

DATE: January 5, 2005

SUBJECT: L-00030161

TO: Law Bureau

FROM: James J. McNulty, Secretary *ddt*

DOCUMENT
FOLDER

PECO Energy Company

Attached is a copy of a Petition for a Protective Order filed by PECO Energy Company, filed in connection with the above-docketed proceeding.

This matter is assigned to your Bureau for appropriate action.

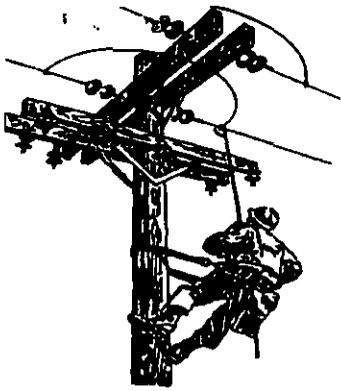
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cc: FUS
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ddt

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JAN 04 2005



CITIZENS' ELECTRIC COMPANY

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

January 24, 2005

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

17105-3265

JAN 26 2005

PA PUBLIC UTILITY COMMISSION
POST ELECTRIC DIVISION

L-00030161

Dear Secretary McNulty:

Enclosed please find an original and six copies of the 4th quarter, 2004 Electric Reliability Report for Citizens' Electric Company.

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

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Sincerely,

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

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

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87

Citizens' Electric Company
 Quarterly Service Reliability Report
 Fourth Quarter, 2004

**DOCUMENT
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Prepared by John A. Kelchner, PE
 Sr. Director of Engineering & Operations
 570-522-6143
kelchnerj@citizenselectric.com
 January 24, 2005

§ 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.

Citizens' Electric experienced no major events during this 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. 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	0.21	0.21	0.27
SAIDI	15	21	38
CAIDI	72	105	141

Total # of Customers Served	# of Interruptions	# of Customers Affected	Customer Minutes
6533	42	1,388	99,949

§ 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
Trees (On R/W)	0	0	0	0
Trees (Off R/W)	4	10	27	3,183
Animals	10	24	163	7,419
Equipment	18	43	565	42,761
Weather	7	17	193	22,606
Vehicle	2	5	430	23,650
Other	1	2	10	330
Total	42	101	1388	99,949

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Discussion

We experienced several strong wind, snow, and ice events during the 4th quarter. Through all of this weather, we experienced very few outages. The highest single cause of outages during the quarter was equipment failure. We have identified two specific types of equipment that cause the majority of our "equipment" outages. Our crews had success this quarter identifying and replacing pieces of this equipment exhibiting signs of imminent failure, before it caused outages. They will continue to look for these problems as they perform their daily tasks. Through this vigilance, we expect to begin reducing the number of outages caused by this type of equipment failure.



UGI Utilities, Inc.
Hanover Industrial Estates
400 Stewart Road
Post Office Box 3200
Wilkes Barre, PA 18773-3200
(570) 819-1212 Telephone

January 25, 2005

VIA FEDERAL EXPRESS

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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 December 31, 2004

Dear Secretary McNulty: L-00030161

Pursuant to the Commission's Final Rulemaking order addressing Electric Service Reliability (52 Pa. Code §§57.191 - 57.197) at Docket No. M-00991220, 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, 2004, as well as the raw data utilized in the development of those results. The actual statistics are well below 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, 2004.

Any questions related to the attached report should be directed to Mr. Brian J. Fitzpatrick at (610) 796-3474.

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.

Sincerely,

Robert R. Stoyko
Vice President - Electric Division

Attachment

cc: Office of Consumer Advocate
Office of Small Business Advocate
Bureau of Audits

56

Quarterly/Annual System Reliability Reports get copied to:

Office of Consumer Advocate

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

Office of Small Business Advocate

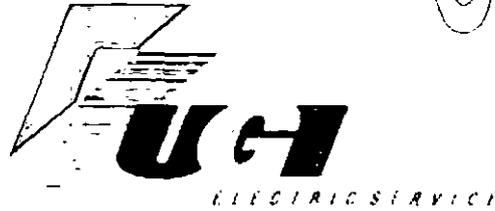
William R. Lloyd
Small Business Advocate
Office of Small Business Advocate
Suite 1102, Commerce Building
300 North Second Street
Harrisburg, PA 17101

Bureau of Audits

Harrisburg and Eastern Region Office
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
3rd Floor, F East
Harrisburg, PA 17101

L-00030161

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

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February 1, 2005

**UGI Utilities, Inc. – Electric Division
System Reliability Report**

§ 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, 2004 are as follows:

Rolling 12-Month Ending December 2004 Reliability Statistics

	SAIFI	SAIDI	CAIDI
Results	0.65	93	143
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

For the fourth consecutive quarter, UGI's SAIFI results have shown continuous improvement. Since December 2003 there has been a 42% performance increase within the SAIFI index with the results improving from a high of 1.12 in December 2003 to the 0.65 result indicated in this report.

