	nsfer lower portion of line to the Richland 36-3 line to reduce ength of line exposure.	Canceled	7/22/2005	Project was cancelled due to capacity concerns on the Richland Substation.
	onductoring 7 single phase taps with XLP and stronger ductor	Completed	11/30/2005	Reduced outage risk. Should see reduction in cases, and possibly lower circuit CAIDI

ank	Action	Status	Due/Comple	te Result
0 Cire	cuit ID: 46302 ROHRSBURG 63-02		-	CPI: 338
Circu	it outage data analysis.	Completed	8/22/2005	The Rohrsburg 63-2 line was reported as having a high CPI during the first and second quarter of 2004. However, a large number of customers experienced outages, short or long in duration has not been reported for the 1st and 2nd quarters in 2004. It was reported on 2/21/2004, 19 customers experienced a 5 hr. outage due to equipment failure. In the Q2, 2004, 24 customers experienced outages ranging from 7 hrs to 12 hrs due to equipment failure on 6/17/2004. No major outages in the Q4, 2004. A snow storm caused long duration outages in Q1, 2005 where 11 customers experienced an outage for approximately 23 hours because of the flood in the area on 3/23/05. It was reported that there were some non controllable causes for long outages on this circuit because of lightning. No major outages in the Q2, 2005 beside the outage on 6/6/2005, which was caused by trees-non trimming related in a very windy day.
addit	ove sectionalizing capability. Review line to determine if ional sectionalizing can be added to minimize the number stomers affected by emergency outages.	Completed	6/1/2005	The line was reviewed and no new locations for new sectionalizing devic were found.
Perfo	orm line maintenance identified by line inspection.	Completed	9/30/2005	Line maintenance was started by the region in the first week of August, 2005. Nothing major was found. Only lower priority things were found. Pole by pole inspection is in process. Fuses on 3 phase and single phase taps has been done. The complete inspection was done by the end of Q3, 2005.
Tree	trimming.	Scheduled for	6/30/2007	the 153 miles long line is scheduled to be trimmed in 2007. The line was checked for trees, and hot spot trimming was completed by the end of 2005.
11/2	2005: Circuit outage data analysis.	Completed	11/2/2005	Major contribution to the CPI on this circuit was due to SAIFI and the number of trouble cases. A storm on 7/14/2005 caused a few long outages on this line. Most of outages in the third quarter of 2005 were due to Trees not trimming related and equipment failure.
11/2	2005: Line inspection-equipment.	Completed	8/31/2005	A line inspection was performed in August 2005 on the entire feeder. 11 WR's were initiated as a result of this patrol. All of the work requests wer completed in 2005.
11/2	/2005: Monitor future performance.	Ongoing		In progress work is expected to improve the circuit's performance. PPL will continue to monitor the circuit's performance in the future.

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ank	Action		Status	Due/Complet	te Result
1 Cire	cuit ID: 43401	BENTON 34-01			CPI: 336
Circu	uit outage data analys	is.	Completed		CPI for the Q2, 2005 was primarily driven by cases of trouble (152; 49% of CPI). The only reported significant outage occurring on 34-1 during the first quarter of 2004 was a vehicle accident on 1/12/2004 causing 183 customers to be out of service for 2 hrs. During the second quarter of 2004, the high CPI was due to equipment failure, approximately 188 customers experienced outages ranging from 1 hr to 6 hrs, on 5-2-2004, 5 3-2004, and 5/5/2004. During the third quarter of 2004, approximately 200 customers experienced outages ranging from 7 hrs to 78 hours, due to hurricane IVAN on 9/18/2004. Specifically, 100 of these 200 customers experienced a the remaining 100 customers did experienced a 16 to 20 hr outage due to inadequate tree trimming. 40 CPI points were due to a pole hit during Q4, 2004, and no major outages in Q1, 2005. The circuit improved since the last quarter of 2004, and nothing major in the Q2, 2005.
Perfo	orm line mainlenance	identified by line inspection.	Completed		The line was inspected in the winter of 2004, and some items were identified by inspection. Work requests were written for those items to replace transformers, TFC's, LBC's, Ridge Pins, and install animal guards, some of the work requests were completed in the first quarter of 2005 and the rest were done by the end of the second quarter.
addit		pability. Review line to determine if an be added to minimize the number emergency outages.	Completed		Susquehanna Region has reviewed line for location to add OCR's, or other sectionalizing devices, no new locations were found.
Tree	trimming Hot Spot Ti	imming	Completed	9/30/2005	Reduced outage risk. 3-phase hot-spot trimming was completed by December 30 of 2004, 132 - miles rural is in the trimming process and expected to be done by the end of 2005. Approximately 100 miles were done by the end of the second quarter.
11/2	2005: Circuit outage	data analysis.	Completed		Major contribution to the CPI was due to the number of cases (47% of total CPI). Trees not trimming related caused long duration outages in the third quarter 2005 due to a big storm on 7/13/2005.
11/2/	/2005: Tree trimming.		Completed	12/1/2005	The Benton line 1 is 132 miles long, and it is all rural. The whole line was trimmed in 2005.
11/2	/2005: Line inspectio	n-equipment.	Completed	8/31/2005	The Benton line was inspected by the end of Q4, 2004. A lot of different items were identified by inspection. WR's 213126, 211539, 205701, 205695, 205639, 205634, 205604, 205401, 205387, 205378, 205332, 204966, and 187571 were written due to inspection. Work requests were completed by August 2005.
11/2	2/2005: Monitor future	performance.	Ongoing		Major contribution to the CPI on this circuit was due to storms in the second and third quarters of 2005. Recent tree trimming and work requests identified by inspection are expected to improve the circuit's performance. PPL will continue to monitor the circuit's performance in the future.

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Rank Action	Status .	Due/Comple	te Result
12 Circuit ID: 40502 CRESSONA 05-02			CPI: 335
Constructed a tie and permanently transferred a problem section to another circuit with better performance.	Completed	7/15/2003	Reduced outage risk.
Transferred inaccessible portion of circuit to another tap.	Completed	12/31/2003	Reduced outage risk.
Eliminated inaccessible tap.	Completed	12/31/2003	Reduced outage risk.
7/13/2005: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	8/31/2005	
Circuit outage data analysis.	Completed	6/30/2004	Main contributors were cases of trouble (various causes) and SAIFI.
Tree trimming.	Completed	8/31/2005	Reduced outage risk,
11/21/2005: Line inspection-equipment.	Scheduled for	3/31/2006	Reduced outage risk. Line inspection to be completed by a modified duty lineman. Should proactively reduce risk to future equipment related outages.
13 Circuit ID: 26002 WEST DAMASCUS	60-02		CPI: 334
Circuit outage data analysis.	Completed	6/15/2004	Major contributors to CPI were the number of cases and SAIFI. Blooming Grove- West Damascus 69kV tripped to lockout which significantly affected SAIFI. There were many tree related outages both trimming and non-trimming related and equipment failures.
Tree trimming.	Completed	12/31/2004	Reduced outage risk. The line was last trimmed in 2000. Areas of the line were identified for hotspot trimming. The forester will complete the work.
Improve sectionalizing capability. The field engineer will re and increase sectionalizing on two poor performing single phase taps.	eview Completed	12/31/2004	This portion of the circuit is already sectionalized in excess of PPL requirements. Further addition of fusing or other protective devices may risk increasing customers outages through nuisance blowing/tripping.
Tree trimming	Completed	12/31/2004	Worst parts done already. Hot spotting completed last year
Circuit outage data analysis - WPC not on preceding qtr. lis	t Completed	6/6/2005	
Field engineer identified additional tap fusing, which will be installed as soon as possible.	e Completed	10/30/2005	Additional fuses installed to reduce number of customers experiencing outages.
Line inspection-equipment.	Completed	10/30/2005	Results sent to field engineer to complete necessary work.
A reliability preservation project (WR 212877) has been approved and will rearrange a poor performing tap; remov inaccessible part of the line, split up customers among sev taps, and add additional sectionalizing.	Scheduled for e an rerat	1/30/2006	
11/23/2005: Tree trimming.	Scheduled for	12/31/2006	
Monitor future performance.	Ongoing		

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ank Action	Status	Due/Complet	te Result
4 Circuit ID: 28102 TWIN LAKES 81-02			CPI: 334
10/10/2005: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/30/2005	
11/23/2005: Tree trimming.	Completed	2/28/2004	
11/23/2005: Monitor future performance.	Ongoing		An inspection was completed in 2004 and problems were addressed. Vegetation was a major issue that caused customer minutes lost. Vegetation related outages were due to weather primarily.
5 Circuit ID: 28801 LAKEVILLE 88-01			CPI: 332
7/13/2005: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	8/31/2005	
WR# 237040: OH repairs made as a result of line inspection	Completed	9/15/2005	Work completed to reduce customer minutes lost
Tree trimming.	Completed	10/31/2005	
Install fuse(s). WR# 242026; WR#241998; WR#241849	Completed	12/31/2005	New fuses being installed to improve SAIDI
Monitor future performance.	Ongoing		Vegetation issues caused nearly half of all the outages on this line. Weather was a significant factor for these outages. Trimming was completed on this line in 2005.
6 Circuit ID: 55001 NEWPORT 50-01			CPI: 328
Improve sectionalizing capability. Three tap fuses were installed.	Completed	12/31/2003	Reduced customer count affected by each outage.
Circuit outage data anatysis.	Completed	6/25/2004	Vehicles and an ice storm in January 2004 contributed to the CP1.
Two OCRs relocated. Low set setting on breaker changed.	Completed	8/18/2004	Reduced customer count affected by each outage. Reduce number of trips.
Tree trimming.	Completed	8/27/2004	Reduced outage risk.
Circuit outage data analysis.	Completed	12/22/2004	Area hard hit by Hurricane Ivan in the 3rd quarter.
Circuit outage data analysis.	Completed	3/18/20 05	The quarterly CPI has decreased 79% from the 3rd to the 4th quarter.
Circuit outage data analysis.	Completed	5/27/2005	CPI continues to improve. Line Maintenance Inspection of circuit was completed and only a few items were found.
Circuit outage data analysis.	Completed	8/31/2005	On 5/7/05 the CB was interrupted when load was transferred and a line loop burned open and then on 5/27/05 an OCR bypass loop burned open This is not expected to reoccur.
Circuit outage data analysis.	Completed	10/31/2005	Outage on 8/23/05 due to customer cutting a tree which fell into line.
Monitor future performance.	Ongoing		

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ank	Action	Status I	Due/Complet	e Result
7 Cir	cuit ID: 52401 GREEN PARK 24-01			CPI: 323
Circu	uit outage data analysis.	Completed	8/18/2004	A conductor loop burned opened during switching.
Circu	uit outage data analysis.	Completed	12/22/2004	Area hit by Hurricane Ivan in the 3rd quarter. Circuit is expected to drop off the list of 5% WPCs. Circuit trimmed in 2003.
Circu	uit outage data analysis.	Completed	3/18/2005	The quarterly CPI has decreased 80% from the 3rd to the 4th quarter.
	/2005: Circuit outage data analysis - WPC not on eding qtr. list.	Completed	8/31/2005	On two occasions the CB operated during load transfer to Newport and loops burned open at different locations. This is not expected to reoccur On 6/15/05 a vehicle broke a pole and an OCR near the substation operated.
Circi	uit outage data analysis.	Completed	10/31/2005	Outage on 7/7/05 due to tree - not trim related interrupted 1435 customer
Моп	itor future performance.	Ongoing		
l8 Cir	cuit ID: 45702 LINDEN 57-02			CPI: 320
	0/2005: Circuit outage data analysis - WPC not on eding qtr. list.	Completed	11/2/2005	The Linden 57-02 line was reported as having a high CPI dring the third quarter of 2005 because of the number of trouble cases. SAIFI contributed 41% to the total CPI. Most outages occurred on the seconda side. No tree outages on this circuit.
11/2	//2005: Tree trimming.	Scheduled for	12/31/2006	No tree outages on this circuit. The circuit is approximately 91 miles. 3 miles urban were trimmed in 2002, and the 88 miles rural were last trimmed in 2000. The urban section is scheduled to be trimmed in 2007, and the rural to be trimmed in 2006.
11/2	2/2005: Line inspection-equipment.	Scheduled for	3/31/2006	Line Inspection of 25-30 miles south of Susquehanna River is planned to be completed by the end of the first quarter 2006.
11/2	2/2005: Improve sectionalizing capability.	Completed	11/2/2005	The Susquehanne region have reviewed the line to determine if addition sectionalizing can be added. No need for sectionalizing on this circuit w found.
12/1	13/2005: Monitor future performance.	Ongoing		No further action is required for this circuit. The WPC team will continue monitor the circuit's performance in the future.

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Rank	Action	Status	Due/Comple	te Result
19 (Circuit ID: 46602 LARRYS CREEK 66-02	2		CPI: 319
fe p	Fircuit outage data analysis. Area planning will review easibility of constructing single phase ties with other single hase taps, in order to reduce outage time during emergencie n single phase taps.	Completed	12/31/2004	The High CPI was due partially to a vehicle accident 8/03 pole hit, and local area - high winds 11/03 causing trees to fall into line.
	0/10/2005: Circuit outage data analysis - WPC not on receding qtr. list.	Completed	11/2/2005	The major contribution to the CPI was the number of cases (60% of total CPI). Major outages occurred in the third quarter of 2005 due to trees-nor trimming related and a vehicle hit.
Т	ree trimming.	Completed	12/31/2004	The line is approximately 92 miles rural. The line was last trimmed in 2004.
1	1/2/2005: Improve sectionalizing capability.	Completed	12/31/2005	The circuit was reviewed for additional fusing. All appropriate single pha taps were fused, and no additional sectionalizing devices were required the three phase section.
1	1/2/2005; Monitor future performance.	Ongoing		PPL will continue to monitor the circuit's performance in the future. If no major outages in the fourth quarter of 2005, the circuit is expected to drop off the list after the first quarter of 2006.
20 0	Circuit ID: 23002 SAINT JOHNS 30-02			CPI: 319
(Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	8/1/2005	Main contributors to CPI were cases of trouble and SAIFI. Snow/ice storr on March 24 and 25 caused numerous outages on the line. Trees (both inadequate trimming and non-trimming related accounted for 54% of CPI total.
۱	mprove sectionalizing capability.	Completed	9/23/2005	Reduced outage risk, reset trip curves on existing OCRs
٨	Nonilor fulure performance.	Ongoing		This circuit is expected to drop off the 5% wpc list by Q2 2006.
1	0/1/2005: Improve sectionalizing capability.	Scheduled for	3/31/2006	Reduced customer count affected by each outage. Sectionalizer to be installed upon Penn Dot issuing permit.

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Rank	Action		Status ₋	Due/Complet	e Result
21 Cir	rcuit ID: 44505	HAMILTON 45-05			CPI: 317
Circ	uit outage data anatysi	S.	Completed		The Hamilton 45-5 line was reported as having a high CPI in the second and third quarters of 2004. 100% of the high CPI during the second quarter 2004 is due to a vehicle accident which occurred on 5-15-04, 18! customers experienced a 7 hr. outage. 100% of the high CPI during the third quarter of 2004 is due to hurricane IVAN, approximately 25 customers experienced outages ranging from 4 hrs to 32 hrs. (outages reported as non-tree trimming related). Also, note, per additional info. received from tree trimming manager, 150 mites of rural 45-5 line were trimmed during 2003.
11/2	2/2005: Circuit outage	data analysis.	Completed	11/2/2005	The major contribution to the CPI was mainly due to the number of cases 70 % of the total CPI). Trees-not trimming related and equipment failure were the major cause of many outages in the third quarter of 2005.
11/2	2/2005: Tree trimming.		Completed	12/31/2003	The line is approximately 164 miles long. The whole circuit was last trimmed in 2003. The next trimming schedule is in 2008 for the urban section, and in 2011 for the rural section. Hot spotting will be evaluated and performed as identified by the forestry crew.
11/2	2/2005: Line inspector	n-equipment.	In progress	3/31/2006	The line inspection was partially completed by 11/1/2005 (about 66 % of the total line). Two immediate problems were identified and fixed (bad transformer fuse cutout and bad tap switch). Additional maintenance iter to be addressed in the Q1, 2006.
11/2	2/2005: Monitor future	performance.	Ongoing		PPL will continue to monitor the circuit's performance.
22 Ci	rcuit ID: 17802	GILBERT 78-02			CPI: 314
Circ	cuit outage data analys	iS.	Completed	6/23/2004	Major contributor to CPI was the number of cases. Although the line was trimmed in 2000, there were several trimming related outages.
	e trimming. A work re- gments identified for ho	quest has been initiated for line t spot trimming	Completed	9/30/2004	
cus	vork request was initia stomer outages on a po rk is to be completed b	ted to add series fusing to decrease or performing section of line. This y October 2004.	Completed	9/30/2004	Reduced customer count affected by each outage.
line	letailed analysis of sec e. A review of the existi dtions will be performe	tionalizing will be completed on this ng protection and potential device d.	Completed	9/30/2004	
	3/2005: Circuit outage eceding atr. list.	data analysis - WPC not on	Completed	8/31/2005	
	tall fuse(s). WR# 2217 ctionalizing device	71; WR# 224357; WR#228964 for	Scheduled for	r 1/31/2006	Work indentified under SAIDI effort to reduce customer minutes lost WR 221771 and WR 224357 are completed. WR 228965 is pending.
Tre	æ trimming.		Scheduled for	r 3/30/2008	
	/22/2005: Field Engine CR's	er will review locations for additional	Scheduled for	r 1/31/2006	
Мо	onitor future performan	ce.	Ongoing		

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Status Due/Complete Result

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23 Circuit ID: 12301 LANARK 23-01			CPI: 314
Load balancing.	Completed	12/31/2003	Reduced outage duration.
Circuit outage data analysis.	Completed	6/15/2004	The number of cases is 67% of the CPI. Two areas have numerous squirrel outages.
Tree trimming.	Completed	9/1/2004	Reduced outage risk.
Replace an overloaded 3 phase OCR and replace a hydraulic OCR with an electronic OCR with telemetrics.	Completed	9/14/2004	Reduced outage duration. The overload OCR was replaced on 9/7/2004 and the electronic OCR was installed on 5/10/2004.
Line inspection-equipment.	Completed	3/28/2005	
64 Animal guards are being installed on transformers on portions of the line with animal problems.	Completed	6/20/2005	Reduced outage risk.
Single phase fuse installations.	Completed	6/20/2005	Reduced customer count affected by each outage.
OCR settings were changed to reduce momentary interruptions	Completed	6/20/2005	Reduced outage duration.
Tree trimming.	Completed	9/30/2005	Reduced outage risk. Hot spotting started in July.
Split up a long single phase tap into two taps by installing 3 spans of OH line.	Completed	10/4/2005	Reduced customer count affected by each outage. Construction completed.
Install 3 switches in southern part of circuit Fault indicators to be installed next to the new switches.	in progress	2/28/2006	The 3 switches were installed and were used during the windstorm over the weekend of January 15, 2006 to get customers back in service white repairs were being made. The fault indicators are on back order and will be installed when received.
Monitor future performance.	Ongoing		All of the above work is expected to improve the circuit's performance.
24 Circuit ID: 52402 GREEN PARK 24-02			CPI: 311
7/13/2005: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	8/31/2005	On two occasions the CB operated during load transfer to Newport and loops burned open at different locations. This is not expected to reoccur.
Circuit outage data analysis.	Completed	10/31/2005	At pole 64/18 outage due to tree - inadequate trim. Silver maples trimmed.
Monitor future performance.	Ongoing		
25 Circuit ID: 40301 TAMANEND 03-01			CPI: 308

1/9/2006: Circuit outage data analysis - WPC not on preceding Scheduled for 2/28/2006 qtr. list.

Ran	k Action	Status	Due/Complet	e Result
26	Circuit ID: 53501 ELIZABETHVILLE 35-01			CPI: 307
	Tree trimming. The entire circuit was trimmed.	Completed	11/29/2003	Reduced outage risk.
	Ten tap fuses were installed,	Completed	12/31/2003	Reduced customer count affected by each outage.
	Circuit outage data analysis	Completed	6/25/2004	80% of CPI for this circuit is due to number of cases.
	10/10/2005: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	10/31/2005	On 7/23/05 UG cable failed interrupting feeder. Cable repaired and service restored. Cable to be replaced in 2nd Q '06.
	Monitor future performance	Ongoing		
27	Circuit ID: 10108 ALLENTOWN 01-08			CPI: 303
	Circuit outage data analysis - WPC not on preceding qtr. list	Completed	5/30/2005	A submersible transformer that serves one customer failed. This is the only case of trouble for this circuit over the past 12 months.
	Monitor future performance,	Ongoing		
28	Circuit ID: 44202 POINT 42-02			CPI: 302
	10/10/2005: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/2/2005	Major contributions to the CPI were due to SAIFI (53% total CPI) and the number of trouble cases (35% or total CPI). The WPC team reviewed th outages on this line, and found that the storm in July, the underground getaway failure in May, and the vehicle his on July 21st caused long duration outages on this line.
	11/2/2005; Tree trimming.	Completed	10/31/2005	The line is 53 miles long, and it is all rural. Tree trimming work was completed on 10/31/2005 on the whole circuit.
	11/2/2005: Line inspection-equipment.	In progress	3/31/2006	The undergrown getaway cable was tested on 11/17/2005, and placed the budget to be replaced before the end of Q2, 2006. The line inspecti was partially completed in October, 2005, and will be fully completed by the end of Q1, 2006. Any identified work due to the inspection result on this circuit, will be addressed and scheduled for completion in 2006.
	11/2/2005: Monitor future performance.	Ongoing		The trimming work, which was completed in the third quarter of 2005, a the maintenance work are expected to improve the circuit's performance PPL will continue to monitor the circuit's performance.

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Ran	k Action	Status	Due/Complete	e Result
29	Circuit ID: 28402 HARTLAND 84-02			CPI: 301
	Circuit outage data analysis - WPC not on preceding qtr. list.	Completed		Main contributors to CPI were cases of trouble and SAIFI. Three separate vehicle hits accounted for 46% of the CPI total (the substation breaker tripped open each time). Snowstorm on March 23-24, 2005 was responsible for several outages as well.
	Tree trimming.	Completed	1/3/2005	Reduced outage risk.
	De-energizing sections of unused line	Completed		2 phase section of this circuit is still energized, and could be contributing to momentaries. This section of line has been de-energized and should no longer be an issue.
	Improve sectionalizing capability. Analyze installing new OCR	In progress	3/31/2006	Reduced customer count affected by each outage.
	1/9/2006: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/28/2006	
30	Circuit ID: 26602 BROOKSIDE 66-02			CPI: 298
	Line inspection-equipment. Due to the high number of animal contacts (35% of the total CPI) and equipment failures (22% of total CPI) an equipment line inspection will be performed.	Completed		Several maintenance items were identified. A WR was initiated to address these problems.
	Circuit outage data analysis.	Completed		Major contributor to CPI was the number of cases. Animal contacts made up about 35% of the total CPI.
	PPL Electric will review the process for animal guard installations to ensure that animal guards are installed for animal related OH transformer outages and new OH transformer installations.	Completed		Animal guard practices have been reviewed and troublemen in this area have been instructed to ensure animal guards are installed when and where appropriate.
	Line inspection-equipment. A helicopter patrol was performed on an inaccessible part of the line.	Completed	6/10/2005	Several broken crossarms and a downed static wire were discovered.
	Fault recorders will be installed on an inaccessible part of the line.	Completed	6/30/2005	
	Perform line maintenance identified by line inspection.	In progress	1/30/2006	
	Line being reconductored for 0.3 miles (WR# 233124)	Scheduled for	3/30/2006	
	Tree trimming. Hot Spotting being done as needed	Completed	9/30/2005	
	11/4/2005: Sectionalizer being replaced. Additional sectionalizing opportunities being considered by field engineer. Monitor future performance.	Scheduled for Ongoing		Replacement of the sectionalizer will improve reliability and decrease the number of customers experiencing an outage.

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Rank	Action	Status	Due/Complet	e Kesult
31 C	ircuit ID: 16401 MOUNT POCONO 64-01			CPI: 298
	ne line was recently thermo-visioned and repairs were made s needed.	Completed	3/31/2004	Reduced outage risk.
Ci	rcuit outage data anatysis.	Completed		Major contributor to CPI was SAIFI. Failure of 64-05 contributed to problems. The line was recently thermo-visioned and repairs were made as needed.
Ci	ircuit outage data analysis - WPC not on preceding qtr. list.	Completed	2/28/2005	
20	erform line maintenance identified by line inspection. WR 05426 was initiated to complete maintenance items found uring the inspection.	Completed	5/13/2005	
Tł	ne entire main line will be reconductored under B50921.	Completed	5/31/2005	The main three phase has been rebuilt with 477 AL_XLP conductor.
Li (t	ne inspection-equipment. A portion of the line along Rt 314 nree phase branch off main line) will be inspected.	Completed	5/31/2005	Equipment failure with galloping conductor contributed to the CPI. This portion of the line had maintenance work completed in Janaury 2005 to that galloping conductor. This line maintenance was completed to ensur no other conductor problems were present on the line.
11	1/15/2005: Tree trimming.	Completed	6/30/2005	A portion of the line was trimmed. Entire line due to be trimmed in 2008
1	1/22/2005: Coordination Study of devices of the line	Completed	11/30/2005	The results of the coordination study were normal. All devices are coordinating properly.
С	ontinue to monitor future performance.	Ongoing		
32 C	Circuit ID: 10903 COOPERSBURG 09-03			CPI: 297
С	ircuit outage data analysis.	Completed	6/15/2004	The number of cases(45%) and SAIFI(44%) are the biggest factors in the CPI.
L	oad belancing.	Completed	6/11/2004	Reduced outage risk.
M	Ionitor future performance on line.	Ongoing		
С	hanged relay setting at substation.	Completed		Completed on 10/26/04, should reduce momentary outages.
	ircuit outage data analysis. Continuing to monitor and ivestigate outages.	Ongoing	12/23/2004	
N	Ionitor future performance.	Ongoing	3/31/2005	Circuit performance improved through quarters one and two of 2004 because of relay improvements, continued improvement expected in 20
	/9/2006: Circuit outage data analysis - WPC not on preceding tr. list.	Scheduled for	r 2/28/2006	
33 (Circuit ID: 20403 ASHFIELD 04-03			CPI: 296

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1/9/2006: Circuit outage data analysis - WPC not on preceding Scheduled for 2/28/2006 qtr. list.

nk Action	Status	Due/Comple	te Result
Circuit ID: 28302 NEWFOUNDLAND 83-02	2		CPI: 295
Circuit outage data analysis.	Completed	6/15/2004	Major contributors to CPI were number of cases and SAIFI. There were several animal contacts and tree related outages during bad weather (not trimming related), but no discernable pattern was apparent. The major outages contributing to SAIFI are unlikely to recur (line de-energized to replace tap fuse, pole top fire, loop burned open). This line had an equipment inspection in January 2004.
Improve sectionalizing capability. Field engineer to review a single phase tap downstream of OCR 66629N42489 to improve sectionalizing on that tap.	Completed	11/12/2004	Field review of the poor performing section of line indicated that additional sectionalizing will not greatly improve reliability on that part of the circuit. Tap fusing in the area already adheres to PPL's policy of fusing all single phase taps.
Tree trimming.	Completed	8/30/2005	
Line inspection-equipment. Field engineer will identify targeted areas for line inspection.	Completed	12/31/2005	Field engineer determined there were no areas requiring line inspections because entire line was inspected in 2004.
Continue to monitor future performance.	Ongoing		
5 Circuit ID: 26001 WEST DAMASCUS 60-0	1		CPI: 293
10/10/2005: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/30/2005	Many of the outages were due to vegetation issues during storms. Majority of the outages were weather related.
11/22/2005: Monitor future performance.	Ongoing		
6 Circuit ID: 26702 HEMLOCK FARMS 67-(02		CPI: 291
10/10/2005: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/30/2005	A vehicle contact contributed significantly to customer minutes lost. This is not expected to occur again.
11/22/2005: Monitor future performance.	Ongoing		

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Rank	Action	Status	Due/Complet	e Result
37 Cire	cuit ID: 53602 DALMATIA 36-02			CPI: 290
Circu	uit outage data analysis - WPC not on preceding qtr. list	Completed		Area hit by Hurricane Ivan in the 3rd quarter. Circuit is expected to drop off the list of 5% WPCs. An electronic OCR was installed on the east side of the river crossing, reducing the customer count affected by each outage
Circu	uit outage data analysis.	Completed	3/18/2005	The quarterly CPI has decreased 50% from the 3rd to the 4th quarter. A motor vehicle accident contributed 13% of the customer minutes interrupted in the 4th quarter. Tree timming planned for 2006.
Circu	uit outage data analysis.	Completed		CPI continues to improve.
Circu	uit outage data analysis.	Completed		Inconclusive. Monitor future performance. Outage on 8/11/05 due to trees - not trimming related. Trees trimmed. Replacement and relocation of pole on on island in river crossing is engineered. It is a two pole structure and is to be completed when procedures are finalized to stage men, equipment and material to the island for the replacement. Date not established at this time.
Circu	uit outage data analysis.	Completed	8/31/2005	Line Maintenance Inspection found a pole requiring replacement on an island in the river crossing due to bank erosion.
Moni	iltor future performance.	Ongoing		
38 Cir	cuit ID: 59401 RICHFIELD 94-01			CPI: 288
Circu	uit outage data analysis - WPC not on preceding qtr. list.	Completed	12/22/2004	Area hard hit by Hurricane Ivan in the 3rd quarter.
Circu	uit outage data analysis.	Completed	3/18/2005	The quarterly CPI has decreased 79% from the 3rd to the 4th quarter. Circuit trimmed in 2004.
Circu	uit outage data analysis.	Completed		Line Maintenance Inspection completed in 1st quarter 2005, this ine has many inaccessible locations. Inspection identified animal guards to be installed and LAs and cutouts to be replaced.
Circu	uit outage data analysis.	Completed	8/31/2005	On 5/13/05 the crossyard tie UG cable failed and transformer fuses operated. The cable was replaced. This is not expected to reoccur. Line Maintenance Inspection identified work completed 5/2005. This line has many inaccessible locations. Installed animal guards and replaced cutouts.
Circu	uit outage data analysis.	Completed	10/31/2005	Inconclusive. Monitor future performance.
Mon	nitor future performance.	Ongoing		
39 Cir	rcuit ID: 16802 WAGNERS 68-02			CPI: 288
Circi	uit outage data anatysis.	Completed	6/23/2004	Major contributor to CPI was the number of cases. There was no conclusive pattern to the outages.
Tree	e trimming. Spot trimming	Completed	12/31/2004	Reduced outage risk. Will continue to monitor this circuit to determine if trimming was successful.
1/9/2 gtr. i	2006: Circuit outage data analysis - WPC not on preceding	Scheduled for	2/28/2006	

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Rank	Action	Status	Due/Complet	e Result
40 C	ircuit ID: 43202 MILLVILLE 32-02			CPI: 288
Cir	rcuit outage data analysis.	Completed	12/31/2004	The Millville 32-2 line was reported as having a high CPI during the 1st and 2nd quarter of 2004. During the Q1 of 2004, on 2/6/2004, approximately 254 customers experienced a 1 hr. outage, nothing found was reported. During the Q2 of 2004, 82 customers experienced approximately 4 hr. outage due to a vehicle accident and on 5/10/2004, 11 customers experienced a 8 hr. outage due to equipment failure. Major outages occurred in the Q3 of 2004 because of hurricane IVAN on 9/18/05 where 22 customers experienced long duration outage because of flood and closed roads. The snow storm in the Q1 of 2005 also caused long duration outages on 3/23/2005. The hurricane IVAN and the snow storm were the major cause for long outages on this circuit.
ас	nprove sectionalizing capability. Review line to determine if dditional sectionalizing can be added to minimize the number i customers affected by emergency outages.	Completed	12/30/2004	The 32-2 line was reviewed for locations to add/install additional sectionalizing devices, none were found. A partial inspection on 3 phase line was done in the winter of 2003, and nothing major found on this circuit. The crew will spot the problem area on this circuit by plotting the outages on the map. Installing additional OCRs will be looked at as a part of SAIFI initiative study.
Tr	ree trimming.	Completed	12/30/2005	The line is approximately 175 miles long. The 9.2 miles urban were trimmed in 2004. The 165 miles rural section is in the budget to be trimmed in 2006. The majority of this line is in inaccessible area. The line was reviewed by the region forestry staff. Some hot spot trimmings were done in Apr/May, 2005, and were completed on the whole circuit by 12/30/2005.
	0/10/2005: Circuit outage data analysis - WPC not on receding qtr. list.	Completed	11/2/2005	The major contribution to the CPI was mainly due to the number of cases (58% of the total CPI). A storm on 7/13 and 7/14 caused 8 cases of trouble in the third quarter of 2005. Trees-not trimming related were the cause of major outages on this circuit.
1.	1/2/2005: Line inspection-equipment.	Completed	8/30/2005	A line maintenace inspection patrol was completed in August 2005. Nine work requests were initiated as a result of the inspection. Seven of those work requests were completed in 2005. Two work requests remain to be completed in the first quarter 2006. One of the work requests requires facility/customer interruption coordination, and the second focation requires a special 75 foot bucket.
1	1/2/2005: Improve sectionalizing capability.	Completed	3/31/2005	The crew reviewed the line for sectionalizing in the first quarter of 2005. A solid blade and additional single phase fuses were installed by the end of Q1, 2005. No additional work is required.
1	1/2/2005: Monitor future performance.	Ongoing		PPL will continue to monitor the circuit's performance in the future.

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Rank	Action	Status	Due/Complet	te Result
41 Cir	cuit ID: 42201 SHENANDOAH 22-01		-	CPI: 287
Line	inspection-equipment.	Completed	5/31/2005	Reduced outage risk. 10-12 minor maintenance items were identified.
Circu	uit outage data analysis - WPC not on preceding qtr. list.	Completed	6/1/2005	Main contributor to CPI was SAIFI (58%). Heavy snowstorm in March caused several outages. While the storm in January was not included, it weakend a lot of the trees which came down in March. Trees (both inadequate trimming and non-trimming related) accounted for 43% of the CPI total.
Tree	trimming.	Completed	6/29/2005	Danger trees were removed in a problem section of the line.
Insta	all fuse(s).	Completed	8/15/2005	Field instatling one tap fuse before the first OCR and one after.
Impr	ove sectionalizing capability.	Completed	9/16/2005	Field is replacing an air break switch with an OCR.
Моп	itor future performance.	Ongoing		Performance is improving. March snowstorm was the main contributing factor.
42 Cir	cuit ID: 18502 CANADENSIS 85-02			CPI: 277
Circu	uit outage data analysis - WPC not on preceding qtr. list.	Completed	11/11/2004	There were mostly tree related outages on this circuit
lmpr	rove sectionalizing capability.	Completed	11/16/2004	Additional fusing was added to a poor performing section of the line.
Tree	trimming Hotspot trimming completed	Completed	12/1/2004	Reduced outage risk.
Моп	itor future performance.	Ongoing		
1/9/2 qtr. 1	2006: Circuit outage data analysis - WPC not on preceding list.	Scheduled for	2/28/2006	
43 Cir	cuit ID: 11001 EAST GREENVILLE 10-	01		CPI: 277
Circ	uit outage data analysis. Attempting to locate trouble spots.	Completed	6/11/2004	Cases are 55% of the circuit's performance problems. After detailed review, there are still no specific known problems.
Line	inspection-vegetation. Trouble feeders inspected for trees	Completed	10/14/2004	Reduced outage risk. No significant performance issues.
Prot	ection Scheme re-evaluated	Completed	10/18/2004	Reduced customer count affected by each outage. This should reduce customer outage exposure.
Tree	e trimming.	Completed	9/30/2005	Reduced outage risk.
Impr	rove sectionalizing capability.	In progress	1/31/2006	Install two sets of disconnect switches and fault indicators in the norther portion of the circuit to provide for sectionalizing, possible transfer of load to the Macungie 27-1 line, and to help reduce restoration time.
	rove sectionalizing capability. Additional fuses will be ed as well.	in progress	6/30/2006	Project being developed to resectionalize trouble spots, and add better fusing scheme to limit customer exposure. Inaccessible portion of the limin will be refed from a new single phase section. Currently being develope to be placed in service as soon as possible.

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Ran	k Action	Status I	Due/Complet	te Result
44	Circuit ID: 64802 MOUNT NEBO 48-02			CPI: 273
	Improve sectionalizing capability.	Scheduled for	1/31/2006	Reduced customer count affected by each outage. Work requests have been initiated to install 1 new single phase OCRs and 6 slot fuses. This work has been designed and is scheduled to be completed by 1/31/06.
	Circuit outage data analysis.	Completed	12/15/2004	Pattern of tree related outages most of which were caused by trees outside the right-of-way.
	Install fault indicators to locate source of outages;	Completed	7/1/2005	Field identified a section of inaccessible circuit which contributed to many of the outages. Installation of the fault indicators was not required. These outages were primarily caused by trees. Recent tree trimming on this circuit is likely to reduce outages in this area.
	Tree trimming	Completed	7/1/2005	Tree trimming of the entire circuit is expected to reduce outage risk.
	Evaluate potential ties.	Completed	9/26/2005	Four different potential ties to this circuit were evaluated. All four were found to be cost prohibitive. The expected benefit of the tie tines did not exceed the excessive costs.
	Improve sectionalizing capability.	Completed	12/31/2005	Reduced customer count affected by each outage. Work requests have been initiated to install 1 new single phase OCRs and 2 slot fuses. This work has been completed.
	Monitor future performance.	Ongoing		
45	Circuit ID: 17801 GILBERT 78-01			CPI: 270
	10/27/2005: Circuit outage data analysis - WPC not on preceding gtr. list.	Completed	11/30/20/ S	
	11/22/2005: Tree trimming. Hot spotting completed. Entire circuit scheduled to be trimmed by the end of 2006.	Scheduled for	12/3 1/2006	
	11/22/2005: Install fuse(s).	Completed	11/30/2005	Aduitional fuses installed on the line to reduce customerminutes lost.

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Ran	k Action	Status	Due/Complet	e Result
46	Circuit ID: 26401 INDIAN ORCHARD 64-	D1		CPI: 270
	Circuit outage data analysis.	Completed	6/23/2004	Major contributors to CPI were the number of cases and SAIFI. Blooming Grove - West Damascus 69kV tripped to lockout contributing greatly to SAIFI. An OCR failed and is not likely to recur. Many tree related outages both trimming and non-trimming related and animal contacts. Line was trimmed in September 2003 so hotspotting the line will be ineffective.
	A detailed analysis of sectionalizing will be completed on this line. A review of the existing protection and potential device additions will be performed.	Completed	6/25/2004	Three single phase taps were identified as requiring further sectionalizing and possibly an additional feed from the main line.
	Improve sectionalizing capability. Areas for further sectionalizing have been identified. Field engineer will locate additional sectionalizing devices.	Completed	12/31/2005	
	10/10/2005: Circuit outage data analysis - WPC not on preceding qtr, list	Completed	11/30/2005	
	11/23/2005: Underground failures were tested and replacements will be made.	Scheduled for	12/31/2006	
	Monitor future performance.	Ongoing		
47	Circuit ID: 41901 REED 19-01			CPI: 270
	1/9/2006: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/28/2006	
48	Circuit ID: 67703 WERNERSVILLE 77-03			CPI: 268
	1/9/2006: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	r 2/28/2006	
49	Circuit ID: 16801 WAGNERS 68-01			CPI: 263
	10/10/2005: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/30/2005	The majority of problems occurred in the second quarter. Many storm- related vegetation issues and vehicle hits contributed to customer minutes lost. Provided the vehicle incidents do not occur again, the performance of the circuit should improve.
	11/22/2005: Monitor future performance. 11/22/2005:	Ongoing		

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ank Action		Due/Comple	te Result
0 Circuit ID: 11506 FREEMANSBURG 15-06			CPI: 261
Circuit outage data analysis.	Completed	6/11/2004	Circuit is a rural feeder, many single phase taps have a weak textile strength and are more susceptible to falling branches. Other equipment related issues are suspected.
Line inspection-equipment.	Completed	6/30/2004	Reduced outage risk. Several problems were found such as: conductor off insulator, deteriorated crossarms, split pole tops, trees growing into lines, etc. A work request was written to correct these problems.
Repairs to the line based on the line inspection.	Completed	8/11/2004	Reduced outage risk.
Tree trimming. A section of line was located that required trimming.	Completed	10/1/2004	Reduced outage risk.
Tree trimming. Spol trimming completed 12/17/04 on trouble areas.	Completed	12/23/2004	Reduced outage risk.
Replaced Tap fuse that was found to be cracked and damaged	Completed	12/23/2004	Reduced outage risk. This work is completed and should result in lower momentary count, as well as lessen number of customers taken out at a time.
Tree trimming.	Completed	1/31/2005	Reduced outage risk. Hot spotting was completed in January of 2005
Monitor future performance. Performance appears to have improved and monitoring will continue.	Origoing		Trimming and other minor work should begin to show performance improvements.
1 Circuit ID: 28601 BLYTHEBURN 86-01			CPI: 257
12/8/2005: Install sectionalizers. Hazelton office investigating fusing of long single phase taps.	in progress		Should reduce customer count affected by each outage.
10/10/2005: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/21/2005	March Snowstorm is the main contributor this circuit performance. Only one signifigant outage since.
12/8/2005. Line inspection-equipment	Scheduled for	3/31/2006	Reduced outage risk. Line Maintenance Inspection should proactively prevent equipment failures.

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Rank	Action	Status	Due/Comple	te Result
52 C	Circuit ID: 46903 MONTGOMERY 69-03			CPI: 256
	0/10/2005: Circuit outage data analysis - WPC not on receding qtr. list.	Completed	11/2/2005	The high CPI on this circuit was mainly due to SAIFI (71% of total CPI). Most outages on this circuit were due to animals and equipment failure. No major tree outages on this circuit.
1	1/2/2005. Tree trimming.	Scheduled for	r 12/31/2006	The line is approximately 43 miles. The 9.7 urban section was last trimmed in 2002, and will be trimmed again in 2006. The 33 miles rural section was last trimmed in 2002, and will be trimmed in 2009. No need for hot spotting on this circuit.
1	1/2/2005 Line inspection-equipment.	Completed	12/31/2005	The line was inspected by the end of 2005. No identified work by the inspection was found. The Field Engineer reviewed the line to determine if animal guards are needed at certain locations. No locations were identified by the review
1	1/2/2005: Install fuse(s).	Scheduled for	r 3/31/2006	The Field Engineer will inspect the line for additional fuses by the end of the Q1, 2006. Work requests will be initiated for any identified works by the inspection, and will be scheduled for completion by the end of 2006.
1	1/2/2005: Monitor future performance.	Ongoing		PPL will continue to monitor this circuit's performance in the future.
53 C	Circuit ID: 21901 HUMBOLDT 19-01			CPI: 256
	/9/2006: Circuit outage data analysis - WPC not on preceding tr. list.	Scheduled for	r 2/28/2006	

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Rank Action	Status	Due/Complet	e Result
54 Circuit ID: 22002 BOHEMIA 20-02			CPI: 256
Circuit outage data analysis.	Completed	6/15/2004	Major contributors to CPI were the number of cases and SAIFI. Blooming Grove-West Damascus 69kV tripped to tockout due to a crossarm failure which is not likely to recur. Other CPI contributors were tree related (not trimming related, the line was trimmed in 2000) outages during bad weather and equipment failures but there was no discernable pattern fo these events. A failure of the line CB also contributed to CPI. The CB wa inspected and repairs were made as needed.
Circuit outage data analysis.	Completed	8/25/2004	A pattern of tree related outages was discovered on a long single phase tap.
Tree trimming. Hot Spot trimming for a poor performing single phase tap identified in Q2 circuit analysis.	Completed	12/31/2004	Reduced outage risk.
Improve sectionalizing capability. Field engineer to review sectionalizing on newly identified poor performing single phase tap.	Completed	12/31/2004	This portion of the circuit is already sectionalized in excess of PPL requirements. Further addition of fusing or other protective devices may risk increasing customers outages through nuisance blowing/tripping.
7/13/2005: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	8/31/2005	
install fuse(s). WR# 225454; WR# 226162; WR# 231128: Install three fuses at 74024N48848	Completed	8/31/2005	Sectionalizing completed to reduce customer minutes lost
11/23/2005: Tree trimming. Hot spotting various locations as needed	Completed	8/30/2005	Over 70% of the customer outages were vegetation related. Trimming was completed on the line in 2000 and hotspotted was done in 2005. Vegetation issues occurred during adverse weather conditions.
Monitor future performance.	Ongoing		

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(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.

The following table shows a breakdown of service interruption causes for the 12 months ended at the current quarter. The top three causes (Equipment Failure, Animals and Trees – Not Trimming Related), based on the percent of cases, are highlighted in the table. Service interruption definitions are provided in Appendix B. PPL Electric's maintenance programs focus on corrective actions to address controllable interruptions (e.g., trees and equipment failure).

Cause Description	Trouble Cases ⁶	Percent of Trouble Cases	Customer Interruptions ⁷	Percent of Customer Interruptions	Customer Minutes	Percent of Customer Minutes
Improper Design	1	0.01%	1	0.00%	53	0.0%
Improper Installation		0.00%		0.00%	,	0.0%
Improper Operation	1	0.01%	686	0.05%	4,802	0.0%
Trees - Inadequate Trimming	1,267	6.78%	93,036	7.15%	17,384,663	10.7%
Trees - Not Trimming Related	2,855	15.27%	248,097	19.06%	46,720,941	28.7%
Animals	4,173	22.32%	75,413	5.79%	6,246,399	3.8%
Vehicles	829	4.43%	156,002	11.99%	18,403,225	11.3%
Contact/Dig-in	212	1.13%	16,515	1.27%	1,419,017	0.9%
Equipment Failure	5,271	28.19%	454,414	34.91%	47,964,696	29.5%
Forced Prearranged	627	3.35%	46,659	3.58%	2,657,238	1.6%
Other - Controllable	272	1.45%	23,940	1.84%	1,660,498	1.0%
Nothing Found	1,925	10.30%	95,966	7.37%	9,120,698	5.6%
Other - Public	83	0.44%	13,315	1.02%	1,482,454	0.9%
Other - Non-Controllable	1,181	6.32%	77,579	5.96%	9,469,904	5.8%
Total	18,697	100.00%	1,301,623	100%	162,534,588	100.0%

⁶ Trouble cases are the number of sustained customer service interruptions (i.e., service outages).

⁷ The data reflects the number of customers interrupted for each interruption event summed for all events, also known as customer interruptions. If a customer is affected by three separate cases of trouble, that customer represents three customer interruptions, but only one customer interrupted.

Analysis of causes contributing to the majority of service interruptions:

Weather Conditions: PPL Electric records weather conditions, such as wind or lightning, as contributing factors to service interruptions, but does not code them as direct interruption causes. Therefore, some fluctuations in cause categories, especially tree- and equipment-related causes, are attributable to weather variations.

Trees – Inadequate Trimming: In 2004, PPL Electric adopted an improved treetrimming specification and shortened maintenance trimming cycles to reverse a gradual increase in service interruptions attributed to inadequate trimming. The shortened cycle times took effect on January 1, 2005. PPL Electric implemented the revised specification in the first quarter of 2005. PPL Electric is monitoring the effectiveness of these changes.

Trees – **Not Trimming Related:** Although their effect on reliability is significant, tree outages not related to trimming are caused by trees falling from outside of PPL Electric's rights-of-way, and generally are not controllable.

Animals: Animals account for more than 22% of PPL Electric's cases of trouble. Although this represents a significant number of cases, the effect on SAIFI and CAIDI is small because over 91% of the number of cases of trouble is associated with individual distribution transformers. However, when animal contacts affect substation equipment, the effect is widespread and potentially can interrupt thousands of customers on multiple circuits.

PPL Electric installs squirrel guards on new installations and in any existing location that has been affected by multiple animal-related interruptions.

Vehicles: Although vehicles cause a small percentage of the number of cases of trouble, they account for a large percentage of customer interruptions and customer minutes, because main distribution lines generally are located along major thoroughfares with higher traffic densities. In addition, vehicle-related cases often result in extended repair times to replace broken poles. Service interruptions due to vehicles are on the rise as a result of an increasing number of drivers and vehicles on the road. PPL Electric has a program to identify and relocate poles that are subject to multiple vehicle hits.

Equipment Failure: Equipment failure is one of the largest single contributors to the number of cases of trouble, customer interruptions and customer minutes. However, approximately 35% of the cases of trouble, 38% of the customer interruptions and 39% of the customer minutes attributed to equipment failure are weather-related and, as such, are not considered to be indicators of equipment condition or performance.

Nothing Found: This description is recorded when the responding crew can find no cause for the interruption. That is, when there is no evidence of equipment failure, damage, or contact after a line patrol is completed. For example, during heavy thunderstorms, when a line fuse blows or a single-phase OCR locks open and when closed for test, the fuse holds, or the OCR remains closed, and a patrol reveals nothing.

Appendix A

PPL Electric Utilities Corporation Worst Performing Circuit Definition

PPL Electric uses a Circuit Performance Index (CPI) to define the worst performing circuits on its system. The CPI covers over 1,000 feeders across the PPL Electric service area.

The CPI is derived using the following statistics and weighting factors:

- Cases of Trouble⁸ 33%
- CAIDI 30%
- SAIFI 37%

Major Events, momentary interruptions, and planned prearranged jobs are excluded.

The CPI values are obtained by multiplying the individual feeder statistics by coefficients based on the 5-year period, 1996-2000. Average values over this period were:

- Cases of Trouble 16.6 per feeder per year
- CAIDI 140 minutes
- SAIFI 0.834 per customer per year

A hypothetical feeder with Cases of Trouble, CAIDI, and SAIFI values equal to the 5-year averages would have a CPI value of 100. Any variations in the values of Cases of Trouble, CAIDI, or SAIFI would affect the CPI values in accordance with the weighting factors.

⁸ Cases of trouble are the number of sustained customer service interruptions.

<u>Appendix B</u>

PPL Electric Utilities Corporation Service Interruption Definitions

<u>**Trouble Definitions:**</u> After field investigations and repairs are complete, PPL Electric linemen report the cause of each case of trouble. This information is electronically recorded as a "cause code" number when the job record is closed. PPL Electric cause codes are subdivided into three general classifications: Controllable, Non-Controllable and Public. The definitions of the cause codes are:

10 – Improper Design	Controllable	• When an employee or agent of PPL Electric is responsible for an error of commission or omission in the engineering or design of the distribution system. (Facility Records personnel use only)
11 – Improper Installation	Controllable	• When an employee or agent of PPL Electric is responsible for an error of commission or omission in the construction or installation of the distribution system. (Facility Records personnel use only)
12 – Improper Operation	Controllable	• When an employee or agent of PPL Electric is responsible for an error of commission or omission in the operation or maintenance of the distribution system. (Facility Records personnel use only)
30 – Trees – Inadequate Trimming	Controllable	• Outages resulting from the lack of adequate tree trimming (within the Right of Way).
35 – Trees – Not Trim Related	Non- Controllable	• Outages due to trees, but not related to lack of or proper maintenance tree trimming. This includes trees falling into PPL Electric facilities from outside the right-of-way, danger timber blown into facilities, and trees or limbs cut or felled into facilities by a non-employee.
40 – Animals	Controllable	• Any outage caused by an animal directly or indirectly coming in contact with PPL Electric facilities. This includes birds, squirrels, raccoons, snakes, cows, etc.
41 – Vehicles	Public	• When cars, trucks or other types of vehicles or their cargoes strike facilities causing an interruption.
51 – Contact/Dig-in	Public	• When work in the vicinity of energized overhead facilities results in interruptions due to accidental contact by cranes, shovels, TV antennas, construction equipment (lumber, siding, ladders, scaffolding, roofing, etc.).
		• When contact is made by a non-employee with an underground facility causing interruption.

60 – Equipment Failure	Controllable	• Outages resulting from equipment failures caused by corrosion or contamination from build-up of materials, such as cement dust or other pollutants.
		• Outages resulting from a component wearing out due to age or exposure, including fuse tearing or breaking.
		• Outages resulting from a component or substance comprising a piece of equipment failing to perform its intended function.
		• Outages resulting from a failure that appears to be the result of a manufacturer's defect or cannot be described by any other code indicating the specific type of failure.
80 – Scheduled Prearranged ⁹	Controllable	• Interruptions under the control of a PPL Electric switchman or direction of a PPL Electric System Operator for the purpose of performing <u>scheduled</u> maintenance, repairs, and capacity replacements for the safety of personnel and the protection of equipment.
		• Includes requests from customers for interruption of PPL Electric facilities.
85 – Forced Prearranged	Non- Controllable	• Interruptions under the control of a PPL Electric switchman or direction of a PPL Electric System Operator for the purpose of dropping load or isolating facilities upon request during emergency situations.
		• Interruptions which cannot be postponed or scheduled for a later time, and include situations like load curtailment during system emergencies, and requests of civil authorities such as fire departments, police departments, civil defense, etc. for interruption of PPL Electric facilities.

⁹ Interruptions under the control of a PPL Electric switchman or the direction of a PPL Electric System Operator for the purpose of isolating damaged facilities to make repairs are reported using the initial cause of the damage when the interruption is taken <u>immediately</u>, but are reported as scheduled prearranged when the interruption is <u>postponed</u>.

<u>Appendix B</u>

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90 – Other – Controllable (Lineman provides explanation)	Controllable	• Interruptions caused by phase to phase or phase to neutral contacts, resulting from sleet or ice dropping off conductors, galloping conductors, or any other phase to phase or phase to neutral contact where weather is a factor.
		• Interruptions resulting from excessive load that cause that facility to fail.
		• When restoration of service to a facility, which had been interrupted for repairs or other reasons, causes an additional interruption to another facility which had not been involved in the initial interruptions.
96 – Nothing Found	Non-	• When no cause for the interruption can be found.
	Controllable	• When there is no evidence of equipment failure, damage, or contact after line patrol is completed. This could be the case during a period of heavy T&L when a line fuse blows or a single phase OCR locks open.
		• When closed for test, the fuse holds or the OCR remains closed. A patrol of the tap reveals nothing.
98 – Other Public (Lineman provides explanation)	Public	• All outages resulting from gunfire, civil disorder, objects thrown, or any other act intentionally committed for the purpose of disrupting service or damaging company facilities.
99 – Other – Non- Controllable (Lineman provides explanation)	Non- Controllable	• Any outage occurring because of a fire, flood, or a situation that develops as a result of a fire or flood. Do not use when facilities are de-energized at the request of civil authorities.
		• When an interruption is caused by objects other than trees, such as kites, balls, model airplanes, roofing material, and fences, being accidentally blown or thrown into overhead facilities.
		• All interruptions caused by contact of energized equipment with facilities of other attached companies or by trouble on customer owned equipment.

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<u>Appendix C</u>

PPL Electric Utilities Corporation Job Descriptions

Transmission and Distribution

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Helper	• Performs manual labor at any work areas containing non-exposed energized electrical equipment.
	• This position can perform work requiring a limited degree of skill provided that the individual has demonstrated the ability.
Lineman	• Works by himself or as part of a crew on the maintenance, operation, and construction activities of the transmission and distribution systems associated with but not limited to PPL Electric facilities.
	• This position can perform work requiring a moderate to high degree of skill provided the individual has demonstrated the ability.
Journeyman Lineman	• Works by himself or as part of a crew on the maintenance, operation, and construction activities of the transmission and distribution systems associated with but not limited to PPL Electric facilities.
	• Under limited supervision, performs and is responsible for work involving the highest degree of skill provided the individual has demonstrated the ability.
Lineman Leader	• Responsible for completing assigned work by directing one or multiple groups of employees involved in the maintenance, operation, and construction activities of the transmission and distribution systems associated with but not limited to PPL Electric facilities.
	• Engage in and perform work along with providing the necessary leadership, all-around knowledge, initiative, judgment, and experience to produce a quality job.
	• Performs all the direct duties of the Journeyman Lineman when not acting as a Lineman Leader.
Troubleman	• Investigates and resolves trouble calls, voltage abnormalities on transmission and distribution systems associated with but not limited to PPL Electric facilities.

<u>Appendix C</u>

Electrical

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Helper	• Performs manual labor at any work areas containing non-exposed
	energized electrical equipment.
	• This position can perform work requiring a limited degree of skill provided that the individual has demonstrated the ability.
Electrician	• Performs and is responsible for work of a moderate to high degree of skill in various types of construction and maintenance work associated with but not limited to PPL Electric facilities such as:
	 Installation and repair work at substations, underground distribution, LTN, and underground transmission facilities.
	• Performs excavating, control wiring, installing of cable and conduit.
	• Uses standard electric test equipment to perform simple troubleshooting related to Field Services electrical work.
Journeyman Electrician	• Under limited supervision, performs and is responsible for work involving the highest degree of skill in various types of construction and maintenance work associated with but not limited to PPL Electric facilities such as:
	 Installation and repair work at substations, underground distribution, LTN, and underground transmission facilities.
	• Uses microprocessor based equipment for troubleshooting and revising relay logic and its control systems related to the Field Services electrical discipline.
Electrician Leader	• Responsible for completing assigned work by directing one or multiple groups of employees involved in the construction and maintenance activities of the transmission and distribution systems associated with but not limited to PPL Electric facilities.
	• Engage in and perform work along with providing the necessary leadership, all-around knowledge, initiative, judgment, and experience to produce a quality job.
	• Performs all direct duties of the Journeyman Electrician when not acting as a leader.





January 31, 2006

RECEIVED

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PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU

Mr. James J. McNulty, Secretary Pennsylvania Public Utility Commission Commonwealth Keystone Building 400 North Street Harrisburg, PA 17120

SENT VIA FEDERAL EXPRESS

Dear Secretary McNulty:

RE: Quarterly Electric System Reliability Report 12 Months Ending December 31, 2005

Pursuant to the Commission's Final Rulemaking Order amending Electric Service Reliability Regulations (52 PA. Code §§57.191 - 57.197) at Docket No. L-00030161, UGI Utilities, Inc. -Electric Division ("UGI") hereby files an original and six copies of its Quarterly System Reliability Report. This report contains SAIDI, SAIFI, and CAIDI results on a 12 month rolling basis for the period ending December 31, 2005, as well as the raw data utilized in the development of those results. The actual statistics continue to be favorable to both the benchmark and standard adopted for UGI. An extended period of relatively storm-free weather has been a contributing factor in the results noted. Also included is a breakdown of outages by cause for the 12 months ending December 31, 2005.

Any questions related to the attached report should be directed to Ms. Abigail J. Hemmerich at (610) 796-3431.

Please acknowledge receipt of this filing by date stamping the enclosed copy of this letter and returning it in the enclosed stamped, self-addressed envelope.

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Sincerely,

Robert R. Stoyko Vice President - Electric Division Attachment



c: VIA FEDERAL EXPRESS

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Irwin A. Popowsky Office of Consumer Advocate 555 Walnut St. 5th Floor, Forum Place Harrisburg, PA 19101 - 1921

William R. Lloyd Office of Small Business Advocate Suite 1102, Commerce Bldg. 300 North Second St. Harrisburg, PA 17101

Thomas E. Sheets Bureau of Audits Pennsylvania Public Utility Commission Commonwealth Keystone Bldg. 3rd Floor, F East Harrisburg, PA 17101

RECEIVED



JAN 3 1 2006

PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU

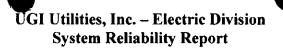
UGI Utilities, Inc. – Electric Division System Reliability Report: Quarterly Update

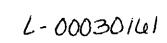




February 1, 2006

6-000 30161





§ 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.

No major events occurred during the preceding quarter.

§ 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.

The reliability results for UGI's service area for the 12 month period ending December 31, 2005 are as follows:

	SAIFI	SAIDI	CAIDI	
Results	0.64	76	119	
Benchmark	0.83	140	169	
Standard	1.12	256	228	

Note: SAIFI – System Average Interruption Frequency Index SAIDI – System Average Interruption Duration Index CAIDI – Customer Average Interruption Duration Index

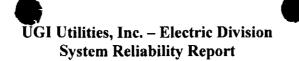
While the results for each of the three reliability indices remain well below their respective standard and benchmark it is important to point out that favorable weather conditions over the past 12 months have contributed significantly to these results.

SAIFI

An increase in lightening, tree damage, and motor vehicle accidents affecting a greater number of customers during the last quarter of CY2005 contributed to the slight increase in the SAIFI index as compared to the last quarter of CY2004. The above result is still below the standard and benchmark levels adopted for UGI.

SAIDI

The SAIDI value for the 12 months ending December 2005 is 76. This result is unchanged from the previous reporting period, tracking below UGI's benchmark level of 140.



CAIDI

The CAIDI result of 119 shows a 6% improvement for the 12 month reporting period ending December 2005. While the total number of customers interrupted increased slightly from the prior reporting period, UGI's restoration of service time improved. There was a 3% reduction in total minutes interrupted per total number of incidences compared to last quarter's system reliability report data.

UGI Utilities, Inc - Electric Division System Reliability - Raw Data January 2005 - December 2005

§ 57.195(e)(2) - Rolling 12-month reliability index values (SAIFI, CAIDI, SAIDI) 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.

	Raw Data				
	SI	TCI	TCB ¹	ТМСІ	
January-05	44	7,931	61,975	506,291	
February-05	19	648	61,936	72,894	
March-05	58	2,505	61,956	527,916	
April-05	29	1,581	61,856	248,097	
May-05	27	374	61,828	43,066	
June-05	77	1,953	61,748	343,717	
July-05	62	4,681	61,720	837,628	
August-05	51	4,575	61,952	485,081	
September-05	37	2,926	61,743	308,140	
October-05	45	5,703	61,787	524,327	
November-05	63	6,240	61,827	717,080	
December-05	33	562	61,876	93,771	
TOTAL	545	39,679	61,850	4,708,008	

SI: Sustained Interruptions

TCI: Total Customers Interrupted

TCB: Total Customers

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TMCI: Total Customer Minutes Interrupted

TCB¹ Total Customers Total is an average for the 12 months.

Note: There were no major events that were excluded from the numbers used in calculating the indices.

UGI Utilities, Inc - Electric Division System Reliability - Outage by Cause Analysis January 2005 - December 2005

§ 57.195(e)(5) - Rolling 12-month breakdown and analysis of outage causes during the preceding guarter, 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.

Outage Cause	% Of Total Incidents	Number of Interruptions	Customers Interrupted	Minutes Interrupted
Animal	7.89%	43	1,275	106,707
Construction Error	0.37%	2	921	104,992
Customer Problem	1.28%	7	10	1,049
Equipment Failure	33,94%	185	11,407	726,150
Lightning	8.62%	47	4,593	635,404
Motor Vehicle	6.24%	34	3,714	405,282
Other	0.73%	4	30	2,540
Public	2.94%	16	635	79,005
Structure Fire	0.92%	5	615	20,322
Trees	31.01%	169	15,527	2,482,919
Unknown	3.85%	21	343	57,342
Weather/Ice	0.55%	3	29	6,078
Weather/Wind	1.65%	9	580	80,218
	100.00%	545	39,679	4,708,008

Proposed Solutions to Identified Problems:

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As reported last quarter, a significant portion of equipment failures have resulted from a manufacturing defect in a distribution-type fuse cutout utilized on the UGI system. A program has been implemented to identify and replace these defective parts. Approximately one third of the replacements are now complete.



WELLSBOROUGH ELECTRIC COMPANY

QUARTERLY RELIABILITY REPORT 57.195 REPORTING REQUIREMENTS

Fourth Quarter July thru September 2005

SUBMITTED BY

DOCUMENT

ROBERT S. McCARTHY VICE-PRESIDENT, ENGINEERING AND OPERATIONS 570-724-3516 <u>bobbym@ctenterprises.org</u>



JAN 8 1 2006

PA PUBLIC UTILITY COMMISSION GECRETARY'S BUREAU



57.195 Reporting Requirements

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Section (e) Item (2)

Rolling 12-Month reliability index Values (SAIFI,CAIDI,SAIDI) 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.

WELLSBORO ELECTRIC COMPANY

ROLLING TWELVE MONTH INTERRUPTION INDEXS

Fourth Quarter of 2005

SAIDI	SAIFI	CAIDI
462	3.2	142

ROLLING TWELVE MONTH STANDARD AS ESTABLISHED BY THE PUC

SAIDI	SAIFI	CAIDI
278	1.66	167

57.195 Reporting Requirements

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Section (e) Item (2)

Wellsboro Elect	ric Company	Reliability Index		SAIDI
MONTH	TOTAL CUST MI	NUTES	# CUSTO	IERS SERVED
Jan-05	588885		5849	
Feb-05	2449.2		5850	
March-05	12511.8		5850	
April-05	55207.2		5869	
May-05	47809.8		5877	
June-05	173671.2		5874	
July-05	52243.2		5883	
August-05	40179.6		5899	
September-05	367795.8		5894	
October-05	21910.8		5886	
November-05	18953.4		5889	
December-05	1333887		5903	
	2715504		70523	
		Average # Customers	Served	5876.917

Rolling 12 Month Average SAIDI Index

462.0627

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WELLSBORO ELECTRIC COMPANY

Reliability Index SAIFI

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Month	# of Customers - Interrupted	# of Cust Served
Jan-05	5670	5849
Feb-05	42	5850
March-05	127	5850
April-05	299	5869
May-05	179	5877
June-05	1245	5874
July-05	493	5883
August-05	644	5899
Sept-05	4117	5894
Oct-05	191	5886
Nov-05	204	5889
Dec-05	5864	5903
		70523
	19075	5876.9167 Avg # of Customers

SAIFI INDEX 3.24575

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Wellsboro Electric Company		Reliability Index	CAIDI
Month	Total Customer Mins # of Customers Inf		errupted
Jan-05	588885	5670	
Feb-05	2449.2	42	
March-05	12511.8	127	
April-05	55207.2	299	
May-05	47809.8	179	
June-05	173671.2	1245	
July-05	52243.2	493	
August-05	40179.6	644	
Sept-05	367795.8	4117	
Oct-05	21910.8	191	
Nov-05	18953.4	204	
Dec-05	1333887	5864	
	2715504	19075	
CAIDI INDEX	142.3593		

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57.195 Reporting Requirements Section (e) Item (1)

A decription of each major event that occurred during the preceding quarter including the time and duration of the event, the numer 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.

Date	Time of Event	Duration of Event	# Cust Affected Affected	# Customer Hours	Cause
10/23/2005	10:19 AM	1 hr 28 min	1866	2736.8	Animal Contact in Substation
11/9/2005	6:27 PM	2 hr 30 min	1336	3340	Severe Weather Event
11/28/2005	8:25 PM	15 hr 10 Min	3193	4009.4	Severe Weather Event
12/3/2005	4:32 AM	3 hr 37 min	5804	22180.95	Loss Power Supply *
Exclusion Filed o	n 12-9-05, Denied by	Commission on 12-23	05, Appeal Filed by We	llsboro on 1-6-06	

Decision pending, outage numbers included in fourth quarter report

The outage of 10-23-05, Animal contact in Substation due to this outage, the breaker has been changed and animal guards have been added to both load side and source side bushing on the new recloser and insulated wire installed from Substation busbar to the recloser in an attempt to prevent future animal contact.

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

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Outages from Oct - D	ec, 2005			
Outage	Number of	Number	Customer	Percentage
Cause	Customers	of	Minutes	of Outages
	Affected	Outages		
Decay	0	0	0	0.0%
Corrosion	0	0	0	
Distribution	0	0	0	
Electrical Overload	0	0	0	0.0%
Equipment	61	13	5036.4	25.0%
Lightning	1	1	223.2	1.9%
Maintenance	0	0	0	
Ice,Sleet,Frost	0	0	0	0.0%
Other, Deterioration	0	0	0	
Rain	13	1	883.8	1.9%
Scheduled	0	0	0	0.0%
Other Utilities	0	0	0	0.0%
Power Supplier	5804	1	1330857	1.9%
Public Accidents	0	0	0	
Small Animals	44	15	1915.8	28.8%
Trees	4	4	262.8	7.7%
Unknown	45	6	2598	11.5%
Car Pole Accidents	131	2	19276.8	3.8%
Wind	156	9	13696.8	17.3%
	6259	52	1374751	100.0%

Enclosed is the Fourth Quarter 2005 Reliability Report for Wellsboro Electric Company

As you review this report you will see a significant increase in the interruption indexes for the fourth quarter of 2005. The reason for this was a power supply outage that occurred on December 3, 2005 in the Penelec substation that supplies the Wellsboro system. On December 3, 2005 at 4:43 AM. A metering transformer failed in the Penelec substation tripping out all power to the Wellsboro system, this outage lasted until 8:10 AM.

This single power supply outage affected 5804 Wellsboro Electric Company customers and accounted for 22180.95 customer hours or 1330857 customer minutes.

Below I have listed what the indexes were with the power supply outage included in our data and what the effect would have been if the power supply outage data was removed.

On December 9, 2005 Wellsboro Electric Company filed a request for exclusion of major outage for reliability reporting, this request was denied on December 23, 2005 "M-00991220F2005", Wellsboro filed an appeal to this denial letter on January 9, 2006.

A copy of all correspondence is attached.

All data is for the fourth quarter 2005

SAIDI with December 3, 2005 power supply outage included.

Total customer minutes rolling twelve month period - 2715504 minutes.

SAIDI INDEX - 462

SAIDI with December 3, 2005 power supply excluded.

Total customer minutes rolling twelve month period – 3102 minutes.

SAIDI INDEX – 235.6

Wellsboro rolling twelve month standard as established by PUC.

SAIDI INDEX – 278

SAIFI with December 3, 2005 power supply outage included

Total customer's interrupted on a rolling twelve month period – 19075

SAIFI INDEX – 3.2

•

SAIFI with December 3, 2005 power supply outage excluded

Total customer's interrupted on a rolling twelve month period – 13211

SAIFHINDEX – 2.25

Wellsboro rolling twelve month standard as established by PUC

SAIFI INDEX 1.66

CAIDI with December 3, 2005 power supply outage included

Total customer min with December 3, 2005 power supply outage included – 2715504

CAIDI INDEX – 142

CAIDI with December 3, 2005 power supply outage excluded.

Total customer minutes with December 3, 2005 power supply outage excluded – 3102

CAIDI INDEX – 72.6

Wellsboro rolling standard as established by PUC

CAIDI INDEX - 167



COMMONWEALTH OF PENNSYLVANIA PENNSYLVANIA PUBLIC UTILITY COMMISSION P.O. BOX 3265, HARRISBURG, PA 17105-3265

IN REPLY PLEASE REFER TO OUR FILE

December 23, 2005

M-00991220F2005

WELLSBORO ELECTRIC COMPANY 33 AUSTIN STREET WELLSBORO PA 16901

ATTN ROBERT S MCCARTHY

Re: Request for Exclusion of Major Outage for Reliability Reporting Purposes to the Pennsylvania Public Utility Commission

Dear Mr. McCarthy:

On December 9, 2005, Wellsboro Electric Company ("Wellsboro") filed a request for exclusion of major outage for reliability reporting purposes in accordance with the requirements of the Commission's Order entered May 11, 2004, at M-00991220.

The request relates to service interruptions associated with a loss of power supply that Wellsboro states caused service interruptions from 4:32 a.m. on December 3, 2005, until 8:10 a.m. on December 3, 2005. Wellsboro cited a Pennsylvania Electric Company ("Penelec") transformer failure at a Penelec substation as contributing to the outage.

52 Pa. Code §57.192 defines a major event as:

(i) Either of the following:

(A) An interruption of electric service resulting from conditions beyond the control of the EDC which affects at least 10% of the customers in the EDC's service territory during the course of the event for a duration of 5 minutes each or greater. The event begins when notification of the first interruption is received and ends when service to all customers affected by the event is restored.

(B) An unscheduled interruption of electric service resulting from an action taken by an EDC to maintain the adequacy and security of the electrical system, including emergency load control, emergency switching and energy conservation procedures, as described in §57.52 (relating to emergency load control and energy conservation by electric utilities), which affects at least one customer.

(ii) The term does not include scheduled outages in the normal course of business or an electric distribution company's actions to interrupt customers served under interruptible rate tariffs.

•

Upon review of the company's filing, it appears that Wellsboro's filing does not meet the definition of major event, since, part (i)(A) of the regulation states that interruptions must be beyond the control of the EDC to be deemed major events. This is not the first major event requested by Wellsboro associated with the Penelec substation. On February 9, 2005, a request for major event exclusion was denied by Secretarial Letter. Additionally, we have been made aware of numerous service quality issues associated with the substation. While we acknowledge that Penelec maintains direct control of the substation, Wellsboro has provided us with no documentation to demonstrate it has attempted to address the performance of this substation with Penelec. Therefore, until such time as Wellsboro has sufficiently demonstrated the actions it has taken to ensure a reliable delivery of power related to this substation, the request for exclusion of service interruptions for reporting purposes is hereby denied.

In addition, this denial will apply only to the matters and parties specifically and clearly defined under this instant filing.

If you are dissatisfied with the resolution of this matter, you may, as set forth in 52 Pa. Code §5.44, file a petition with the Commission within 10 days of the date of this letter.

Sincerely,

James J. McNulty

Secretary

cc: Tom Sheets, Audits George Dorow, Audits Wayne Williams, CEEP Blaine Loper, CEEP Betsy Barnes, Law Bureau Kerry Klinefelter, FUS Kathleen Aunkst, Secretary's Bureau

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Wellsboro Electric Company Request	:	
For Exclusion of Major Outage	:	Docket Nos. M-00991220F2005
For Reliability Reporting Purposes	:	Р

Petition for Appeal, *Nunc Pro Tunc*, of Staff Determination Denying Request For Exclusion of Major Outage Occurring December 3, 2005

Pursuant to Section 5.44 of the Pennsylvania Public Utility Commission's ("PUC" or "Commission") Regulations, 52 Pa. Code § 5.44. Wellsboro Electric Company ("Wellsboro" or "Company") hereby files this Petition for Appeal *Nunc Pro Tunc*, requesting review of a staff decision to deny the Company's request for exclusion of a major outage for reliability reporting purposes related to a service interruption event experienced on December 3, 2005. As set forth below, the outage at issue constituted an event beyond the control of Wellsboro that affected at least ten percent of the customers in the Company's service territory for a duration of five minutes or greater. See id. at 57.192 (definition of "Major Event"). The outage took place due to the failure of a transformer at a Pennsylvania Electric Company ("Penelec") substation that serves the Wellsboro service territory and is under the control of Penelec. As a result, Wellsboro respectfully requests that the Commission review and reverse the determination. In support thereof. Wellsboro states as follows:

I. BACKGROUND

1. The Petitioner is Wellsboro Electric Company, with business offices located at 33 Austin Street, Wellsboro, PA 16901.

2. Wellsboro is a small jurisdictional Electric Distribution Company ("EDC") serving approximately 5,804 customers in the Borough of Wellsboro and surrounding areas in Tioga County.

3. Wellsboro's attorneys for purposes of this matter are:

David M. Kleppinger Pamela C. Polacek Charis Mincavage McNees Wallace & Nurick LLC 100 Pine Street P.O. Box 166 Harrisburg. PA 17101-1166 Tel: 717-232-8000 Fax: 717-237-5300 <u>dkleppinger@mwn.com</u> <u>ppolacek@mwn.com</u> <u>cmincavage@mwn.com</u>

Inquiries regarding this filing can be directed to Ms. Polacek at the telephone number noted above.

4. On December 3, 2005, all 5,804 of Wellsboro's customers experienced a service interruption from 4:32 a.m. until 8:10 a.m. The time between the receipt of the first notification of service interruption and the actual time that service was restored to the last affected customer was three hours and thirty-eight minutes.

5. The outage occurred due to a current transformer failure in the Penelec 35,000 volt substation serving the Wellsboro system. This Penelec substation is fed by four 35,000 volt circuits on a 34.5 KV transmission line between the Wellsboro Aggregate Bus on the PJM transmission system and the Penelec substation.¹ Two 35,000 volt circuits connect the Penelec substation to Wellsboro's own substation. Wellsboro's single substation serves its entire service territory. Wellsboro personnel are prohibited by Penelec from entering the Penelec substation to diagnose or correct equipment failures.

6. On December 9, 2005, the Company filed a Request for Exclusion of Major Outage for Reliability Reporting Purposes in accordance with procedures in the Commission's Order entered

¹ Although the location on PJM's system is called the "Wellsboro Aggregate Bus," Wellsboro neither owns nor operates the interconnection point.

May 11, 2004 at Docket No. M-00991220. A true and correct copy of that filing is attached as Appendix A to this Petition.

7. On December 23, 2005, the Commission issued a Secretarial Letter denying the

Company's request and stating:

it appears that Wellsboro's filing does not meet the definition of major event, since, part (i)(A) of the regulation states that interruptions must be beyond the control of the EDC to be deemed major events... [and] while we acknowledge that Penelec maintains direct control of the substation. Wellsboro has provided us with no documentation to demonstrate it has attempted to address the performance of this substation with Penelec. Therefore, until such time as Wellsboro has sufficiently demonstrated the actions it has taken to ensure a reliable delivery of power related to this substation, the request for exclusion of service interruptions for reporting purposes is hereby denied.

A true and correct copy of the Secretarial Letter is attached as Appendix B to this Petition.

8. Pursuant to Section 5.44 of the Commission's Regulations, Wellsboro respectfully

appeals the determination that the filing does not meet the definition of a Major Event.

II. REQUEST FOR NUNC PRO TUNC CONSIDERATION

9. Section 5.44(a) of the Commission's regulations states that a party can appeal a staff

determination "by filing a petition within 10 days after service of notice of the action." 52 Pa. Code

§5.44(a). The Secretarial Letter states that an appeal must be filed within 10 days of the date of the

Secretarial Letter. See Appendix B, page 2.

10. Because the Secretarial Letter was issued on December 23, 2005, the 10-day appeal period per the terms of the Secretarial Letter ended on January 3, 2006.²

11. Wellsboro received the Secretarial Letter in the mail the week of December 26, 2005.

The specific Company personnel responsible for responding to issues such as this were not in the

² It is unclear whether the Commission's regulations classify the issuance date of the Secretarial Letter as the date Wellsboro had "service of notice of the action" or whether additional time is available for the appeal period because Wellsboro did not receive the letter until the following week. For purposes of this request, Wellsboro has assumed that the appeal period is as stated in the Secretarial Letter (i.e., 10 days from the date of the Secretarial Letter).

office that week due to the holidays. Upon their return to the office, Wellsboro became aware of the exclusion denial and the Company expeditiously began preparing this appeal; however, Wellsboro was unable to file on January 3, 2006.

12. Section 1.2 of the Commission's regulations states: "The Commission or presiding officer at any stage of an action or proceeding may disregard an error or defect of procedure which does not affect the substantive rights of the parties." 52 Pa. Code § 1.2. Consideration of this appeal out of time will not affect the substantive rights of any party. Wellsboro is submitting this Petition only three days after the end of the appeal period set forth in the Secretarial Letter. This was the earliest that the Company could prepare a thorough and complete filing to the PUC to explain the factual circumstances and basis for this appeal. Because no party will be adversely impacted and given the extraordinary circumstances created by the timing of the Secretarial Letter, Wellsboro respectfully requests that the PUC accept this appeal *nunc pro tunc*.

III. BASIS FOR APPEAL

13. In relevant part, Section 57.192 of the Commission's regulations defines a "Major Event" as follows: "An interruption of electric service resulting from conditions beyond the control of the EDC which affects at least 10% of the customers in the EDC's service territory during the course of the event for a duration of 5 minutes each or greater." 52 Pa. Code §57.192(i)(A).

14. The December 3rd outage impacted 100% of Wellsboro's customers and lasted over three hours.

15. The cause of the interruption (<u>i.e.</u>, the failure of a current transformer in Penelec's substation) is beyond the control of Wellsboro.

16. Penelec owns, operates and maintains the transmission line from the Wellsboro Aggregate Bus on the PJM system to the Wellsboro service territory, as well as the substation at issue where the current transformer malfunction occurred on December 3, 2005. At this time, the

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Penelec 35 KV transmission line from the Wellsboro Aggregate Bus is the only source of supply for the Wellsboro territory and Wellsboro's generation supply must go through the Penelec substation.

17. On December 3, 2005, Wellsboro's power supply from Penelec was lost due to Penelec's transformer failure in the Penelec substation. As the Secretarial Letter acknowledges, Penelec maintains direct control over this substation. Penelec prohibits Wellsboro personnel from entering or performing repairs to its substation. Under circumstances such as these, Wellsboro must wait until Penelec restores its system before taking any further action. Thus, Penelec's station clearly is not under Wellsboro's control.

18. The Secretarial Letter concludes that the failure of the Penelec substation on December 3, 2005, is within Wellsboro's control because "Wellsboro has provided us with no documentation to demonstrate it has attempted to address the performance of this substation with Penelec." Appendix B, page 2.

19. Wellsboro respectfully submits that, regardless of any actions that it has taken or may take with Penelec, any failure of equipment owned, operated and maintained by Penelec is not within the Company's control, and that Penelec's equipment failures must be recognized as Major Events under the definition (assuming that the other criteria are met). Penelec's actions and the performance of Penelec's equipment are beyond Wellsboro's reasonable control.

20. Wellsboro questions the conclusion that documenting its discussions and activities with Penelec is necessary to show that the December 3rd outage resulted from "conditions beyond the control" of Wellsboro. The form provided by the PUC to request Major Event exclusions does not require information regarding any electric distribution company activities with third parties. <u>See</u>. Appendix A. The form simply requests the cause of the outage. In addition, in the two weeks between Wellsboro's filing and the Secretarial Letter denying the request, the Commission never requested any information regarding prior actions taken by Wellsboro with Penelec.

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21. Wellsboro has used its best efforts to address the issue of reliability with Penelec. In 2002, Wellsboro attempted to join the Met-Ed/Penelec Reliability Committee created by the Commission's Order in the GPU/FirstEnergy merger proceeding at Docket Nos. A-110300F0095, A-110400F0040, P-00001860 and P-00001862. Penelec denied Wellsboro's request for participation.

22. Additionally. Wellsboro remains in communication with Penelec regarding maintenance or other reliability issues that could impact service to Wellsboro's customers. Upon request, Wellsboro can assemble additional information regarding its communications with Penelec.

23. Finally, Wellsboro is undertaking a long range construction project to eliminate its reliance on the Penelec facilities. Specifically, in July 2005, Wellsboro completed Phase I of this project, which included construction of a new substation with a new transformer. Phase II of Wellsboro's plan will result in installation of an additional transformer at the substation to provide redundancy and also a radial transmission line³ that will connect with PJM at the Wellsboro Aggregate Bus or at the Niles Valley location on Penelec's 115 KV transmission line that is close to Wellsboro's territory. Once this project is completed, Wellsboro will no longer rely on the Penelec substation at issue. Wellsboro currently anticipates that it will be able to complete Phase II by mid-2008.⁴

24. Wellsboro is committed to providing safe, adequate and reliable service to its customers. Over the last ten years, the Company has invested significant amounts in replacing and upgrading its own distribution facilities. The outage on December 3rd clearly was due to Penelec's equipment. The Commission itself appears to have the power to approach Penelec directly regarding these reliability issues. Section 57.193(b) of the Commission Regulations state:

³ Wellsboro anticipates that this line will be a distribution facility and that it will not be subject to Federal Energy Regulatory Commission jurisdiction.

⁴ This projection is based on many variables, including receipt of various regulatory and governmental approvals, availability of necessary equipment and the Company's ability to obtain financing for the project.

The reliability of an electric distribution company's transmission service provided to wholesale customers, such as electric cooperative corporations and municipal corporations, shall be comparable to the reliability which the transmission supplier provides at the wholesale level, taking into account the nature of each service area in which electricity is delivered to the customer, the delivery voltage and the configuration and length of the circuit from which the electricity is delivered.

52 Pa. Code §57.193(b). Wellsboro is a wholesale customer. If the PUC believes that the transmission service provided by Penelec to Wellsboro is inadequate, then it appears that the Commission can address this issue directly with Penelec.

WHEREFORE, Wellsboro Electric Company hereby respectfully requests that the Commission: (1) consider this Petition for Appeal, *nunc pro tunc*; (2) review the determination issued in the Secretarial Letter of December 23, 2005, denying Wellsboro's request for exclusion of a Major Event; (3) reverse the staff determination by confirming that Wellsboro can exclude the December 3, 2005, outage due to the failure of Penelec's transformer as a major event beyond the Company's control for reliability reporting purposes: and/or (4) grant such other relief as the Commission deems reasonable.

Respectfully submitted,

McNEES WALLACE & NURICK LLC

By

Pamela C. Polacek David M. Kleppinger Charis Mincavage 100 Pine Street P.O. Box 1166 Harrisburg, PA 17108-1166 Tele. (717) 232-8000 Fax (717) 237-5300

Counsel to Wellsboro Electric Company

Dated: January 6, 2006

Brian D. Crowe Director Rates & Regulatory Affairs

PECO Energy Company 2301 Market Street Philadelphia, PA 19103

Mail To: P.O. Box 8699 Philadelphia, PA 19101-8699

January 31, 2006

Via Federal Express

Mr. James McNulty, Secretary Pennsylvania Public Utility Commission Commonwealth Keystone Building 400 North Street Second Floor Harrisburg, Pennsylvania 17120

Telephone 215.841.5316 Fax 215.841.6333 www.exeloncorp.com brian.crowe@peco-energy.com



RECEIVED

An Exelon Company

JAN 31 2006

PA PUBLIC UTILITY COMMISSION DECRETARY'S BUREAU

Re: PUC Docket No. L-00030161 Rulemaking Re Amending Electric Service Reliability Regulations at 52 Pa. Code Chapter 57

Dear Secretary McNulty:

In accordance with Electric Service Reliability Regulations at 52 Pa. Code Chapter 57, enclosed are an original and six copies of PECO Energy's 2005 Quarterly Reliability Report for the period ending December 31, 2005.

Because portions of the report contain sensitive and proprietary information, PECO Energy is filing two versions of the report, one public and one proprietary. PECO Energy requests that the proprietary report, which has been separated and clearly marked with a "Confidential and Proprietary" header on each page, be kept confidential, pursuant to commission procedures and pending final commission action on PECO's Petition for Protective Order filed on December 30, 2004.

If you have any further questions regarding this matter, please call me at 215-841-5316.