SAIDI

The SAIDI value for the 12 months ending December 31, 2004 was 93. This remains well below both the standard and benchmark adopted for UGI.

**UGI Utilities, Inc. – Electric Division
System Reliability Report**

CAIDI

The CAIDI result of 143 for the 12 month period ending December 31, 2004 continues to remain below the benchmark and standard.

UGI Utilities, Inc - Electric Division
System Reliability - Raw Data
January 2004 - December 2004

§ 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		
	TCI	TCB	TMCI
January-04	182	61,822	16,107
February-04	297	61,863	37,411
March-04	311	61,852	28,234
April-04	1,299	61,778	177,383
May-04	4,989	61,705	771,748
June-04	5,078	61,671	518,961
July-04	3,020	61,660	446,480
August-04	11,711	61,708	1,452,849
September-04	3,685	61,727	1,001,526
October-04	2,435	61,768	171,534
November-04	4,925	61,882	692,946
December-04	2,193	61,946	434,069

TCI: Total Customers Interrupted
TCB: Total Customers
TMCI: Total Customer Minutes Interrupted

UGI Utilities, Inc - Electric Division
System Reliability - Outage by Cause Analysis
January 2004 - December 2004

§ 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 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	13.04%	72	1,417	93,645
Construction Error	1.99%	11	288	83,233
Customer Problem	1.09%	6	14	1,490
Equipment Failure	36.05%	199	10,697	912,251
Structure Fire	1.09%	6	139	26,293
Lightning	9.78%	54	13,356	1,824,600
Motor Vehicle	5.07%	28	2,177	526,837
Public	5.07%	28	1,683	136,828
Trees	19.20%	106	9,247	1,994,224
Unknown	5.43%	30	347	47,123
Weather/Wind	0.72%	4	486	72,903
Weather/Ice	0.72%	4	4	1,307
Other	0.72%	4	270	28,514
Total	100.00%	552	40,125	5,749,248

L-00030161

WELLSBOROUGH ELECTRIC
COMPANY

QUARTERLY RELIABILITY REPORT
57.195 REPORTING REQUIREMENTS

FOURTH QUARTER 2004

OCTOBER THRU DECEMBER 2004

SUBMITTED BY

ROBERT S. McCARTHY
VICE-PRESIDENT, ENGINEERING AND OPERATIONS

570-724-3516

bobbym@ctenterprises.org

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WELLSBORO ELECTRIC COMPANY

ROLLING TWELVE MONTH INTERRUPTION INDEXES

Fourth Quarter 2004

SAIDI 263

SAIFI 2.83

CAIDI 92.74

**Established Benchmarks and Standards for
Wellsboro Electric Company**

	SAIDI	SAIFI	CAIDI
Benchmark	153	1.23	124
Rolling 12 Month Standard	278	1.66	167
Rolling 3 Year Avg Standard	185	1.35	136

11/15/04 2:15

SAIDI: 263

57.195

Reporting Requirements

Section (e) Item (1)

Description of Major Events that occurred during the preceding quarter.

Date	Time of Event	Duration of Event	# Cust Affected	Cause
10/25/2004	9.10 AM	32 Minutes	5622	Contractor was moving a 12 kV Phase line for Wellsboro in preparation for a new substation on this site, A wire slipped in a hotline grip causing the energized 12 kV line to contact a Wellsboro Electric 34.5 kV energized line outside of the Wellsboro Beuna Vista Substation which in turn caused the Penelec breakers feeding the entire Wellsboro System to open.
11/5/2004	1:19 AM	7 hrs 47 min	692	After patrolling appx 9 miles of distribution line pole for pole, the cause was a static neutral wire slacked off and was contacting a phase wire when the wind would blow, this line was not off the entire 7 hrs, we would energize the line, it would hold for a period of time and trip back out, the way our outage system captured the outage it took the time from first notification of an outage until crew advised dispatch they found and fixed the problem.
11/7/2004	1:21 PM	1 hr 32 min	5622	Insulator failed in the Wellsboro Electric Buena Vista Substation on our Dresser Circuit. Which in turn caused the Penelec breakers feeding Wellsboro to trip open.
12/3/2004		3 min	5622	Penelec breakers feeding Wellsboro tripped No cause was found, both the Wellsboro Substation and the Penelec Substation was checked and no cause was found for the outage.