Sincerely,

Den

cc: Office of Consumer Advocate Office of Small Business Advocate

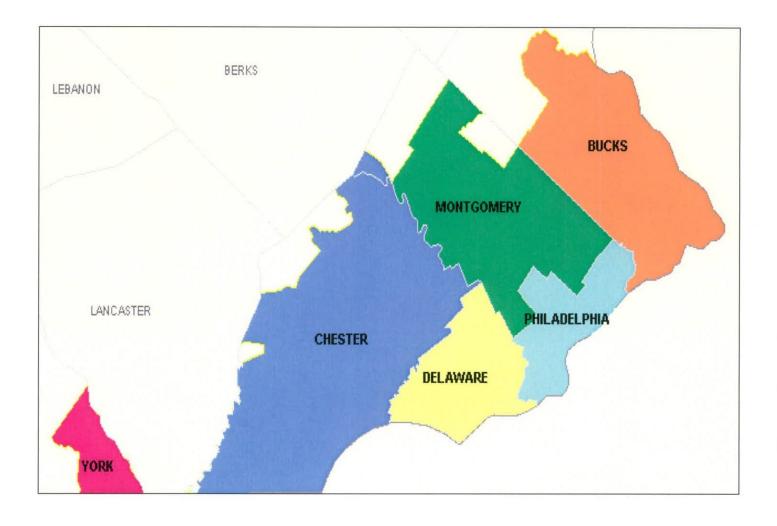
enclosures

W.IP/mpb





PECO Energy Company Quarterly Reliability Report For Period Ending December 31, 2005







Quarterly Reliability Report for period ending December 31, 2005

DOCUMENT

Page 1 of 3

PECO Energy ("PECO") Quarterly Reliability Report for the Period Ending December 31, 2005 filed with the Pennsylvania Public Utility Commission

Submitted per Rulemaking Re: Amending Electric Service, Docket No. L-00030161 Reliability Regulations at 52 Pa.Code Chapter 57

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

PECO experienced no major events in the fourth quarter of 2005.

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

PECO Customers	Sustained Customer Interruptions	Customer	Momentary Customer Interruptions	Customer	SAIFI	CAIDI	SAIDI	MAIFI
1,622,687	1,652,581	2,715,401	1,413,725	162,924,047	1.02	99	100	0.87

**Data reflects 12 months ending 12/31/2005

PECO Benchmarks and Rolling 12-Month Standards							
SAIFI CAIDI SAIDI MAIFI							
Benchmark	1.23	112	138	N/A			
Rolling 12-Month Standard	1.48	134	198	N/A			

SAIFI, CAIDI, and SAIDI are all better than the respective benchmarks and standards established on May 7, 2004. No benchmark or standard was established for MAIFI.

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."

In 2004 PECO's selection criteria changed. PECO's worst performing 5% circuits for 2005 are selected based on rolled up customer interruptions – a count of all customer interruptions on a given circuit and on other circuits for which it is a source, due to outages on the given circuit in a 12 month period. This measure is oriented toward its contribution to system SAIFI.

Section 57.195(e)(5) <u>"A Rolling 12-month breakdown and analysis of outage causes during the</u> 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."

12 Months Ending December 31, 2005								
Cause	Cases of Trouble	% Cases of Trouble	Customer* Interruptions	% Customer Interruptions	Customer Minutes			
Animal Contact	767	6.9%	45,793	2.8%	2,425,597			
Contact / Dig In	317	2.9%	33,119	2.0%	2,495,639			
Equipment Failure	4,143	37.4%	595,827	36.1%	57,026,878			
Lightning	900	8.1%	148,144	9.0%	20,618,186			
Transmission / Substation	17	0.2%	23,378	1.4%	1,336,298			
Vegetation - Broken / Uprooted	1,589	14.3%	298,288	18.0%	36,095,171			
Vegetation – In-growth	1,488	13.4%	121,523	7.4%	13,981,803			
Vehicles	329	3.0%	101,651	6.2%	7,306,348			
Unknown	607	5.5%	150,606	9.1%	12,527,785			
Other	918	8.3%	134,252	8.1%	9,110,341			

*The data supplied is the number of interrupted customers for each interruption event summed for all events, also known as customer interruptions. A customer interrupted by three separate trouble cases represents three customer interruptions, but only one customer interrupted.

The largest contributors to customer interruptions were equipment failure and tree-related interruptions. The leading groups within the equipment failure category were aerial equipment and underground equipment. Most customer interruptions caused by trees came from broken branches and tree trunks or uprooted trees, as opposed to ingrowth.

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)."

Data not required for fourth quarter report

Contact Persons: Richard M. Cornforth Manager, T&D Reliability (215) 841-5843 richard.cornforth@peco-energy.com

Brian D. Crowe Director, Rates & Regulatory Affairs (215) 841-5316 brian.crowe@peco-energy.com



(845) 577-3341

Orange and Rockland Utilities, Inc. 390 West Route 59 Spring Valley NY 10977-5300 www.oru.com





February 16, 2006

RECEIVED

Pennsylvania Public Utility Commission P.O. Box 3265 Harrisburg, PA 17105-3265

Attention: Secretary James J. McNulty

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PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU

FEB 2 0 2006

Re: Fourth Quarter 2005 Quarterly Report for Pike County Light and Power PUC Docket No. L-00030161; Rulemaking Re Amending Electric Service Reliability Regulations At 52 Pa. Code Chapter 57

Dear Secretary McNulty:

Pike County Light & Power Company ("Pike") hereby submits six copies of its Fourth Quarter 2005 quarterly report as set forth in the Pennsylvania Public Utility Commission's ("Commission, PUC)") Docket No. L-00030161 adopted Rulemaking Re Amending Electric Service Reliability Regulations At 52 Pa. Code Chapter 57 ("Order"). As such, Pike's quarterly reporting requirements, as set forth in Section 57.195(e) (1) (2) and (5) of the Order, are enclosed.

Please contact me if you have any questions regarding this report or require any additional information.

Very truly yours,

Timothy Lanin

Timothy T. Garvin Manager - Performance & Operational

Pike County Light and Power (Orange and Rockland Utilities, Inc.)

Engineering

cc: Office of Consumer Advocate Office of Small Business Advocate

Enclosures

Pike County Light and Power Company (Orange and Rockland Utilities, Inc.)

: ,

Quarterly Reliability Report

Fourth Quarter 2005



FEB 2 C 2006

PA PUBLIC UTILITY COMMISSION SEGRETATIC'S DUREAU

§ 57.195. (e)(1)

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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.

4th Quarter 2005 Major Events

Date	Time	Circuit	Cause	Duration	Customers Affected	Cust Min of Interruption
2005/11/06	19:33	L07-06-34	Storm	Various	2,255	259,065

4th Quarter 2005 Pre-Arranged Outages

Date	Time	Circuit	Cause	Duration	Customers Affected	Cust Min of Interruption
2005/10/29	05:16	L07-06-34	Pre- Arranged	Various	2,485	480,397
2005/11/17	10:16	05-10-34	Pre- Arranged	Various	206	99,022
2005/12/15	09:51	L07-06-34	Pre- Arranged	70 minutes	15	1,050
2005/12/22	09:45	L07-06-34	Pre- Arranged	97 minutes	30	2,910

§ 57.195. (e)(2)

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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.

Interruption Data Rolling 12-Month Data

Year	Quarter	Customers Served Rolling 12 Mth	Number of Interruptions Rolling 12 Mth	Customers Affected Rolling 12 Mth	Customer Min of Interruptions Rolling 12 Mth
2005	1st Qtr	4,355	51	2,616	439,859
2005	2nd Qtr	4,360	66	6,396	567,611
2005	3rd Qtr	4,372	85	7,551	841,980
2005	4th Qtr	4,386	90	8,123	885,329

Performance Ratios^{*} Rolling 12-Month Data

	Frequency	Restoration	Duration
	SAIFI	CAIDI (Min)	SAIDI (Min)
Benchmark	0.61	174	106
Rolling 12-Month Standard	0.82	235	1 9 4

* Benchmarks and Standards revised as described in the Recommended Decision on Remand of Administrative Law Judge Susan D. Colwell issued on January 11,2006 (Docket Number M-00991220F0002.)

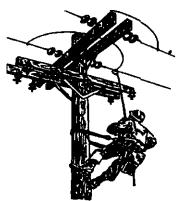
Year	Quarter	Frequency SAIFI	Restoration CAIDI (Min)	Duration SAIDI (Min)
2005	1st Qtr	0.60	168	101
2005	2nd Qtr	1.47	89	130
2005	3rd Qtr	1.73	112	193
2005	4th Qtr	1.85	109	202

§ 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.

Fourth Quarter 2005 Cause Analysis Rolling 12 Months Data *Excludes Storms, Major Events, Pre-Arrranged

Cause	Number of Interruption s	Number of Interruption s (%)	Customers Affected	Customers Affected (%)	Cust Min of Interruption	Cust Min of Interruptio n (%)
Animal Contact	4	4.4%	229	2.8%	17,010	1.9%
Tree Contact	39	43.3%	3,160	38.9%	540,843	61.1%
Overload	4	4.4%	178	2.2%	21,881	2.5%
Work Error	1	1.1%	73	0.9%	3,066	0.3%
Equipment Failure	21	22.2%	3,691	45.4%	212,029	23.9%
Non-Comp Accident	10	11.1%	428	5.3%	59,540	6.7%
Customer Problem	0	0.0%	0	0.0%	0	0.0%
Lightning	5	5.6%	44	0.5%	3,048	0.3%
Unknown / Other	7	7.8%	320	3.9%	27,912	3.2%
All Causes	90	100.0%	8,123	100.0%	885,329	100.0%



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CITIZENS' ELECTRIC COMPANY

1775 INDUSTRIAL BLVD . P.O. BOX 551 . LEWISBURG, PA 1783

Mr. James J. McNulty Bureau of Fixed Utility Services Pennsylvania Public Utility Commission PO Box 3265 Harrisburg, PA 17105-3265

RECEIVED APR 1 1 2006 PA PUBLIC UTILITY COMMISSION BECRETARY'S BUREAU

70) 524-2231 • FAX: (570) 524-5887

Dear Secretary McNulty:

-00030161

April

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Enclosed please find an original and six copies of the 1st quarter, 2006 Electric Reliability Report for Citizens' Electric Company.

Please contact me at 570-522-6143 or <u>kelchnerj@citizenselectric.com</u> if I can answer any questions.

Sincerely,



AKell

John A. Kelchner, PE Sr. Director of Engineering & Operations

cc: Pennsylvania Office of Consumer Advocate Pennsylvania Office of Small Business Advocate

Citizens' Electric Company Quarterly Service Reliability Report First Quarter, 2006 Prepared by John A. Kelchner, PE Sr. Director of Engineering & Operations 570-522-6143 <u>kelchnerj@citizenselectric.com</u> April 10, 2006

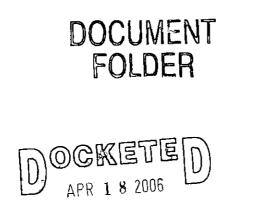
§ 57.195(e)(1) - A description of each major event that occurred during the preceding quarter, including the time and duration of the event, the number of customers affected, the cause of the event and any modified procedures adopted in order to avoid or minimize the impact of similar events in the future.

We experienced two Major Events during the preceding quarter, as detailed below. Both events were approved for exclusion from reliability calculations.

Date	Time First Call Received	Duration of Event (Minutes)	# of Customers Affected	Cause
1/26/2006	9:04 AM	31	1,252	Customer (Other)
2/17/2006	8:37 AM	569	988	Weather

On January 26th, a Bucknell University maintenance crew cut a tree down onto our 3 phase line at the Bucknell golf course. This locked out the entire circuit at the substation causing an interruption to 1,252 customers. Our crews responded, removed the tree, and restored service in 31 minutes.

On February 17th, high winds associated with a strong cold front brought several off r/w trees down onto our lines. Outages continued throughout the day, with a total of 988 customers affected. The last customer was restored at 6:06 PM.



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PA PUBLIC UTILITY COMMISSION SEGRETARY'S BUREAU Citizens' Electric Company Quarterly Service Reliability Report First Quarter, 2006 Prepared by John A. Kelchner, PE Sr. Director of Engineering & Operations 570-522-6143 <u>kelchnerj@citizenselectric.com</u> April 10, 2006

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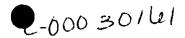
§ 57.195(e)(1) - A description of each major event that occurred during the preceding quarter, including the time and duration of the event, the number of customers affected, the cause of the event and any modified procedures adopted in order to avoid or minimize the impact of similar events in the future.

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On February 17th, high winds associated with a strong cold front brought several off r/w trees down onto our lines. Outages continued throughout the day, with a total of 988 customers affected. Crews worked throughout the day restoring service. The last customer was restored at 6:06 PM.



§ 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.

Index	Rolling 12-Month Value for Quarter	Benchmark	Standard
SAIFI	0.08	0.21	0.27
SAIDI	7	21	38
CAIDI	82	105	141

Total # of Customers Served	# of Interruptions	# of Customers Affected	Customer Minutes
6,632	30	551	45,201

The following outages were approved for exclusion as Major Events during the preceding 12month period and are not included in the above calculations:

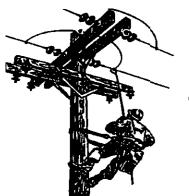
Date	# of Customers Affected	Customer Minutes
4/30/2005	1,153	106,076
5/14/2005	1,252	63,852
11/6/2005	1,252	20,032
11/10/2005	1,252	62,600
1/26/2006	1,252	38,812
2/17/2006	988	30,889

§ 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.

Outage Cause	Number of Interruptions	% of Interruptions	Number of Customers Affected	Customer Interruption Minutes
On R/W Trees	0	0	0	0
Animals	13	43	230	12,765
Equipment	14	47	272	30,104
Off R/W Trees	1	3	2	250
Weather	2	7	47	2,082
Vehicle	0	0	0	0
Other	0	0	0	0
Total	30	100	551	45,201

Discussion

Mild weather prevailed throughout the quarter. With the exception of two major events, all outages affected a small number of customers and were generally short in duration. The average outage so far in 2006 affected just 7 customers and lasted 59 minutes. Animals and equipment failures have been the most common outage causes on our system. To mitigate the equipment outages, we are continuing our aggressive inspection program to help identify failure prone equipment before it causes an outage. To help reduce animal outages, we are installing wildlife protection on all new transformer installations and in targeted problem areas as they are identified.



CITIZENS' ELECTRIC COMPANY

1775 INDUSTRIAL BLVD • P.O. BOX 551 • LEWISBURG, PA 17837-0551 • (570) 524-2231 • FAX: (570) 524-5887

April 13, 2006



Mr. James J. McNulty Secretary Pennsylvania Public Utility Commission PO Box 3265 Harrisburg, PA 17105-3265

L-000 30161

Dear Mr. McNulty,

Enclosed please find an original and six copies of the 2005 Annual Reliability Report for Citizens' Electric Company.

Please contact me at 570-522-6143 or <u>kelchnerj@citizenselectric.com</u> if I can answer any questions.

Sincerely,

Joh A Kell

John A. Kelchner, PE Sr. Director of Engineering & Operations

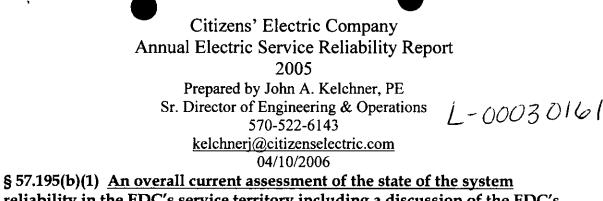
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PA PUBLIC UTILITY COMMISSION SECRETARY'S PUREAU

cc: Pennsylvania Office of Consumer Advocate Pennsylvania Office of Small Business Advocate





§ 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.

Moderate weather conditions during 2005, along with continued diligence in maintenance and inspections, contributed to improvements in SAIDI and SAIFI. In addition to the annual programs completed, we made significant progress on long-term projects that have reliability implications.

We continued deployment of an Automatic Meter Reading (AMR) system across our service territory. This project was completed in February, 2006. We are now in the early stages of assessing the best ways to integrate the information this system can provide into our reliability and outage management processes. Also, with the system now fully operational, we plan to redirect a significant part of the labor previously spent reading meters to maintenance and inspection activities. This will help us continue our efforts to maximize reliability.

Work on implementing an Automated Mapping/Facilities Management system progressed during 2005. Nearly all distribution lines, poles and equipment have now been electronically mapped. During 2006, work will continue on entering the associated data such as size, date installed, and status for each piece of equipment on the map. Among other benefits, this system will give us the ability to automate and consolidate our maintenance scheduling and tracking to allow us to better manage these processes. When fully implemented, this system will also help us more accurately model our distribution system to ensure the best possible overcurrent protection design, minimizing the number of customers affected by an outage. We also plan to use the mapping system to drive an automated outage management system. By analyzing circuit configuration, sectionalizing points, and customer outage calls, this system will help us quickly identify probable trouble spots and efficiently dispatch crews to the correct location. This system will help us maintain our outstanding restoration times when outages do occur.

Citizens' Electric was proud to again be recognized in 2005 as a "Tree Line USA" utility. This award from the National Arbor Day Foundation recognizes Citizens' for using nationally approved trimming techniques and procedures in its vegetation management program.

Citizens' Electric does not own or maintain any transmission facilities.

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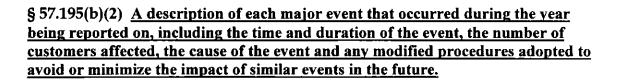
Current Maintenance Programs

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Program	Description	Cycle
Infrared Inspection	All substation equipment biennially, and 1/3 of all overhead lines	3 years
Vegetation Management	Each year, all primary lines are visually inspected. This comprehensive field inspection allows us to identify areas that require trimming. We maintain a 4- year trimming cycle, but all areas are inspected annually to help identify unexpected "hot spots." All areas needing attention are trimmed by the end of the 3 rd quarter.	Annual
Visual Line Inspection	All distribution lines and pole hardware are visually inspected during preparation of tree trimming contract. Line sections receiving infrared inspection are also inspected visually during that process.	Annual
Padmount Equipment Inspection	Padmounted equipment is visually inspected to identify and correct any developing problems or safety concerns.	4 Years
30 Padmount Transformer Oil Test	Insulating oil is tested from every 3Ø padmounted transformer on our system, and all substation power transformers.	Annual
Line Equipment Inspection	All airswitches, circuit tie switches, capacitors, regulators, and reclosers are visually inspected. Where applicable, proper operation of control equipment is verified and counter readings are recorded.	Annual
Pole Inspection and Treatment	Poles are inspected and treated at the ground line. External and/or internal decay inhibitors are applied where appropriate.	10 Years
Danger & Reject Pole Replacements	Replace condemned poles identified during pole inspection.	As needed, annually
Substation Equipment Inspection	Entire station is visually inspected. Equipment batteries are tested, communications equipment operation is verified, fans are tested, various gauge and counter readings are recorded. An infrared inspection is performed on all equipment twice a year.	Monthly
Recloser Maintenance	Change oil, check and adjust mechanism, check contacts, test operation.	Manufacturer's Recommendations



Date	Time	Duration (Minutes)	Customers Affected	Cause
4/30/2005	1:21 PM	92	1,153	Equipment failure during extended rain event
5/14/2005	9:11 PM	51	1,252	A large limb from an off r/w tree came down onto a 3- phase line during a strong thunderstorm.
11/6/2005	5:11 PM	16	1,252	Strong winds during thunderstorm damaged a 3-phase line allowing phases to slap together.
11/10/2005	8:14 AM	50	1,252	Strong winds caused phase wires to slap together. This was a problem created on 11/6, but not discovered until the winds recurred on 11/10.

§ 57.195(b)(3) <u>A table showing the actual values of each of the reliability indices</u> (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.

Year	SAIFI	SAIDI	CAIDI	Avg # of Customers Served	# of Interruptions	# of Customers Interrupted	Customer Interruption Minutes
2005	0.10	12	116	6,657	33	667	77,100
2004	0.39	25	64	6,533	43	2,528	160,675
2003	0.42	30	72	6,447	43	2,685	194,562
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§ 57.195(b)(4) <u>A breakdown and analysis of outage causes during the year being</u> reported on, 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.

Outage Cause	Number of Interruptions	% of Interruptions	Number of Customers Affected	Customer Interruption Minutes
On R/W Trees	0	0	0	0
Animals	11	33	223	12,772
Equipment	15	46	267	31,746
Off R/W Trees	4	12	101	25,106
Weather	2	6	47	2,082
Vehicle	1	3	29	5,394
Other	0	0	0	0
Total	33	100	667	77,100

While equipment related outages continued to be the most common cause of service interruptions, we began seeing reduction in 2005. In the third quarter of 2005, equipment outages caused 53% of all outages. By the end of the year, this contribution had reduced to 46%. We are continuing to reduce equipment outages through diligent inspection and maintenance.

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

Program	Goal	Completed	Comment
Infrared Inspection	Substation and 1/3 of all overhead	100%	
	lines		
Vegetation Management	Entire System (9 circuits), as needed	100%	
Visual Line Inspection	Entire System (9 circuits)	100%	
Padmount Equipment	148 Locations	100%	
Inspection			
3Ø Padmount	31 Transformers	100%	
Transformer Oil Test			
Line Equipment	173 locations	100%	
Inspection			
Pole Inspection and	478 Poles	100%	
Treatment			
Danger and Reject Pole	13 Poles	100%	
Replacement			
Substation Equipment	12 Monthly Inspections	100%	
Inspection			
Recloser Maintenance	10	100%	

§ 57.195(b)(7) <u>A comparison of budgeted versus actual transmission and</u> <u>distribution operation and maintenance expenses for the year being reported on in</u> <u>total and detailed by the EDC's own functional account code or FERC account code</u> <u>as available. Explanations of any variances 10% or greater shall be included.</u>

Program	Budget \$	Actual \$	Comment
Infrared Inspection	N/A	\$2,548	Not budgeted individually. 100% completed.
Vegetation Management	\$72,000	\$48,243	100% of system completed, as needed. Budgeted \$3,000 for contract storm work and \$5,000 for herbicide application. These expenditures were not necessary in 2005.
Visual Line Inspection	N/A	\$3,387	Not budgeted individually. 100% completed.
Padmount Equipment Inspection	N/A	\$1,386	Not budgeted individually. 100% completed.
30 Padmount Transformer Oil Test	N/A	\$1,710	Not budgeted individually. 100% Completed.
Line Equipment Inspection	N/A	\$839	Not budgeted individually. 100% completed.
Pole Inspection and Treatment	\$14,700	\$15,218	
Danger and Reject Pole Replacement	N/A	\$7,209	Not budgeted individually. (Projects 06-C-01-04, 05-C-02-04)
Substation Equipment Inspection	N/A	\$3,224	Not budgeted individually. 100% completed.
Recloser Maintenance	N/A	\$3,796	Not budgeted individually.
Total	\$86,700	\$87,560	

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

Project	Budget Amount	Actual Expenditures	Variance	Comment
Reconductor Bucknell Line	\$69,400	\$0	-100%	Project delayed, pending master campus plan from Bucknell
Capacitor – Quarry Line	\$13,020	\$11,647	-10.5%	Actual material cost was \$645 less than estimated. Actual labor, overheads and truck were \$728 less than estimated.
Total	\$82,420	\$11,647		

§ 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).

Program	Goal	
Infrared Inspection	Substation and 3 circuits	
Vegetation Management	Entire System (9 circuits), as	
	needed	
Visual Line Inspection	Entire System (9 circuits)	
Padmount Equipment	150 Locations	
Inspection		
30 Padmount	31 Transformers	
Transformer Oil Test		
Line Equipment	173 Locations	
Inspection		
Pole Inspection and	570 Poles	
Treatment		
Danger and Reject Poles	To be determined from pole	
	inspections	
Substation Equipment	12 Monthly Inspections	
Inspection		
Recloser Maintenance	To be determined from counter	
	readings.	

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

(These items are not budgeted by FERC account.)

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Program	Budget \$	Comment
Infrared Inspection	N/A	Not budgeted individually
Vegetation Management	\$62,500	
Visual Line Inspection	N/A	Not budgeted individually
Padmount Transformer Inspection	N/A	Not budgeted individually
3Ø Padmount Transformer Oil Test	\$1,500 (estimated)	Not budgeted individually
Line Equipment Inspection	N/A	Not budgeted individually
Pole Inspection and Treatment	\$18,800	
Danger and Reject Poles	\$15,000 (estimated)	Not budgeted Individually
Substation Equipment Inspection	N/A	Not budgeted individually
Recloser Maintenance	N/A	Not budgeted individually
Total	\$79,000	

§ 57.195(b)(11) <u>Budgeted transmission and distribution capital expenditures</u> for the current year in total and detailed by the EDC's own functional account code or FERC account code as available.

(These items are not budgeted by FERC account.)

Project	Budget
	Amount
Bull Run Crossing – Relocate 3-phase line	\$83,588
Century Village – Underground Cable Replacement	\$25,229
Total	\$108,817

§ 57.195(b)(12) <u>Significant changes, if any, to the transmission and</u> <u>distribution inspection and maintenance programs previously submitted to the</u> <u>Commission.</u>

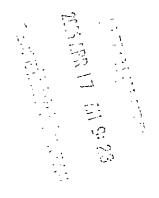
No significant changes.

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Orange and ockland Utilities, Inc. 390 West Route 59 Spring Valley NY 10977-5300 www.oru.com

April 14, 2006



Pennsylvania Public Utility Commission P.O. Box 3265 Harrisburg, PA 17105-3265

Attention: Secretary James J. McNulty

Re: First Quarter 2006 Quarterly Report for Pike County Light and Power PUC Docket No. L-00030161; Rulemaking Re Amending Electric Service Reliability Regulations At 52 Pa. Code Chapter 57

Dear Secretary McNulty:

Pike County Light & Power Company ("Pike") hereby submits six copies of its First Quarter 2006 quarterly report as set forth in the Pennsylvania Public Utility Commission's ("Commission, PUC)") Docket No. L-00030161 adopted Rulemaking Re Amending Electric Service Reliability Regulations At 52 Pa. Code Chapter 57 ("Order"). As such, Pike's quarterly reporting requirements, as set forth in Section 57.195(e) (1) (2) and (5) of the Order, are enclosed.

Please note that a Major Event is listed for January 15, 2006. This event involved a circuit that is an external supply for our customers, METE 83-2 (listed as 00-83-2M). This outage was not due to problems on our system, and has been excluded from our statistics.

Please contact me if you have any questions regarding this report or require any additional information.



cc: Office of Consumer Advocate Office of Small Business Advocate Very truly yours,

mothy Gann

Timothy T. Garvin Manager - Performance & Operational Engineering Pike County Light and Power (Orange and Rockland Utilities, Inc.)

Enclosures



L-00030141

Pike County Light and Power Company (Orange and Rockland Utilities, Inc.)

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Quarterly Reliability Report

First Quarter 2006

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§ 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.

L-00030161

1st Quarter 2006 **Major Events**

					Customers	Cust Min of
Date	Time	Circuit	Cause	Duration	Affected	Interruption
2006/01/15	04:57:00	00-83-2M	Storm	Various	48	114,624
2006/02/19	12:34:00	L07-06-34	Tree Contact	0 minutes	2,552	865,264

Pre-Arranged Outages

					Customers	Cust Min of
Date	Time	Circuit	Cause	Duration	Affected	Interruption

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§ 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 interrruption. If MAIFI values are provided, the report shall also include the number of customer momentary interruptions.

Interruption Data Rolling 12-Month Data

Year	Quarter	Customers Served Rolling 12 Mth	Number of Interruptions Rolling 12 Mth	Customers Affected Rolling 12 Mth	Customer Min of Interruptions Rolling 12 Mth
2005	2nd Qtr	4,360	66	6,396	567,611
2005	3rd Qtr	4,372	85	7,551	841,980
2005	4th Qtr	4,386	90	8,123	885,329
2006	1st Qtr	4,404	92	8,276	905,440

Performance Ratios **Rolling 12-Month Data**

	Frequency SAIFI	Restoration CAIDI (Min)	Duration SAIDI (Min)
Benchmark	.61	174	106
Rolling 12 Mth Standard	.82	235	194

Year	Qtr	Frequency SAIFI Rolling 12 Mth	Restoration CAIDI Rolling 12 Mth	Duration SAIDI Rolling 12 Mth
2005	2nd Qtr	1.47	89	130
2005	3rd Qtr	1.73	112	193
2005	4th Qtr	1.85	109	202
2006	1st Qtr	1.88	109	206

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§ 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.

First Quarter 2006 Cause Analysis Rolling 12 Months Data *Excludes Storms, Major Events, Pre-Arrranged

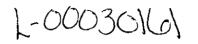
Cause	Number of Interr. Rolling 12 Mth.	Number of Interr. Rolling 12 Mth. (%)	Customers Affected Rolling 12 Mth.	Customers Affected Rolling 12 Mth. (%)	Customer Min. Interr. Rolling 12 Mth.	Customer Min. Interr. Rolling 12 Mth. (%)
Animal Contact Tree Contact Overload Work Error Equip. Failure Non-Comp Acc. Custmr Problem Lightning Unknown-Other All Causes	5 44 4 20 7 0 5 7 92	5.4% 47.8% 4.3% .0% 21.7% 7.6% .0% 5.4% 7.6% 100.0%	374 3,324 178 0 3,704 332 0 44 320 8,276	4.5% 40.2% 2.2% .0% 44.8% 4.0% .0% .5% 3.9% 100.0%	40,355 584,691 21,881 0 212,739 14,814 0 3,048 27,912 905,440	4.5% 64.6% 2.4% .0% 23.5% 1.6% .0% .3% 3.1% 100.0%



AY,

Wellsboro Electric Company

P.O. Box 138 • 33 Austin Street • Wellsboro, PA 16901 • (570) 724-3516 • FAX (570) 724-1798



April 26, 2006

James J. McNulty, Secretary Pennsylvania Public Utility Commission P.O. Box 3265 Harrisburg, PA 17105-3265

Dear James J. McNulty, Secretary,

2005 Annual Reliability Report



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PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU

Enclosed is an original and six (6) copies of the 2005 Annual Reliability Report for Wellsboro Electric Company.

Sincerely,

Rost. S. me

Robert S. McCarthy Vice-President, Operations & Engineering Wellsboro Electric Company



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Wellsboro Electric Company

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2005 Annual Reliability Report

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PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU

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57.195 Section (a) Item 2

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Wellsboro Electric Company

The Name, title, telephone number and e-mail address of the person who has knowledge of the matters, and can respond to inquires.

Robert S. McCarthy Vice-President, Engineering and Operations Phone: 570-724-3516 E-Mail: bobbym@ctenterprises.org

Address: 33 Austin St. Wellsboro, Pa 16901

57.195 Section (b) item 1

Wellsboro Electric Company

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.

Substations- Substations are inspected monthly, one-half off all substation transformers have an oil sample taken annually to check for abnormal conditions that may be occurring with each unit.

Currently Wellsboro has sixteen voltage regulators in use in substations, six units will be removed from service and rebuilt in 2006

Currently Wellsboro has ten hydraulic oil circuit reclosers in use in substations, six of these units will be removed and rebuilt and tested in 2006

Infared imaging is conducted annually on all substation equipment, three phase power lines and select single phase lines each year, usually two days are earmarked for infared imaging.

Wellsboro Electric will visually inspect 2500 poles in 2006, the inspection will focus on the overall condition of the pole and related equipment, cable and tv attachments, condition on use of guy wire markers, anchor condition, the inspection will also be looking to ensure compliance with the National Electrical Safety Code on clearances

One thousand pole will be tested in 2006

Wellsboro Electric uses a self -protected transformer for all residential and small commercial single phase customers on our 12 kV system, this eliminates the open fuse link or fused cutout These transformers have an animal bushing guard installed on the high voltage bushing and the high voltage lead from the power line to the transformer is done in coated wire to prevent an animal or tree contract on the unit.

For poly-phase customers and customers on our 4 kV system a conventional transformer is used. On these setups a fused coutout is used to protect the transformer, on these installations a animal guard is installed on the high voltage bushing and coated stinger wire is installed, the fused cutout is also covered with a guard along with the lightning arrestor to prevent animal or tree contact on this equipment.

Wellsboro Electric tracks causes of outages with our Outage Management System (OMS), this data is used to determine circuits or individual customers that are experiencing multiple outages due to animals, trees, etc. With this data we can take preventive action in an attempt to prevent future outages from occurring. One example of this is a street or circuit that has multiple outages from animals is looked and the entire street or circuit is covered up with animal guards on transformer bushing, covers on fused cutouts and lightning arrestors and coated stinger wire is installed. The same goes for individual transformers that have multiple outages. The data from the OMS is also used indentify circuits that tree clearing may be needed on, thus allowing us to preplan future trimming needs.

Wellsboro will continue our Right-of-Way clearing program in 2006, Forty circuit miles of Distribution line will be trimmed of cleared in 2006. Trimming for 2006 will be under a lump sum contract

Wellsboro has budgeted for chemical application of select Right-of-Ways in 2006. We are planning on spraying around 20 acres in 2006, based on getting the approval from property owners in the select areas.

We also have an educational program in place in conjunction with the Wellsboro Shade Tree Commission in an attempt to educate customers in planting the proper species of tree in the proper location near power lines, information is listed on our web site, thru bill inserts and pamphlets in our office, We hold this program will help to prevent future problems with improperly planted vegetation.

With the small geographic area that our system covers, we have a good chance that employees are across a good portion of our system monthly. Employees such as our meter reader are trained to look for problems on our system and report them. Problems found are either repaired or a maintenance order is issues to our Operations Department for repair later, depending on the situation found.

One circuit will have a fuse coordination and sectionilizing study completed in 2006, this will include field marking of phasing

Page 3

57.195 Section(2) Item 3

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A table showing the actual values of each of the reliability indices(SAIFI,CAIDI,SAIDI) 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.

	SAIFI	SAIDI	CAIDI
Benchmark for WECo	1.23	153	124
Rolling 12-Month Standard	1.66	278	167

Reliability Index Table for SAIFI, SAIDI and CAIDI for a Three year period.

	<u>SAIFI</u>	<u>SAIDI</u>	<u>CAIDI</u>
2003	2.5	289	115
2004	3.13	262.6	83.7
2005	1.37	144	105

2003 DATA	Avera	Average Number of Customers Served 57				
Power Supplier	1	1	76.8			
Maintenance	15	272	43608.6			
Scheduled	10	1827	47946.6			
Equipment	31	98	381538.8			
Conductor Sag	10	40	4546.2			
Other, Faulty Equip	12	116	6403.8			
Overload	1	72	2160			
Decay	2	2	176.4			
Other, Deterioration	5	118	13492.8			
Lightning	9	243	99807			
Wind	6	238	29956.8			
Trees	46	4290	633550.2			
Weather, Other	1	10	1309.8			
Public Activites	2	28	2754			

Fire	1	1	148.8	
Small Animals	40	858	415995.4	
Vehicles	7	531	16150.2	
Other Utilities	4	177	11911.8	
Unknown	99	2180	214847.9	
	302	11102	1926382	Page 6

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2004 Outage I	Data Avera	Average number of customers served			
	Number of Interruptions	# Customers Interrupted	# Customer Minutes		
Maintenance	4	283	134965		
Scheduled	11	2906	220817		
Equipment	27	1997	185870		
Other Faulty Equip	10	626	26380		
Corrosion	1	1	34.8		
Electrical Overload	3	544	31711		
Deterioration	1	193	18721		
Lightning	17	170	7684.2		
Wind	5	560	21131		
Trees	40	1323	258490		
Animals	42	331	11554.8		
Vehicles	12	566	101001.4		
Public Activites	3	54	6498		

57.195 (b) Item 4

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A Breakdown and analysis of outage causes during the year being reported on, including the number and percentage of outages, the number of customers interrupted, and customer interruption minutes categorized by outage cause Proposed solutions to indentified service problems shall be reported.

2005	Average number	of customers served	5864	
	# Of	Percentage	Cust	Customers
CAUSE	Interruptions	of Interruptions	Mins	Affected
Animals	35	14.40%	56558.4	501
Decay	2	0.82%	1252.2	28
Equipment	37	15.23%	171263.4	2840
Lightning	61	25.10%	157389.6	1222
Trees	26	10.70%	66314.4	393
Wind	17	7.00%	190115.4	1239
Unknown	50	20.58%	42244.2	668
Vehicles	7	2.88%	113434.8	684
Rain	1	0.41%	883.8	13
Elec Overload	1	0.41%	33858	342
Other, Utilities	1	0.41%	900	50
Ice	5	2.06%	11817	103
	243	100.00%	846031.2	8083

57.195 (b) Item 6

A comparison of established transmission and distribution inspection and maintenance goals/objectives versus actual results achieved during the year being reported on. Explanations of any variances shall be included. **Substations and Distribution System**

Code	Description	Goal/Objective		Actual Results
582	Substation Oil Testing	Test 50% of all Substation Transformers	13 Units	50% Tested
593.8	Sectionlizing/Fuse Coordination	Two Circuits		Completed
593.8	Substation Chemical Spraying	Spray 100% of Substations		100% Completed
593.8	Pole Testing	Test 1000 Poles		1000 Tested
500 B				
593.8	Visual Line Inspection	Visual inspection of 2500 Poles		Inspected 2500 poles
593.8	Infared Imaging ALL SUBSTATION WERE COM	Perform two days of infared inspection PLETED AND THREE PHASE LINES		Two Days Completed
593.1	Tree Trimming	Trim/Clear 30 Circuit miles of Line		40 Miles Completed
593.1	Right-of -way clearing (Chemical)	Spray 40 acres of right-of-way		10% Complete
593.9	Voltage Regulator rebuilts	Repair/rebuilt three units		100% Complete
593.9	Oil circuit breakers(Substations)	Calibrate and test three substation units		100% Complete
593.9	OCR Repair/rebuild	Test and rebuilt six single phase units		50% Complete
593.8	Phase Marking	One Circuit		One Completed

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Explanations- 593.1 Chemical application- Very liitle chemical was applied in 2005, the area we earmarked for application was near the urban area of our system, the customers were not receptive to chemical use in this area, or the area was near waterways farm field, homes, etc.

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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 or FERC account code as available. Explanations of any variances 10% or greater shall be included

Enclosed is a comparative statement of Operations and Maintenance expenses for 2005 attached as appendix 1 and the 2005 Operations and Expense Budget attached as appendix 2, due to the way these accounts are booked, I am unable to break down the O&M expenses from our statement of operations and show a comparison to the E&O budget Appendix 2 due to the bundling of multiple items into GL Codes, One example is on the statement of expenses appendix 1 Account 593.8 the annual budget was \$28,600 and the actual was \$2637.30 this account 593.8 includes Rubber goods /hotline testing, Rubber goods/hotline equipment replacements, pole testing and inspection, infared imaging, substation chemical application, pole numbers and phase markers and fuse coordination studies.

The Company has indentified this problem and changes will be made in 2006 to be able to show the actual vs budgeted line items based on the Appendix 2 O&M Budget, this will require GL codes established for each O&M item which will be done, our goal is to have this in place by the end of 2006. Also on the 593.8 account as an example for pole inspections this is done mainly by in house employees and their labor is not shown in 593.8, that is another GL code of 593, I would be more than willing to discuss this in further detail if you desire.

2005 Engineering and	Operations	Department Budget
11/17/2004		

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Vehicles

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	11/1/2004					
Vehicles						2004
404.0	Mahiston Exponence, Ropping Incurance Cos O	il Eta			æ	Budget
184.2	Vehicles Expenses- Repairs, Insurance, Gas, O	'II,⊑€6.			\$	45,000.00
184.2	Vehicle Expenses, Spot Lights/Traffic Lights Truck 5 - 2000 Ford Service Truck			1199/Month	\$	2,000.00
184.2				2800/Month	\$	14,500.00
184.2	Truck 6 - 2004 Freightliner 55' Bucket Truck			3100/Month	\$	33,600.00
184.2	Truck 8- 1995 Ford Digger, Lease Payment				\$	37,200.00
184.2	Truck 10 - 2005 Service Bucket			2100/Month	\$	25,200.00
184.2	Unit 18- 1995 Allegheny Pole Trailer, Lease Pa	-		150/Month 80/Month	\$	1,800.00
184.2	Unit 20- 1997 CarMart Trailer, Lease Payment Vehicle Expenses- Repairs, Insurance, Gas, Oil,			00/10/10/10/1	\$ \$	960.00
184.3 184.3			N DEP I.	654/Month	э \$	5,000.00
184.3	Truck 11- Meter Tester, Truck Lease Payment Truck 12 - Ford Ranger Lease Payment			654/Month	ې \$	7,900.00
184.5	Vehicles Expenses- Repairs, Insurance, Gas, C	il Etc	Car # 2	034/14/01/01	3 \$	7,900.00
184.5	Car # 2, Vehicle Lease Payment	/II,EIÇ.		872/Month	\$ \$	4,500.00
184.5	Car # 1, Vehicle Lease Payment			927/Month	э \$	10,500.00
184.4	Car # 1, Vehicle Expenses, Repair, Insurance, (Car # 2	927/10/01/01	\$ \$	11,200.00 5,000.00
932	General Maintenance Vehicle Expenses	345,01	Truck 7		S	1,500.00
932	Truck #13 General Use Vehicle		TIUCK 7	654/Month	3 \$	7,900.00
	Truck #15 General Ose venicle			004/14/0/11(1	-	221,660.00
Training	2. Cafabi				Ψ	221,000.00
ranning	a Salety					
588.2	Basic Climbing School	L. White	Instructor		\$	1,200.00
588.2	Intermediate Gloving	One Man			\$	1,000.00
588.2	Advanced Gloving					•
588.2	Intermediate Sticking				S \$	-
588.2	Advanced Sticking					-
588.2	Substation School	Two Men			\$ \$	2,000.00
588.2	Underground School	Two Men			\$	2,000.00
588.4	Audiometric Testing				\$	300.00
926.9	Safety Glasses/Eye Exams				\$	1,000.00
588.4	PREA Bi-Monthly Safety Meeting				\$	1,000.00
588.2	 Keyman Conferences (Crew Chief & Linemen))	One Man		\$	1,000.00
588.2	Keyman Conference (Supervisors)		One Man		\$	1,000.00
588.4	Drug/Alcohol Testing Random				\$	1,000.00
588.2	Staking School		One Man		\$	1,000.00
588.2	Chainsaw School		Two Men		\$	1,500.00
588.2	Stringing & Sagging School		Eaux March		\$	3,000.00
588.4	PREA Supt & Engineering Meetings		Four Meet	-	\$ \$	1,500.00 1,000.00
588.4	PEA Committee Meetings		Two Meeti One Man	nys	э \$	1,000.00
588.2	Stray Voltage Training		Two Men		ې 3	3,000.00
588.2	Regulator/ OCR Training		I WO MICH		Ψ	5,000.00

\$ 23,500.00

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Appendix 2

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Dispatching/Rentals/Leasing

589	Pager Rental	\$ 800.00
589	Radio Tower Rental	\$ 3,600.00
589	Radio Line Lease	\$ 1,000.00
921.7	After-Hours Emergency Dispatching	\$ 35,000.00
921.8	Computer Line Lease	\$ 8,000.00
593.2	Cell-Phone Outside Crews	\$ 3,000.00
921.6	Cell-Phone (R. McCarthy	\$ 1,500.00
		\$ 52,900.00

Maintenance/Operations Expenses

582	Transformer Oil Testing (Substations)		\$	3,000.00
163.3	Crew Chief Tool Budget (593) 593.	02	\$	10,000.00
	Fire Resistant Clothing		S	3,000.00
588.9	Staking Engineer Budget		\$	1,500.00
	Meter Dept Budget Tool Budget		\$	700.00
	Meter Dept Training		S	1,200.00
	Meter Dept, Turtle Maintenance Agreer	ment	\$	1,500.00
	Meter Test Set Annual PUC Calibration		S	1,000.00
588	Eng/Oper Dept. Misc. Printing Expense	es l	S	500.00
588	Right of Way Filing Fee's		\$	2,000.00
589		monwealth Telephone	\$	23,000.00
589	Right of Way Lease Rail Crossings	-	\$	1,400.00
593.8	Rubber Goods/Hotline Equipment Testi	ing	\$	2,500.00
593.8	Rubber Goods/ Hotline Equipment Rep	-	. \$	3,000.00
593.8	Pole Numbers/ Phase Markers		\$	1,000.00
593.8	Sectionalizing/ Fuse Coordination Stud	y Two Circuits	\$	3,000.00
593.8	Substation Spraying		S	600.00
923.2	Misc Engineering Services		\$	5,000.00
593.8	Pole Testing 1000		\$	7,500.00
593.8	Line Inspection 2500 Pol	es	\$	9,000.00
593.8	Infared Imaging 2 Days		\$	2,000.00
593.1	Right of Way Clearing		\$	125,000.00
593.1	Right of Way Chemical Spraying		\$	40,000.00
588	Tree Replacement Program		\$	1,000.00
588	Arbor Day Planting/Tree Line USA		\$	600.00
593.2	Basic Phone Service on-call linemen		\$	900.00
593.4	Crew Expenses, Food/Misc Outage Re	elated	\$	500.00
593.9	Regulator/OCR Repair		\$	5,000.00
593.9	OCR/Relay Calibration/Testing 3/15-0	5 5677 23	\$	
594.9	Pennsylvania One Call Expenses		\$	2,000.00
595.8	Transformer Disposal		\$	9,000.00
595.8	Transformer Repair 3 - 15 - 5 - 15 - 5	7.	\$	
	VP, Engineering & Operations	Seminars/Meetings	\$	
909.6	Customers Meetings	Power Lunch	\$ \$	
930.2	Mapping Updates		э \$	
930.3	VOAM Dues		э \$	
930.3	VOAM Expenses	Meetings	ۍ ۲	
912	Whitneyville Fair Booth		3 S	
923.2	Quest Tech Line			289.150.00

Building and Grounds

932	Dumpster - Pole Yard	\$ 2,000.00
932.2	Maintenance - Communications Equipment (SCADA/AMR/ETC)	\$ 8,000.00
932.3	Maintenance Dept Tool Budget	\$ 500.00
932	Maintenance, Yards, Subs, Etc.	\$ 5,000.00
932.1	Maintenance Office Building	\$ 3,000.00
932.3	Maintenance Operations Building	\$ 4,000.00
932.3	Maintenance Storage Garage	\$ 1,500.00
932 4	Maintenance Apartment House	\$ 2,000.00
932.4	Maintenance Rental House	\$ 2,000.00
932	Emergency Generator Maintenance Contract	\$ 1,800.00
588	Repair Customer Property	\$ 2,000.00
		\$ 31,800.00

\$ 619,010.00

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WELLSBORO ELECTRIC COMPANY

COMPARATIVE STATEMENT OF OPERATIONS & MAINTENANCE EXPENSES

	YTD	Annual
	<u>Dec. 31, 2005</u>	<u>Budget</u>
DISTRIBUTION EXPENSES		
580-Operation, supervision, & engineering	24,849.85	34,800.00
582-Station expense	2,535.79	3,000.00
583-Overhead line expense	17,342.65	20,700.00
584-Underground line expense	0.00	0.00
585-Street lighting expenses	2,596.25	2,400.00
586-Meter expenses	10,877.46	11,700.00
586.3-Meter expenses-small tools	0.00	700.00
586.4-Meter expenses-outside training	945.89	1,200.00
587-Customer installation expenses	4,869.13	7,300.00
588-Miscellaneous distribution expenses	74,182.69	51,100.00
588.1-Misc dist exp-general meetings	4,973.18	4,900.00
588.2-Misc dist exp-outside training	14,910.73	20,700.00
588.24-Misc dispatch center	0.00	0.00
588.3-Misc dist exp-on call standby	6,247.41	5,400.00
588.4-Misc dist exp-safety meeting training	6,704.23	6,800.00
588.5-Misc dist exp-sick leave	0.00	0.00
588.9-Misc dist exp-staking dept-tools	<u>956.36</u>	<u>1,500.00</u>
Total operations	<u>171,991.62</u>	<u>172,200.00</u>
590-Maintenance, supervision & engineering	20,272.67	25,400.00
591-Maintenance of structures	0.00	0.00
592-Maintenance of station equipment	9,348.40	2,700.00
593-Maintenance of overhead lines	126,627.61	110,800.00
593.1-Maint o/h line-brush contractors	141,918.80	165,000.00
593.2-Maint o/h line-servicemens phone	670.57	3,900.00
593.3-Maint o/h line-working off system	1,013.59	0.00
593.4-Maint o/h line-meals	356.59	500.00
593.5-Maint o/h line-major storm labor	21,099.86	14,100.00
593.6-Maint o/h line-major storm extra crews	0.00	0.00
593.7-Maint o/h line-material inventory	0.00	0.00
593.8-Maint o/h line-testing/inspect tools	2,637.30	28,600.00
593.9-Maint o/h line-special equipment repair	5,981.38	10,000.00
594-Maintenance of underground lines	5,459.04	6,800.00
594.4-Maint undgrd lines-materials inventory	0.00	0.00
594.9-Maint undgrd lines-pa one call	1,660.35	2,000.00
595-Maintenance of line transformers	11,564.30	11,400.00
595.8-Maint line transformers-oil disposal	2,583.40	12,000.00
596-Maintenance of street lights	1,852.60	200.00
597-Maintenance of meters	13,403.75	6,300.00
598-Maintenance of misc dist plant	<u>0.00</u>	<u>0.00</u>
Total maintenance	<u>366,450.21</u>	<u>399,700.00</u>
589-Distribution rents	<u>26,572.89</u>	<u>29,800.00</u>
Total distribution expense	<u>565,014.72</u>	<u>601,700.00</u>

57.195 (b) Item 8

A comparision of budgeted versus actual transmission and distribution capital expenditures 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.

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			get	Act	
New Services		\$	90,000.00	\$	106,188.29
Pole Replacments		\$	29,000.00	\$	60,055.45
Hilltop Substation		\$1	,414,000.00	\$ 1,700,668.00	
Maple Hill	Stringing School	\$	25,000.00	\$	-
Fischler St.		\$	9,000.00	\$	-
Route 287 South		\$	30,000.00	\$	-
East/West Main	Voltage Conversion	\$	30,000.00	\$	-
Meade St.	Voltage Conversion	\$	15,000.00	\$	-
Nichols/Water St.		\$	7,000.00	\$	-
Total of System Improvement And the above six specific projects				\$	262,843.93
AMR - Turtle Meters		\$	45,000.00	\$	45,006.80
Industrial/Commercia	al Metering	\$	5,000.00	\$	6,971.56
Voltage Capacitors		\$	1,500.00	\$	352.39
Outdoor and Street Lights				\$	16,317.63
Oil Circuit Reclosers	and Sectionilizing Switches	\$ \$ 1	15,000.00 ,715,500.00	\$ \$ 2	20,957.78 2,219,361.83

Explanation of variances of 10% or greater

Pole Replacements Budget \$ 29,000 Actual \$ 60,055.45 Additional poles were replaced due to inspection and testing, storm damage, vehicle accidents,etc.

Hilltop Substation - Budget \$ 1,414,000 Actual \$ 1,700,668 Material and labor costs higher than anticipated. Power transformer, Substation Structure and Contract Labor to install station.

Industrial/Commerical Metering Budget \$ 5,000 Actual \$ 6,971.56 Additional meters were purchased for new services installed and Four spare polyphase meters

Voltage Capacitors Budget \$ 1,500 Actual \$ 352.39 Less than anticipated capacitors were needed

Oil Circuit Reclosers and Sectionilizing Switches Budget \$ 15,000 Actual \$ 20,957.78 Additional OCR'S were removed from service in 2005 and rebuilt for use in future years.

Total Capital Projects of \$ 262,843.93 included the specific projects listed in the budget, then additional capital work was completed due to inspection and testinf activities, storm damage code violations that were corrected and day to day activities that required additional work.

Outdoor and street lights - \$16,317.63 was for addition of outdoor lights at customers locations, and the replacement of mercury vapor lights to sodium lights for street lighting purposes, we no longer use a mercury vapor as they go bad they are replaced with a sodium vapor.

57.195 (b) ltem 9

Quantified transmission and distribution operation and maintenance goals/objectives for the current calender year detailed by system area (that is transmission, Substation, distribution)

Year 2006

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Substations

G.L. Code	Description	Goal
582	Substation Oil Testing	Test thirteen units
593.8	Substation Weed Control	Spray all stations
593.8	Infared Imaging	Infared all stations
593.9	OCR/Relay Calibration/Testing	Calibrate/Test six units
593.9	Voltage Regulator Rebuilds	Rebuild three substation units

Distribution System

593.8	Fuse Coordination/Sectionalizing Study	Complete One Circuit
593.8	Pole Testing	Test 1000 Poles
593.8	Visual Line Inspection	Visual inspection of 2500 poles
593.1	Right-of-Way Clearing (Manual)	Clear/Trim 40 Miles of Line
593.1	Right-of-Way Chemical Application	Spray 25 Acres
593.9	Regulator testing/repair	Test three distribution regulators
593.9	OCR testing/repair	Test/ repair six units
595.8	Transformer repair	as needed
593.8	Phase Marking	One Circuit

2006 Engineering and Operations Department Budget 11/4/2005

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Vehicles				2006 Budget
184.2	Vehicles Expenses- Repairs, Insurance, Gas, Oil, 8	Etc.		\$ 50,000.00
184.2	Vehicle Expenses, Spot Lights/Traffic Lights			\$ 1,500.00
184.2	Truck 5 - 2000 Ford Service Truck		770/Month	\$ 9,240.00
184.2	Truck 6 - 2004 Freightliner 55' Bucket Truck		2950/Month	\$ 35,400.00
184.2	Truck 8- 1995 Ford Digger, Lease Payment W	//Pole Trailer # 1	8 2050/Month	\$ 24,600.00
184.2	Truck 10 - 2005 Service Bucket		1215/Month	\$ 14,600.00
184.2	Unit 20- 1997 CarMart Trailer, Lease Payment		50/Month	\$ 600.00
184.3	Vehicle Expenses- Repairs, Insurance, Gas, Oil, Et	C-METER DEPT		\$ 5,500.00
184.3	Truck 11- Meter Tester, Truck Lease Payment		400/Month	\$ 4,800.00
184.3	Truck 12 - Ford Ranger Lease Payment		400/Month	\$ 4,800.00
184.3	Truck 14 - Dodge Dakota Lease Payment		470/Month	\$ 5,640.00
184.5	Vehicles Expenses- Repairs, Insurance, Gas, Oil, I	Etc. Car#2	2	\$ 4,000.00
184.5	Car # 2, Vehicle Lease Payment		600/Month	\$ 7,200.00
184.4	Car # 1, Vehicle Lease Payment		550/Month	\$ 6,600.00
184.4	Car # 1, Vehicle Expenses, Repair, Insurance, Ga	s Oil Car # 2	2	\$ 4,000.00
932	General Maintenance Vehicle Expenses	Truck	7	\$ 1,500.00
Training	& Safety			\$ 179,980.00

588.2	Basic Climbing School	L. White	Instructor	\$	-
588.2	Intermediate Gloving	One Man		\$	-
588.2	Advanced Gloving			\$	1.500.00
588.2	Intermediate Sticking			\$	-
588.2	Advanced Sticking			\$	-
588.2	Substation School	Two Men		\$	1,000.00
588.2	Underground School	Two Men		\$	-
588.4	Audiometric Testing			\$	300.00
926.9	Safety Glasses/Eye Exams			\$	1,000.00
588.4	PREA Bi-Monthly Safety Meeting			\$	2,400.00
588.2	Keyman Conferences (Crew Chief & Linemen)		One Man	\$	1,000.00
588.2	Keyman Conference (Supervisors)		One Man	\$	1,000.00
588.4	Drug/Alcohol Testing Random			\$	1,000.00
588.2	Staking School		One Man	\$	-
588.2	Chainsaw School		Two Men	\$	1,000.00
588.2	Stringing & Sagging School			\$	4,000.00
588.4	PREA Supt & Engineering Meetings		Four Meetings	\$	1,500.00
588.4	PEA Committee Meetings		Two Meetings	\$	1,000.00
588.2	Stray Voltage Training		One Man	S	-
588.2	Regulator/ OCR Training		Two Men	S	700.00

\$ 17,400.00

Dispatching/Rentals/Leasing

589	Pager Rental			\$	800.00
589	Radio Tower Rental			\$	3,600.00
589	Radio Line Lease			\$	1,200.00
921.7	After-Hours Emergency	Dispatching		\$	51,500.00
921.8	Computer Line Lease			\$	
593.2	Cell-Phone Outside Cre	:WS		\$	
921.6	Cell-Phone (R. McCarth	ıy		\$	2,000.00
589	Pole Leasing	WECo on Commonwe	alth	\$	23,000.00
589	Right of Way Leasing	Grow Rail Crossings		\$	1,400.00
				\$	84,700.00
	ce/Operations Expens				
-	Transformer Oil Testing			\$	
163.3	Crew Chief Tool Budge	t (593)		\$	
	Fire Resistant Clothing			\$	
588.9	Engineering Dept Tool I			\$	
586.3	Meter Dept Budget	Tool Budget		\$	
586	Meter Dept, Tri-County			S	
586.4	Meter Dept Training			S	
597	Meter Dept, Turtle Main	itenance Agreement		\$	
597	Meter Test Set Annual	PUC Calibration		\$	
588	Eng/Oper Dept. Misc. P	Printing Expenses		5	500.00
588	Right of Way Filing Fee			\$	
593.8	Rubber Goods/Hotline I	Equipment Testing		S	2,500.00
593.8	Rubber Goods/ Hotline	Equipment Replaceme	ent	\$	2,000.00
~ 593.8	Pole Numbers/ Phase N	Markers		5	1,200.00
≁ 593.8	Sectionalizing/ Fuse Co	ordination Study	Two Circuits	S	3,000.00
593.8	Substation Spraying			5	600.00
923.2	Misc Engineering Servi	ces		S	5,000.00
~593.8	Pole Testing	1000		\$	5,000.00
~593.8	Line Inspection	2500 Poles		Ş	5,000.00
~593.8	Infared Imaging	2 Days		Ş	,
593.1	Right of Way Clearing			5	120,000.00
593.1	Right of Way Clearing L	Jrban Trimming		\$	5,000.00
593.1	Right of Way Chemical	Spraying		\$	5 15,000.00
588	Tree Replacement Prog	gram		5	1,000.00
588	Arbor Day Planting/Tree	e Line USA		\$	600.00
593.4	Crew Expenses, Food/I	Misc Outage Related		5	500.00
~593.9	Regulator/OCR Repair			9	5,000.00
593.9	OCR/Relay Calibration/	Testing		\$	5 2,000.00
594.9	Pennsylvania One Call	Expenses		9	5 2,100.00
~ 595.8	Transformer Disposal			9	8,000.00
~ 595.8	Transformer Repair			9	2,000.00
588/920.6	VP, Engineering & Ope	rations	Seminars/Meetings	9	9,000.00
909.6	Customer Meeting/ Key	/ Accounts	Power Lunch/Misc	9	3,000.00
~930.2	Mapping Updates			9	5,000.00
∽ 930.3	VOAM Dues			9	
930.3	VOAM Expenses		Meetings	S	600.00
923.2	Quest Tech Line				1,200.00
				9	\$ 229,600.00

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Building and Grounds

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932	Dumpster - Pole Yard	\$ 2,000.00
932.2	Maintenance - Communications Equipment (SCADA/AMR/ETC)	\$ 8,000.00
932.3	Maintenance Dept Tool Budget	\$ 500.00
932	Maintenance, Yards, Subs, Etc.	\$ 6,000.00
932.1	Maintenance Office Building	\$ 3,000.00
932.3	Maintenance Operations Building	\$ 4,000.00
932.3	Maintenance Storage Garage	\$ 500.00
932.4	Maintenance Apartment House	\$ 2,000.00
932.4	Maintenance Rental House	\$ 2,000.00
932	Emergency Generator Maintenance Contract	\$ 2,000.00
588	Repair Customer Property	\$ 2,000.00
		\$ 32,000.00

\$ 543,680.00

11	/4/2005
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57.195 (b) (11)

		2006 Ca	BORO ELECTRIC (apital Budget ering and Operatio		IY		
А.	New Services	-	Services	\$	81,000.00		
	Misc. System Impro Sub-			\$ \$	25,000.00 106,000.00	¢	400 000 00
В.	Pole Replacements WECo Projects	100 Pol	es			\$ \$	106,000.00 150,000.00
	Rt 287 South		One (1) Mile			\$	37,000.00
	Lower Hills Creek		Stringing School	1/0 Alu	m	\$	25,000.00
	Fischler St. Rebuild		1300'	1/0 Alu	m	\$	10,000.00
	West Ave					\$	7,000.00
	Bodine St.		One Mile Tie Line t	to Marsh	Creek	\$	37,000.00
	West Branch		Line Relocation -	05-04	>	\$	18,000.00

	Construction Estimate		\$	390,000.00
C.	Automated Meter Reading System	TURTLE Meters	\$	51,000.00
D.	Metering Industrial / Commercial Metering	Upgrades/AMR	\$	5,000.00
	SCADA		\$	5,000.00
Ξ.	Misc.			
	Wire Trailer	Single Reel Trailer	. \$	8,000.00
	Two-Way Radios	Portable Radio	\$	1,500.00
	Power Tools- Line Trucks	Hot Line Tools	\$	4,000.00
	Computers	Crew Chief Office	\$	1,500.00
	Sectionilizing Switches		\$	3,000.00
	Voltage Capacitors	3 Units	\$	1,000.00
	Oil Circuit Reclosers		\$ \$	5,500.00 85,500.00
		Total	э \$	475,500.00

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(845) 577-3341



Honorable James J. McNulty Secretary Pennsylvania Public Utility Commission Commonwealth Keystone Building 400 North Street Harrisburg, PA 17120 Orange and Rockland Utilities, Inc. 390 West Route 59 Spring Valley NY 10977-5300 www.oru.com

April 27, 2006

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PA PUBLIC UTILITY COMMISSION DECRETATING DUREAU

Re: <u>Electric Service Reliability Regulations</u> <u>Docket No. L-00030161</u>

Dear Secretary McNulty:

In accordance with the Electric Reliability Regulations adopted by the Pennsylvania Public Utility Commission in its order dated May 20, 2004 in Docket No. L-00030161 and a March 17, 2004, letter from James J. McNulty extending the filing date, Pike County Light & Power Company hereby files an original and six copies of its Service Reliability Report for 2005 System Performance.

Any questions regarding this report should be addressed to me at the address listed above or I can be reached at (845) 577-3341.



TTG/dlp

Enclosures

cc: Office of Consumer Advocate Office of Small Business Advocate Pennsylvania AFL-CIO Very truly yours,

Timotry Lanun

Timothy T. Garvin Manager Performance & Operational Engineering

Sent to:

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Mr. Irwin A. Popowsky Office of Consumer Advocate 555 Walnut Street Forum Place, 5th Floor Harrisburg PA 17101-1923

Mr. George Svokos Office of Small Business Advocate Commerce Building, Suite 1102 300 North Second Street Harrisburg, PA 17101

Pennsylvania AFL-CIO Utility Division 231 State Street 7th Floor Harrisburg, PA 17101 (717) 238-9351

Honorable James J. McNulty Secretary Pennsylvania Public Utility Commission Commonwealth Keystone Building 400 North Street Harrisburg, PA 17120 Pike County Light and Power Company (Orange and Rockland Utilities, Inc.)

Annual Electric Reliability Report

2005



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PARTICIPAL OF A CONTRACT OF A

April 2006

§ 57.195. (b)(1) An overall 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.

Overall Current Assessment

Orange & Rockland Utilities' "Northern Division" serves Pike County Light and Power (Pike or the Company), as well as portions of Orange County and Sullivan County in New York State, and portions of Sussex County in New Jersey. Pike County is the westernmost portion of Orange & Rockland Utilities' "Northern Division". This area is primarily fed from two 34.5 kV radial circuits that back up each other.

In January 2006, The Pennsylvania Public Utilities Commission (PAPUC) adjusted the Standards to which Pike operates as follows:

12-Month Frequency (SAIFI) 0.82 interruptions per customer served 12-month Restoration (CAIDI) 235 minutes of interruption per customer interrupted 12-month Duration (SAIDI) 194 minutes per customer served

In 2005, the Pike County service territory experienced a frequency (SAIFI) of 1.85 interruptions per customer served, a restoration time (CAIDI) of 109 minutes, and duration (SAIDI) of 202 customer minutes of interruption (Table 2). SAIFI was 2.25 times the standard for frequency, while CAIDI achieved a 54% improvement over the 235-minute average reliability standard for restoration. The resultant SAIDI was 8 minutes over the reliability standard for duration. It should be noted, however, that two interruptions affecting more than 10% of Pike customers were not approved for exclusion from the statistics. These types of interruptions had previously been excluded. With these two incidents excluded, the 12-month SAIFI would have been reduced to 0.971, the 12-month CAIDI would have increased to 178 minutes, and the 12-month SAIDI would have been reduced to 173 minutes. These adjusted metrics would be more in line with the standards: SAIFI would be 18% over the standard, CAIDI would be 24% better than its standard, and SAIDI would have been 11% better than the standard. In addition, temporary circuit configurations due to capital improvements increased the impact of interruption on the Pike System. Refer to Table 2 for a listing of the reliability statistics and the data used in calculating these indices for the past 3 years.

There were ten major events affecting Pike County during the year 2005 that were accepted by the Commission to be excluded from the statistics. These events are noted in Table 1.

Table 3 shows a summary by cause, for the Pike County interruptions experienced in 2005, with pre-arranged outages and major events removed. The major cause is tree contact with 39 interruptions affecting 3,160 customers for a total of 540,843 minutes. This represents 43% of the number of interruptions, 39% of the customers affected, and 61% of the customer minutes of interruption. The program targeted to improve this area is the four-year, cycle-based tree clearance program. A "cycle-buster" trimming program was also in effect to address key areas where recurring outages have occurred. The Company's Service Reliability programs, discussed later in this report, are designed to target equipment and circuits that require performance upgrades.

The distribution inspection and maintenance goals/objectives and distribution and capital expenses, are listed starting on page 6. Presently, Pike County has no transmission lines.

§ 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

Date	Cause	Time	Duration (minutes)	Customers Affected	Cust Min of Interruption
2005/01/12	Tree Contact Unknown-Other	15:18 11:06	240 72	234 234	35,424 16,848
2005/03/24	Storm (6 Interruptions)	1:32	848	4,212	1,067,666
2005/04/14	Non-Comp Acc.	11:20	68	2,230	138,872
2005/05/02	Equip. Failure	20:42	32	820	26,240
2005/06/10	Non-Comp Acc.	13:09	273	2,804	738,697
2005/06/17	Tree Contact	9:59	95	2,706	111,864
2005/06/22		16:59	234	2,232	381,583
2005/08/08	Storm (3 Interruptions)	13:02	176	3,052	221,297
2005/08/12	Storm (4 Interruptions)	19:45	1,166	1,727	290,416
2005/11/06	Storm (5 Interruptions)	19:33	1,156	2,255	259,065

TOTAL

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22,506 3,287,972

Table 1

§ 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 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.

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Reliability Indices 2003 - 2005

Year	Frequency SAIFI (Cust Aff/ Cust Srvd)	Restoration CAIDI (Cust Min/ Cust Aff)	Duration SAIDI (Cust Min/ Cust Srvd)	Avg Cust Served	Interruptions	Customers Affected	Cust Min of Interruption
2003	.52	184	96	4,321	56	2,250	414,845
2004	.52	172	90	4,349	43	2,267	390,469
2005	1.85	109	202	4,386	90	8,123	885,329

Table 2



§ 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, and customer interruption minutes categorized by outage cause such as equipment failure, animal contact, tree related, and so forth. Proposed solutions to identify service problems shall be reported.

Causes Of Interruptions

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Cause	Interruptions	% of Interruptions	Customers Affected	Cust Min of Interruption
Animal	4	4.4%	229	17,010
Tree	39	43.3%	3,160	540,843
Overload	4	4.4%	178	21,881
Work Error	1	1.1%	73	3,066
Eq Failure	20	22.2%	3,691	212,029
Non-Comp Acc	10	11.1%	428	59,540
Cust Problem	0	.0%	0	0
Lightning	5	5.6%	44	3,048
None Fnd/Other	7	7.8%	320	27,912
TOTAL				
	90		8,123	885,329

Table 3

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

T/D Inspection/Maintenance Goals/Objectives

Goals/Objectives vs. Results

Distribution goals and objectives focused on completing all scheduled preventive maintenance, These goals were met. Pike has no transmission.

Distribution Tree Trimming

In 2005, 68.2 miles of the 85.5 total were scheduled to be completed by years end, as the 2005 schedule included L7 and 6-8, as well as the Met-Ed fed area. This tree maintenance goal was met.

Infrared Inspection Program

Our 2005 program included follow up of outstanding 2004 hot spots, and shooting all 3 phase mainline circuitry again. The infrared inspection goals were met.

Power Quality

The 2005 maintenance season required inspection of 14 capacitors and 5 regulators. 5 regulators were inspected. 12 Capacitors were inspected, and 2 were removed due to voltage conversions. The Power Quality goals were met.

Mid-point Recloser / Sectionalizing Program

The 2005 maintenance season required inspection of 1 sectionalizer and 1 recloser. The Mid-point Recloser / Sectionalizing Program goals were met.

§ 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 or FERC account code as available. Explanations of any variances 10% or greater shall be included.

T&D Operation and Maintenance Expenses

O&M	2005 Budget k\$	2005 Actual k\$-
580 Operation Supervision And Engineering	\$ 29.0	\$ 66.6
581 Load Dispatching	4.2	3.7
582 Station Expenses	3.4	19.8
583 Overhead Line Expenses	29.7	112.8
584 Underground Line Expenses	(0.3)	10.3
586 Meter Expenses	40.8	8.8
587Customer Installation Expenses	0.8	0.3
588 Miscellaneous Distribution Expenses	29.9	35.8
589 Rents	0.8	0.3
592 Maintenance Of Structures And Equipment	-	0.2
593 Maintenance of Overhead Lines	69.5	218.1
594 Underground Line Expenses	0.0	20.1
595 Maintenance of Line Transformers	-	-
596 Maintenance of Street Lighting and Signal Systems	4.6	14.4
597 Maintenance of Meters	3.8	13.8
598 Maintenance of Miscellaneous Distribution Plant	-	0.2
599 Joint use	90.0	121.5
Total Distribution	\$ 306.2	\$ 646.7

Overall 2005 O&M Expenses exceeded the Budget by more than 10%. Within the O&M expenses, additional costs in the Maintenance of Overhead Lines, Operation Supervision and Engineering, and Overhead Line Expenses were incurred. Increased costs in these areas were incurred as the result of additional work due to load growth, damage due to storm activity, and efforts to improve reliability including voltage conversions.

§ 57.195. (b)(8) A comparison of budgeted versus actual transmission and distribution capital expenditures 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.

05 Actual k\$
\$ 26.9
(54.7)
(20.1)
12.1
244.7
90.9
342.5
109.1
49.8
39.0
\$ 840.2
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T/D Capital Expenditures

The 2005 overall Capital Expenditures exceeded the Budget by more than 10%. Within Capital Expenditures, additional costs in the construction of the Matamoras Substation and Tie circuits, Underground Transformer purchase, and Electric Distribution Blankets were incurred. Costs incurred for the Matamoras Substation and associated projects was due the fact that the work that was scheduled for 2004 was carried over to the beginning of 2005. Underground Transformer costs were the results of several New Business jobs. The Electric Distribution Blankets were exceeded as the result of additional work due to efforts to improve reliability and an increase in New Business activities.

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

T/D Inspection and Maintenance Goals/Objectives Quantified

Inspection and maintenance programs, designed with the intention to improve frequency of interruption and minimize the resultant increases in restoration (as frequency is improved), have been in effect for over 10 years. These programs are focused on field facilities and customer satisfaction, and are effective in minimizing the probability of an interruption while limiting the number of customers affected per interruption. The major programs are:

Distribution Tree Trimming

In 2005, 68.2 miles of the 85.5 total was completed, and in 2006, the Matamoras area, the remaining 17.3 miles, is scheduled. This tree maintenance goal will be met by the end of the first quarter of 2006.

Infrared Inspection Program

Our 2006 program will include shooting all 3 phase mainline circuitry again.

Power Quality

The 2006 maintenance program will require inspection or removal due to voltage conversions, of 12 capacitors and inspection of 5 regulators.

Mid-point Recloser / Sectionalizing Program

The 2006 maintenance season will require inspection of 1 sectionalizer and 1 recloser.

§ 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.

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T/D Operation and Maintenance Expenses By FERC Account

	2006 Budget k\$
580 Operation Supervision And Engineering	\$ 59.7
581 Load Dispatching	4.4
582 Station Expenses	4.6
583 Overhead Line Expenses	\$71.80
584 Underground Line Expenses	(2.4)
586 Meter Expenses	110.1
587Customer Installation Expenses	1.2
588 Miscellaneous Distribution Expenses	23.1
589 Rents	0.7
593 Maintenance of Overhead Lines	115.0
596 Maintenance of Street Lighting and Signal Systems	s 4.2
597 Maintenance of Meters	9.8
599 Joint use	\$100.80
Total Distribution	\$ 503.0

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

T/D Capital Expenditures By FERC Account

Account Code	Capital	06 Budget k\$
70/90 -Various	Electric Distribution Blankets - New Business OH	181.6
70/90 -Various	Electric Distribution Blankets - System Integrity OH	167.4
70-9696	Line 7 Matamoras to RT 84 Crossing	296.5
70-0777, 70-0888	Electric Meter Purchases / Instalis	72.1
	Pike Total 2006 Capital Budget	\$ 714.6

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

T/D Inspection and Maintenance Programs Significant Changes

Inspection & Maintenance Changes

No significant changes

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Robert R. Stoyko Vice President - Electric Distribution

April 27, 2006

DRUGINAL

UGI Utilities, Inc. Hanover Industrial Estates 400 Stewart Road Wilkes Barre, PA 18706-1495

(570) 830-1222 Telephone (570) 830-1190 Fax rstoykoœugi.com

Mr. James J. McNulty, Secretary Pennsylvania Public Utility Commission Commonwealth Keystone Building 400 North Street Harrisburg, PA 17120

RE: Quarterly Electric System Reliability Report 12 Months Ending March 31, 2006

Dear Secretary McNulty:

Pursuant to the Commission's May 7, 2004 Final Rulemaking Order amending Electric Service Reliability Regulations (52 Pa. Code §§57.191 - 57.197) at Docket No. L-00030161, UGI Utilities, Inc. -Electric Division ("UGI") hereby files an original and six copies of its Quarterly System Reliability Report. This report contains SAIDI, SAIFI, and CAIDI results on a 12-month rolling basis for the period ending March 31, 2006 along with the raw data from the same period. The actual statistics continue to be favorable to both the benchmark and standard adopted for UGI. An extended period of relatively storm-free weather has been a contributing factor in the results noted. Also included is a breakdown of outages by cause for the 12 months ending March 31, 2006.

Copies of this filing have been served upon the Office of Consumer Advocate, the Office of Small Business Advocate, and the Bureau of Audits.

Questions related to the attached report should be directed to Ms. Abigail J. Hemmerich at (610) 796-3431 or email ahemmerich@ugi.com.

Kindly acknowledge receipt of this filing by date stamping the enclosed copy of this letter and returning it in the enclosed stamped, self-addressed envelope.

Sincerely,

Robert R. Stoyko Vice President, Electric Distribution Attachment



and to be

PARENTIA UTUTY COMMISSION

SENT VIA FEDERAL EXPRESS

cc: FEDERAL EXPRESS

Irwin A. Popowsky Office of Consumer Advocate 555 Walnut St. 5th Floor, Forum Place Harrisburg, PA 17101-1921

William R. Lloyd Office of Small Business Advocate Suite 1102, Commerce Bldg. 300 North Second St. Harrisburg, PA 17101

Thomas E. Sheets Bureau of Audits Pennsylvania Public Utility Commission Commonwealth Keystone Bldg. 3rd Floor, F East Harrisburg, PA 17101



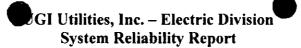
UGI Utilities, Inc. – Electric Division System Reliability Report: Quarterly Update

L-00030141



DOCUMENT FOLDER

May 1, 2006



§ 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.

No major events occurred during the preceding quarter.

§ 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.

The reliability results for UGI's service area for the 12 month period ending March 31, 2006 are as follows:

Reliability Statistics

	SAIFI	SAIDI	CAIDI
12-Month Standard	1.12	256	228
12-Month Benchmark	0.83	140	169
12 months Ended March, 2006	0.68	82	121

Note:

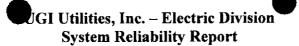
SAIFI – System Average Interruption Frequency Index SAIDI – System Average Interruption Duration Index

CAIDI – Customer Average Interruption Duration Index

While the results for each of the three reliability indices remain well below their respective standard and benchmark it is important to point out that favorable weather conditions over the past 12 months have contributed significantly to these results.

SAIFI

The 12-month rolling SAIFI index increased from 0.64 in our last report to 0.68 for the period ending March 2006.



SAIDI

The SAIDI value for the 12 months ending March 2006 is 82. This result is 6 points higher than from the previous reporting period, but still tracking well below UGI's benchmark level of 140.

CAIDI

The CAIDI result of 121 is 2% higher for the 12 month reporting period ending March 2006. Despite this small increase, UGI's 12-month rolling CAIDI index has consistently tracked below the benchmark level since the metric was instituted.

Month	SI	тсі	тсв	тмсі
Apr-2005	29	1,581	61,856	248,097
May-2005	27	374	61,828	43,066
Jun-2005	77	1,953	61,748	343,717
Jul-2005	62	4,681	61,720	837,628
Aug-2005	51	4,575	61, 9 52	485,081
Sep-2005	37	2,926	61,743	308,140
Oct-2005	45	5,703	61,787	524,327
Nov-2005	63	6,240	61,827	717,080
Dec-2005	33	562	61,876	93,771
Jan-2006	55	4,232	61,946	664,701
Feb-2006	44	8,426	61,990	775,329
Mar-2006	<u>19</u>	<u>589</u>	<u>61,952</u>	<u>31,327</u>
TOTAL	542	41,842	61,852	5,072,264

Raw Data: April 2005 - March 2006

- SI: Sustained Interruptions
- TCI: Total Customers Interrupted
- TCB: Total Customer Base (12-month arithmetic average)
- TMCI: Total Minutes Customer Interruption

Note: There were no major events excluded from the numbers used in calculating the indices.

UGI Utilities, Inc. – Electric Division System Reliability Report

§57.195(e)(5)-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 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.

Cause	% of Total Incidents	Number of Interruptions	Customers Interrupted	Minutes Interrupted
Animal	9.59%	52	1,350	114,270
Company Agent	0.18%	1	7	84
Construction Error	0.55%	3	922	105,570
Customer Problem	1.29%	7	9	758
Equipment Failure	31.55%	171	8,715	725,669
Lightning	8.67%	47	4,593	635,404
Motor Vehicle	5.72%	31	3,665	443,643
Other	0.55%	3	3	266
Public	2.77%	15	4,625	286,737
Structure Fire	0.74%	4	86	10,791
Trees	29.89%	162	15,111	2,283,968
Unknown	3.87%	21	1,415	98,680
Weather/Ice	0.18%	1	7	1,890
Weather/Wind	<u>4.43%</u>	<u>24</u>	<u>1,334</u>	<u>364,534</u>
TOTAL	100.00%	542	41,842	5,072,264

Outage by Cause: April 2005 - March 2006

Proposed Solutions to Identified Problems:

Thirty-two percent of the outages reported above resulted from equipment failure. A large portion of these equipment failures are attributed to a problem in a distribution-type fuse cutout utilized on the UGI system. As discussed in previous reports, UGI has implemented a replacement program to actively identify and replace these defective parts. The replacement work effort is ongoing.

WELLSBORO ELECTRIC COMPANY

QUARTERLY RELIABILITY REPORT 57.195 REPORTING REQUIREMENTS

First Quarter 2006 January thru March 2006

SUBMITTED BY

ROBERT S. McCARTHY VICE-PRESIDENT, ENGINEERING AND OPERATIONS 570-724-3516 <u>bobbym@ctenterprises.org</u>

> DOCUMENT FOLDER

L-00030161

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57.195 **Reporting Requirements**

Time of

Event

Section (e) Item (1)

L-000301Ul

A decription of each major event that occurred during the preceding guarter including the time and duration of the event, the numer 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.

Date

Duration of Event # Cust Affected Affected

Customer Hours

Cause

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NO MAJOR EVENTS



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57.195 Reporting Requirements

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Section (e) Item (2)

Rolling 12-Month reliability index Values (SAIFI,CAIDI,SAIDI) 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.

WELLSBORO ELECTRIC COMPANY

ROLLING TWELVE MONTH INTERRUPTION INDEXS

First Quarter of 2006

SAIDI	SAIFI	CAIDI	
149	1.48	101	

ROLLING TWELVE MONTH STANDARD AS ESTABLISHED BY THE PUC

SAIDI	SAIFI	CAIDI
278	1.66	167

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PARTINIA DENTRY CONTRACT

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57.195 Reporting Requirements

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Section (e) Item (2)

Wellsboro Electi	ric Company	Reliability Index		SAIDI
MONTH	TOTAL CUST MI	NUTES	# CUSTOME	RS SERVED
April-05	55207.2		5869	
May-05	47809.8		5877	
June-05	173671.2		5874	
July-05	52242.6		5883	
August-05	40179.6		5899	
September-05	367794.6		5894	
October-05	21910.8		5886	
November-05	18953.4		5889	
December-05	3029.4		5903	
Jan-06	46000.2		5905	
Feb-06	23728.8		5895	
Mar-06	26127.6		5906	
	876655.2		70680	
		_ Average # Customers	Served	5890

Rolling 12 Month Average SAIDI Index

148.83789

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WELLSBORO ELECTRIC COMPANY

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Reliability Index SAIFI

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Month	# of Customers Interrupted	# of Cust Served
April-05	299	5869
May-05	179	5877
June -05	1245	5874
July-05	493	5883
August-05	644	5899
Sept-05	4 117	5894
Oct-05	19 1	5886
Nov-05	204	5889
Dec-05	60	5903
Jan-06	528	5905
Feb-06	361	5895
Mar-06	396	5906
		70680
	8717	5890 Avg # of Customers

.

SAIFI INDEX 1.479966

Wellsboro Electric Company

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Reliability Index CAIDI

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Month	Total Customer Mins	# of Customers Interrupted
April-05	55207.2	299
May-05	47809.8	179
June-05	173671.2	1245
July-05	52242.6	493
August-05	40179.6	644
Sept-05	367794.6	4117
Oct-05	21910.8	191
Nov-05	18953.4	204
Dec-05	3029.4	60
Jan-06	46000.2	528
Feb-06	23728.8	361
March-06	26127.6	396
	876655.2	8717

CAIDI INDEX

100.5685

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 indentified service problems shall be reported.

Outages from April 05 thru March 06

Outage	Number of	Number	Customer	Percentage
Cause	Customers	of	Minutes	of Outages
	Affected	Outages		-
Animals	520	47	57135.6	14.6%
Vehicles	686	7	113565.6	2.9%
Decay	8	1	792	0.8%
Electrical Overload	· 1	1	88.8	0.4%
Equipment	3134	39	180150	15.5%
Ice,Sleet,Frost	0	0	0	2.1%
Lightning	1222	61	157387.8	25.5%
Other, Utilities	0	0	0	0.4%
Rain	13	1	883.8	0.4%
Trees	829	39	107648.4	10.9%
Unknown	722	44	44763	19.2%
Wind	1488	25	211138.2	7.1%
Public Contact	94	1	3102	
	8717	266	876655.2	100.0%

PECO Energy Company 2301 Market Street P.O. Box 8699 Philadelphia, PA 19101-5699 www.exeloncorp.com



May 1, 2006



Via Federal Express

400 North Street

Mr. James McNulty, Secretary

Pennsylvania Public Utility Commission Commonwealth Keystone Building

52 Pa. Code Chapter 57

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PA PUBLIC UTILITY COMMISSION SEGRETAIN'S BUITEAU

Second Floor Harrisburg, Pennsylvania 17120 Re: PUC Docket No. L-00030161 Rulemaking Re Amending Electric Service Reliability Regulations at

Dear Secretary McNulty:

Enclosed is PECO's Annual Reliability Report for the period ending December 31, 2005, submitted pursuant to the Electric Service Reliability Regulations at 52 Pa. Code Chapter 57.

Sincerely,

In Dela

enclosure

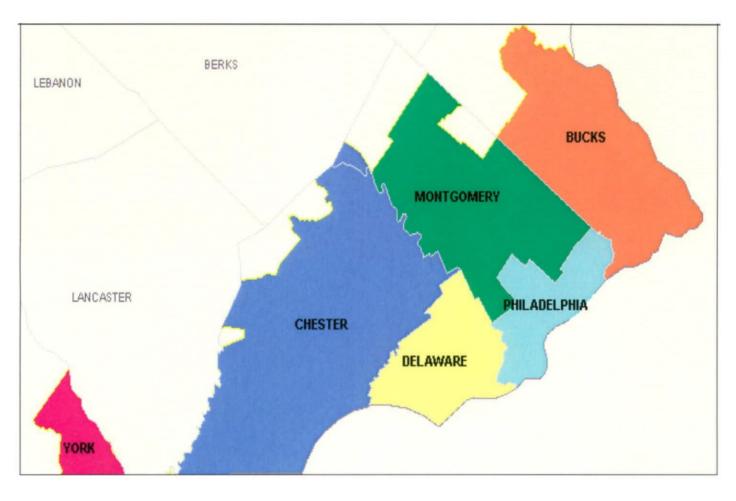
SAN/mpb







2005 Electric Distribution Company Annual Reliability Report



DOCUMENT FOLDER

April 30, 2006



MAY 0 1 2005

PA PUBLIC UTILITY COMMISSION SEGRETARY'S BUREAU



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PA PUBLIC UTILITY COMMISSION DEGRETARY'D BUDEAU

INTRODUCTION

PECO Energy ("PECO") is submitting this report to the Pennsylvania Public Utility Commission (the "Commission") in accordance with 52 Pa Code 5.423.

PECO is committed to providing safe and reliable electric service to its customers. PECO serves approximately 1.6 million electric customers covering nearly 2,000 square miles in Bucks, Montgomery, Delaware, Chester, York and Philadelphia Counties, including the City of Philadelphia.

PECO's system performed reliably in 2005 as demonstrated by the reliability indices. For 2005, SAIFI was 1.02, CAIDI was 99 and SAIDI was 100. All three indices were better than the respective Benchmarks and Standards.



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PA PUBLIC UTILITY CO. HISSION SECRETARY'S BUREAU

B1: Section 57.195(b)(1)

"The annual reliability report shall include ... an overall current assessment of the state of the system reliability in the electric distribution company's service territory including a discussion of the electric distribution company's current programs and procedures for providing reliable electric service."

Current Assessment:

Despite the 5th warmest summer season on record in Philadelphia, leading to the six highest daily peak loads ever, PECO Energy's reliability performance in 2005 was good. The SAIFI of 1.02, the CAIDI of 99 and the SAIDI of 100 were all better than the respective Benchmarks and Standards.