57.195 Reporting Requirements

Section (e) Item (2)

Wellsboro Electric Company	Reliability Index	SAIDI
MONTH	TOTAL CUST MINUTES	# CUSTOMERS SERVED
Jan-04	15416	5832
Feb-04	127695	5830
Mar-04	107694	5825
April-04	62972	5840
May-04	225953	5843
June-04	29210	5849
July-04	71643	5849
August-04	5513	5859
Sept-04	5998	5855
Oct-04	319618	5853
Nov-04	108986	5860
Dec-04	454970	5869
	1535668	Average # Customers Served 5847

Rolling 12 Month Average SAIDI Index

262.64211

WELLSBORO ELECTRIC COMPANY

Reliability Index

SAIFI

Month	# of Customers Interrupted	# of Cust Served
Jan-04	165	5832
Feb-04	285	5830
Mar-04	2316	5825
April-04	464	5840
May-04	2001	5843
June-04	367	5849
July-04	836	5849
August-04	64	5859
Sept-04	130	5855
Oct-04	7090	5853
Nov-04	1532	5860
Dec-04	1308	5869
		70164
	16558	5847 Avg # of Customers

SAIFI INDEX **2.83188**

Wellsboro Electric Company

Reliability Index CAIDI

Month Total Customer Mins # of Customers Interrupted

Jan-04	15415.8	165
Feb-04	127695	285
Mar-04	107694	2316
April-04	62972.4	464
May-04	225953.4	2001
June-04	29209.8	367
July-04	71643	836
August-04	5513.4	64
Sept-04	5997.6	130
Oct-04	319618	7090
Nov-04	108986	1532
Dec-04	454973	1308

1535671

16558

CAIDI INDEX

92.74498

57.195 Reporting Requirements

Section (e) Item 5

Data for Period of 1-1-04 thru 12-31-04

	# of Outages	Percentage Of Outages	Customer Interruption Hours
Corrosion	1	0%	0.6
Power Supply	8	3%	147168.0
Electrical Overload	2	1%	29695.2
Equipment	25	8%	476608.8
Lightning	17	6%	7684.8
Maintenance	4	1%	135721.2
Major Storm	6	2%	1092139.8
Deterioration	2	1%	18526.8
Other, Faulty Equipment	57	19%	247338.0
Scheduled	11	4%	220771.8
Other, Utilities	2	1%	14311.8
Public Accidents	1	0%	3744.0
Public Activites	1	0%	778.8
Small Animals	39	13%	13308.0
Trees	54	18%	284785.2
Unknown	47	16%	1188282.0
Vehicles	14	5%	100507.2
Wind	6	2%	14331.0
	297	100%	3995703.0

Fourth quarter of 2004 reliability information is enclosed. Wellsboro Electric had Three (3) system wide outages in the fourth quarter; the outages were all related to problems arising from our Buena Vista St. Substation.

In order to alleviate future problems from this substation, we are currently in the process of constructing a new substation on Buena Vista to replace the current station that is old and in need of repair. The new substation is currently scheduled to be online and serving load by the second quarter of 2005.

Once this new station is complete and serving load, the old substation will be taken out of service; this will eliminate problems such as equipment failure related to the old substation and help to improve our reliability.

As we reported in prior reports the substation is a two phase project, phase one includes the installation of one 25 MVA power transformer and four feeder bays that will replace the current Buena Vista St. Substation, the second phase will include the construction of eight miles of 115 kV transmission line from Niles Valley to Wellsboro and the addition of four more feeder bays that will then replace our Austin St. Substation. Also with the construction of the 115 kV line this will allow Wellsboro to discontinue its feeds from Penelec at 34,500 volts which has caused many problems over the years in terms of outages.

Wellsboro Electric is confident that with the addition of the new substation and transmission line along with the many other programs in place at Wellsboro the reliability of the system will increase greatly.

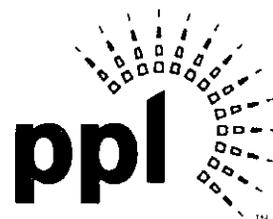
If you have any further questions on this matter, I would welcome the opportunity to discuss this further with you.