Programs and Procedures:

PECO Energy continues to stress excellence in fundamentals:

- Emergency response and daily operation
- Thorough preventive and corrective maintenance
- Appropriate capacity and design
- Adequate bulk supply
- Appropriate investment
- Enhanced use of automation

PECO Energy's program for providing reliable electric service is multifaceted. It starts with a transmission and distribution system that is designed and built to reliable standards. Under a formal, comprehensive, predictive and preventive maintenance program, equipment receives maintenance to ensure its safe, reliable operation. Vegetation in the proximity of the system is pruned and controlled via a funded, well-managed program that protects the electric facilities while respecting the beauty and environmental importance of the vegetation.

The transmission and distribution system is operated around-the-clock, every day, from control centers where trained personnel use modern monitoring and control equipment to ensure that equipment is run within its load rating and other technical constraints.

When interruptions to electric service do occur, calls are noted in a computer-aided outage management system, which associates calls with information about the distribution system configuration to construct probable trouble groupings. These outage reports quickly appear on the screens for the operations center personnel. First response personnel are on the system at all times to make trouble locations safe and quickly restore service.

PECO Energy established a link between its automated meter reading system and its outage management system during 2004 and continued to make enhancements in 2005. This link takes advantage of modern technology to provide timelier outage notification and improve response time. This system can also be used to verify service restoration.

Should a storm or other emergency arise, an appropriate emergency response team is assembled via group pager notification. The trained team performs per the specifications of a thorough, documented, tested emergency response procedure, quickly escalating the magnitude of the response when required, and communicating with the public and government agencies. If necessary, pre-established agreements with local

contractors and neighboring utilities are exercised to augment PECO Energy's workforce. After each significant emergency event, the groups involved evaluate the response. Strengths and weaknesses are identified, action plans are constructed, and individuals are tasked with bringing about the necessary changes to facilities, the organization, the procedures, and the workforce's understanding of the procedures.

Management tracks each action item and demands timely completion to ensure continuous improvement.

Seasonal emergency response drills are carefully planned and carried out, followed by critiques and improvements to ensure that the entire organization can function properly when called upon for actual emergencies.

Management sets clearly-defined, challenging reliability goals, communicates them to the workforce, demands meaningful action plans, monitors progress, holds the organization accountable for results, and attaches incentive compensation for all employees to the achievement of the goals. Full-time engineering professionals monitor and analyze reliability trends and changes, and institute capital upgrades and improvements to maintenance, design, construction and/or operations to ensure that customers continue to enjoy reliable electric service.

B2: Section 57.195(b)(2)

"The annual reliability report shall include... 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 in order to avoid or minimize the impact of similar events in the future."

PECO Energy experienced no major events during 2005.

B3: Section 57.195(b)(3)

"The report shall include... a table showing the actual values of each of the reliability indices (SAIFI, CAIDI, SAIDI, and if available, MAIFI) for the electric distribution company'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 customer affected, and the minutes of interruption. If MAIFI values are provided, the number of customer momentary interruptions shall also be reported."

	SAIFI	CAIDI	SAIDI	MAIFI
2005	1.02	99	100	0.87
2004	0.98	106	104	0.93
2003	1.00	103	103	1.00
2002	1.11	104	116	1.19

	SAIFI_	CAIDI	SAIDI	MAIFI
2003 – 2005 Average	1.00	103	102	0.93
Benchmark	1.23	112	138	N/A
3-Year Average Standard	1.35	123	167	N/A

The rolling 3-year average values of SAIFI, CAIDI, and SAIDI for 2003 to 2005 were better than the respective Standards, and in addition were better than the Benchmarks.

	2005	2004	2003	2002
Number of customers served *	1,622,687	1,602,490	1,602,490	1,592,875
Sustained customer minutes	162,924,047	166,641,211	165,300,000	183,994,440
Number of customers affected	1,652,581	1,574,526	1,600,471	1,760,839
Number of customer momentary interruptions	1,413,725	1,489,252	1,595,298	1,892,308

* Customers served is the total number of premises listed in the PECO outage management system. Since SAIFI, SAIDI, and MAIFI are ratios with customers served in their denominators, the value of customers served is taken from the same source as the numerators (customers affected, customer interruption minutes, and momentary customer interruptions), the PECO outage management system. As shown, the customer count did not change from 2003 to 2004. PECO changed from using a year-end customer count to the customer count at the beginning of the year. Starting in 2005, PECO is using average customer counts for its quarterly and annual reports.

B4: Section 57.195(b)(4)

"The report shall include... 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 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."

Cause	Case of Trouble	% Cases of Trouble	Customer Interruptions	% Customer Interruptions	Customer Minutes
Animal Contact	767	6.9%	45,793	2.8%	2,425,597
Contact / Dig In	317	2.9%	33,119	2.0%	2,495,639
Equipment Failure	4,143	37.4%	595,827	36.1%	57,026,878
Lightning	900	8.1%	148,144	9.0%	20,618,186
Transmission / Substation	17	0.2%	23,378	1.4%	1,336,298
Vegetation Broken / Uprooted	1,589	14.3%	298,288	18.0%	36,095,171
Vegetation In-Growth	1,488	13.4%	121,523	7.4%	13,981,803
Vehicles	329	3.0%	101,651	6.2%	7,306,348
Unknown	607	5.5%	150,606	9.1%	12,527,785
Other	918	8.3%	134,252	8.1%	9,110,341

The largest contributors to customer interruptions were equipment failure and tree-related incidents. The majority of customer interruptions caused by trees came from broken branches and trunks or uprooted trees (71%), while ingrowth accounted for 29% of vegetation-related customer interruptions. The PECO service territory experienced 14 storms containing lightning activity during the 12-month reporting period.

B5: Section 57.195(b)(5)

"The reports shall include... 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."

The following circuits were on our worst performing 5% of circuits list for a year or more:

Angora 011	Line 300CR
Ardmore 17	Line 3600CR
Bradford 341	Llanerch 141
Bradford 346	Lombard 138
Cedarbrook 138	Newlinville 343
Crescentville 134	Newlinville 353
Crum Lynne 138	North Wales 362
Flint 132	Richmond 145
Flint 144	Saville 132
Flint 146	Solebury 001
Furnace 000	Upper Darby 140
Heaton 133	Upper Merion 132
Line 147-00PB	Warrington 342
Line 2445	Wayne 146

This list is longer than in previous years since circuits with a history of poor reliability were included in the worst performing list in order to increase focus on improvements in 2006. As of the date of this report, analysis of these circuits continues. Additional information on efforts taken and planned will be included in future quarterly reliability reports. Following are the efforts taken to date and planned for these circuits:

Angora 011 <u>Planned</u> Currently under analysis <u>Completed</u>

• Inspected circuit visually and with thermographic camera

Ardmore 017

<u>Planned</u>

• Installed faulted circuit indicators

Bradford 341

Completed

- Inspected/maintained reclosers
- Completed reliability corrective workorders
- Inspected circuit visually and with thermographic camera <u>Planned</u>
- Equip breakers for automatic load transfer
- Complete reliability corrective workorders

Bradford 346

<u>Completed</u>

- Installed 3 phase recloser
- Installed additional fuses
- Repaired switches
- Completed reliability corrective workorders

Cedarbrook 138

Completed

- Completed reliability corrective workorders
- Replaced transformer
- Inspected/maintained reclosers
- Completed regularly scheduled tree trimming
- Inspected circuit visually and with thermographic camera <u>Planned</u>
- Complete reliability corrective workorders

Crescentville 134

Completed

- Completed reliability corrective workorders
- Installed additional fuses
- Inspected circuit visually and with thermographic camera
- Completed regularly scheduled tree trimming <u>Planned</u>
- Install single phase reclosers
- Complete reliability corrective workorders
- Install 3-phase recloser

Crum Lynne 138

Planned

- Inspect/maintain reclosers
- Complete reliability corrective workorders
- Install single phase reclosers <u>Completed</u>
- Inspected selected areas of circuit for vegetation issues and corrected as needed

Flint 132

<u>Completed</u>

- Inspected selected areas of circuit for vegetation issues and corrected as needed
- Inspected circuit visually and with thermographic camera
- Completed reliability corrective workorders
 <u>Planned</u>
- Install 3 phase reclosers
- Perform regularly scheduled tree clearance

Flint 144

Completed

- Completed reliability corrective workorders
- Inspected selected areas of circuit for vegetation issues and corrected as needed
- Installed wildlife protection •
- Inspected circuit visually and with thermographic camera Planned
- Install three-phase reclosers
- Complete reliability corrective workorders
- Install single phase recloser
- Perform regularly scheduled tree clearance •

Flint 146

Completed

- Completed reliability corrective workorders
- Inspected selected areas of circuit for vegetation issues and corrected as needed
- Inspected circuit visually and with thermographic camera • Planned
- Complete reliability corrective workorders
- Inspect/maintain reclosers
- Upgrade fusing
- Upgrade lightning protection
- Install wildlife protection
- Perform regularly scheduled tree clearance

Furnace 000

Completed

• Inspected circuit visually and with thermographic camera Planned

Currently under analysis

Heaton 133

Completed

- Installed single phase reclosers
- Inspected/maintained reclosers
- Completed reliability corrective workorders
- Inspected selected areas of circuit for vegetation issues and corrected as needed
- Inspected circuit visually and with thermographic camera •

Line 147-00PB Completed

- Inspected/repaired reclosers
- Completed reliability corrective workorders
- Inspected circuit visually and with thermographic camera <u>Planned</u>
- Repair switch
- Upgrade fusing
- Complete reliability corrective workorders
- Perform regularly scheduled tree trimming

Line 2445

Completed

- Inspected circuit visually and with thermographic camera <u>Planned</u>
- Install automatic transfer switches

Line 300CR

Planned

- Inspect selected areas of circuit for vegetation issues and correct as needed
- Install 3 phase recloser
- Perform regularly scheduled tree clearance

Line 3600CR

Completed

- Inspected selected areas of circuit for vegetation issues and corrected as needed
- Installed additional fuses
- Completed reliability corrective workorders <u>Planned</u>
- Install single-phase reclosers
- Perform regularly scheduled tree clearance

Llanerch 141

<u>Completed</u>

- Installed additional fuses
- Completed reliability corrective workorders
- Inspected circuit visually and with thermographic camera <u>Planned</u>
- Install single phase recloser
- Install wildlife protection
- Complete reliability corrective workorders

Lombard 138

<u>Completed</u>

- Inspected circuit visually and with thermographic camera <u>Planned</u>
- Currently under analysis
- Perform regularly scheduled tree clearance

Newlinville 343

Completed

- Complete reliability corrective workorders
- Inspected circuit visually and with thermographic camera <u>Planned</u>
- Install 3-phase recloser

Newlinville 353

Completed:

- Replaced 3-phase recloser
- Inspected selected areas of circuit for vegetation issues and corrected as needed <u>Planned</u>:
- Complete reliability corrective workorders

North Wales 362

Completed

- Inspected circuit visually and with thermographic camera <u>Planned</u>
- Currently under analysis

Richmond 145

Completed

- Completed regularly scheduled tree trimming
- Inspected circuit visually and with thermographic camera <u>Planned</u>
- Upgrade switches
- Install additional fuses
- Complete reliability corrective workorders

Saville 132

Planned

- Install three-phase reclosers
- Complete reliability corrective workorders
- Inspect selected areas of circuit for vegetation issues and correct as needed

Solebury 001

Completed

- Inspected circuit visually and with thermographic camera <u>Planned</u>
- Currently under analysis

Upper Darby 140

Completed

- Inspected circuit visually and with thermographic camera <u>Planned</u>
- Install three-phase reclosers
- Complete reliability corrective workorders
- Inspect selected areas of circuit for vegetation issues and correct as needed

Upper Merion 132

Completed

- Inspected/maintained reclosers
- Installed single phase recloser <u>Planned</u>
- Install 3 phase recloser
- Install wildlife protection
- Complete reliability corrective workorders
- Install additional fuses
- Perform regularly scheduled tree clearance

Warrington 342

Completed

- Complete reliability corrective workorders
- Inspected circuit visually and with thermographic camera
- Inspected/maintained reclosers
- Inspect selected areas of circuit for vegetation issues and correct as needed <u>Planned</u>
- Complete reliability corrective workorders
- Upgrade lightning protection

Wayne 146

Completed

- Installed single phase recloser <u>Planned</u>
- Complete reliability corrective workorders
- Perform regularly scheduled tree clearance Inspect selected areas of circuit for vegetation issues and correct as needed

B6: Section 57.195(b)(6)

"The report shall include... a comparison of established transmission and distribution inspection and maintenance goals/objectives versus actual results achieved during the year being reported on. Explanations of any variances shall be included."

General Statement on Maintenance Programs Work Prioritization and Scheduling

PECO Energy develops its annual T&D maintenance plan to conform to company established maintenance cycles and based on current program priority determined by safety, risk and reliability evaluations. Resources may be reallocated during the maintenance period depending on impact on key performance areas. There is an adherence to schedule grace period equivalent to 25% of the maintenance cycle length to allow for scheduling and bundling of work.

PECO Energy's Distribution Inspection and Maintenance Plan vs. Actual Work for 2005

Program	Planned Tasks	Completed Tasks
Manhole Inspections (Number of manholes inspected)	2,534	2,726
Circuit Patrol & Thermography (Number of circuits inspected)	736	892
Recloser Inspections (Number of reclosers inspected)	209	215
Center City Network Inspections (Number of maintenance tasks performed (e.g. visual inspection, functional testing)	318	397
T&S Maintenance (Number of maintenance tasks performed (e.g. visual inspection, predictive/diagnostic maintenance, preventive maintenance) for a variety of substation components)	4,097	4,508
T&S Testing (Number of maintenance tasks performed (e.g. calibration, trip testing)	948	1,327

Vegetation Management Preventive Maintenance Program

	Miles Planned	Miles Completed
Distribution Lift & Manual Trimming	2,737	2,739
Transmission Trim & Removal	198	200

B7: Section 57.195(b)(7)

"The report shall include...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 electric distribution company's own functional account code or FERC account code as available. Explanations of any variances 10% or greater shall be included."

Functional Account Code	Budget	Actual	Variance
New Business Connections	\$2.2 million	\$1.6 million	\$0.6 million
Capacity Expansion	\$1.8 million	\$1.0 million	\$ 0.8 million
System Performance	\$7.3 million	\$14.4 million	(\$7.1) million
Facility Relocation	\$2.4 million	\$1.9 million	\$0.5 million
Maintenance	\$124.1 million	\$123.9 million	\$0.2 million
Category Totals	\$137.8 million	\$142.8 million	(\$5.0) million
Budgeted T&D O&	M Expenses	\$137.8 million	
Actual T&D O&N	1 Expenses	\$142.8 million	
Varianc	e	(\$5.0 million)	
Percent Var	iance	(3.6%)	

Operation and Maintenance Expenses

"Explanations of any variances 10% or greater shall be included"

• New Business was under budget due to an accounting policy that provided for labor credits associated with the purchase of meters and transformers. More credits were incurred than budgeted.

• Capacity Expansion was under budget due primarily to work plan schedule revisions (due to material delivery delays, permitting delays, etc.) that carried costs into 2006.

• System Performance (SP) was over budget due primarily to the reclassification of damage claim credits to the maintenance category instead of system performance, additional environmental contracting costs due to a change of rules by the City of Philadelphia that resulted in the pumping of more manholes, and the related collection and treatment of the water. Increased line school costs and flagging costs also contributed to the over run.

• Facility Relocation was under budget due to delayed scheduling of PennDot and other municipal highway work.

B8: Section 57.195(b)(8)

"The report shall include... a comparison of budgeted versus actual Transmission and Distribution capital expenditures for the year being reported on in total and detailed by the electric distribution company's own functional account code or FERC account code as available. Explanations of any variances 10% or greater shall be included."

Functional Account Code	Budget	Actual	Variance
New Business Connections	\$66.1 million	\$62.3 million	\$3.8 million
Capacity Expansion	\$52.2 million	\$50.4 million	\$1.8 million
System Performance	\$35.6 million	\$21.9 million	\$13.7 million
Facility Relocation	\$9.6 million	\$8.6 million	\$1.0 million
Maintenance	\$45.3 million	\$60.0 million	(\$14.7) million
ategory Totals \$208.8 million		\$203.2 million	\$5.6 million
Budgeted Capita	l Expenses	\$208.8	million
Actual Capital	Expenses	\$203.2 million	
Variano	ce	\$5.6 million	
Percent Van	riance	2.	7%

"Explanations of any variances 10% or greater shall be included"

• System Performance (SP) was under budget primarily driven by URD cable replacements being completed as emergent work in Corrective Maintenance rather than pursuant to our cable program. Also, environmental projects, replacement of distribution poor performing cable, flagging costs and spare transformer purchases were also under budget.

• Facility Relocation was under budget due to scheduling of PennDot and other municipal highway work.

• Maintenance was over budget primarily due to additional URD cable replacements (see SP above), storm restoration costs, cable fault locating and repairs, increased distribution transformer purchases due to heat storms, and other emergent repairs.

B9: Section 57.195(b)(9)

"The report shall include... quantified Transmission and Distribution inspection and maintenance goals/objectives for the current calendar year detailed by system area (i.e., transmission, substation, and distribution)."

Maintenance Program	Units (Planned)
Manhole Inspections (Number of manholes inspected)	2,491
Circuit Patrol & Thermography (Number of circuits inspected)	739
Recloser Inspections (Number of reclosers inspected)	249
Center City Network Inspections (Number of maintenance tasks performed (e.g. visual inspection, functional testing)	318
T & S Maintenance (Number of maintenance tasks performed (e.g. visual inspection, predictive/diagnostic maintenance, preventive maintenance) for a variety of substation components)	4,017
T & S Testing (Number of maintenance tasks performed (e.g. calibration, trip testing)	1,097

Vegetation Management Preventive Maintenance Program

	Miles Planned
Distribution Lift & Manual Trimming	2,991
Transmission Trim & Removal	199

B10: Section 57.195(b)(10)

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"The report shall include... budgeted transmission and distribution operation and maintenance expenses for the current year in total and detailed by the electric distribution company's own functional account code or FERC account code as available".

Functional Account Code	2006 O&M Budget
New Business Connections	\$2.7 million
Capacity Expansion	\$1.7 million
System Performance	\$20.8 million
Facility Relocation	\$2.2 million
Maintenance	\$118.1 million
Category Totals	\$145.5 million

B11: Section 57.195(b)(11)

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"The report shall include... budgeted transmission and distribution capital expenditures for the current year in total and detailed by the electric distribution company's own functional account code or FERC account code as available"

Functional Account Code	2006 Capital Budget
New Business Connections	\$63.9 million
Capacity Expansion	\$66.4 million
System Performance	\$31.5 million
Facility Relocation	\$9.2 million
Maintenance	\$54.1 million
Category Totals	\$225.1 million

B12: Section 57.195(b)(12)

"The report shall include... significant changes, if any, to the Transmission and Distribution inspection and maintenance programs previously submitted to the Commission."

Approved Changes to PECO Energy's T&D Maintenance Programs

No significant changes have taken place to PECO's T&D inspection and maintenance programs in 2005

Brian D. Crowe Director Rates & Regulatory Affairs

PECO Energy Company 2301 Market Street Philadelphia, PA 19103

Mail To: P.O. Box 8699 Philadelphia, PA 19101-8699

May 1, 2006

Via Federal Express

Mr. James McNulty, Secretary Pennsylvania Public Utility Commission Commonwealth Keystone Building 400 North Street Second Floor Harrisburg, Pennsylvania 17120

Telephone 215.841.5316 Fax 215.841.6333 www.exeloncorp.com brian.crowe@peco-energy.com



An Exelon Company



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PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU

Re: PUC Docket No. L-00030161 Rulemaking Re Amending Electric Service Reliability Regulations at 52 Pa. Code Chapter 57

Dear Secretary McNulty:

In accordance with Electric Service Reliability Regulations at 52 Pa. Code Chapter 57, enclosed are an original and six copies of PECO's 2006 Quarterly Reliability Report for the period ending March 31, 2006.

Because portions of the report contain sensitive and proprietary information, PECO is filing two versions of the report, one public and one proprietary. PECO requests that the proprietary report, which has been separated and clearly marked with a "Confidential and Proprietary" header on each page, be kept confidential, pursuant to commission order of March 20, 2006.

If you have any further questions regarding this matter, please call me at 215-841-5316.

Sincerely,

~)h



cc: Office of Consumer Advocate Office of Small Business Advocate

enclosures

WJP/mpb



PECO Energy Company Quarterly Reliability Report For Period Ending March 31, 2006 L-000 30141

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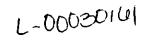
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PECO Energy ("PECO") Quarterly Reliability Report for the Period Ending March 31, 2006 Filed with the Pennsylvania Public Utility Commission. PA PUPLIC UTILITY COMMISSION SECHE TARY'S BUREAU

Submitted per Rulemaking Re: Amending Electric Service, Docket No. L-00030161 Reliability Regulations at 52 Pa.Code Chapter 57

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

PECO experienced no major events in the first quarter of 2006.

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."

PECO Customers	Sustained Customer Interruptions	Customer	Momentary Customer Interruptions	Customer	SAIFI	CAIDI	SAIDI	MAIFI
1,624,684	1,895,209	3,283,280	1,500,482	196,996,786	1.17	104	121	0.92

Data reflects 12 months ending 3/31/2006

PECO Be	nchmarks and Rolli	ng 12-Month Stand	lards	
	SAIFI	CAIDI	SAIDI	MAIFI
Benchmark	1.23	112	138	N/A
Rolling 12-Month Standard	1.48	134	198	N/A

SAIFI, CAIDI, and SAIDI are better than the respective benchmarks and standards established on May 7, 2004. No benchmark or standard was established for MAIFI. PECO experienced two large storms in January, 2006 that were not counted as major events by PUC criteria. These two storms combined to affect over 200,000 customers, increasing SAIFI by 0.13 and also increasing CAIDI and SAIDI.

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."

PECO's worst performing 5% circuits for 2006 are selected based on rolled up customer interruptions – a count of all customer interruptions on a given circuit and on other circuits for which it is a source, due to outages on the given circuit in a 12 month period. This measure is oriented toward its contribution to system SAIFI. In addition, circuits with a history of repeat appearance on worst performing lists, or with high circuit SAIFI, were selectively included in the 5% list.

Worst circuits and the rolling 12-month reliability index values requested are shown in Appendix A.

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

Remedial efforts taken or planned to date for PECO's worst performing 5% of circuits are shown in Appendix B.

Section 57.195(e)(5) <u>"A Rolling 12-month breakdown and analysis of outage causes during the</u> 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 included."

	12 Month	s Ending Mar	ch 31, 2006		
Cause	Cases of Trouble	% Cases of Trouble	Customer* Interruptions	% Customer Interruptions	Customer Minutes
Animal Contact	896	7.3%	49,877	2.6%	2,631,972
Contact / Dig In	314	2.5%	37,847	2.0%	2,715,473
Equipment Failure	4,353	35.2%	626,614	33.1%	60,086,650
Lightning	917	7.4%	156,967	8.3%	21,091,220
Transmission / Substation	14	0.1%	34,531	1.8%	3,274,084
Vegetation - Broken / Uprooted	1,960	15.9%	402,838	21.3%	51,146,510
Vegetation - In-growth	1,725	14.0%	147,403	7.8%	17,668,749
Vehicles	336	2.7%	103,951	5.5%	8,023,876
Unknown	660	5.3%	161,175	8.5%	13,826,648
Other	1,182	9.6%	174,006	9.2%	16,531,603

*The data supplied is the number of interrupted customers for each interruption event summed for all events, also known as customer interruptions. A customer interrupted by three separate trouble cases represents three customer interruptions, but only one customer interrupted.

The largest contributors to customer interruptions were equipment failure and tree-related interruptions. The leading groups within the equipment failure category were aerial equipment and underground equipment. Most customer interruptions caused by trees came from broken branches and tree trunks or uprooted trees (73%), as opposed to ingrowth (27%).

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PA PUBLIC UTILITY COMMISSION BECTIETARY & DUREAU 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)."

Predictive and Preven	tive Maintena	nce Program ·	- status as	of 3/31/06	
	1 st Quarter Tasks		YTD Tasks		2006 Total Planned
	Planned	Complete	Planned	Complete	
Manhole Inspections (Number of manholes inspected)	366	152	366	152	2491
Circuit Patrol & Thermography (Number of circuits inspected)	219	534	219	534	739
Recloser Inspections (Number of reclosers inspected)	91	144	91	144	249
Center City Network Inspections (Number of maintenance tasks performed (e.g. visual inspection, functional testing)	190	174	190	174	318
T&S Maintenance (Number of maintenance tasks performed (e.g. visual inspection, predictive/diagnostic maintenance, preventive maintenance) for a variety of substation components)	890	1097	890	1097	4017
T&S Testing (Number of maintenance tasks performed (e.g. calibration, trip test)	313	210	313	210	1097
Totals	2069	2311	2069	2311	8911

Vegetation Management Preventiv	e Maintenand	e Program –	status as of	3/31/06	
	1 st Quarter Miles		YTD	Miles	2006 Total Planned
	Planned	Complete	Planned	Complete	
Distribution Lift and Manual Trimming	474	452	474	452	2,991
Transmission Trimming and Removals	42	44	42	44	199
Totals	516	496	516	496	3,190

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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 1 st Quarter	Actual 1 st Quarter	Budgeted Year-to-Date	Actual Year-to-Date
New Business Connections	\$603,863	\$765,095	\$603,863	\$765,095
Capacity Expansion	\$898,469	\$497,817	\$898,469	\$497,817
System Performance	\$5,383,692	*\$2,274,987	\$5,383,692	*\$2,274,987
Facility Relocation	\$511,676	\$642,870	\$511,676	\$642,870
Maintenance	\$29,615,693	\$31,030,355	\$29,615,693	\$31,030,355
Total	\$37,013,393	\$35,211,124	\$37,013,393	\$35,211,124

*Actual 1st Quarter and Actual Year-to-Date excludes (\$3,947,106) environmental remediation reserve adjustment made in March 2006.

See Appendix C for category definitions.

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 1 st Quarter	Actual 1 st Quarter	Budgeted Year-to-Date	Actual Year-to-Date
New Business Connections	\$14,841,233	\$15,653,075	\$14,841,233	\$15,653,075
Capacity Expansion	\$25,578,324	\$21,523,766	\$25,578,324	\$21,523,766
System Performance	\$7,688,667	\$2,119,047	\$7,688,667	\$2,119,047
Facility Relocation	\$2,352,521	\$1,362,136	\$2,352,521	\$1,362,136
Maintenance	\$12,307,283	\$18,421,883	\$12,307,283	\$18,421,883
Total	\$62,768,028	\$59,079,907	\$62,768,028	\$59,079,907

See Appendix C for category definitions.

Section 57.195(e)(9). "<u>Dedicated staffing levels for transmission and distribution operation and</u> maintenance at the end of the quarter, in total and by specific category (e.g., lineman, technician and electrician)."

PECO's full-time trade staff as of March 31st 2006 was as follows:

Aerial Lineman	365
Underground Lineman	62
Transmission / Substation Mechanics, Operators	88
Energy Technicians	97
Aerial Foreman	52
Underground Foreman	18
Transmission / Substation Foreman	29
Total	711

Note: An underground line school began in March. An additional underground line school is planned for this year. An aerial line school began in April.

Contact Persons:

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Appendix A Rolling 12- month reliability index values for 5% worst performing circuits.

	<u></u>						ig on our	
CIRCUIT	CUSTOMERS ON CIRCUIT	12 Month Rolling Circuit SAIFI	12 Month Rolling Circuit CAIDI	12 Month Rolling Circuit SAIDI	12 Month Rolling Circuit MAIFI	12 Month Rolling Customers Interrupted	12 Month Rolling Customer Hours	12 Month Rolling Momentary Customers Interrupted
ANGORA 011	1,105	4,23	64	270	0.00	4,670	4,975	
ARDMORE 017	411	3.45	178	612	0.00	· · · · ·		0
BALA 136	1.577	2.08	66	137	0.16	1,417 3,284	4,194	· · · · · · · · · · · · · · · · · · ·
BERWYN 002	543	7.70	124	956	2.00	4,180	3,596	247
	1,228	3.14	56	175		·	8,650	1,086
BLUE_GRASS_137 BLUE GRASS 144	1,551	1.44	91	175	2.00	3,859	3,585	2,455
		h		99	0.45	2,235	3,380	699
BRADFORD_341	1,581	1.53	64	1	4.17	2,422	2,596	6,589
BRADFORD_342	2,100	1.74	126	220	0.63	3,663	7,702	1,320
BRADFORD_344	2,803	2.01	155	311	1.48	5,640	14,526	4,151
BRADFORD_346	1,074	3.71	76	284	1.09	3,983	5,078	1,174
BROOMALL_136	1,371	2.56	102	260	0.00	3,503	5,951	0
BRYN_MAWR_131	1,354	1.42	100	141	0.32	1,916	3,182	440
BRYN_MAWR_143	654	7.41	95	707	0.00	4,844	7,708	00
BRYN_MAWR_144	1,240	3.36	156	522	0.48	4,162	10,793	600
BUCKINGHAM_344	1,444	2.11	114	240	1.26	3,045	5,774	1,819
BUCKINGHAM_351	781	2.18	70	153	0.64	1,705	1,992	500
BUCKINGHAM_354	1,249	1.06	91	96	1.78	1,318	1,996	2,221
BYBERRY_143	2,219	2.90	151	438	0.00	6,430	16,197	0
CALLOWHILL_138	1,252	3.00	61	182	0.00	3,757	3,789	0
CALLOWHILL_142	901	3.39	59	199	0.00	3,056	2,987	1
CEDARBROOK_132	953	3.37	100	337	1.00	3,209	5,357	950
CEDARBROOK_138	3,603	1.05	91	96	2.37	3,787	5,747	8,535
CHICHESTER_139	1,611	3.66	42	152	1.20	5,889	4,087	1,932
CORNOG 001	530	5.06	118	599	5.00	2,683	5,287	2,650
CRESCENTVILLE 134	1,820	2.41	61	147	0.00	4,383	4,461	0
CRUM_LYNNE_138	1,739	3.06	139	427	1.68	5,329	12,368	2,928
DAVISVILLE_003	918	5.47	88	484	3.93	5,018	7,399	3,604
EDDYSTONE_132	2,195	1.01	54	55	0.50	2,209	2,003	1,098
EDGMONT 133	2,259	2.25	52	117	5.39	5,082	4,407	12,181
FLINT 132	1,185	5.60	69	385	0.93	6,636	7,599	1,100
FLINT_141	845	3.67	118	435	0.00	3,105	6,123	0
FLINT 144	829	6.28	116	727	2.45	5,203	10,050	2,032
FLINT 146	1,144	4.55	143	652	1.57	5,210	12,434	1,801
FOULK 131	1,643	2.55	73	185	0.56	4,187	5,077	915
FOULK 142	859	3.08	82	252	0.00	2,648	3,610	0
FURNACE 000	545	11.74	67	790	2.00	6,400	7,172	1,091
HAGYS_004	306	4.19	85	355	0.00	1,281	1,812	0
HARMONY 007	1,266	5.16	<u>69</u>	355	0.00	6,535	7,498	0
HEATON 131	937	4.63	116	538	0.57	4,336	8,406	534
HEATON 133	2,033	0.58	189	110	0.00	1,176	3,712	0
HOPEWELL_000	286	10.47	105	1095	2.00	2,995	5,219	571
HOWELL 002	384	9.30	83	777	2.00	3,573	4,971	768
HUNTING PARK 032	1,314	2.62	76	201	0.00	3,449	4,396	,00
ISLAND_ROAD_136	1,826	1.89	176	332	0.00	3,443	10,098	0
ISLAND ROAD 138	2,320	0.98	100	97	0.84	2,265	3,768	1,938
JENKINTOWN 138	1,876	1.14	30	34	1.01	2,205	1,076	1,896
JENKINTOWN_141	678	4.58	85	390	0.00	3,103	4,406	3
— · · — ·			83	1	1.76			
JENKINTOWN_143	1,794	3.22		267		5,783	7,977	3,160
LANE_001	820	0.47	292	137	2.00	385	1,871	1,642
LENAPE_341	895	3.23	70	225	3.75	2,889	3,354	3,359

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CIRCUIT	CUSTOMERS ON CIRCUIT	12 Month Rolling Circuit SAIFI	12 Month Rolling Circuit CAIDI	12 Month Rolling Circuit SAIDI	12 Month Rolling Circuit MAIFi	12 Month Rolling Customers Interrupted	12 Month Rolling Customer Hours	12 Month Rolling Momentary Customers Interrupted
LINE 109 00	420	2.06	148	307	2.00	867	2,146	839
LINE_131_00WO	684	3.66	72	265	2.64	2.502	3.019	1,808
LINE 145 00UP	171	3.99	132	528	2.04	683	1.505	342
LINE 147 00PB	869	2.43	56	135	0.00	2,112	1,954	0
LINE 2241	1,332	5.07	50	252	0.00	6,747	5,588	0
LINE_2394	1,789	3.45	46	160	0.00	6.170	4,757	1
LINE 2445	477	5.17	58	302	0.00	2,466	2,404	1
							· · · · · · · · · · · · · · · · · · ·	
LINE_2471 LINE_2682	1,112	3.92 2.23	<u>85</u> 45	332 101	0.13	4,364	6,158 2,749	<u>144</u> 0
LINE_300CR	1,896	6.31	144	910	0.03	11,971	28,768	63
LINE 3336	1	2.00	74	148	0.00	2	20,100	0
LINE 3340	934	2.00	189	384	1.02	1,901	5,974	954
				1.		<u>-</u>	<u> </u>	
LINE_3600CR	1,704	6.56 4.00	<u>119</u> 98	778 392	0.98	<u>11,184</u> 4	22,099	1,670
LINE_7900 LINTON 343		4.00		392 94	1.00		<u> </u>	 ` -
LINTON_343	4,136	1.21	<u>108</u> 75	94	5.06	<u>3,586</u> 4,002	6,445 5,018	5,106 16,713
	1,700	2.00	<u>75</u> 84	169	· · · · · · · · · · · · · · · · · · ·	•	1	
LLANERCH_141					3.55	3,402	4,785	6,041
LLANERCH_147	2,330	1.11	175	194	0.60	2,578	7,525	1,387
LOMBARD_132	3,011	2.23	104	233	0.88	6,718	11,691	2,662
LOMBARD_133	2,826	1.59	44	71	0.45	4,504	3,330	1,261
LOMBARD_138	2,077	5.78	47	270	1.64	12,013	9,331	3,406
MACDADE_132	1,631	2.39	70	168	1.00	3,895	4,565	1,632
MACDADE_135	2,238	3.39	111	377	1.81	7,598	14,051	4,051
MACDADE_148	1,578	2.70	60	162	0,00	4,268	4,253	0
MARCUS_HOOK_135	3	3.67	34	125	0.00	11	6	0
MARSHALLTON_002	527	7.47	69	514	3.01	3,938	4,514	1,585
MATSON_131	846	5.40	172	929	3.98	4,571	13,098	3,370
MOSER_342	2,469	2.91	56	163	2.35	7,193	6,710	5,814
NESHAMINY_142	1,515	2.27	79	179	1.00	3,439	4,526	1,515
NEWLINVILLE_343	1,971	2.28	169	386	1.68	4,491	12,664	3,314
NEWLINVILLE_346	752	1.15	122	140	5.01	864	1,750	3,771
NEWLINVILLE_351	1,066	2.43	102	247	0.97	2,587	4,385	1,033
	2,052	6.99	88	614	6.21	14,339 6,766	20,991	12,753 3.962
NEWLINVILLE_354	2,501	2.71		241	1.58	· ·	<u> </u>	t '
NORTH_PHILADE_133	3,788	3.30	57	189	1.00	12,509	11,909	3,782
NORTH_PHILADE_135	2,232	1.47	72	105	0.00	3,291	3,922	0
NORTH_WALES_362	1,486	2.70	130	352	6.05	4,019	8,723	8,993
OVERBROOK_131	3,636	1.32	29	38	1.21	4,787	2,332	4,412
PENCOYD_014	1,356	3.44	109	374	2.02	4,668	8,451	2,745
PLYMOUTH_139	1,329	1.72	93	160	2.96	2,284	3,554	3,932
PULASKI_131	4,619	1.60	77	124	0.94	7,391	9,523	4,335
PULASKI_132	2,191	1.65	155	256	1.21	3,613	9,344	2,660
RICHMOND_138	1,321	3.30	34	113	1.00	4,363	2,496	1,321
	899	5.00	48	238	0.00	4,493	3,565	0
ROXBOROUGH_136	1,132	4.66	91	424	0.86	5,280	8.007	973
SAVILLE_132	2,482	2.11	107	225	0.00	5,234	9,314	0
SHEEDER_000	430	8.09	62	500	0.98	3,479	3,584	420
SOLEBURY_001	496	8.91	53	474	0.99	4,420	3,917	493
TABOR_136	2,719	1.59	59	95	0.00	4,321	4,283	0
UPPER_DARBY_008 UPPER_DARBY_134	797 2,060	3.57	137	491 118	0.00	2,847 2,899	<u>6,517</u> 4,067	0
		1.41	84	1 118	1154 1	2 844	1 4 (167	1,114

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CIRCUIT	CUSTOMERS ON CIRCUIT	12 Month Rolling Circuit SAIFI	12 Month Rolling Circuit CAID!	12 Month Rolling Circuit SAIDI	12 Month Rolling Circuit MAIFI	12 Month Rotting Customers Interrupted	12 Month Rolling Customer Hours	12 Month Rolling Momentary Customers Interrupted
UPPER_MERION_132	1,465	3.89	121	472	0.00	5,693	11,517	0
UPPER_MERION_351	2,687	2.33	64	149	0.00	6,261	6,670	3
WANEETA_139	1,550	2.08	38	79	0.00	3,229	2,046	0
WARMINSTER_141	1,698	2.60	63	164	0.00	4,421	4,639	0
WARRINGTON_342	3,479	1.25	146	182	2.84	4,350	10,555	9,890
WARRINGTON_343	2,093	1.65	128	211	1.29	3,453	7,363	2,697
WAYNE_134	714	5.50	56	309	0.72	3,924	3,682	511
WAYNE_146	1,042	5.52	112	616	1.01	5,752	10,693	1,049
WEST_GROVE_001	818	4.19	40	169	2.00	3,428	2,307	1,632
WHITEMARSH 142	895	2.13	59	126	0.00	1,909	1,874	0

*The data supplied is the number of interrupted customers for each interruption event summed for all events, also known as customer interruptions. If a customer is interrupted by three separate trouble cases, they represent three customer interruptions, but only one customer interrupted.

Appendix B Remedial efforts taken and planned for 5% worst performing circuits as of 3/31/06

ANGORA 011	edial efforts taken and planned for 5% worst performin Completed	Planned
	Inspected circuit visually and with thermographic camera	Currently Under analysis
		Perform regularly scheduled tree clearance
ARDMORE 017	Completed	Planned
		Install faulted circuit indicators
BALA 136	Completed	Planned
· _ · _ · _ · _ · _ · _ · _ · _ ·		Complete reliability corrective workorders
	Installed 3-phase recloser	Perform regularly scheduled tree clearance
BERWYN 002	Completed	Planned
	Inspected circuit visually and with thermographic camera	Perform regularly scheduled tree clearance
		Remediate supply circuit
BLUE GRASS 137	Completed	Planned
	Completed reliability corrective workorders	
•	Replaced Cable	
BLUE GRASS 144	Completed	Planned
	Completed reliability corrective workorders	
	Replaced underground cable	
	Installed additional fuses	
BRADFORD 341	Completed	Planned
	Inspected/maintained reclosers	Equip breakers for automatic switching
	Completed reliability corrective workorders	Complete reliability corrective workorders
	Inspected circuit visually and with thermographic camera	- · ·
BRADFORD 342	Completed	Planned
	Completed reliability corrective workorders	Complete reliability corrective workorders
	Inspected circuit visually and with thermographic camera	Upgrade lightning protection
	Repaired recloser	
	Replaced transformers	
BRADFORD 344	Completed	Planned
	Completed reliability corrective workorders	Replace cable
	Inspected circuit visually and with	
BRADFORD 346	thermographic camera Completed	Planned
	Installed 3 phase recloser	
	Installed additional fuses	
	Repaired switches	
	Completed reliability corrective workorders	· · · · · · · · · · · · · · · · · · ·
BROOMALL 136	Completed	Planned
#1.44400 EE 100		Complete reliability corrective workorders
	Inspected selected areas of circuit for	Install 3-phase reclosers
	vegetation issues and correct as needed	

BRYN MAWR 131	Completed	Planned
	Inspected circuit visually and with thermographic camera	Install single phase reclosers
		Install wildlife protection
		Inspect selected areas of circuit for
		vegetation issues and correct as needed
		Complete reliability corrective workorders
BRYN MAWR 143	Completed	Planned
·	Replaced recloser	Complete reliability corrective workorders
	Inspected circuit visually and with	Inspect selected areas if circuit for
	thermographic camera	vegetation issues and correct as needed
	Installed additional phases	
	Replaced cable	
BRYN MAWR 144	Completed	Planned
	Completed reliability corrective workorders	· ·
	Inspected/repaired recloser operation	
	Inspected motor operated switch	
1	Installed faulted circuit indicator	<u>+ · · · · - · · · - · · · · · · · · · · </u>
BUCKINGHAM 344	Completed	Planned
BUCKINGHAM 344	Inspected circuit visually and with	Currently Under analysis
	thermographic camera	
BUCKINGHAM 351	Completed	Planned
BOCKING TAIL 351	Inspected/repaired recloser operation	
	Completed reliability corrective workorders	<u></u>
	Inspected selected areas if circuit for	
	vegetation issues and correct as needed	
	Inspected circuit visually and with	
	thermographic camera	
	Replaced recloser	· ····
BUCKINGHAM 354	Completed	Planned
Boormon Am 304	Inspected circuit visually and with	Install single phase recloser
	thermographic camera	
	Inspect selected areas if circuit for	
	vegetation issues and correct as needed	
	Performed scheduled recloser	
	maintenance	
BYBERRY 143	Completed	Planned
	Completed reliability corrective workorders	
CALLOWHILL 138	Completed	Planned
		Perform regularly scheduled tree clearance
	Inspected circuit visually and with	<u> </u>
	thermographic camera	
CALLOWHILL 142	Completed	Planned
	Inspected circuit visually and with	Perform regularly scheduled tree clearance
	thermographic camera	
		Complete reliability corrective workorders
		Upgrade switches
		Inspect selected areas if circuit for
		vegetation issues and correct as needed

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CEDARBROOK 132	Completed	Planned
	Inspected circuit visually and with thermographic camera	Currently Under analysis
		Perform regularly scheduled tree clearance
CEDARBROOK 138	Completed	Planned
	Completed reliability corrective workorders	Complete reliability corrective workorders
	Replaced transformer	
	Inspected circuit visually and with	
	thermographic camera	
	Inspected/maintained reclosers	
	Completed regularly scheduled tree trimming	
CHICHESTER 139	Completed	Planned
	Inspected circuit visually and with thermographic camera	Upgrade switches
CORNOG 001	Completed	Planned
		Complete reliability corrective workorders
	Inspected circuit visually and with	Inspect selected areas of circuit for
	thermographic camera	vegetation issues and correct as needed
CRESCENTVILLE 134	Completed	Planned
	Completed reliability corrective workorders	Install single phase reclosers
	Inspected circuit visually and with thermographic camera	Complete reliability corrective workorders
	Completed regularly scheduled tree trimming	Install 3-phase recloser
	Installed additional fuses	
CRUM LYNNE 138	Completed	Planned
	Inspected selected areas of circuit for vegetation issues and corrected as needed	Inspect/maintain reclosers
		Complete reliability corrective workorders
		Install single phase reclosers
DAVISVILLE 003	Completed	Planned
	Completed reliability corrective workorders	
	Inspected selected areas of circuit for	
	vegetation issues and corrected as needed	· · · · · · · · · · · · · · · · · · ·
EDDYSTONE 132	Completed	Planned
	Inspected circuit visually and with thermographic camera	Complete reliability corrective workorders
	Completed reliability corrective workorders	
EDGMONT 133	Completed	Planned
	Installed wildlife protection	
	Inspected selected areas of circuit for vegetation issues and corrected as needed	
· · · · · ·	Completed reliability corrective workorders	1

	Upgraded fuses	
FLINT 132	Completed	Planned
	Inspected circuit visually and with thermographic camera	Install 3 phase reclosers
	spected selected areas of circuit for getation issues and corrected as needed	Perform regularly scheduled tree clearance
	Completed reliability corrective workorders	
FLINT 141	Completed	Planned
	Inspected selected areas of circuit for vegetation issues and corrected as needed	Install 3 phase reclosers
	Completed reliability corrective workorders	
	Inspected circuit visually and with thermographic camera	Perform regularly scheduled tree clearance
		Complete reliability corrective workorders
FLINT 144	Completed	Planned
	Completed reliability corrective workorders	Complete reliability corrective workorders
<u> </u>	Inspected selected areas of circuit for vegetation issues and corrected as needed	
	Inspected circuit visually and with thermographic camera	Perform regularly scheduled tree clearance
	Installed wildlife protection	Install single phase reclosers
FLINT 146	Completed	Planned
	Completed reliability corrective workorders	Complete reliability corrective workorders
	Inspected selected areas of circuit for vegetation issues and corrected as needed	Perform regularly scheduled tree clearance
	Inspected circuit visually and with thermographic camera	Install wildlife protection
		Inspect/maintain reclosers
		Upgrade lightning protection
<u> </u>		Upgrade fusing
FOULK 131	Completed	Planned
		Currently Under analysis
FOULK 142	Completed	Planned
	Inspected circuit visually and with thermographic camera	Complete reliability corrective workorders
	Completed reliability corrective workorders	
FURNACE 000	Completed	Planned
	Inspected circuit visually and with thermographic camera	Currently under analysis
HAGYS 004	Completed	Planned
	Inspected circuit visually and with thermographic camera	Inspect selected areas of circuit for vegetation issues and correct as needed
		Upgrade fusing
<u></u> <u>-</u>		Complete reliability corrective workorders
		Perform regularly scheduled tree clearance
HARMONY 007	Completed	Planned
	Completed reliability corrective workorders	
	Inspected circuit visually and with thermographic camera	
· · ·	ariad and ing March 21, 2006	Page 12 of 22

•

	Remediated supply circuit	
HEATON 131	Completed	Planned
	Inspected circuit visually and with thermographic camera	Currently Under analysis
		Perform regularly scheduled tree clearance
HEATON 133	Completed	Planned
	Inspected circuit visually and with thermographic camera	Perform regularly scheduled tree clearance
	Installed single phase reclosers	
	Inspected/maintained reclosers	-
	Inspected selected areas of circuit for	
	vegetation issues and corrected as needed	
	Completed reliability corrective workorders	· · · · · · · · · · · · · · · · · · ·
HOPEWELL 000	Completed	Planned
	Remediated supply circuit	Complete reliability corrective workorders
	Completed reliability corrective workorders	,,
	Inspected circuit visually and with	
	thermographic camera	
HOWELL 002		Planned
	Completed reliability corrective workorders	Remediate supply circuit
	Inspected selected areas of circuit for	Complete reliability corrective workorders
	vegetation issues and corrected as needed	
	Inspected circuit visually and with thermographic camera	Perform regularly scheduled tree clearance
HUNTING PARK 032	Completed	Planned
	Inspected selected areas of circuit for vegetation issues and corrected as needed	Complete reliability corrective workorders
	Inspected circuit visually and with thermographic camera	
ISLAND ROAD 136	Completed	Planned
	Inspected circuit visually and with thermographic camera	Complete reliability corrective workorders
		Install underground cable
		Install additional fuses
		Inspect selected areas of circuit for vegetation issues and correct as needed
ISLAND ROAD 138	Completed	Planned
	Completed reliability corrective workorders	
	Inspected selected areas of circuit for	
	vegetation issues and corrected as needed	
	Inspected circuit visually and with	
	thermographic camera	
	Installed additional fusing	
	Installed wildlife protection	
JENKINTOWN 138	Completed	Planned
	Completed reliability corrective workorders	
. <u> </u>	Installed single phase recloser	
	Inspected selected areas of circuit for	
	vegetation issues and corrected as needed	

	Completed regularly scheduled tree clearance	
JENKINTOWN 141	Completed	Planned
	Replaced cables	Complete reliability corrective workorders
	Inspected circuit visually and with thermographic camera	Install additional fuses
	Completed regularly scheduled tree clearance	
JENKINTOWN 143	Completed	Planned
	Completed reliability corrective workorders	
	Installed single phase recloser	
	Completed regularly scheduled tree clearance	
LANE 001	Completed	Planned
	Completed reliability corrective workorders	
	Remediated supply circuit	
LENAPE 341	Completed	Planned
	Completed reliability corrective workorders	
	Inspected circuit visually and with	
	thermographic camera	
<u> </u>	Inspected/repaired reclosers	
	Completed regularly scheduled tree	
	clearance	
	Upgraded wildlife protection	
LINE 109 00	Completed	Planned
	Inspected circuit visually and with thermographic camera	Currently Under analysis
LINE 131 00WO	Completed	Planned
	Inspected circuit visually and with thermographic camera	Currently Under analysis
LINE 145 00UP	Completed	Planned
	Inspected circuit visually and with thermographic camera	Perform regularly scheduled tree clearance
		Repair switch
		Upgrade fusing
		Complete reliability corrective workorders
LINE 147 00PB	Completed	Planned
	Inspected/repaired reclosers	Repair switches
	Completed reliability corrective workorders	Complete reliability corrective workorders
	Inspected circuit visually and with	Inspect selected areas of circuit for
	thermographic camera	vegetation issues and corrected as needed
		Improve recloser grounding
LINE 2241	Completed	Planned
	Completed reliability corrective workorders	Complete reliability corrective workorders
	Inspected circuit visually and with thermographic camera	Install wildlife protection
		Install aerial faulted circuit indicators
		Upgrade lightning protection
		Inspect selected areas of circuit for

		vegetation issues and corrected as needed
		Perform regularly scheduled tree clearance
LINE 2394	Completed	Planned
	Completed reliability corrective workorders	Complete reliability corrective workorders
		Upgrade fusing
		Install additional fuses
		Install wildlife protection
LINE 2445	Completed	Planned
	Inspected circuit visually and with thermographic camera	Install automatic transfer switches
LINE 2471	Completed	Planned
	Replaced underground cable	Upgrade transformers
		Repair underground cable
LINE 2682	Completed	Pianned
	Inspected circuit visually and with thermographic camera	Perform regularly scheduled tree clearance
	Completed reliability corrective workorders	
	Upgraded fuses	
	Inspected selected areas of circuit for vegetation issues and corrected as needed	
LINE 300CR	Completed	Planned
		Inspected selected areas of circuit for
		vegetation issues and corrected as needed
		Install 3-phase recloser
		Perform regularly scheduled tree clearance
LINE 3336	Completed	Planned
	Replaced switch	Install 3-phase reclosers
	Inspected circuit visually and with thermographic camera	Complete reliability corrective workorders
LINE 3340	Completed	Planned
	Completed reliability corrective workorders	
	Inspected selected areas of circuit for	
	vegetation issues and corrected as needed	
	Inspected /repaired switch	
	Inspected recloser	
LINE 3600CR	Completed	Planned
	Inspected selected areas of circuit for vegetation issues and corrected as needed	Perform regularly scheduled tree clearance
	Installed additional fuses	Install single phase recloser
	Completed reliability corrective workorders	
LINE 7900	Completed	Planned
	Completed reliability corrective workorders	r la meu
LINTON 343	Completed	Planned
		Complete reliability corrective workorders
	Inspected selected areas of circuit for vegetation issues and corrected as needed	
	Checked recloser operation	

	Replaced cables	
	Replaced recloser	
LINTON 352	Completed	Planned
	Completed reliability corrective workorders	Complete reliability corrective workorders
	Inspected circuit visually and with	
	thermographic camera	
	Replaced recloser	
	Repaired cable	
	Replaced transformer	
	Inspected selected areas of circuit for	
	vegetation issues and corrected as needed	
LLANERCH 141	Completed	Planned
	Completed reliability corrective workorders	Complete reliability corrective workorders
	Installed additional fuses	Install single phase recloser
	Inspected circuit visually and with	Upgrade wildlife protection
	thermographic camera	
LLANERCH 147	Completed	Planned
	Completed reliability corrective workorders	
LOMBARD 132	Completed	Planned
	Inspected circuit visually and with thermographic camera	Perform regularly scheduled tree clearance
	Installed additional fuses	
	Completed reliability corrective workorders	
	Upgraded switch	
	Inspected selected areas of circuit for	
	vegetation issues and corrected as needed	
LOMBARD 133	Completed	Planned
	Inspected selected areas of circuit for vegetation issues and corrected as needed	Perform regularly scheduled tree clearance
••• · · ·	Upgraded transformer	
	Replaced cable	
	Inspected circuit visually and with	
	thermographic camera	
	Installed additional fuses	
	Completed reliability corrective workorders	· · · · · · · · · · · · · · · · · · ·
LOMBARD 138	Completed	Planned
LUNIDARD 130	Inspected circuit visually and with	Currently under analysis
	thermographic camera	
· ·		Perform regularly scheduled tree clearance
MACDADE 132	Completed	Planned
	Completed reliability corrective workorders	
MACDADE 135	Completed	Planned
	Upgraded wildlife protection	Perform regularly scheduled tree clearance
<u> </u>	Inspected circuit visually and with	- energinally conclude not ordening
	thermographic camera	
	Replaced transformer	+ ·· · · · · · · · · · · · · · · · · ·

MACDADE 148	Completed	Planned
	Inspected circuit visually and with thermographic camera	Currently under analysis
		Perform regularly scheduled tree clearance
MARCUS HOOK 135	Completed	Planned
	Inspected circuit visually and with thermographic camera	Check customer relays
		Complete reliability corrective workorders
MARSHALLTON 002	Completed	Planned
	Remediated supply circuit	Complete reliability corrective workorders
	Inspected selected areas of circuit for vegetation issues and corrected as needed	Inspect/repair breaker control
	Inspected circuit visually and with thermographic camera	
	Completed reliability corrective workorders	
MATSON 131	Completed	Planned
·	Completed reliability corrective workorders	Complete reliability corrective workorders
	Replaced primary wires	Install 3-phase reclosers
	Inspected selected areas of circuit for vegetation issues and corrected as needed	
· · · · · · · · · · · · · · · · · · ·	Upgraded wildlife protection	
MOSER 342	Completed	Planned
	Completed reliability corrective workorders	Complete reliability corrective workorders
	Inspected/tested reclosers	
	Inspected/repaired switches	
· · · · · · · · · · · · · · · · · · ·	Repaired reclosers	
	Inspected selected areas of circuit for	
	vegetation issues and corrected as needed	
	Installed 3 phase recloser	
NESHAMINY 142	Completed	Planned
		Currently under analysis
NEWLINVILLE 343	Completed	Planned
	Completed reliability corrective workorders	Install 3-phase recloser
	Inspected circuit visually and with thermographic camera	
NEWLINVILLE 346	Completed	Planned
	Inspected circuit visually and with thermographic camera	Complete reliability corrective workorders
		Install 3-phase recloser
NEWLINVILLE 351	Completed	Planned
		<u> </u>

	Completed reliability corrective workorders	
NEWLINVILLE 353	Completed	Planned
	Replaced three-phase recloser	Complete reliability corrective workorders
	Inspected selected areas of circuit for	
	vegetation issues and corrected as needed	
NEWLINVILLE 354	Completed	Planned
	Inspected selected areas of circuit for	
	vegetation issues and corrected as needed	
	Inspected circuit visually and with	
	thermographic camera	
	Upgraded transformers	
NORTH PHILADELPHIA 133	Completed	Planned
· · · · · · · · · · · · · · · · · · ·		Complete reliability corrective workorders
	Inspected circuit visually and with	Inspect/repair switch
	thermographic camera	· · · · · · · · · · · · · · · · · · ·
	Inspected/tested reclosers	
NORTH PHILADELPHIA 135	Completed	Planned
		Complete reliability corrective workorders
	Inspected circuit visually and with	Inspect/repair reclosers
	thermographic camera	· · · · -
	Installed aerial switch	· · · · · · · · · · · · · · · · · · ·
NORTH WALES 362	Completed	Planned
ł	Inspected circuit visually and with	Currently under analysis
OVERBROOK 131	thermographic camera Completed	Planned
OVERBROOK 131		Complete reliability corrective workorders
	Inspected circuit visually and with	Automate switching of recloser
	thermographic camera	Automate switching of recloser
PENCOYD 014	Completed	Planned
	Inspected circuit visually and with	Currently under analysis
	thermographic camera	
		Perform regularly scheduled tree clearance
PLYMOUTH 139	Completed	Planned
	Inspected/tested reclosers	Complete reliability corrective workorders
· · · · · · · · · · · · · · · · · · ·		Upgrade wildlife protection
		Upgrade lightning protection
		Inspect/test reclosers
<u> </u>		Perform regularly scheduled tree clearance
PULASKI 131	Completed	Planned
	Completed reliability corrective workorders	Inspect selected areas of circuit for
	1	vegetation issues and correct as needed
	Inspected circuit viewally and with	Inspect/test recipsors
	Inspected circuit visually and with thermographic camera	Inspect/test reclosers
	Inspected circuit visually and with thermographic camera	
PULASKI 132		Inspect/test reclosers Perform regularly scheduled tree clearance Planned

	-	-
	Inspected selected areas of circuit for vegetation issues and corrected as needed	Upgrade fusing
		Perform regularly scheduled tree clearance
RICHMOND 138	Completed	Planned
	Inspected circuit visually and with thermographic camera	Currently under analysis
RICHMOND 145	Completed	Planned
	Completed regularly scheduled tree trimming	Upgrade switches
	Inspected circuit visually and with thermographic camera	Complete reliability corrective workorders
		Install additional fuses
ROXBOROUGH 136	Completed	Planned
	Completed reliability corrective workorders	Complete reliability corrective workorders
	Inspected circuit visually and with thermographic camera	Perform regularly scheduled tree clearance
	Upgraded switches	Upgrade switches
SAVILLE 132	Completed	Planned
	Inspected circuit visually and with thermographic camera	Inspect selected areas of circuit for vegetation issues and correct as needed
		Complete reliability corrective workorders
		Install three-phase reclosers
SHEEDER 000	Completed	Planned
	Remediated supply circuit	Install additional fuses
	Inspected circuit visually and with	
	thermographic camera	
	Completed reliability corrective workorders	
SOLEBURY 001	Completed	Planned
	Inspected circuit visually and with thermographic camera	Currently under analysis
TABOR 136	Completed	Planned
	Completed reliability corrective workorders	
	Inspected/tested recloser	· · · · · · · · · · · · · · · · · · ·
	Installed wildlife protection	
	Upgraded switches	
		Diamond
UPPER DARBY 008	Completed Completed reliability corrective workorders	Planned
	Completed reliability corrective workorders	vegetation issues and correct as needed
	Inspected circuit visually and with	Install additional fuses
	thermographic camera	
		Complete reliability corrective workorders
UPPER DARBY 134	Completed	Planned
	Completed reliability corrective workorders	
	Installed single phase recloser	· · · ·
· · · · · · · · · · · · · · · · · · ·	Upgraded fuses	
<u> </u>	Inspected/tested recloser	
	Inspected selected areas of circuit for vegetation issues and corrected as needed	

UPPER DARBY 140	Completed	Planned
	Inspected circuit visually and with thermographic camera	Install three-phase reclosers
·		Complete reliability corrective workorders
		Inspected selected areas of circuit for
		vegetation issues and corrected as needed
UPPER MERION 132	Completed	Planned
	Inspected/maintained reclosers	Install 3-phase recloser
	Installed single phase recloser	Perform regularly scheduled tree clearance
		Install wildlife protection
		Install additional fuses
		Complete reliability corrective workorders
UPPER MERION 351	Completed	Planned
	Replaced load center	Replace switching module
	Inspected circuit visually and with thermographic camera	Complete reliability corrective workorders
		Perform regularly scheduled tree clearance
WANEETA 139	Completed	Planned
	Inspected circuit visually and with thermographic camera	Complete reliability corrective workorders
		Install additional fuses
WARMINSTER 141	Completed	Planned
		Currently under analysis
WARRINGTON 342	Completed	Planned
	Completed reliability corrective workorders	Complete reliability corrective workorders
	Inspected circuit visually and with thermographic camera	Upgrade lightning protection
	Inspected/maintained reclosers	
	Inspected selected areas of circuit for	
	vegetation issues and corrected as needed	
WARRINGTON 343	Completed	Planned
<u> </u>	Completed reliability corrective workorders	
, 	Inspected selected areas of circuit for vegetation issues and corrected as needed	Upgrade lightning protection
	Inspected circuit visually and with	
	thermographic camera	
	Inspected/tested reclosers	
WAYNE 134	Completed	Planned
	Inspected selected areas of circuit for	Inspect selected areas of circuit for
	vegetation issues and correct as needed	vegetation issues and correct as needed Install 3-phase reclosers
	Installed single phase reclosers Completed reliability corrective workorders	Perform regularly scheduled tree clearance
	Upgraded fusing	
		l

	Installed aerial faulted circuit indicators	1
WAYNE 146	Completed	. Planned
	Installed single phase recloser	Complete reliability corrective workorders
		Perform regularly scheduled tree clearance
	•	Inspect selected areas of circuit for
		vegetation issues and correct as needed
WEST GROVE 001	Completed	Planned
	Completed reliability corrective workorders	
	Inspected selected areas of circuit for	
	vegetation issues and correct as needed	
WHITEMARSH 142	Completed	Planned
	Completed reliability corrective workorders	Upgrade switches
	Inspected circuit visually and with	Complete reliability corrective workorders
	thermographic camera	
		Perform regularly scheduled tree clearance

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Appendix C

New Business Connections

This work category includes all the facility work required to add a new customer or to increase the load to an existing customer. The facility work will include the facilities required to directly connect the customer to the system and the upgrade/replacement of any existing facility to serve the requested additional load.

Capacity Expansion

This work category includes only capacity work generated by the system design engineer to prevent system failure and to assure the delivery of voltage as specified in the tariff. The addition of new substations and substation enlargements for future load growth will also be included in this project.

System Performance

This work category includes projects designed to upgrade, modify or improve the performance of the distribution system.

Facility Relocation

This work category includes all requests for relocation of PECO facilities including municipal as well as customer related relocation requests.

Maintenance

This work category includes work performed to repair and restore equipment to its normal state of operation, along with planned preventive maintenance work such as visual and thermographic inspections and tree trimming around transmission and distribution lines.



Rates & Regulatory Affairs Unit 411 Seventh Avenue 8-6 Pittsburgh, Pennsylvania 15219

RECEIVED MAY 0 1 2006 PUBLIC UTILITY COMMISSION SECRETARY'9 BUREAU

May 1, 2006

VIA OVERNIGHT MAIL DELIVERY:

James J. McNulty, Secretary Pennsylvania Public Utility Commission P. O. Box 3265 Harrisburg, Pennsylvania 17105-3265 DOCUMENT FOLDER

Dear Mr. McNulty:

-000301121

Enclosed for filing please find an original and six (6) copies of Duquesne Light Company's annual reliability report for the calendar year 2005, as required by 52 Pa. Code §57.195.

Please return a date-stamped copy of this letter in the enclosed, self-addressed stamped envelope.

If you have any questions regarding the information provided, please contact me at (412) 393-6334.

Sincerely,

Kayo

Nancy J. D. Krajovic Manager, Regulatory Affairs

Enclosures

c: Mr. W. Williams – Bureau of CEEP
 Mr. I. A. Popowsky – Office of Consumer Advocate
 Mr. W. R. Lloyd – Office of Small Business Advocate
 Mr. B. J. Loper – Bureau of CEEP

w/ enclosure

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MAY 1, 2006

L-00030161

PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU

57.195 REPORTING REQUIREMENTS

(a)(2) <u>The name, title, telephone number, and e-mail address of the persons who have</u> knowledge of the matters, and can respond to inquiries.

Wayne H. Honath - Manager, Reliability and Standards (412) 393-8332, whonath@duqlight.com

DOCUMENT FOLDER

Nancy J. Krajovic - Manager, Regulatory Affairs (412) 393-6334, nkrajovic@duqlight.com

(b)(1) An overall current assessment of the state of the system reliability in the electric distribution company's service territory including a discussion of the electric distribution company's current programs and procedures for providing reliable electric service.

Duquesne Light Company's service territory covers approximately 800 square miles, with a well-developed distribution system throughout. Electric service reliability is fairly consistent across the service territory. The combination of an effective outage restoration process and significant distribution automation allows the Company to quickly restore power to large numbers of customers in outage situations.

We experienced 14 storms throughout 2005, three of which were PUC reportable. These storms all caused damage to overhead equipment, but none affected enough customers to qualify for Major Event exclusion.

Achieving outstanding performance in system reliability continues to be one of Duquesne's long-term objectives. The commitment to accomplishing that goal is evidenced by the Company's organization, planning and analysis, and budget priorities, in addition to the programs and processes that have been implemented.

The Chief Operations Officer meets regularly with the President to discuss reliability issues and progress relative to our system reliability plans and targets.

Within the Operations and Customer Service organization is the Asset Management and Engineering Group, whose Planning and Analysis personnel are responsible for managing processes, programs and procedures to maintain and improve reliability.

Ongoing analysis of reliability indices, root cause analysis of outages, and tracking and monitoring of other performance measures is done to optimize the reliability process and to identify process improvements in order to enhance Duquesne's performance.



. . . .

Asset Management analyzes circuit performance on an ongoing basis and has successfully used the results to identify areas that could benefit from investment in reliability improvement. For the past nine years, SGS Statistical Consultants, an independent consultant has conducted statistical analyses of interruption data to provide additional intelligence about the performance of distribution circuits. This collective information is used to plan and prioritize reliability improvement investments in the distribution system.

Component failure analysis continues to be utilized to identify equipment types to target for preventive maintenance and/or capital replacement. Analysis at the component level is used to identify small areas where customers may experience multiple outages during the year. System level, and even circuit level indices mask such isolated problem areas, but we have determined that they can be identified by tracking component lockouts.

Scheduled preventative and predictive maintenance activities continue to reduce the potential for future service interruptions. Corrective maintenance is prioritized with the objective to reduce and eliminate any backlog in the most cost-efficient manner.

Several capital budget projects target distribution reliability improvements, including pole replacement, substation rehabilitation, circuit load relief and voltage improvement, circuit rearrangement and installation of additional automated remotely controlled pole top devices.

Specific programs, procedures and ongoing maintenance activities that support Duquesne's commitment to excellent service reliability include:

An Infrared and Ultrasound Inspection Program that systematically identifies circuit and substation problems for remedial action in advance of failure.

A comprehensive Vegetation Management Program, which is designed to provide long-term line clearance, deter future growth and achieve optimum cycle for trimming. All of the Company's circuits are included in a multi-year Vegetation Management maintenance program. The impact on SAIDI and SAIFI due to treerelated outages continues to trend positively.

An ongoing long-term Sectionalizer Maintenance and Replacement Program serves to refurbish and maintain reliable operation of all automatic and remote controllable switches on Duquesne's automated distribution system, and to replace those that are no longer operating efficiently.

A comprehensive Substation Rehabilitation Program targets improvements in delivery system substation facilities including replacement of deteriorated and obsolete transformers, breakers, switches, relays, regulators and other equipment.

New distribution substations are being installed between existing major substations to take advantage of transmission reliability, decrease distribution circuit exposure and improve reliability to end users.



MAY 0 1 2005

PA PUBLIC UTILITY COMMISSION DEGRETARY'D BUREAU Line maintenance work of various types is regularly performed in order to maintain distribution plant. This work includes replacement of cross arms, arresters, insulators, and other equipment on the overhead system as well as inspections and remedial work on the underground system.

A Storm Preparedness Drill is conducted each year prior to the beginning of the expected storm season. The drill is a real-time simulation of a significant major event, and includes all participants representing all functional areas associated with actual storm response.

Storm Review Meetings are held following major events. These meetings focus on the successes and failures of the most recent emergency service restoration effort. Service restoration process improvements are made as needed to improve response time and effectiveness during the next restoration effort.

(b)(2) <u>A description of each major event that occurred during the year being reported</u> on, 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.

No major events occurred during 2005.

(b)(3) A table showing the actual values of each of the reliability indices (SAIFI, CAIDI, SAIDI, and if available, MAIFI) for the electric distribution company'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 BENCHMARKS AND STANDARDS

Duquesne Light Company System Performance Measures with Major events Excluded**

Year	SAIDI	SAIFI	CAIDI	MAIFI
2003	110	1.30	85	*
2004	95	1.03	92	*
2005	97	0.98	98	*
3 Year Average	101	1.10	92	*
Benchmark	126	1.17	108	NA
Standard for 3 Year Avg.	153	1.29	119	NA

* Sufficient information to calculate MAIFI is unavailable.



MAY 0 1 2006

(b)(3) (continued)

Formulas used in calculating the indices

SAIFI =	(Total KVA interrupted) - (KVA impact of major events) System Connected KVA
SAIDI ≈	(Total KVA-minutes interrupted) - (KVA-minute impact of major events) System Connected KVA
CAIDI =	SAIDI/SAIFI

Data used in calculating the indices

2005

Total KVA interrupted for the period: Total KVA-minutes interrupted:	6,760,225 664,258,773	KVA KVA-Minutes
System connected load as of 12/31/05:	6,863,693	KVA
2004		

Total KVA interrupted for the period:8,929,966 KVATotal KVA-minutes interrupted:1,196,244,898 KVA-MinutesSystem connected load as of 12/31/04:6,386,215 KVA

May 21, 2004 major event:

June 14, 2004 major event:

September 17, 2004 major event:

2003

Total KVA interrupted for the period: Total KVA-minutes interrupted: System connected load as of 12/31/03:	9,981,201 KVA 1,112,237,215 KVA-Minutes 6,311,039 KVA
June 8, 2003 major event:	1,061,482 KVA (17% of system load) 251,032,283 KVA-minutes
July 8, 2003 major event:	711,507 KVA (11% of system load) 165,535,703 KVA-Minutes

814,316 KVA (13% of system load)

620,309 KVA (10% of system load)

906,344 KVA (14.2% of system load)

137,141,850 KVA-minutes

112,078,821 KVA-minutes

338,257,694 KVA-Minutes

(b)(4) A breakdown and analysis of outage causes during the year being reported on, including the number and percentage of service outages 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.

Cause	No of Outages	Outage Percentage	KVA Total	KVA Percentage	KVA-Minute Total	KVA- Minute Percentage
Storms	919	25.79%	1,889,102	27.94%	234,869,789	35.36%
Tree Growth and Contact	116	3.26%	99,195	1.47%	9,574,859	1.44%
Tree (Falling Limb or Tree)	392	11.00%	740,082	10.95%	85,251,102	12.83%
Equipment Failures	960	26.94%	2,367,091	35.01%	215,569,908	32.45%
Overload	579	16.25%	85,065	1.26%	8,012,098	1.21%
Vehicles	163	4.57%	322,538	4.77%	36,530,618	5.50%
All Other	434	12.18%	1,257,152	18.60%	74,450,399	11.21%
Total	3,563	100%	6,760,225	100%	664,258,773	100%

January 1, 2005 through December 31, 2005

(b)(5) <u>A list of remedial efforts taken to date and planned for circuits that have been on the</u> worst performing 5% of circuits list for a year or more.

,

	Circuit	Remedial Actions Planned or Taken
1	22869	VM completed Q4 2002; VM scheduled for 2007. IR survey 7/28/04; hot spots repaired 8/23/04.
	Midland-Cooks Ferry	Lateral fuses installed 5/3/04. Installed new sectionalizers 5/4/05 and 10/24/05; installed new reclose
		8/20/05. Pilot to improve communications to hard to reach devices was successful. The improved
		communications method will be extended to other parts of the system.
2	23620	VM completed 10/15/04; VM scheduled for 2009. IR survey 11/23/05; hot spots repaired 1/3/06.
	Raccoon	Lateral fusing completed 9/05. A new circuit, Crescent 23662, will reduce exposure and connected
		kVA on this circuit, to be energized in 2007. Overload relief for 2 step-down transformer areas is
		under construction & scheduled for completion by 6/9/06. Additional sectionalizing to be proposed for
		2006, including advanced installation of devices proposed for 23662, where practical.
3	23840	Extended Arsenal 23844 to reduce exposure and load on this circuit. VM completed Q1 2005, Latera
3		
	Arsenal	fusing completed in 2005. IR completed on 10/25/05. A total of 15 anomalies were found. Two
		arresters and one pole top pin were replaced. Five hot spots were repaired. All 15 anomalies have
		been corrected by the Highland Service Center.
4	23783	VM completed Q3 2002; VM scheduled for 2006. IR survey 9/7/04; hot spots repaired 9/13/04. Latera
	Valley	fuses installed 2/19/04. Defective sectionalizer control box replaced 10/11/05. Additional
		sectionalizing to be designed and installed in 2006.
5	22565	The circuit was eliminated in July 2005. Customers were transferred to circuit 22567, and this circuit
	Parkview-Blaw Knox	being monitored and reported in our Reliability Reports through year-end 2005.
6	23920	VM completed Q1 2006. IR survey 6/17/04; hot spots repaired 9/1/04. Lateral fuses installed 2/23/04
v	Logans Ferry	New circuit, Logans Ferry 23923, cut in 1/4/06; load transfer expected by 6/06 will reduce exposure
	Logano r city	and connected kVA. New circuits from California Substation will greatly reduce exposure and
	00500	connected KVA; expected cut-in 12/06.
7	22563	The distribution load on this circuit will be transferred to a new 23 kV circuit supplied from the new
	Pine Creek-Blaw Knox	California SS, which is to be completed by 12/06.
8	23630	VM completed Q3 2003; VM scheduled for 2007. IR survey 8/10/04; hot spots repaired 9/30/04.
	Sewickley	Lateral fuses installed. A bulk power supply substation is scheduled to be installed at Sewickley by
		12/07. Related work will include installation of a second Sewickley 23 kV circuit.
9	23670	VM completed Q4 2001; VM scheduled for 2006. IR survey 11/11/05; hot spots repaired 1/31/06.
	Montour	Lateral fuses installed 6/05. New circuit, Findlay 23613, is being installed to reduce exposure and loa
		on this circuit. Rights of way acquisition in progress, but may require litigation. Construction to be
		completed approximately 6 months after right of way is obtained.
10	23704	VM completed in 2003. New Wildwood substation will allow reduced exposure and load on this circuit
10	North	The expected cut-in date for Wildwood Substation will allow reduced exposure and load on this circuit.
	NORT	
		completed on 3/02/05. One hot spot was found and repaired. Two blown arrestors were replaced and
	00000	bracing was repaired.
11	22860	VM started Q4 2005, to be completed Q1 2006. Overloaded step-down transformers and non-
	Valley-Morado No. 2	standard aerial cable will be eliminated through conversion to 23 kV distribution and rearrangement of
	· <u> </u>	the area by 12/06. Underarm switches installed Q4 2005 to improve sectionalizing.
	23710	New circuit Pine Creek 23718, cut into service 12/06/05, reduced exposure and load on this circuit.
	Pine Creek	
13	23760	VM completed Q4 2005. IR survey 6/17/04; hot spots repaired 8/24/04. Lateral fuses installed 6/1/04.
	Wilmerding	New circuit, Port Perry D23970, cut in 6/18/05, reduces this circuit's exposure and connected load.
	23870	Repaired sectionalizer that misoperated. VM completed in 2003. Lateral fuses installed 2/5/04. IR
	Mt. Nebo	survey 7/15/04; hot spots repaired 8/23/04. New circuit Mount Nebo 23871 reduced exposure and
		load on this circuit; energized 1/10/06.
15	23622	
15		VM completed 10/4/2005. IR survey 6/29/04; hot spots repaired 8/23/04. Lateral fuses installed
	Raccoon	6/30/04 and 5/05. Repaired failed lightning arresters and replaced faulty insulators. Overload relief fo
		2 step-down transformer areas scheduled for construction 5/06-11/06. Beaver Valley Mail rehab
		scope issued 1/30/06; to be designed & constructed in 2006. Added 3 manual switches in Q4 2005.
16	23715	VM completed 2/4/05. New Wildwood substation is scheduled for cut-in June, 2007. This circuit is no
	Pine Creek	part of the present scope but will be added to the project if necessary. This will reduce exposure and
		load. Lateral fusing completed on 2/16/05. IR was completed on 2/16/05. One hot spot was repaired
		and four lightning arresters were replaced.
17	23635	VM completed Q3 2003; VM scheduled for 2007. IR survey 1998. Lateral fusing scheduled for 2006.
••	Ambridge	
10		VAL completed 02 2002 VAL extended at 2007 JD current 4000
	22862	VM completed Q3 2003; VM scheduled for 2007. IR survey 1999.
	Ambridge-Sewickley #3	
	22854	VM completed 8/22/2005; VM scheduled for 2010. A new circuit, Crescent 23662, will be extended to
	Phillips-Aliquippa	this area in 2007. Remote controlled devices will be installed for service restoration.
	23683	VM completed Q3 2002; VM scheduled for 2006. IR survey 9/7/04; hot spots repaired 9/13/04. Latera
20	20000	
20	Woodville	fuses installed 3/30/04.

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

2005 Transmission and Distribution Goals and Objectives

Program	Unit of	Target for	Actual	Per Cent
Project	Measurement	2005	2005	Complete
Communications Goals				
Telecom Battery Maintenance	Batteries	132	144	109%
Mobile Radio Maintenance	Radio Units	96	103	107%
Microwave Radio Maintenance	Radio Units	36	36	100%
Overhead Distribution Goals				
Sectionalizer/Recloser Control	Control Units	242	246	102%
Sectionalizer Upper Switch	Switches	286	257	90%
Overhead Transmission Goals				
Tower Helicopter Inspections	Number of Towers	500	558	112%
Tower Ground Detail Inspections	Number of Towers	300	265	88%
Substations Goals				
Breaker Maintenance	Breakers	577	433	75%
Transformer Maintenance	Transformers	80	72	90%
Station Battery Maintenance	Batteries	1,292	881	68%
Station Relay Maintenance	Relays	3,175	2,765	87%
Underground Distribution Goals				
Manhole Inspections	Manholes	750	742	99%
Network Vault Inspections	Compartments	579	450	78%
Network Protector Inspections	Protectors	300	523	174%
Underground Transmission Goals				
Pressurization Plant	· · · · · ·			
& Cable Inspections	Work Packages	52	52	100%
Vegetation Management Goals				
Overhead Line Clearance	Circuit Overhead Miles	1,550	1,221	79%

Variances:

Sectionalizers & Reclosers: Of the total planned for 2005, preventive maintenance on 40 sectionalizer upper switches was cancelled because those switches were replaced with newer technology ScadaMate units. As such, the planned maintenance requirement dropped. Additional controls were tested during corrective maintenance, so the total exceeded 100%.

Overhead Transmission Goals: Our Engineering Group expects a variance of plus or minus 15% in the helicopter and ground inspection programs. Our aggregate tower inspection totals are 823 inspections versus 800 scheduled, or a completion rate of 103%.

Substation Breakers: Conventional breaker mechanism lubrications were deferred during 2005 as we implemented the Kelman Profile P1 condition-based maintenance program. This method is widely recognized in the utility industry and provides better results than conventional lubrication. This meets our needs, as several manufacturers have recommended eliminating conventional lubrications for specific breaker models. Scheduling issues with PJM have been addressed, and we are on track to complete all scheduled breaker maintenance in 2006.

Substation Transformers: Eight transformer load tap changer inspections were not completed in 2005 when scheduled outages had to be changed due to system loading, generation plant status and/or weather conditions, or unavailability of mobile substations. The scheduling issues have been addressed, and we are on track to complete all scheduled transformer scheduled maintenance in 2006

Substation Batteries: Our control battery database contained duplicate records, where batteries recently replaced were not removed from the count. This has been corrected for 2006. The total for 2005 should have been lower, at 1120. Approximately 239 battery tests were delayed. These are on schedule as of 2/1/06.

Substation Relays: Relay testing slipped by 13%, as we implemented an enhanced process of experience- and condition-based testing. Some testing was delayed when scheduled outages had to be changed due to system loading, generation plant status and/or weather conditions. This backlog is getting top priority in 2006 & testing is back on schedule.

Underground: Duquesne Light Company's supervisory system for the low voltage secondary network experienced an unusually high incidence of trouble during 2005. Network protector inspections were increased to mitigate this trouble. The network protector inspections included examination of the interface between the supervisory system and the network protector. The vault inspections were reduced to permit the increase in network protector inspections. Duquesne is installing an enhanced network supervisory system in 2006 and 2007. The inspection schedule will return to normal in 2006.

Vegetation Management: Some scheduled line clearance was deferred to focus on the remediation of potential fall-in trees located outside existing right-of-way, and continued aggressive removal selected trees within transmission rights-of-way to reduce potential grow-in situations. in conjunction with targeted herbicide applications on the right-of-way floors. Capital infrastructure program reduced resources available for maintenance.

(b)(7) <u>A comparison of budgeted versus actual transmission and distribution operation</u> and maintenance expenses for the year being reported on. Explanations of any variances shall be included.

Program	2005 Budget	4th Qtr Actual	4th Qtr Budget	YTD Actual	YTD Budget
Restoration of Service	4,600,000	227,142	1,150,000	3,008,240	4,600,000
Customer Commitment	1,700,000	721,354	425,000	2,501,721	1,700,000
System Maintenance	22,900,000	5,504,009	5,725,000	24,161,143	22,900,000
System Improvement	-	0	0	0	0
Infrastructure Support	-	0	0	0	0
Net Clearing	10,600,000	2,719,794	2,650,000	10,153,585	10,600,000
Total Work Plan	39,800,000	9,172,298	9,950,000	39,824,688	39,800,000
Total Non-Work Plan	53,100,000	14,248,987	13,262,000	53,066,510	53,100,000
Total Operations & Customer Services	92,900,000	23,421,285	23,212,000	92,891,198	92,900,000

(b)(8) <u>A comparison of budgeted versus actual transmission and distribution capital</u> <u>expenditures for the year being reported on. Explanations of any variances shall</u> <u>be included.</u>

Program	2005 Budget	4th Qtr Actual	4th Qtr Budget	YTD Actual	YTD Budget
Restoration of Service	19,000,000	3,152,969	5,300,000	17,480,357	19,000,000
Customer Commitment	23,000,000	5,281,507	6,200,000	20,039,676	23,000,000
System Maintenance	•	-	-	-	-
System Improvement	82,500,000	46,651,845	41,860,000	83,850,538	82,500,000
Infrastructure Support	25,500,000	22,624,806	10,400,000	31,600,781	25,500,000
Net Clearing	-	1,489,238	-	960,752	-
Total Work Plan	150,000,000	79,200,365	63,760,000	153,932,105	150,000,000
Total Non-Work Plan	-	-	-	-	-
Total Operations & Customer Services	150,000,000	79,200,365	63,760,000	153,932,105	150,000,000

(b)(9) <u>Quantified transmission and distribution inspection and maintenance</u> <u>goals/objectives for the current calendar year detailed by system area (i.e.,</u> <u>transmission, substation, and distribution).</u>

2006 Transmission and Distribution Goals and Objectives

Program Project	Unit of Measurement	Target for Year 2006
Communications Goals		
Telecom Battery Maintenance	Batteries	120
Microwave Radio Maintenance	Radio Units	18
Overhead Distribution Goals		
Sectionalizer/Recloser Control	Control Units	210
Sectionalizer Upper Switch	Switches	220
Overhead Transmission Goals		
Tower Helicopter Inspections	Number of Towers	500
Tower Ground Detail Inspections	Number of Towers	300
Substations Goals		
Breaker Maintenance	Breakers	740
Transformer Maintenance	Transformers	75
Station Battery Maintenance	Batteries	1,120
Station Relay Maintenance	Relays	3,410
Underground Distribution Goals		
Manhole Inspections	Manholes	750
Network Vault Inspections	Network Units	579
Network Protector Inspections	Protectors	300
Underground Transmission Goals		
Pressurization and Cathodic		
Protection Plant Inspection	Work Packages	52
Vegetation Management Goals		
Overhead Line Clearance	Circuit Overhead Miles	1,410

(b)(10) <u>Budgeted transmission and distribution operation and maintenance expenses for</u> the current year in total and detailed by FERC account.

Program	2006 Budget
Restoration of Service	4,000,000
Customer Commitment	2,000,000
System Maintenance	21,300,000
System Improvement	-
Infrastructure Support	-
Net Clearing	10,600,000
Total Work Plan	37,900,000
Non-Work Plan	56,664,000
Total Operations & Customer Services	94,564,000

(b)(11) <u>Budgeted transmission and distribution capital expenditures for the current year</u> in total and detailed by FERC account.

Program	2006 Budget
Restoration of Service	18,000,000
Customer Commitment	19,000,000
System Maintenance	-
System Improvement	161,500,000
Infrastructure Support	21,500,000
Net Clearing	-
Total Work Plan	220,000,000
Non-Work Plan	•
Total Operations & Customer Services	220,000,000

(b)(12) <u>Significant changes, if any, to the transmission and distribution inspection and</u> maintenance programs previously submitted to the Commission.

Mobile Radio Maintenance is no longer an item in the maintenance plan. Our 1970s vintage mobile radios were replaced in 2005 with newer technology that doesn't require routine testing.





Rates & Regulatory Affairs Unit 411 Seventh Avenue 8-6 Pittsburgh, Pennsylvania 15219

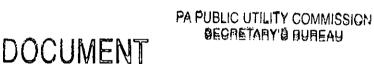
May 1, 2006

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VIA OVERNIGHT MAIL DELIVERY:

James J. McNulty, Secretary Pennsylvania Public Utility Commission P. O. Box 3265 Harrisburg, Pennsylvania 17105-3265



Dear Mr. McNulty:

In accordance with the Commission's Order at L-00030161 entered March 20, 2006, on Duquesne's Petition for Protective Order Pertaining to Information contained in its Quarterly and Annual Reliability Reports, Duquesne is submitting an original and six (6) copies of its report for the quarter ended March 31, 2006, in two versions, both included under this transmittal letter. The first version contains only that information for which the Commission did not grant protective treatment. The second version includes all of the information required by 52 Pa. Code §57.195, is marked "confidential and proprietary" and is enclosed in a sealed envelope.

FOLDER

Duquesne respectfully requests that the version marked "confidential and proprietary" not be made available to the public.

Please return a date-stamped copy of this letter in the enclosed, self-addressed stamped envelope.

If you have any questions regarding the information provided, please contact me at (412) 393-6334.

Sincerely,

J. O. Krayovi

Nancy J. D. Krajovic Manager, Regulatory Affairs

Enclosures

c: Mr. W. Williams – Bureau of CEEP
 Mr. I. A. Popowsky – Office of Consumer Advocate
 Mr. W. R. Lloyd – Office of Small Business Advocate
 Mr. B. J. Loper – Bureau of CEEP

w/ enclosure

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DUQUESNE LIGHT COMPANY QUARTERLY RELIABILITY REPORT May 1, 2006

57.195 Reporting Requirements

(d)(2) <u>The name, title, telephone number and e-mail address of the persons who</u> have knowledge of the matters, and can respond to inquiries.