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

ORIGINAL

Paul E. Russell
Associate General Counsel

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



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January 31, 2005

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

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JAN 31 2005

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

**Re: Quarterly Reliability Report for the
Period Ended December 31, 2004
Docket No. L-00030161**

Dear Mr. McNulty:

Enclosed for filing on behalf of PPL Electric Utilities Corporation ("PPL Electric") is a copy of PPL Electric's Quarterly Reliability Report for the Period Ended December 31, 2004. 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 31, 2005, 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,

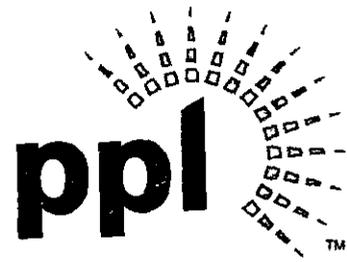
Paul E. Russell

KJR

Enclosures

cc: Elizabeth H. Barnes, Esquire

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PPL Electric Utilities

DOCKETED
MAY 04 2005

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

**DOCUMENT
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January 2005

- (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 the 4th quarter of 2004.

- (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.*

The following table provides data for the 12 months ended December 31, 2004:

SAIFI (Benchmark = 0.98; Rolling 12-month Std. = 1.18)	1.089
CAIDI (Benchmark = 145; Rolling 12-month Std. = 174)	159
SAIDI (Benchmark = 142; Rolling 12-month Std. = 205)	173
MAIFI	5.204
Average Number of Customers Served	1,321,511
Number of Sustained Customer Interruptions (Trouble Cases)	18,608
Number of Customers Affected¹	1,448,632
Customer Minutes of Interruptions	230,513,257
Number of Customer Momentary Interruptions	6,921,581

¹ The data reflects the number of interrupted customers 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	Customers	Cases of Trouble ²	Customer Minutes Interrupted	CPI
1	55001	6.660	193	1,284	22.000	2,669	141	3,428,191	645
2	28302	5.450	162	883	2.059	2,746	93	2,424,144	471
3	13806	0.140	2,196	307	0.000	227	3	69,780	429
4	59301	3.260	674	2,196	3.129	1,562	59	3,430,103	400
5	16101	0.650	688	447	3.000	2,447	94	1,093,853	396
6	64202	6.120	196	1,198	10.000	967	48	1,158,516	387
7	11506	3.410	391	1,335	4.000	1,226	67	1,636,227	372
8	10702	0.050	1,830	91	3.000	1,835	9	167,863	372
9	66504	4.870	117	569	13.000	1,737	66	988,118	372
10	40902	1.100	997	1,096	9.000	2,175	50	2,384,246	358
11	16401	7.490	93	693	7.000	667	25	462,564	358
12	59401	2.240	355	796	3.000	2,476	80	1,969,692	356
13	10805	5.080	549	2,789	3.000	1,070	24	2,984,742	353
14	47001	4.020	238	956	8.000	2,351	59	2,248,114	345
15	12301	2.590	179	464	2.000	1,695	83	787,180	343
16	43401	2.140	413	883	8.000	1,475	72	1,302,814	342
17	56802	3.130	175	549	15.000	2,161	75	1,186,664	342
18	65603	2.500	471	1,177	17.000	2,214	62	2,606,874	341
19	64802	4.010	262	1,052	1.000	1,234	55	1,298,741	339
20	16402	5.100	157	799	7.000	837	46	668,863	336
21	56504	0.530	828	439	4.000	1,959	60	859,968	331
22	26602	3.420	146	499	7.000	2,927	67	1,461,209	326
23	27101	2.630	177	465	5.000	2,621	75	1,220,033	324
24	53602	1.440	244	352	0.000	2,719	84	956,053	316
25	67701	7.340	47	342	5.000	995	13	340,334	313
26	45302	4.740	294	1,393	6.000	1,522	31	2,119,628	310

² Cases of trouble are the number of sustained customer service interruptions.