Wayne H. Honath - Manager, Reliability and Standards (412) 393-8332, whonath@duqlight.com

Nancy J. Krajovic - Manager, Regulatory Affairs (412) 393-6334, nkrajovic@duqlight.com



MAY 0 1 2006

PA PUBLIC UTILITY COMMISSION SEGRETARY'® BUREAU



DOCKETED MAY 10 2006

(e)(1) <u>A description of each major event that occurred during the preceding guarter, 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.</u>

No major events occurred during the first quarter of 2006.

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

RELIABILITY BENCHMARKS AND STANDARDS

Duquesne Light Company

System Performance Measures with Major Events Excluded

Entire System						
	SAIDI	SAIFI	CAIDI	MAIFI		
Benchmark	126	1.17	108	*		
12 Month Standard	182	1.40	130	*		
2006 1Q (Rolling 12 mo)	96	0.98	98	*		

* Sufficient information to calculate MAIFI is unavailable.

Data used in calculating the indices

Total KVA interrupted for the period:	6,761,463	KVA
Total KVA-minutes interrupted:	664,559,043	KVA-Minutes
System connected load as of 3/31/06:	6,835,496	KVA

Formulas used in calculating the indices

SAIFI = (Total KVA interrupted) - (KVA impact of major events) System Connected KVA

SAIDI = <u>(Total KVA-minutes interrupted) - (KVA-minute impact of major events)</u> System Connected KVA

CAIDI = SAIDI/SAIFI

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PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU (e)(3) <u>Rolling 12-month reliability index values (SAIFI, CAIDI, SAIDI, and if</u> <u>available, MAIFI) and other pertinent information such as customers served,</u> <u>number of interruptions, customer minutes interrupted, number of lockouts, and</u> <u>so forth, for the worst performing 5% of the circuits in the system. An explanation</u> <u>of how the electric distribution company defines its worst performing circuits</u> <u>shall be included.</u>

Rank	Circuit	Connected KVA	KVA Min Interrupted	KVA	SAIDI	SAIFI	CĂIDI
1	22869 Midland-Cooks Ferry	34,481	10,884,672	82,837	316	2.4	131
2	23620 Raccoon	39,826	9,667,079	114,718	243	2.9	84
3	23622 Raccoon	40,270	6,935,010	72,597	172	1.8	96
4	23716 Pine Creek	37,682	9,874,717	175,648	262	4.7	56
5	23670 Montour	32,800	4,199,745	52,164	128	1.6	81
6	23783 Valley	42,521	4,576,520	141,552	108	3.3	32
7	23920 Logans Ferry	39,493	3,464,157	61,747	88	1.6	56
8	23683 Woodville	46,429	6,832,219	57,051	147	1.2	120
9	23715 Pine Creek	33,812	5,228,099	59,019	155	1.7	89
10	22860 Valley-Morado No. 2	11,185	11,415,762	23,572	1021	2.1	484
11	22563 Pine Creek-Blaw Knox	4,555	16,110,511	50,744	3537	11.1	317
12	23630 Sewickley	33,692	9,367,947	46,442	278	1.4	202
13	23635 Ambridge	37,088	13,466,333	119,640	363	3.2	113
14	23870 Mt. Nebo	26,795	17,809,366	174,149	665	6.5	102
15	23711 Pine Creek	33,318	5,959,703	46,247	179	1.4	129
16	22862 Ambridge-Sewickley #3	16,242	8,521,428	56,214	525	3.5	152
17	23650 Dravosburg	27,349	1,504,336	18,657	55	0.7	81
18	22854 Phillips-Aliquippa	12,917	3,884,810	48,157	301	3.7	81
19	23704 North	32,482	4,817,674	34,865	148	1.1	138
20	23782 Valley	37,618	4,301,337	39,120	114	1.0	110

Circuit performance is based on an annual statistical evaluation performed by SGS Statistical Services. Scores are assigned to each circuit based on time-weighted, multiyear outage data, and are typically available in the first quarter of the year. The composite scores include analysis of outage duration, outage frequency, mean time between failures, and customers served by each circuit. A gap score is calculated for each circuit by subtracting its composite score percentile from its connected KVA percentile. The circuits are stack-ranked according to gap scores and assigned a performance rank, with 1 being the lowest rank. The circuits in the above list are sorted by performance rank.

Additionally, Duquesne Light's Asset Management group monitors the number of operations of automatic devices (circuit breakers, sectionalizers, reclosers, and fuses) to identify smaller pockets of customers experiencing frequent outages. This analysis goes beyond the circuit level, and is a proactive method of addressing small areas before they begin to affect circuit or system performance indices. This information is used throughout the year to plan and prioritize additional reliability projects. Projects identified by this method are rolled into the work plan on an ongoing, dynamic basis.

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

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lank	Circuit	Remedial Actions Planned or Taken
1	22869	VM completed Q4 2002; VM scheduled for 2007. IR survey 7/28/04; hot spots repaired 8/23/04.
	Midland-Cooks Ferry	Lateral fuses installed 5/3/04. Installed new sectionalizers 5/4/05 and 10/24/05; installed new
		recloser 8/20/05. Pilot to improve communications to hard to reach devices was successful. The
		improved communications method will be extended to other parts of the system.
2	23620	VM completed 10/15/04; VM scheduled for 2009. IR survey 11/23/05; hot spots repaired 1/3/06.
-	Raccoon	Lateral fusing completed 9/05. A new circuit, Crescent 23662, will reduce exposure and connected
		kVA on this circuit, to be energized in 2007. Overload relief for 2 step-down transformer areas is
		under construction & scheduled for completion by 6/9/06. Additional sectionalizing to be designed
		and installed in 2006, including advanced installation of devices proposed for 23662, where practica
3	23622	VM completed 10/4/2005. IR survey 6/29/04; hot spots repaired 8/23/04. Lateral fuses installed
	Raccoon	6/30/04 and 5/05. Repaired failed lightning arresters and replaced faulty insulators. Overload relief
		for 2 step-down transformer areas scheduled for construction 5/06-11/06. Beaver Valley Mall rehab
		scope issued 1/30/06; to be designed & constructed in 2006. Added 3 manual switches in Q4 2005.
4	23716	New circuit on this list. Remedial efforts will be reviewed and reported on in the Second Quarter PU
	Pine Creek	Report.
5	23670	VM completed Q4 2001; VM scheduled for 2006. IR survey 11/11/05; hot spots repaired by 1/31/06
	Montour	Lateral fuses installed 6/05. New circuit, Findlay 23613, is being installed to reduce exposure and
		load on this circuit. Rights of way acquisition in progress, but may require litigation. Construction to
		be completed approximately 6 months after right of way is obtained.
6	23783	VM completed Q3 2002; VM scheduled for 2006. IR survey 9/7/04; hot spots repaired 9/13/04.
•	Valley	Lateral fuses installed 2/19/04. Defective sectionalizer control box replaced 10/11/05. Additional
	10	sectionalizing to designed and installed in 2006.
7	23920	VM completed Q1 2006. IR survey 6/17/04; hot spots repaired 9/1/04. Lateral fuses installed
1		2/23/04. New circuit, Logans Ferry 23923, cut in 1/4/06; load transfer expected by 6/06 will reduce
	Logans Ferry	
		exposure and connected kVA. New circuits from California Substation will greatly reduce exposure
<u>.</u>		and connected KVA; expected cut-in 12/06.
8	23683	VM completed Q3 2002; VM scheduled for 2006. IR survey 9/7/04; hot spots repaired 9/13/04.
	Woodville	Lateral fuses installed 3/30/04.
9	23715	VM completed 2/4/05. New Wildwood substation is scheduled for cut-in June, 2007. This circuit is
	Pine Creek	not part of the present scope but will be added to the project if necessary. This will reduce exposure
		and load. Lateral fusing completed on 2/16/05. IR was completed on 2/16/05. One hot spot was
		repaired and four lightning arresters were replaced.
10	22860	VM started Q1 2006. Overloaded step-down transformers and non-standard aerial cable will be
	Valley-Morado No. 2	eliminated through conversion to 23 kV distribution and rearrangement of the area by 12/06.
	,	Underarm switches installed Q4 2005 to improve sectionalizing.
11	22563	The distribution load on this circuit will be transferred to a new 23 kV circuit supplied from the new
	Pine Creek-Blaw Knox	California SS, which is to be completed by 12/06.
12	23630	VM completed Q3 2003; VM scheduled for 2007. IR survey 8/10/04; hot spots repaired 9/30/04.
	Sewickley	Lateral fuses installed. A bulk power supply substation is scheduled to be installed at Sewickley by
	Dewickley	12/07. Related work will include installation of a second Sewickley 23 kV circuit.
13	23635	VM completed Q3 2003; VM scheduled for 2007. IR survey 1998. Lateral fusing scheduled for 2006
15	Ambridge	Vivi completed Q5 2003, Vivi Scheduled for 2007. In Survey 1930. Lateral fusing Scheduled for 2000
		Descind costing lines that missing stated 1/11 completed in 2002. New rise it Mayor Nake 22074 in
14	23870	Repaired sectionalizer that misoperated. VM completed in 2003. New circuit Mount Nebo 23871 is
	Mt. Nebo	planned to reduce exposure and connected KVA on this circuit. Lateral fuses installed 2/5/04. IR
		survey 7/15/04; hot spots repaired 8/23/04. New circuit Mount Nebo 23871 reduced exposure and
		load on this circuit; energized 1/10/06.
15	23711	New circuit on this list. Remedial efforts will be reviewed and reported on in the Second Quarter PU
	Pine Creek	Report.
16	22862	VM completed Q3 2003; VM scheduled for 2007. IR survey 1999.
	Ambridge-Sewickley #3	
17	23650	New circuit on this list. Remedial efforts will be reviewed and reported on in the Second Quarter PU
	Dravosburg	Report.
18	22854	VM completed 8/22/2005; VM scheduled for 2010. A new circuit, Crescent 23662, will be extended
	Phillips-Aliquippa	to this area in 2007. Remote controlled devices will be installed for service restoration.
19	23704	VM completed in 2003. New Wildwood substation will allow reduced exposure and load on this
13	North	circuit. The expected cut-in date for Wildwood Substation is 6/07. Lateral fusing completed 3/3/05. Il
	TNOT UT	completed on 3/02/05. One hot spot was found and repaired. Two blown arrestors were replaced
		and bracing was repaired.
		and Diagno was (CDAIED
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20	23782 Valley	New circuit on this list. Remedial efforts will be reviewed and reported on in the Second Quarter PU Report.

IR = Infrared Inspection of Overhead Equipment

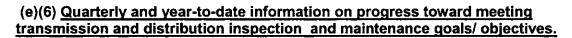
(e)(5) <u>A rolling 12-month</u> breakdown and analysis of outage causes during the preceding quarter, including the number and percentage of service outages, the number of customers interrupted, and customer interruption minutes categorized by outage cause such as equipment failure, animal contact,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

Cause	No of Outages	Outage Percentage	KVA Total	KVA Percentage	KVA-Minute Total	KVA-Minute Percentage
Storms:	975	27%	1,974,009	29%	240,999,773	36%
Trees (Contact):	128	3%	102,105	2%	9666752	1%
Trees (Falling):	412	11%	811,837	12%	93,649,737	14%
Equipment Failures:	948	26%	2,195,843	32%	203,790,935	31%
Overloads:	577	16%	85,428	1%	8,049,455	1%
Vehicles:	151	4%	334,054	5%	37,672,603	6%
Other:	470	13%	1,258,189	19%	70,729,790	11%
Totals:	3,661	100%	6,761,463	100%	664,559,043	100%

April 1, 2005 through March 31, 2006

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Program	Unit of	Target for	Actual for	Percent	Target for
Project	Measurement	2006 1Q	2006 1Q	Complete	Year 2006
Communications Goals					
Telecom Battery Maintenance	Batteries	30	35	117%	120
Microwave Radio Maintenance	Radio Units	4	55	125%	18
Overhead Distribution Goals					
Sectionalizer/Recloser Control	Control Units	90	190	211%	210
Sectionalizer Upper Switch	Switches	100	162	162%	220
Overhead Transmission Goals					
Tower Helicopter Inspections	Number of Towers	0	0	N/A	500
Tower Ground Detail Inspections	Number of Towers	0	0	N/A	300
Substations Goals					
Breaker Maintenance	Breakers	170	210	124%	740
Transformer Maintenance	Transformers	6	13	217%	75
Station Battery Maintenance	Batteries	280	299	107%	1,120
Station Relay Maintenance	Relays	851	1,421	167%	3,410
Underground Distribution Goals					
Manhole Inspections	Manholes	120	140	117%	750
Network Vault Inspections	Network Units	145	238	164%	579
Network Protector Inspections	Protectors	150	210	140%	300
Underground Transmission Goals					
Pressurization and Cathodic					
Protection Plant Inspection	Work Packages	13	13	100%	52
Vegetation Management Goals					
Overhead Line Clearance	Circuit Overhead Miles	425	370	87%	1,410





(e)(7) <u>Quarterly and year-to-date information on budgeted versus actual</u> <u>transmission and distribution operation and maintenance expenditures in total</u> <u>and detailed by the EDC's own functional account code or FERC account code as</u> <u>available.</u>

Program	2006 Budget	1st Qtr Actual	1st Qtr Budget
Restoration of Service	4,000,000	282,718	1,000,000
Customer Commitment	2,000,000	305,969	500,000
System Maintenance	21,300,000	5,461,882	5,325,000
System Improvement	•	-	-
Infrastructure Support	-	-	-
Net Clearing	10,600,000	2,414,839	2,650,000
Total Work Plan	37,900,000	8,465,408	9,475,000
Total Non-Work Plan	56,664,000	12,380,961	12,582,494
Total Operations & Customer Services	94,564,000	20,846,369	22,057,494

(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.

Program	2006 Budget	1st Qtr Actual*	1st Qtr Budget
Restoration of Service	18,000,000	3,377,652	3,960,000
Customer Commitment	19,000,000	4,111,867	4,070,000
System Maintenance	-	-	-
System Improvement	161,500,000	34,377,109	34,130,000
Infrastructure Support	21,500,000	9,150,977	13,570,000
Net Clearing	-	268,000	-
Total Work Plan	220,000,000	51,285,605	55,730,000
Total Non-Work Plan	-	-	-
Total Operations & Customer Services	220,000,000	51,285,605	55,730,000

* 1st quarter actuals exclude \$7,741,268 of non-cash accounting adjustments

(e)(9) <u>Dedicated staffing levels for transmission and distribution operation and</u> <u>maintenance at the end of the guarter, in total and by specific category (e.g.</u> <u>linemen, technician, and electrician).</u>

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Telecom	Electronic Technician	8	
	Sr. Electronic Tech	12	
	Telcom Splicer/Trouble	10	
	Test Table Tech	1	
	Total	31	31
Substation	Electrical Equipment Tech	34	
	Protection & Control Tech	33	
	Sr. Elec Equipment Tech	8	
	Total	75	75
Underground	Apprentice T&D	6	
	Driver Helper	11	
	Journey UG Inspector	6	
	Journey UG Splicer	13	
	Sr. UG Splicer	5	
	UG Apprentice Inspector	0	
	UG Mechanic	14	
	UG Service Person	7	
	Total	62	62
Overhead	Apprentice T&D	58	
	Automotive Crane Operator	4	
	Equipment Attendant	1	
	Equipment Material Handler	5	
	Equipment Operator	1	
	Field Inspector	4	
	Journey Lineworker	82	
	Lineworker 2/c	3	
	Lineworker Helper	2	
	Rigger Crew Leader	2	
	Service Crew Leader	5	
	Shop Mechanic 2 Rigger	2	
	Shop Mechanic Rigger	0	
	Sr. Lineworker	66	
	Total	235	235
Street Light Changers	Total	10	10
Mobile Worker	Total	4	4

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(e)(9) (Continued)

Ensinearing	Drafter	4	
Engineering	General Clerk - Grad	4	
	General Technician	4	İ
	GIS Technician B	2	
	Head File Record Cle	1	
	Intern	0	
	Joint Use Technician	1	
	Right of Way Agent A	4	
	Sr. Technician	9	
	T&D Mobile Worker	3	
	Technician A	1	
	Technician B	14	
	Technician C	1	
	Test Technician, Mob	4	
	Total	55	55
Service Center Technician	General Technician	1	
	Sr. Technician	11	
	Technician	3	
	Total	15	15
Traveling Operator/Troubleshooter	Senior Operator	32	
	Traveling Operator	4	
	Traveling Operator 1	9	
	Troubleshooter	5	
	Troubleshooter 1/c	3	
	Total	53	53
Load Dispatcher	Total	12	12
Meter Technician	Meter Technician	22	
	Sr Meter Technician	21	
	Total	43	43
Meter Reader	Total	15	15
Customer Service Representatives	Autodialing Operator	12	
	Control Teller	1	
	Customer Service Rep	91	
	Intermediate Clerk	0	
	Sr. Customer Service	5	
	Telephone Switchboard	1	
	Teller	2	
	Total	112	112
Admin/Supervisory/Mgmt	Total	436	436
	•	Total	1,158





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

Call-out acceptance rate

	Accepts	Refusals	Total	Percentage
January	106	118	224	47%
February	36	74	110	33%
March	89	150	239	37%

Amount of time it takes to obtain the necessary personnel

	Total Calls	Workers Accepting		Response ew Call-out		e Response / Worker
January	34	106	30.4	1,034/34	9.8	1,034/106
February	14	36	12.5	175/14	4.9	175/36
March	33	89	11.4	375/33	4.2	375/89
1st Quarter	81	231	19.6	1,584/81	6.9	1,584/231
YTD	81	231	19.6	1,584/81	6.9	1,584/231

LEGAL SERVICES



800 Cabin Hill Drive Greensburg, PA 15601-1689 Phone: (724) 837-3000 FAX: (724) 838-6177 Writer's Direct Dial No. (724) 838-6210 E-mail: jmunsch@alleghenyenergy.com

May 1, 2006

VIA FEDERAL EXPRESS

James J. McNulty, Secretary Pennsylvania Public Utility Commission Commonwealth Keystone Building 400 North Street 1-0003016 Harrisburg, PA 17120

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PA PL"LOTH" PL CON J

Re: 2005 Annual Reliability Report and First Quarter 2006 Reliability Report of Alleghenv Power

Dear Secretary McNulty:

Enclosed please find an original and five (5) copies of the 2003 Annual Reliability Report and an original and five (5) copies of the First Quarter 2004 Reliability Report of Allegheny Power. These reports are filed by Federal Express and are deemed filed today, May 1, 2006. Copies have been served on the Office of Consumer Advocate and the Office of Small Business Advocate.

DOCUMENT FOLDER

Very truly yours,

John J. Munsch John L. Munsch Attorney

Thomas E. Sheets cc: Pennsylvania Public Utility Commission - Bureau of Audits



Allegheny Ventures

Allegheny Power Quarterly Report for First Quarter 2006

This quarterly report is being submitted in accordance with <u>Title 52</u>. <u>Public Utilities -</u> <u>Part I. Public Utility Commission -Subpart C. Fixed Services Utilities - Chapter</u> <u>57. Electric Service Subchapter N. Electric Reliability Standards</u>.

§ 57.195 (e) (2) The name, title, telephone number and e-mail address of the persons who have knowledge of the matters, and can respond to inquiries, shall be included.

James D. Cormack General Manager, Distribution Reliability (724) 838-6540 jcormac@alleghenypower.com

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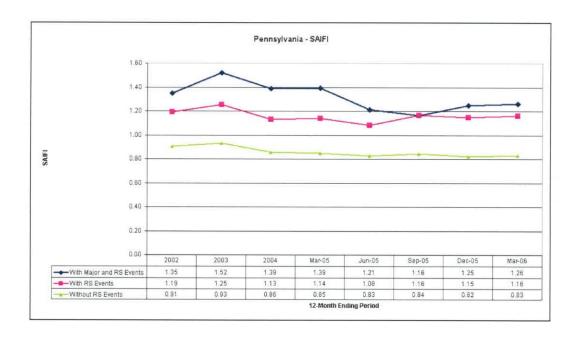
PAT THE RECEIPTION

§ 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.

- a. The following Major Events occurred during the first quarter of 2006. Note that these events are excluded based upon the proposed service-areawide definition.
- b. Major events occurred on the following dates. A description of the events is attached as Appendix VI in form of final 'Distribution System Outage Reports' reports as previously issued to the Commission if applicable.
 - i. There were no Major Events in the first quarter.
- c. Allegheny Power's Restore Service Process Management Team constantly monitors the process and conducts post-event meetings in an attempt to enhance the restoration process for future events.
- d. Although not excluded from statistics, AP's Pennsylvania service territory experienced several minor events ('RS Events') in the past 12 months characterized by having received a severe weather alert accompanied by at least 5,000 Allegheny Power Company customers interrupted. The following chart shows the effect on SAIFI of Major Events and RS Events for Pennsylvania customers through yearend 2005:







§ 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.

> a. The following table provides Pennsylvania's 12-month ending reliability statistics for month ending March 2006. MAIFI statistics are not recorded nor readily available at Allegheny Power. As disclosed in prior filings, sufficient field equipment is not available to provide meaningful data for momentary interruptions.

		Rolling	Rolling	Current Quarter
Reliability	Recomputed	12-Month	3-Yr Avg.	Performance
Indices	Benchmark	Standard	Standard	(Rolling 12-month)
SAIFI	0.67	0.8	0.74	1.16
CAIDI	178	214	196	182
SAIDI	119	172	144	212

Note that Allegheny Power has a petition pending with the Commission to modify its benchmarks due to incomplete and inaccurate outage data utilized during establishment of the benchmarks. The proposed benchmarks are presented below:

	Proposed	Rolling	Rolling
Reliability	Settlement	12-Month	3-Yr Avg.
Indices	Benchmarks	Standard	Standard
SAIFI	1.05	1.26	1.16
CAIDI	170	204	187
SAIDI	179	257	217

Data supporting indices:

Zone	Incidents	Interrupted Customers	Avg Cust Served	kVA	Calls	CMI	SAIDI	ASAI	CAIDI	SAIFI
Pennsylvania	17,195	809,467	695,957	8,155,068.0	121,672	147,640,092	212	0.999595	182	1.16

§ 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.

- a. This report provides a listing of all Pennsylvania circuits ranking in the lowest five percent as ranked by Circuit Improvement Index Ranking, which incorporates reliability statistics at a local level to further address individual customer satisfaction. The report is attached as Appendix I.
- b. A description of the Circuit Improvement Index process is presented in Appendix V.

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

- a. Allegheny's current process for addressing poor performing circuits and line segments is outlined in the Reliability Improvement Program (RIP). The details of which have been previously submitted to the Commission staff. In summary, the RIP program addresses all circuits experiencing two or more lockouts as well as any other protective device experiencing multiple operations. Field personnel review outages on these circuits or line segments and corrective action is taken as necessary to address any immediate reliability concerns.
- b. Remedial work for the 5% circuits is shown in Appendix II. Field personnel review these circuits quarterly. After the third quarter reporting is complete, outage causes are evaluated and action plans are developed for circuits requiring more comprehensive maintenance and these plans are incorporated in next year's budgets and work plans.
- c. AP has also continued a Reliability Improvement Initiative (RIPInit) for 2006 to review over-current protection on poor performing and highdensity distribution circuits. This initiative focuses on installing additional sectionalizing equipment to reduce main line exposure and to minimize the number of customers impacted by forced interruptions. Many of these RIPInit circuits are also on the worst performing circuit list.

d. AP has initiated a circuit improvement initiative whereby AP's recent 100 worst performing circuits are identified, studied, and targeted for further possible improvements based on the review of outage causes. Approximately one-third of these circuits are Pennsylvania circuits. This program is being integrated into the RIP process.

§ 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.

- a. A summary of outage causes by customers interrupted and by customer minutes interrupted follows.
- b. Note that 73% of all customer interruptions are caused by non-equipmentrelated causes. Also note that 98% of customers interrupted by trees are a result of trees falling from outside of the right-of-way.
- c. AP's definition of tree-related outages includes those cases where trees have fallen as a result of severe weather conditions.
- d. 'Weather' definition includes weather-related outages involving lightning damage, severe snow/ice loading, extreme wind, flooding, etc. and **does not** include tree-related outages.

Outage Cause	Incident	s	Customers Inte	rrupted	Customers Minutes	Interrupted	
	12 Month endin	g Mar O6	12 Month ending	g Mar D6	12 Month ending Mar 06		
	Number	Percent	Number	Percent	Number	Percent	
Animals	1,175	6.8%	38,458	4.8%	4,270,989	2.9%	
Overhead Equipment Failure				I			
Overhead Line Equipment	1,195	7.0%	21,779	2.7%	3,512,222	2.4%	
Overhead Line Material	1,800	10.5%	102,649	12.7%	12,125,408	8.2%	
Overhead Wire	1,365	7.9%	66,659	8.2%	8,011,198	5.4%	
Underground Equipment							
Underground Line Material	39	0.2%	429	D.1%	100,125	0.1%	
Underground Line Equipment	93	0.5%	1,170	D.1%	570,758	0.4%	
Underground Cable	467	2.7%	12,088	1.5%	3,337,541	2.3%	
Service Equipment	72	0.4%	101	0.0%	17,526	0.0%	
Substation Equipment	60	0.3%	17,147	2.1%	2,488,619	1.7%	
Other	224	1.3%	16,955	2.1%	1,688,144	1.1%	
Public/Customer	1,964	11.4%	131,712	16.3%	21,733,329	14.7%	
Trees							
On Right of Way	101	0.6%	7,585	0.9%	1,283,451	0.9%	
Off Right of Way	3,943	23.0%	192,009	23.8%	51,827,296	35.1%	
Slide into Line from off ROW	8	0.0%	82	0.0%	18,600	0.0%	
Unknown	1,628	9.5%	79,781	9.9%	10,246,538	6.9%	
Weather	3,042	17.7%	119,705	14.8%	26,236,699	17.8%	
Total	17,176	100%	808,309	100%	147,468,443	100%	

§ 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).

- a. A report attached as Appendix III provides a listing of updates to the planned Ensure Reliable Service work for 2006.
- b. AP's goals may vary slightly throughout the year as work may be modified to meet new or changing field conditions. Some work has more inherent uncertainty associated with establishing budgets and goals more than a year ahead of time.

§ 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.)

a. Please note that AP's financial expenditure reporting system is based on a hierarchical view of the company. Cost categories may change as individual groups are sometimes realigned but the total T&D O&M expenditures will remain consistent.

T&D Area	Q1	2006 Budget (\$1000)	Q1	2005 Actual (\$1000)
Distribution DEPT	\$	(144)	\$	(172)
Distribution Support DEPT	\$	875	\$	1,084
Field Operations DEPT	\$	5,006	\$	5,051
Forestry DEPT	\$	3,582	\$	2,874
Transportation DEPT	\$	4	\$	5
Distribution Subtotal	\$	9,324	\$	8,843
System Planning DEPT	\$	146	\$	189
Substations DEPT	\$	1,495	\$	1,422
System Operations DEPT	\$	1,287	\$	1,160
Technical Services DEPT	\$	731	\$	666
Transmission Other DEPT	\$	84	\$	170
Transmission Engineering DEPT	\$	622	\$	710
Transmission Projects DEPT	\$	141	\$	155
Transmission Subtotal	\$	4,506	\$	4,472
Total T&D 0&M	\$	13,829	\$	13,315

§ 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.)

(\$ in Thousands)	Q1 Budget (\$1,000)	Q1 Actual (\$1,000)
Distribution Lines	10,494	9,975
Distribution Substations	1,900	4,325
EHV Lines	(0)	1,998
EHV Substations	(222)	(1,123)
General Plant	1,790	412
Sub-Transmission	8	53
Transmission Lines	372	264
Transmission Substations	1,044	172
Total	15,385	16,077

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§ 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).

Position Name		Count
Lead Lineman		108
Lineman A		66_
Lineman B		1
Lineman C		. 2
SS Crew Leader Construction		1
SS Crew Leader Maintenance		13
SS Electrician A		33
SS Electrician Apprentice	_	5
SS Electrician B		4
SS Electrician C		7
Serviceman A		85
Serviceman Apprentice		18
Serviceman Apprentice 102		2
Serviceman B		1
Serviceman C		2
Utilityman A		7
Utilityman B		2
Total		357

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

a. Contract dollars include capital as well as O&M work as available from AP financial reporting system. Note that much of AP's contracted work involves firm price contracts for which no man-hours are documented.

Quarter	Contract Dollars - Qtr	Contract Dollars - YTD
1 st qtr	\$5,369,584	\$5,369,584

§ 57.195 (e) (11) Monthly call-out acceptance rate for transmission and distribution maintenance workers PRESENTED IN TERMS OF BOTH THE PERCENTAGE OF ACCEPTED CALL-OUTS 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.

- a. Attached as Appendix IV is a report indicating call out acceptance for the each service center in AP Pennsylvania service territory.
- b. The monthly call-out acceptance rate does not include statistics for crewmembers who are assigned ready-response duties, where applicable.
- c. Allegheny Power implemented its Automated Resource Call Out System (ARCOS) on June 10, 2005 to track the amount of time to obtain necessary personnel.
- d. The average response time per worker per list called was 8.85 minutes in the first quarter. This number represents the elapsed time per callout list divided by the number of people that accepted. If the callout list was run and no one accepted, the elapsed time per worker equals the actual callout list elapsed time. This time includes ready response, which has an elapsed time of 0 minutes. The data is only for linemen and electrician callouts. Allegheny Power is investigating its Automated Resource Call Out System (ARCOS) to determine if the capability exists to obtain callout time per crew.

Appendix I – 5% Distribution Circuit Statistics

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SCName	SSName	CktName	CustServed		SAIFL	SAIDI	CAIDI	ASAI	CMI		CircuitLockouts	Incidents	Miles
Arnold	ALL DAM NO. 5	SCHENLEY	180	(26)	8.72	1,312	150	0.99750	236,005	1,569	8	21	5
Arnold	FAWN	BULL CREEK	851	. 39	3.70	632	171	0.99880	538,461	3,147	Э	40	. 42
Arnold	GOBAIN	PITTSBURGH STREET	1619	47	3 66	472	129	0.99910	765,379	5,914	2	44	34
Arnold	HARWICK	SPRINGDALE	1099	44	2.12	651	307	0.99880	715,183	2,326	2	10	11
Arnold	SARDIS	DRENNEN	191	38	2.38	742	314	0.99860	143,077	455	-	21	15
Arnold	SILVERVILLE	COLE ROAD	1726	64	1 37	355	258	0.99930	610,075	2,365	1	67	71
Arneld	TUNNELTON	TUNNELTON_DIST	97	29	2.00	906	451	0.99830	87,553	194	2	2	6
Boyce	CECIL	MURRAY HILL	1673	16	4.19	1,031	246	0.99800	1,724,973.00	7,002	2	8 t	24
Butler	BUENA VISTA	HOOKER	302	29	3 01	892	295	0.99830	268,623	910	-	19	23
Butler	COOPERSTOWN	COOPERSTOWN	940	22	3.15	1,009	319	0.99810	946,173	2,964	2	73	46
Butler	HERMAN	HERMAN	797	26	3 41	917	269	0.99830	730,924	2,721	1	46	39
Butler	SAXONBURG	CABOT	887	57	2.54	406	160	0.99920	359,980	2,255	1	48	45
Charleroi	BENTLEYVILLE	ELLSWORTH	2067	7	4 40	1,198	272	0.99770	2,476,038	9,092	3	57	67
Charleroi	VANCEVILLE	VANCEVILLE	1299	53	1.83	512	280	0.99900	664,533	2,373	1	60	102
Clarion	SHAMBURG	SHAMBURG	4	Э	2 50	1,371	548	0.99740	5,482	10	-	4	. 1
Hyndman	HYNDMAN	RT 96S	540	82	0.56	113	201	0.99980	61 074	304	-	19	39
Jeannette	HUNTINGDÓN	SCOTCH HILL	726	49	1.56	569	. 369	0.99890	417 975	1,132	1	47	23
Jeannette	SEVMCKLEY	HERMINIE	1255	14	3.13	1,161	371	0.99780	1,456,967	3,922	2	47	41
Jefferson	FRANKLIN	ROGERSVILLE	844	16	2.50	1,140	455	0.99780	960,043	2,109	-	39	115
Jefferson	RUTAN	BRISTORIA	1140	(118)	7.33	3,642	497	0.99310	4,150,653	8,350	2	135	189
Jefferson	RUTAN	WINDRIDGE	1274	(8)	2 66	1,569	590	0.99700	2,000,378	3,388	·	100	199
McConnellsburg	EMMAVILLE	STONEY BREAK	355	55	1 07	453	420	0.99910	159,677	380	-	13	54
McDonald	HICKORY	HICKORY	891	29	2.31	913	395	0.99830	812,360	2,059		58	68
St Marys	WEEDVILLE	BYRNEDALE	408	49	2 54	554	218	0.99890	225,911	1,035	2	10	21
St Marys	WEEDVILLE	WEEDVILLE	1337	25	3 64	911	250	0.99830	1,214,682	4,862	2	40	75
State College	CENTRE HALL	CENTRE HALL	931	67	2.18	256	117	0.99950	237,836	2,028	1	32	37
State College	CENTRE HALL	POTTERS MILLS	847	66	0.94	302	320	0.99940	255,233	798	-	49	79
State College	FILLMORE	COURTS	600	95	0. 06	5	82	1.00000	3,204	39	-	8	20
State College	FOWLER	BALD EAGLE	. 376	20	3.46	1,032	298	0.99800	387,734	1,299	. 1	23	41
State College	MT. RIANSARES TOWER	MT. RIANSARES	. 13	2	2.00	1,341	670	0.99740	17,425	26	-	2	4
State College	PORT MATILDA	PORT MATLDA	. 1354	66	2.07	292	141	0.99940	395,048	2,803	1	69	98
State College	PORT MATILDA	STORMSTOWN	. 858	78	1.60	138	87	0.99970	118,584.00	1,368	1	25	59
State College	STUCK	STUCK EXT	29	55	2 62	436	166	0.99920	12,640	76		6	9
State College	THOMPSON FARM	TOFTREES	. 925	29	4.17	773	186	0.99850	715 185	3,855	. 3	23	16
State College	WATERVILLE	WATERVILLE	338	(47)	9.01	1,758	195	0.99670	593 044	3,039	-	28	20
Uniontown	SUMMIT	CHALK HILL	567	9	4.34	1,167	269	0.99780	660,661	2,457	4	17	27
Washington	AMITY	AMITY	504	20	2 59	1,060	410	0 99800	535 151	1,304	2	36	. 57
Washington	GALLEY	WATERDAM	1256	(14)	2.68	1,698	587	0.99680	2,122,978	3,615	- 1	84	20
Washington	HOUSTON	CHARTIERS	2535	12	5.30	989	187	0.99810	2,512,285	13,420	4	79	45
Washington	LONG FARM SHAFT	LONG FARM SHAFT	116	52	2.03	519	254	0.99900	59.646	235		5	9

Appendix II - 5% Distribution Circuit Remedial Actions

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SCName	SSName	CktName	Actions Taken or Planned	Status
Amold	ALL DAM NO 5	SCHENLEY	Tree trimming performed in 2005	Monitor results.
Arnold	FAWN	BULL CREEK	Tree trimming performed in 2005	Monitor results.
Arnold	GOBAIN	PITTSBURGH STREET	Analyze circuit under Circuit Improvement Initiative.	Plan review.
Arnold	HARWICK	SPRINGDALE	Fifteen sectionalizing devices added as part of 2004 RiPlinit	Monitor results.
Arnold	SARDIS	DRENNEN	Tree trimming performed in 2005. One sectionalizing device added as part of 2005	Implement automation project in 2006
			RIPInit, Substation automation planned for early 2006, many circuit lockouts will be eliminated.	in periodi adionianen project in Leco
Arnold	SILVERVILLE	COLE ROAD	Tree trimming performed in 2005.	Monitor results.
Arnold	TUNNELTON	TUNNELTON_DIST	Installed additional switching to reduce outage durations by picking up customers from an adjacent circuit.	
Зоусе	CECIL	MURRAY HILL	Tree trimming planned for 2006.	Plan work.
Butler	BUENA VISTA	HOOKER	Tree trimming planned for 2006 Substation automation completed in 2005; many circuit lockouts will be eliminated	Plan work.
Butler	COOPERSTOWN	COOPERSTOWN	Tree trimming planned for 2006.	Ptan work.
Butler	HERMAN	HERMAN	Reviewed fuse coordination (RIPInit) in 2004. Load balancing completed in 2005.	Monitor results.
Butler	SAXONBURG	CABOT	Six sectionalizing devices to be added as part of 2006 RIPInit.	Plan work
Charlero	BENTLEYVILLE	ELLSWORTH	Tree trimming planned for 2006.	Plan work.
Charlero	VANCEVILLE	VANCEVILLE	Tree trimming planned for 2006.	Plan work,
Clarion	SHAMBURG	SHAMBURG	2 outages in the year affected the one industrial customer on this circuit.	Monitor reliability.
Hyndman	HYNDMAN	RT 96S	Tree trimming performed in 2005.	Monitor results.
Jeannelle	HUNTINGDON	SCOTCH HILL	Seven sectionalizing devices added as part of 2004 RIPInit. Tree trimming planned for 2006	Plan work,
Jeannette	SEWICKLEY	HERMINIE	Tree trimming planned for 2006.	Plan work.
Jefferson	FRANKLIN	ROGERSVILLE	Fourteen sectionalizing devices added as part of 2004 RIPInit. Tree trimming performed in 2005,	Monitor results.
Jefferson	RUTAN	BRISTORIA	Nineteen sectionalizing devices added as part of 2004 RIPInit.	Monitor results.
Jefferson	RUTAN	WINDRIDGE	Tree trimming performed in 2005.	Monitor results.
McConnellsburg	EMMAVILLE	STONEY BREAK	Tree trimming performed in 2005.	Monitor results.
McDonald	HICKORY	HICKORY	Fifteen sectionalizing devices added as part of 2004 RIPInit,	Monitor results.
St Marys	WEEDVILLE	BYRNEDALE	Analyze circuit under Circuit Improvement Initiative.	Plan review.
St Marys	WEEDVILLE	WEEDVILLE	Tree trimming performed in 2005/2006. Thirty-four sectionalizing devices added as part of 2004 RIPInit.	
State College	CENTRE HALL	CENTRE HALL	Six sectionalizing devices added as part of 2004 RIPInit.	Monitor results.
State College	CENTRE HALL	POTTERS MILLS	86% of the outages occurred on 3 days in January during ice storm.	Monitor reliability,
State College	FILLMORE	COURTS	Tree trimming planned for 2006.	
State College	FOWLER	BALD EAGLE	Tree trimming performed in 2005. Twenty-nine sectionalizing devices added as part of 2004 RiPlnit.	Monitor results.
State College	MT. RIANSARES TOWER	MT. RIANSARES	Tree trimming performed in 2005.	Monitor results.
State College	PORT MATILDA	PORT MATILDA	Tree trimming performed in 2005. Twenty-two sectionalizing devices added as part of 2004 RIPInt	Monitor results.
State College	PORT MATILDA	STORMSTOWN	96% of the outages occurred on 3 days in January during ice storm.	Monitor reliability.
State College	STUCK	STUCK EXT	Four sectionalizing devices added as part of 2004 RIPInit.	Monitor results.
State College	THOMPSON FARM	TOFTREES	Tree trimming planned for 2006.	Plan work.
State College	WATERVILLE	WATERVILLE	Entire circuit reviewed for additional fusing opportuntites with three additional locations identified in 2005. One-third of the outages were caused by ties with another utility.	
Uniontown	SUMMIT	CHALK HILL	Tree trimming planned for 2006.	Plan work.
Washington	AMITY	AMITY	Ten sectionalizing devices added as part of 2004 RIPInit. Circuit review planned for 2006.	Plan review.
Washington	GALLEY	WATERDAM	Tree trimming planned for 2006. Substation automation planned for early 2006; many circuit lockouts will be eliminated	Plan work.
Washington	HOUSTON	CHARTIERS	Tree trimming planned for 2006. Circuit reviewed in early 2006 for possible splitting to reduce outages and outage time.	Plan work.
Washington	LONG FARM SHAFT	LONG FARM SHAFT	Tree trimming planned for 2006	Plan work.

Note: A non-excludable ice storm on January 6-9, 2005 affected most of the State College Service Center circuits on this list.

<u> Appendix III – Goals Progress</u>

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2006 Goals - Pennsylvania - Complete Planned Ensure Reliable Service (ERS) Work										
First Quarter Results										
ERS Program/Project	Unit of Measurement	Target for 2006	Actual Completed	% Completed						
Transmission Herbicide Application	#Transmission Lines	12	0							
Transmission Lines Trimming and Clearing	# Transmission Lines	46	2	4%						
Subtransmission Herbicide Application	# of Subtransmission Lines	54	0	0%						
Subtransmission Line Trimming and Clearing	# of Subtransmission Lines	30	0	0%						
Distribution Line Trimming, Clearing & Herbicide Applic.	# of Distribution Line Miles	6,492	734	11%						
Major ERS SS Projects	# Projects	12	0.6	5%						
Major ERS Lines Projects	# Projects	3		0%						
Transmission Comprehensive Patrol	#Transmission Lines	13	3	23%						
Transmission General Patrol	# Transmission Lines	120	Ü	0%						
Ground & Footer Inspections	# Transmission Lines	8	0	0%						
Pole Inspection	#Transmission Lines	11	0	0%						
Pole Replacements	# Transmission Poles	0	0	0%						
Non-Critical Transmission Repairs	#Non-Critical Items	49	16	33%						
Subtransmission General Patrol	# Subtransmission Lines	325	Ö Ö	0%						
SS Work (Includes Capital, Planned, & Preventative)	Man-Hours	71,740	6,023	6%						
SS Spraying	Man-Hours	149		0%						
Controls Work (Includes Cap., Planned, & Preventative)	Man-Hours	3,163	173	5%						
Individual ERS Budget Projects	Man-Hours	14,689	2,355	16%						
Small Planning Projects	Man-Hours	29,717	4,671	16%						
Pole Inspection	# of Circuits	118	26	22%						
Pole Reinforcement	#Poles	72	0	0%						
Danger Poles	#Danger Poles		29	42%						
Reject Poles	#Reject Poles	175	133	76%						
AIM Work	Points Completed	1,644	1,127	69%						
RIP Program	Manhours	15,320	3,693	24%						
UG Equipment Inspections	# Locations	6,577	2,438	37%						
Recloser Inspections	#Reclosers	3,061	1,890	62%						
Regulator Inspections	#Regulators	353	192	54%						
Capacitors Inspections	#Capacitors	1,108	630	57%						
Recloser Replacements	#Reclosers	211	82	39%						
UGD Cable Replacement	#Feet	16,000	2,633	16%						
Cable Injection	#Feet	50,000	1,734	3%						

Appendix IV - Callout Acceptance

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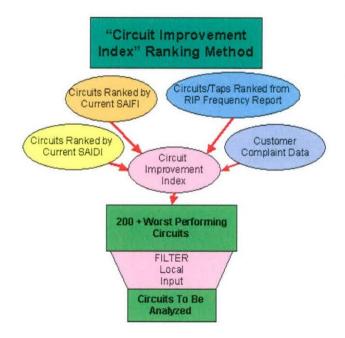
Linemen			••		-	· · ·		· · · ·							
Linghigh	Jan,Feb,Mar			Apr,May,Jun			Jul,Aug,Sep		Oct,Nov,Dec			YTD			
Service Center	No. of Calls	No. Accepted	Average	No. of Calls	No Accepted	Average	No. ot Calls	No Accepted	Average	No. of Calls	No Accepted	Average	No. of Calls	No. Accepted	Avera
					·······································		1				,			· · · ·	-
Arnold	565	120	21%	0	<u> </u>		0	0		0	0		565	120	21
Bovce	243	84	35%	ő	0		o I	0 0		o i	0 0		243	84	35
Butler	604	226	37%	ŏ	ŭ		ŭ	õ		l o '	ŏ		604	226	37
Charleroi	429	149	35%	ā	õ		ŏ	ŏ	1	l õ '	Ū		429	149	35
Clarion	115	43	38%	Ō	Ū		O I	Q		İ ö	ū		113	43	38
Jeannette	1279	136	11%	Û	Û		0	0			G		1279	136	11
Jetterson	533	124	23%	0	O		α	0		0	0		533	124	23
Kittanning	201	94	47%	0	0		0	0		0	G		201	94	47
Latrobe	454	124	27%	D	0		0	0		0	0		454	124	27
McConnellsburg	169	98	58%	Ū	0		0	Ó		0	G		169	98	58
McDanald	189	40	21%	D	0		0	0		0	0		189	40	21
Pleasant Valley	336	121	36%	0	0		0	0		O O	0		336	121	36
St.Mary's	180	93 149	52%	0	0 0		0	0			0 0		180 580	93 149	52 26
State College Uniontown	580 659	149	26% 20%	0	0			0 0			0		659	129	20
Washington	661	116	18%	ā	0		ů	0		o i	G		661	116	18
Waynesboro	803	152	19%	ů	0		i n	Ď		l o	ũ		803	152	19
Waynesiboro		132		Ŭ	Ŭ			Ŭ			Ŭ		000	132	'`
Total AP Average	7998	1998	25%		0		0	0		0	Ö		7998	1998	25
Electricians	••														
		Jan,Feb,Ma	ŗ	Apr,May,Jun		Jul Aug Sep		Oct Nov Dec		YTD		,			
Service Center	No of Calls	No. Accepted	Average	No. of Calls	No. Accepted	Average	No. of Calls	No. Accepted	Average	No. of Calls	No. Accepted	Average	No. of Calls	No. Accepted	Aver
	1. 1.					_								-	ſ
Arnold	37	24	65%	Ū	0		0	0			0		37	24	65
Βυγαέ	15	11	73%	0	0		0	0		0	0		15	11	73
Butler	40	21	53%	0	0		0	0		0	0		40	21	53
Charleroi	32	13	41%	0	0		0	0		0	0		32	13	41
Jeannette	28	- 6 10	21%	บิ	0		0	0		0	0		26	6	21
Jefferson Kittanning	42 23	16 14	38% 61%	0 0	0 0		0	0			0 0		42 23	16 14	38 51
Latrobe	23 38	14	32%	ο	0			a l			0 G		38	14	32
Pleasant Valley	- 30 59	20	32% 34%	U Ū	ů ů		ŏ	o o			0		55	20	34
St.Mary's	19	10	53%	0	Ö		n i	ŏ		ŭ	Ő		19	10	53
State College	36	9	30%	ŭ	0		ŭ	ŏ		ŏ	ŭ		30	9	30
Washington	24	5	21%	D	ō		õ	õ		l o i	G		24	5	21
Waynesboro	53	19	30%	Ū	Ū		Ō	Ō		Ō	G		63	19	30
Tutal AP Average	450	180	43%	Û	0	L		0] 0	Ū		450	180	40

Appendix V – Circuit Improvement Index

Circuit Improvement Index replaces Distribution Circuit Improvement Index (DCII) as the primary means of selecting poor performing circuits for annual evaluation. DCII is a satisfactory ranking if statistics alone (SAIFI, CAIDI, SAIDI, and ASAI) are used to evaluate circuit performance based on a five-year system average performance. But circuit improvement involves much more than just a high-level statistical ranking. Circuits need to be evaluated for a number of factors including frequency of lockouts. frequency of major tap interruptions representing individual customer outage frequency, customer complaint data (if applicable), plus traditional reliability indexes such as SAIFI and SAIDI. A 'master' circuit improvement list will be generated annually and reviewed at the local levels for field input. Field offices, being closer to the customer, have information needed to complete the selection process based on known circuit problems. The master list will then be narrowed to the 100 or so circuits to be studied for the next year. No less than the required applicable state commission requirement will be addressed. Under the new circuit selection method, about the same number of circuits will be evaluated since 5% of AP's 1850 circuits equals 93 circuits. Once circuits are selected for the next year, individual analysis will take place as part of AP's ongoing structured Reliability Improvement Program (RIP). Outage causes will be evaluated. circuit outage maps will be created to assist in the evaluation if needed, and budgets and work plans will be established to improve reliability for viable projects.

A schematic diagram of the process follows:

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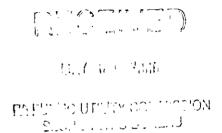


Appendix VI – Major Event Descriptions

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Commission reports for the following major events are presented on the pages following this appendix:

i. There were no Major Events in the first quarter.



Allegheny Power

Annual Transmission and Distribution System Reliability Report

Pennsylvania PUC 52 PA 57.195

Annual Report for 2005

L-00030161





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Allegheny Power – 2005 Annual Reliability Report

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52 Pa. Code 57.193 (c) <u>Annual Transmission System Reliability Report</u>

Allegheny Power (AP) is a member of the Reliability*First* Corporation (RFC). This Regional Reliability Council prepares a semi-annual assessment of the bulk Transmission system. The purpose of this assessment is to provide insight into the expected performance of the bulk transmission system under a wide range of system conditions. The 2006 summer assessment is titled "2006 Summer Assessment of Transmission System Performance". This report will be available upon request from RFC.

52 Pa. Code 57.195 (b1) Introduction

On June 9, 2004, AP filed a petition with the PUC to amend its reliability benchmarks. Under assigned Docket No. M-00991220F0003, AP has submitted a negotiated settlement involving interested parties. The amended reliability benchmarks could provide recognition of incomplete reliability data and a change from manual reporting to a more accurate automated outage management system during the years that reliability benchmarks were established. Resolution of the settlement was pending at the time of report submittal.

52 Pa. Code 57.195 (b1) Assessment and Programs

Assessment

Allegheny Power's distribution system can be characterized as good with a trend of improving reliability. AP has made great strides implementing technology to monitor reliability and respond to forced outage events. Technologies such as Automated Mapping/Facilities Management, Outage Management System, Call Center Interactive Voice Response, Computerized Work Management System, and mobile technologies all support timely response to field conditions. A corporate training center, reliability programs, and processes to support reliability initiatives are in place to continually improve distribution reliability. These and other initiatives also support intense work efforts for responding to severe weather events. Well-established maintenance programs are in place to ensure the existing system will continue to operate in a safe and reliable manner. Allegheny also has maintenance programs in place to address poor performing circuits as well specific line segments where reliability issues may exist.

Weather events continue to affect circuit reliability and reliability statistics. Major events, discussed later in this report, are excluded from statistics but can affect budgets and work plans. Other, less severe, weather events are included in statistics and can contribute significantly to reliability statistics, especially on an individual circuit basis. These events are also mentioned later.

Current Programs and Procedures

Select subsections of Sections 04, 05, 09, and 13 of the Allegheny Power *Construction, Operation, and Maintenance (COM) Manual*, Section 20 of the Allegheny Power *Engineering Manual* and Allegheny's *Substation Notebook* detail the company's inspection & maintenance programs as summarized below.

<u>COM 04-01</u> Overhead Lines – Patrol of EHV, Transmission and Subtransmission Lines - Patrol Description and Scheduling

- Comprehensive patrols are performed on a five-year interval for all EHV lines (345-500 kV) and on a ten-year interval for all transmission lines 115-230 kV).
- All lines (115 through 500 kV) undergo a general patrol annually between the comprehensive patrol years, and subtransmission lines (23 through 69 kV) receive a general patrol annually.
- All EHV and transmission lines are patrolled annually to assess vegetation and danger tree conditions.
- All steel poles, towers, and concrete footers are inspected during each line's scheduled comprehensive patrol.

<u>COM 04-02</u> Overhead Lines – Patrol of EHV, Transmission and Subtransmission Lines – Inspection and Report Guidelines

Provides guidelines for performing inspections of EHV, transmission, and subtransmission lines and preparing reports.

<u>COM 04-03</u> Overhead Lines – River Crossing Inspections

All river crossings covered by permits issued by the Corps of Engineers are inspected every ten years and immediately after floods or high water.

<u>COM 04-04</u> Overhead Lines – Distribution Inspection and Maintenance Program for Capacitors

> All distribution line capacitors are visually inspected annually.

<u>COM 04-05</u> Overhead Lines – Annual Inspection & Maintenance (AIM) – Lines 46 kV and Below

- AIM Tier 1 is a time-based inspection of every circuit by contract pole inspectors over a twelve-year, recurring cycle.
- AIM Tier 2 projects are both time-based and reliability-based projects. The timebased portion of AIM Tier 2 will consist of Company personnel inspecting every circuit on the AIM Tier 2 schedule once every 12 years. The AIM Tier 2 schedule will lag the AIM Tier 1 schedule by approximately 6 years. The reliability-based portion of AIM Tier 2 will consist of projects identified through the Reliability Improvement Program (RIP). Any circuit or line segment flagged through RIP reviews will be addressed by the service center.

<u>COM 04-06</u> Overhead Lines – Painting of Steel Transmission, Subtransmission, and Distribution Structures

Service Centers submit recommendations for painting steel structures to Lines Operations based on scheduled line patrols as documented above. Lines Operations evaluates the condition of the protective coatings and is responsible for the painting required to extend the useful life of the assets.

<u>COM 04-07</u> Overhead Lines – Maintenance of Transmission, Subtransmission, and Distribution Foundations

Service Centers submit recommendations for repairing foundations to Lines Operations based on scheduled footer patrols as described elsewhere in this summary. Lines Operations evaluates the condition of the foundations and is responsible for the necessary upgrades or repairs.

COM 04-08 Overhead Lines – Inspection of Standing Wood Poles

- Inspections of distribution and subtransmission wood poles and hardware are conducted on a twelve-year cycle by contract inspectors.
- Transmission poles are inspected on a ten-year schedule in conjunction with the Comprehensive Aerial Patrol described above.

<u>COM 04-09</u> Overhead Lines – Inspection and Maintenance Program for Three Phase Group Operated Air Switches Used On Overhead Distribution and Subtransmission

Manual air switches are inspected prior to planned or emergency operation of the switch. Automatic air switches are visually inspected during inspection and maintenance of the motor mechanisms (annually).

<u>COM 04-10</u> Overhead Lines – Inspection and Maintenance Program for Oil Circuit Reclosers

Oil circuit reclosers on distribution lines are visually inspected once per year.
 Units are removed from service for refurbishing in the shop based on the

manufacturer's duty cycle recommendations or every 10 years, whichever comes first.

<u>COM 04-11</u> Overhead Lines – Inspection and Maintenance of Distribution Line Voltage Regulators

Voltage regulators on distribution lines are visually inspected once every five years. Regulators are tested to assure proper operation. Faulty regulators are replaced.

<u>COM 05-01</u> Underground Distribution/Subtransmission Lines – Underground Equipment Inspection

> Underground equipment is inspected on a five-year cycle.

COM 05-04 and 05-05 Underground Cable Treatment and Replacement Program

- Underground cable treatment has been accepted in the industry as a means to extend cable life at a fraction of the replacement cost.
 - Primary cable injection is a process in which a silicon-based fluid is injected into the conductor strands of a cable. The fluid is absorbed by the surrounding cable insulation. The result is rejuvenation of cable insulation and increased life expectancy of the cable.
 - Unsuccessfully injected direct buried cable sections shall be scheduled for replacement. When replaced the cable section(s) shall be installed in conduit.

Vegetation Control Program Overview

Allegheny Power has a structured vegetation control program in which rural distribution circuits are maintained on a 6 – 8 year cycle. Urban distribution circuits are maintained on a 3 - 4 year cycle. Cycle lengths may vary due to shorter or longer growing seasons, species variation, and other factors that influence growth. Transmission lines are patrolled annually and maintained on an as needed basis.

<u>COM 09-06</u> Vegetation – Initial Clearing Guidelines

Guidelines have been established for initial right-of-way clearing. Standard corridor widths are maintained for each voltage class and construction type.

<u>COM 09-07</u> Vegetation – Planning, Scheduling, Budgeting, Contracting, and Recording Vegetation Management Work on Distribution Voltages

Vegetation management activities follow a standard cycle length of 6 - 8 years for rural distribution lines and 3-4 years for urban distribution lines.

<u>COM 09-08</u> Vegetation – Planning, Scheduling, Budgeting, Contracting, and Recording Vegetation Management Work on Subtransmission Voltages

> Vegetation management activities follow an as needed basis based on patrols.

<u>COM 09-09</u> Vegetation – Planning, Scheduling, Budgeting, Contracting, and Performing Vegetation Management Work on Transmission Voltages

Recommended cycles by activity have been established for vegetation management of transmission lines. Annual general aerial patrols are used to identify emergency conditions, to assess effectiveness of maintenance activities, to determine vegetation conditions, and to assist in creating and refining management plans.

<u>COM 09-13</u> Vegetation – Vegetation Management Inspection

This procedure outlines the requirements for inspecting vegetation management contractors. Audit of contractor activities ensures contract compliance and quality of work.

COM 13-01 Street Lighting - Maintenance and Inspection

For group light accounts, inspection of street lighting equipment is performed at the same time that the group lamp replacement is made. The replacement schedule for mercury vapor and high-pressure sodium lights is four years.

Engineering Manual

20-1.0 Reliability and Improvement Program (RIP)

- Detailed reviews are conducted on distribution circuits with reliability indices falling outside of AP's reliability targets. RIP guidelines identify a range of targeted and cyclic inspection and maintenance programs that can be applied to poor performing circuits.
- This program places greater emphasis on analyzing data available through the Outage Management System (OMS) to focus maintenance activities on poor performing circuits and line segments. These enhancements were made as the result of new reporting functionality provided via web based reporting from the outage management system. This program targets reliability improvement as follows:
 - Poor Performing Circuits Targets poorest performing circuits as ranked by the DCII (DCII - Distribution Circuit Interruption Index is a composite index comprised of SAIFI SAIDI, CAIDI and ASAI utilized to rank and prioritize circuits). Detailed outage analysis is performed on these circuits and an action plan (if necessary) is developed to improve performance. DCII will soon be replaced with a Circuit Improvement Index.
 - **Circuit that have two or more lockouts** Any circuit that's has locked out multiple times in a 12 month period will require a detailed analysis and if necessary an action plan will be developed to improve performance.
 - **Open Sectionalizing Devices** Sectionalizing devices experiencing multiple operations in a 12-month period will require detailed analysis and if necessary an action plan will be developed to improve performance.
 - **Substation Breaker/Recloser Operation** Reclosers experiencing more tan abnormal number of operations annually will be reviewed and if necessary an action plan will be developed to improve performance.
 - By utilizing the above criteria (in addition to our standard maintenance activities) to target maintenance to poor performing circuits and line segments, we are able to focus our resources to those customers experiencing the poorest levels of reliability.

SS Notebook: Substation Maintenance Program - Objectives and Desired Outcomes

The objective of Allegheny's substation maintenance program is to maintain safe and reliable service to our customers. The program has three components:

Allegheny Power – 2005 Annual Reliability Report

- 1. **Preventive Maintenance** is done to preserve the function of equipment or facilities and to prevent failures. These tasks are either performed periodically or are triggered by number of operations.
- 2. Predictive Maintenance is done to assess the condition of the equipment and consists of diagnostic tests and inspections. It is completed in conjunction with preventive and corrective maintenance.
- **3.** Corrective Maintenance is done to repair equipment and facilities or to replace failed equipment and facilities.

Procedures

The Substation Notebook documents substation maintenance and operating practices. The section titled "Maintenance Class Details" lists the various classes of maintenance and inspection procedures (see definitions below) performed on all substation equipment such as power & instrument transformers, circuit breakers, regulators, reclosers, capacitors, batteries & chargers.

Maintenance Class Definitions*

- Class A Complete inspection, adjustment, testing and repair of those electrical, mechanical, physical, and structural components as required by this standard for each unique piece of equipment, and the recording of appropriate data. Normally the equipment will be removed from service.
- Class B The inspection, adjustment, testing and repair of those electrical, mechanical, physical and structural subcomponents as required by this standard for each unique piece of equipment, and the recording of appropriate data. Items included in this category are those subcomponents of equipment requiring more frequent attention than the periodicity of Class A maintenance.
- Class C Visual inspection of those electrical, mechanical, physical and structural components available while the equipment is in service, and the logging of substation data. Perform such special tests as prescribed by individual equipment maintenance guide.
- Class D Visual inspection of those electrical, mechanical, physical and structural components available while the equipment is in service, and the daily logging of the data.
- P Perform a bushing PF test on all GE transformers 230 kV and below and all breakers with GE type U or McGraw Type PA bushings.
- G Perform gauge inspection.
- * For each maintenance class, the lower classes are also performed. For initial installation, the highest form of maintenance shall be performed.

52 Pa. Code 57.195 (b)(2) <u>Major Events</u>

The reliability data included in this document excludes the following Major Event. This event was approved by the PUC for exclusion as shown in Appendix I. Statistics for the Major Event follows:

- 1. October 24th to October 30th: Heavy, wet snowstorm
 - a. Customers excluded = 69,676 customers interrupted
 - b. Customer minutes excluded = 83,330,542 CMI

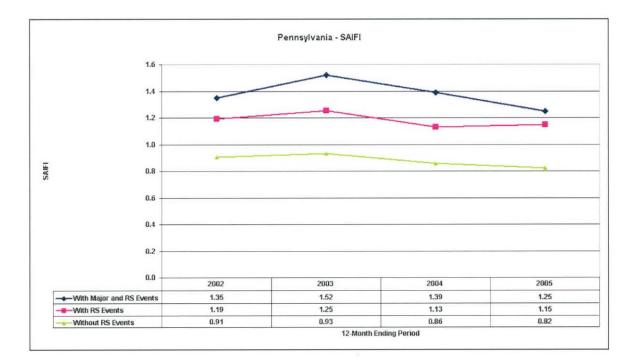
Major event description:

- (i) Either of the following (A) or (B) qualifies as a major event for data exclusion, with approval of the PUC:
 - (A) An interruption of electric service resulting from conditions beyond the control of the electric distribution company which affects at least 10% of the customers in an operating area during the course of the event for a duration of 5 minutes each or greater. The event begins when notification of the first interruption is received and ends when service to all customers affected by the event is restored. When one operating area experiences a major event, the major event shall be deemed to extend to all other affected operating areas of that electric distribution company.
 - (B) An unscheduled interruption of electric service resulting from an action taken by an electric distribution company to maintain the adequacy and security of the electrical system, including emergency load control, emergency switching and energy conservation procedures, as described in § 57.52 (relating to emergency load control and energy conservation by electric utilities), which affects at least one customer.
- (ii) A major event does not include scheduled outages in the normal course of business or an electric distribution company's actions to interrupt customers served under interruptible rate tariffs.

Allegheny Power's Restore Service storm response procedures are continually being updated following major events. Process team members and others involved in the storms meet to share 'lessons learned'. Procedures are revised as necessary to improve response to the variety of storms encountered across AP's service territory.

Allegheny Tower - 2005 Annual Reliability Report

Although not excluded from statistics, AP's Pennsylvania service territory experienced several minor events ('RS Events') characterized by having received a severe weather alert accompanied by at least 5,000 Allegheny Power customers interrupted. The following chart shows the effect on SAIFI of Major Events and RS Events for Pennsylvania customers:



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52 Pa. Code 57.195 (b)(3) Reliability Indices, Performance Measures, and Supporting Data

The following tables provide 2005 reliability statistics (SAIFI, CAIDI, and SAIDI) and three years of supporting statistics along with AP's current Benchmarks and Performance Standards:

Year	Interrupted Customers	Avg Cust Served	CMI	SAIDI	ASAI	CAIDI	SAIFI
2003	850,488	682,308	183,895,901	270	0.999487	216	1.25
2004	782,493	688,671	148,781,237	216	0.999590	190	1.13
2005	797,656	694,739	155,683,034	224	0.999574	195	1.15

The following table provides Allegheny Power's current benchmarks and standards.

		Rolling	Rolling	2005
Reliability	Recomputed	12-Month	3-Yr Avg.	Yearend
Indices	Benchmark	Standard	Standard	Performance
SAIFI	0.67	0.8	0.74	1.15
CAIDI	178	214	196	195
SAIDI	119	172	144	224

Note that Allegheny Power has a petition pending with the Commission to modify its benchmarks due to incomplete and inaccurate outage data utilized during establishment of the benchmarks. The proposed benchmarks are presented below:

	Proposed	Rolling	Rolling	2005
Reliability	Settlement	12-Month	3-Yr Avg.	Yearend
Indices	Benchmarks	Standard	Standard	Performance
SAIFI	1.05	1.26	1.16	1.15
CAIDI	170	204	187	195
SAIDI	179	257	217	224

Supporting Discussion:

MAIFI Indices Reporting

Momentary Average Interruption Frequency Index (MAIFI) statistics are not recorded or readily available at Allegheny Power. Sufficient field equipment is not available to provide meaningful data for momentary interruptions indices.

Outage Management System Implementation

The Commission recognized AP's data quality issues associated with implementation of an automated Outage Management System (OMS) in its Docket No. M-00991220. The following represents AP's OMS implementation timeline affecting data quality during the time of establishing benchmarks and performance standards:

- ✤ 1994 1998: Manual reporting of data
- ✤ 1996 1998: Incomplete data during OMS development
- ✤ 1999: First year of utilizing new OMS for reliability reporting
- 1999 2000: Data quality clean-up including verifying customer connectivity and equipment identifications

52 Pa. Code 57.195 (b)(4) Outage Causes and Proposed Solutions

Outage Cause	Incident 12 Month endin		Customers Inte 12 Month endin	•	Customers Minutes 12 Month ending	
	Number	Percent	Number	Percent	Number	Percent
Animals	1,074	6,3%	36,921	4.6%	4,228,323	2.7%
Overhead Equipment Failure						
Overhead Line Equipment	1,229	7.2%	24,288	3.0%	3,766,895	2.4%
Overhead Line Material	1,869	11.0%	107,878	13.5%	12,924,528	8.3%
Overhead Wire	1,259	7.4%	57,585	7.2%	8,005,957	5.1%
Underground Equipment						
Underground Line Material	44	0.3%	908	0.1%	228,945	Q.1%
Underground Line Equipment	76	0.4%	904	0.1%	478,513	0.3%
Underground Cable	463	2.7%	13,000	1.6%	3,770,315	2.4%
Service Equipment	70	0.4%	96	0.0%	18,027	0.0%
Substation Equipment	62	0.4%	18,087	2.3%	2,534,011	1.6%
Other	183	1.1%	16,793	2.1%	1,484,561	1.0%
Public/Customer	1,974	11.6%	135,009	16 9%	21,858,250	14.0%
Trees						
On Right of Way	105	0.6%	6,614	0.8%	1,042,297	0.7%
Off Right of Way	4,005	23.6%	190,048	23 8%	57,061,762	36.7%
Slide into Line from off ROW	8	0.0%	82	0.0%	18,600	0.0%
Unknown	1,619	9.5%	72,953	9.1%	9,661,541	6.2%
Weather	2,950	17.4%	116,490	14.6%	28,600,507	18.4%
Total	16,990	100%	797,856	100%	165,683,032	100%

A summary and review of service territory-wide outage causes follows:

Note: Numbers may be slightly off from aggregated totals in summary section above due to rounding. Allegheny Power's Outage Management System (OMS) tracks the number of incidents recorded for a circuit. This number does not necessarily reflect the number of outages on a circuit. One outage may be recorded as multiple incidents on different phases or grouped to different sectionalizing devices. It should be noted that the number of incidents on a circuit may be overstated due to the way similar incidents may not have grouped together in OMS.

Analysis and Plans of Action

Allegheny Power believes that the greatest improvement in company-controllable outages will result from several initiatives in place to improve distribution reliability in Pennsylvania.

- Reliability Improvement Initiative Review substation devices and main line protective devices for un-fused taps. Review over-current protection on poor performing and high-density distribution circuits.
- Through AP's Reliability Improvement Plan (see 'Current Programs and Procedures' in this report), address poor performing circuits and line segments.
- Expanded Forestry Danger Tree Program Allegheny Power's Danger Tree Program consists of removing, or significantly reducing in height, diseased or damaged trees located outside the boundary of the right-of-way (off ROW) that lean toward the line in a manner that poses a threat to service reliability and/or the integrity of the line under any weather condition. Beginning in 2003, AP initiated this program to target live, healthy trees that are leaning and located along higher voltage lines and main lines of distribution circuits.

Allegheny Power – 2005 Annual Reliability Report

- Circuit Improvement Initiative AP has initiated a circuit improvement initiative whereby AP's recent 100 worst performing circuits are identified, studied, and targeted for further possible improvements based on the review of outage causes.
- Subtransmission substation automation Automate subtransmission substations that have dual feed capabilities.
- Six-Sigma teams are focusing on root cause analysis in several areas
 - Reduction of circuit lockouts caused by fallen off-ROW trees
 - o Reduction of substation outages caused by subtransmission outages
 - Reduction of customer interruptions caused by cutout failures
 - Reduction of response time to after-hours outages
 - Piloting of automated overhead fault indicators to reduce scouting time
 - o Analysis and improvement of restoration efforts during storms
 - o Improving outage data quality

52 Pa. Code 57.195 (b)(5) Remedial Efforts for 5% Worst Performing Circuits

The following seven circuits were on the 5% worst performing circuit list as of 9/30/04 and 9/30/05. AP targets the worst performing circuit list as of September 30th each year to allow time to develop budgets and work plans for the following year before yearend. A description of remedial efforts for each circuit is included along with description of significant outage causes.

Allegheny Power plans to change its circuit ranking methodology from the current Distribution Circuit Improvement Index (DCII) in 2006. The new method, Circuit Improvement Index Ranking, incorporates reliability statistics at a local level to further address individual customer satisfaction. The methodology is described in Appendix III.

Rutan substation/Bristoria circuit:

Significant outages and actions taken or planned with respect to this circuit are as follows:

- Seventy percent of the outages occurred on two days 12/1/04 (12%) and 7/25/05 (58%). July 25th was an AP RS event.
- > Eighty-eight percent of the outages were caused by off right-of-way trees.
- Nineteen sectionalizing devices were added a result of the 2004 Reliability Improvement Initiative.

Waterville substation/ Waterville District circuit:

Significant outages and actions taken or planned with respect to this circuit are as follows:

- > Thirty-four percent of the outages were a result of outages on ties with an adjacent utility.
- The entire circuit was reviewed for additional fuse locations with three locations identified for additional fusing in 2005.

Amity substation/ Amity circuit:

Significant outages and actions taken or planned with respect to this circuit are as follows:

- Ten sectionalizing devices were added in 2004 as part of the reliability improvement initiative.
- The circuit will be reviewed in early 2006 for possible improvements as part of the Circuit Improvement Initiative.

Franklin_substation/ Rogersville circuit:

Significant outages and actions taken or planned with respect to this circuit are as follows:

- ▶ Fifty-five percent of the outages occurred on 7/25/05 during an AP RS Event.
- > Ninety-four percent of the outages were caused by off right-of-way trees.
- Fourteen sectionalizing devices were added in 2004 as part of the reliability improvement initiative.
- Tree trimming was performed in 2005.

Huntingdon substation/ Scotch Hill circuit:

Significant outages and actions taken or planned with respect to this circuit are as follows:

- Seventy-nine percent of the outages occurred on two days due to a public vehicle hitting a pole and lightning.
- Seven sectionalizing devices were added in 2004 as part of the reliability improvement initiative.
- > Circuit was re-configured to reduce exposure and reduce circuit lockouts.
- \succ Tree trimming is scheduled for 2006.

Tunnelton substation/ Tunnelton District circuit:

Significant outages and actions taken or planned with respect to this circuit are as follows:

- Two outages, which were circuit lockouts, caused all of the interruptions on this six-mile circuit, which has 98 customers.
- Installed switching to reduce outage durations by picking up customers from an adjacent circuit.

Herman substation/ Herman circuit:

Significant outages and actions taken or planned with respect to this circuit are as follows:

- Major outages on the circuit were as follows (85% of the total outages occurred on 3 days):
 - Forty percent of the outages on this circuit occurred on 4/3/05 during an AP RS snow event.
 - Twenty-eight percent of the outages occurred on 7/13/05 as a result of lightning.
 - \circ Seventeen percent of the outages occurred on 1/1/05 as a result of an off right-ofway tree.
- Load balancing completed in 2005.
- Reviewed fuse coordination (RIPInit) in 2004.

52 Pa. Code 57.195 (b)(6)

Transmission and Distribution Inspection/Maintenance Goals Results

Attached as Appendix II is comparison of 2005 T&D goals versus actual results for Ensure Reliable Service (ERS) work. Overall, AP completed over 98% of planned work objectives with any follow-up work not completed by yearend 2005 scheduled for completion in early 2006. For certain work insufficient contractors were available to complete work towards the end of the year as storm restoration efforts took precedence. Note that occasionally goal targets may change somewhat during the year as certain work adjusts to meet field conditions and inspection/replacement guidelines. Some work has more inherent uncertainty associated with establishing budgets and goals more than a year ahead of time. **> >** .

52 Pa. Code 57.195 (b)(7) Transmission and Distribution Budget versus Actual O&M Expenses

Following is comparison of budgeted versus actual 2005 transmission and distribution operations and maintenance expenses. Overall, AP actual expenses were 105% of budget. Contributing to the increased expenses was additional use of contractors and company personnel for projects and storm restoration work.

T&D Area	200	5 Actual (\$1000)	2	:005 Budget (\$1000)
Distribution DEPT	\$	(1,021)	\$	(488)
Distribution Support DEPT	\$	3,929	\$	3,726
Field Operations DEPT	\$	23,603	\$	18,979
Forestry DEPT	\$	13,595	\$	14,450
Transportation DEPT	\$	57	\$	7
Distribution Subtotal	\$	40,163	\$	36,674
System Planning DEPT	\$	830	\$	625
Substations DEPT	\$	6,870	\$	7,114
System Operations DEPT	\$	5,241	\$	5,337
Technical Services DEPT	\$	3,252	\$	2,923
Transmission Other DEPT	\$	(17)	\$	374
Transmission Engineering DEPT	\$	2,458	\$	2,891
Transmission Projects DEPT	\$	647	\$	449
Transmission Subtotal	\$	19,282	\$	19,712
Total T&D O&M	\$	59,444	\$	56,386

52 Pa. Code 57.195 (b)(8) <u>Transmission and Distribution Budget versus Actual Capital Expenditures</u>

Following is comparison of budgeted versus actual 2005 transmission & distribution capital expenditures (\$1,000) followed by an explanation of any significant variances:

Equipment Category	2005	Budget (\$1,000)	2005	Actual (\$1,000)
Distribution Lines	\$	38,339	\$	40,866
Distribution Substation	S	3,903	\$	8,863
EHV Lines	\$	-	\$	21
EHV Substation	\$	-	\$	289
General Plant	S	6,798	S	5,435
Sub-transmission Line	\$	626	\$	(597)
Subtotal Distribution	\$	49,666	\$	54,877
Transmission Substation	\$	3,902	\$	1,668
Transmission Line	\$	2,019	\$	1,548
Subtotal Transmission	S	5,921	\$	3,216
Total T&D	\$	55,587	\$	58,093

2005 expenditures were 5% over budget overall. Note that a negative amount for the Subtransmission Line category indicates that more money was received from others for work performed than AP expended. Money may be shifted between individual categories during the course of the year to better allocate funds as needs arise. Contributing to additional spending was an unexpected increase in new customer connections over the prior year and a late year major snowstorm. Several distribution substation projects were also carried over from the prior year. .

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52 Pa. Code 57.195 (b)(9) <u>Transmission and Distribution 2006 Inspection and Maintenance Goals</u>

Following is list of transmission & distribution inspection and maintenance goals for 2006:

2006 Goais - Pennsylvania - Com	plete Planned Ensure Reliable Servic	e work
ERS Program/Project	Unit of Measurement	Target for 2008
Transmission Herbicide Application	# Transmission Lines	1:
Transmission Lines Trimming and Clearing	# Transmission Lines	4
Subtransmission Herbicide Application	# of Subtransmission Lines	5
Subtransmission Line Trimming and Clearing	# of Subtransmission Lines	3
Distribution Line Trimming, Clearing & Herbicide Applic.	# of Distribution Line Miles	6,49
Major ERS SS Projects	# Projects	12
Major ERS Lines Projects	# Projects	3
Transmission Comprehensive Patrol	#Transmission Lines	13
Transmission General Patrol	# Transmission Lines	120
Ground & Footer Inspections	# Transmission Lines	
Pole Inspection	#Transmission Lines	11
Pole Replacements	#Transmission Poles	
Non-Critical Transmission Repairs	# Non-Critical Items	49
Subtransmission General Patrol	# Subtransmission Lines	32
SS Work (Includes Capital, Planned, & Preventative)	Man-Hours	71,74
SS Spraying	Man-Hours	149
Controis Work (Includes Cap., Planned, & Preventative)	Man-Hours	3,163
Individual ERS Budget Projects	Man-Hours	14,88
Small Planning Projects	Man-Hours	29,71
Pole Inspection	# of Circuits	11
Pole Reinforcement	# Poles	7
Danger Poles	# Danger Poles	6
Reject Poles	# Reject Poles	17
AIM Work	Points Completed	1,64
RIP Program	Manhours	15,32
UG Equipment Inspections	# Locations	6,57
Recloser Inspections	# Reclosers	21
Regulator Inspections	# Regulators	35
Capacitors Inspections	# Capacitors	1,10
Recloser Replacements	# Reclosers	21
UGD Cable Replacement	# Feet	16,000
Cable Injection	#Feet	50,000

52 Pa. Code 57.195 (b)(10) <u>Transmission and Distribution 2006 O&M Expense Budget by FERC Account</u>

AP does not budget by FERC account in its current financial reporting system. Following is the 2006 transmission & distribution operations & maintenance expense budget as available from AP's financial reporting system:

r	<u></u>
T&D Area	2006 Budget (\$1000)
Distribution DEPT	\$ (931)
Distribution Support DEPT	\$ 4,035
Field Operations DEPT	\$ 20,422
Forestry DEPT	\$ 14,523
Transportation DEPT	\$ 17
Distribution Subtotal	\$ 38,066
System Planning DEPT	\$ 656
Substations DEPT	\$ 6,850
System Operations DEPT	\$ 5,418
Technical Services DEPT	\$ 3,190
Transmission Other DEPT	\$ 492
Transmission Engineering DEPT	\$ 3,037
Transmission Projects DEPT	\$ 701
Transmission Subtotal	\$ 20,344
Total T&D O&M	\$ 58,411

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52 Pa. Code 57.195 (b)(11) <u>Transmission and Distribution 2006 Capital Expenditure Budget by FERC Account</u>

AP does not budget by FERC account in its current financial reporting system. Following is the 2006 capital expenditure budget as available from AP's capital project system for Pennsylvania.

WPP Capital Budget By Plant Code				
(\$ in Thousands)	2006			
Distribution Lines	\$41,976			
Distribution Substations	\$ 7,599			
EHV Lines	\$ -1			
EHV Substations	\$ -888			
General Plant	\$ 7,158			
Sub-Transmission	\$ 30			
Transmission Lines	\$ 1,489			
Transmission Substations	\$ 4,176			
Total	\$ 61,539			

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52 Pa. Code 57.195 (b)(12) <u>Transmission</u> and Distribution Inspection and <u>Maintenance Program Changes</u>

There have been no changes to existing inspection and maintenance programs previously submitted to the Commission.



Appendix I Major Event Exclusion Approvals



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COMMONWEALTH OF PENNSYLVANIA PENNSYLVANIA PUBLIC UTILITY COMMISSION P.O. BOX3265, HARRISBURG, PA 17105-3265

IL REPLYPLENCE RETER TO OVE FILE

December 8, 2005

Docket No. M-00991220F2005

ALLEGHENY POWER ATTN JAMES E BARRELL 800 CABIN HILL DRIVE GREENSBURG PA 15601

Re: Request for Exclusion of Major Outage for Reliability Reporting Purposes to the Pernsylvania Public Utility Commission

Dear Mr. Barrell:

On December 1, 2005, Allegheny Power ("Allegheny") filed a request for exclusion of major outage for reliability reporting purposes in accordance with the requirements of the Commission's Order entered May 11, 2004, & M-00991220.

The request relates to a weather event that Allegheny states coused service interruptions first reported on October 24, 2005, at 9:20 p m., with full customer service restoration on October 30, 2005, at 6:01 p m.

Upon review of the company's filing, it appears that the service interruptions described by Allegheny qualify as a major event, as defined in 52 Pa. Code §57.192. Therefore, the request for exclusion of service interruptions for reporting purposes is hereby approved. However, the Commission's approval is contingent upon the possibility that subsequent audits, reviews, and inquiry, in any Commission proceeding, may be conducted, pursuant to 52 Pa. Code §57.197 (relating to Reliability investigations and enforcement).

In addition, this approval will apply only to the matters and parties specifically and clearly defined under this instant filing.

If you are dissatisfied with the resolution of this matter, you may, as set forth in 52 Pa. Code §5.44, file a petition with the Commission within 10 days of the date of this letter.

Sincerely,

James J. McNulty Secretary

cc: Tom Sheets, Audits Blaine Loper, CEEP Wayne Williams, CEEP Keny Klinefelter, FUS George Dorow, Audis. Betsy Barnes, Law Bureau Kathleen Aurist, Secretary's Bureau

Appendix II <u>Transmission and Distribution Inspection/Maintenance Goals Results</u>

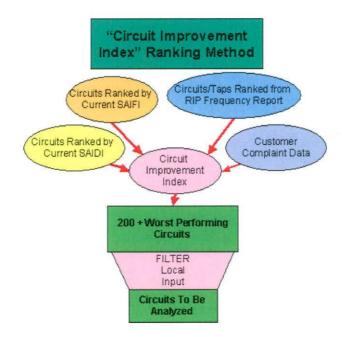
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	2005 G	oals - Penns	ylvania - Plann	ed Ensure F	Reliable Service Work Completed
Program or Project	Unit of Measurement	Target for 2005	Actual Completed	% Completed	Reason for < 100% Goal Attainment
Transmission Herbicide Application	# Transmission Lines	21	21	1	
Transmission Lines Trimming and Clearing	# Transmission Lines	36	36		
Subtransmission Herbicide Application	# of Subtransmission Lines	48	48		
Subtransmission Line Trimming and Clearing	# of Subtransmission Lines	53	53		
Distribution Line Trimming, Clearing & Herbicide Applic.	# of Distribution Line Miles	6,604	6,732	102%	NA
Major ERS SS Projects	# Projects	16	16	100%	NA
Major ERS Lines Projects	#Projects	4	4	100%	NA
Transmission Comprehensive Patrol	#Transmission Lines	29	29		NA
Transmission General Patrol	#Transmission Lines	120	120	100%	NA
Ground & Footer Inspections	#Transmission Lines	33	16	48%	Delayed due to manpower needs for storm restoration. Completed first quarter 2006.
Pole Inspection	# Transmission Lines	38	38	100%	NA
Critical Transmission Repairs	# Critical Items	2	2	100%	NA
Non-Critical Transmission Repairs	#Non-Critical Items	18	10	56%	Delayed due to manpower needs for storm restoration. Completed first quarter 2006.
SS Work (includes Capital, Planned, & Preventative)	Man-Hours	71,740	80,163	112%	NA
SS Spraying	# Substations	2,400	B,311	346%	NA
Controls Work (Includes Cap., Planned, & Preventive)	Man-Hours	5,209	4,981	96%	Delayed due to inciement weather - completed by April 30, 2006.
Subtransmission General Patrol	# Subtransmission Lines	325	325	100%	NA
Individual ERS Budget Projects	Man-Hours	10,920	6,262	57%	Customer decided not to add load on 1 project; 1 other delayed due to weather - completed 3/31/06.
Small Planning Projects	Man-Hours	25,274	20,970	83%	Some projects carried over to early 2006 so contractors could be used for storm restoration work.
Pole Inspection	# of Circuits	68	68	100%	Completed all planned circuit inspections. 2 of the 70 circuits on the planned list no longer exist.
Danger Poles	# Danger Poles	84	97	115%	N/A
Reject Poles	# Reject Poles	187	191	102%	NA
AIM Work	Points Completed	1,232	956	78%	Yearend work was delayed due to adverse weather and outage restoration efforts. Carryover work completed in 2006.
RIP Program	Manhours	44,767	42,976	96%	Required work was completed for fewer than budgeted manhours.
UG Equipment Inspections	#Locations	7,171	7,429	104%	NA
Recloser Inspections	# Reclosers	3,565	3,538	100%	NA
Regulator Inspections	# Regulators	332	279	84%	Yearend work was delayed due to adverse weather and outage restoration efforts. Carryover work completed in 2006.
Capacitors Inspections	# Capacitors	1,283	1,282		
Recloser Replacements	# Reclosers	200	200	100%	The goal changed as the year progressed due to fewer recloser replacements needed than anticipated
UGD Cable Replacement	#Feet	89,000	83,940	94%	Ran out of time to complete work - carried over to 2006 to complete in 1st half.
Cable Injection	#Feet	19,000	19,000	100%	NA

Appendix III Circuit Improvement Index

Circuit Improvement Index replaces Distribution Circuit Improvement Index (DCII) as the primary means of selecting poor performing circuits for annual evaluation. DCII is a satisfactory ranking if statistics alone (SAIFI, CAIDI, SAIDI, and ASAI) are used to evaluate circuit performance based on a five-year system average performance. But circuit improvement involves much more than just a high-level statistical ranking. Circuits need to be evaluated for a number of factors including frequency of lockouts, frequency of major tap interruptions representing individual customer outage frequency, customer complaint data (if applicable), plus traditional reliability indexes such as SAIFI and SAIDI. A 'master' circuit improvement list will be generated annually and reviewed at the local levels for field input. Field offices, being closer to the customer, have information needed to complete the selection process based on known circuit problems. The master list will then be narrowed to the 100 or so circuits to be studied for the next year. No less than the required applicable state commission requirement will be addressed. Under the new circuit selection method, about the same number of circuits will be evaluated since 5% of AP's 1850 circuits equals 93 circuits. Once circuits are selected for the next year, individual analysis will take place as part of AP's ongoing structured Reliability Improvement Program (RIP). Outage causes will be evaluated, circuit outage maps will be created to assist in the evaluation if needed, and budgets and work plans will be established to improve reliability for viable projects.

A schematic diagram of the process follows:



BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

CERTIFICATE OF SERVICE

I certify that this 1st day of May 2006, I have served a true and correct copy of the

2005 Annual Reliability Report and the First Quarter 2006 Reliability Report of Allegheny

Power, by first-class mail, postage prepaid, upon the following:

Office of Consumer Advocate 555 Walnut Street Forum Place, 5th Floor Harrisburg, PA 17101-1921

Office of Small Business Advocate Suite 1102, 300 North 2nd Street Harrisburg, PA 17101

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PART PARTICIPATION

John J. Munsch

Attorney for ALLEGHENY POWER