WPC Rank	Feeder ID	SAIFI	CAIDI	SAIDI	MAIFI	Customers	Cases of Trouble ²	Customer Minutes Interrupted	CPI
27	57502	4.770	314	1,498	8.008	1,428	29	2,138,762	310
28	40201	3.440	163	560	11.000	1,553	58	870,157	307
29	52403	3.160	162	512	5.000	1,094	62	560,524	307
30	59002	3.790	248	940	11.000	2,493	45	2,344,260	303
31	15701	3.280	93	304	8.000	2,145	63	651,637	301
32	57401	4.850	120	580	4.000	1,431	38	830,413	299
33	28301	1.330	182	242	1.000	2,772	83	671,838	297
34	10803	4.170	638	2,659	3.000	139	8	369,624	295
35	14403	3.300	150	496	6.000	2,453	56	1,217,149	294
36	13102	2.410	178	430	3.000	1,845	66	793,024	292
37	54505	5.380	91	488	21.000	928	28	452,683	288
38	42901	3.020	530	1,601	20.000	1,261	28	2,018,509	284
39	64201	4.460	82	366	12.000	1,880	40	688,727	283
40	47704	2.770	601	1,665	7.000	677	26	1,127,424	283
41	60502	4.260	37	157	10.000	2,254	46	353,739	282
42	67402	3.880	112	433	17.000	1,262	44	546,505	278
43	56801	3.880	71	274	18.000	2,098	47	574,294	277
44	45602	3.640	184	671	0.000	1,137	42	763,297	277
45	28001	2.160	214	462	3.000	1,707	60	788,122	275
46	53901	2.050	179	367	5.000	2,647	64	970,665	274
47	50201	1.500	950	1,425	6.000	1,344	15	1,914,575	274
48	10903	2.700	138	372	5.000	2,004	57	746,041	272
49	18502	2.670	100	266	0.000	1,741	60	462,848	272
50	54501	5.150	143	737	12.000	1,443	21	1,063,440	271
51	14705	2.880	214	617	5.032	1,892	48	1,167,004	270
52	52401	1.740	336	584	10.000	1,691	55	987,891	269
53	10802	1.750	682	1,193	1.961	1,025	29	1,222,781	268
54	45002	2.410	118	284	6.000	1,794	61	509,054	268

PPL Electric's Circuit Performance Index (CPI) is derived from the frequency and duration of outages that occurred during the specified time period. Improving a circuit's CPI depends upon reducing either the outage frequency, or duration, 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 outages that occurred during the time span to determine if there are causal patterns, or geographic patterns, for which corrective actions are feasible that would reduce the incidence or duration of outages.

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

Rank	Action	Status	Date	Result
1 Circuit ID: 55001 Newport 50-1				
	Improve sectionalizing capability. Three tap fuses were installed.	Completed	12/31/2003	Reduced customer count affected by each outage.
	Circuit outage data analysis.	Completed	6/25/2004	Vehicles and an ice storm in January 2004 contributed to the CPI.
	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.
	Monitor future performance.	Ongoing		
2 Circuit ID: 28302 Newfoundland 83-2				
	Circuit outage data analysis.	Completed	6/15/2004	Major contributors to CPI were number of cases and SAIF I. 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 exceeds PPL specifications and installing additional single phase automatic devices could lead to miscoordination and increased outages.
	Continue to monitor future performance.	Ongoing		CPI has dropped 34% over the past quarter. The downward trend is expected to continue.
3 Circuit ID: 13806 Salisbury 38-6				
	Circuit outage data analysis - WPC not on preceding qtr. list. Field Services and Asset Management investigated the cause of this circuit's appearance on the worst performing list.	Completed	12/23/2004	During the Ivan storm a specific incident cause an extended outage that was difficult to get to and fix. After visiting the site and reviewing the cause it is believed that there is a low probability of this incident repeating.
4 Circuit ID: 59301 McAllisterville 93-1				
	Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	12/22/2004	Area hard hit by Hurricane Ivan in the 3rd quarter. Circuit is expected to drop off the list of 5% WPCs. Circuit trimmed in December 2004.
	Monitor future performance.	Ongoing		

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
5 Circuit ID: 16101 Bingen 61-1				
	Tree trimming. Spot trimming.	Completed	3/31/2004	Reduced outage risk.
	Circuit outage data analysis.	Completed	6/11/2004	Number of cases and SAIFI are the two biggest factors in the CPI. There is no detectable pattern. Cases alone contribute 60% of this circuit's performance issues, with SAIFI contributing just under 30%.
	New Sectionalizing : Replace 1 fused cutout with an OCR and install 2 fused cutouts to reduce the length of line on a sectionalizing device. Install a 3 phase loadbreak airswitch to enable customers to be restored quicker during an outage.	Completed	7/19/2004	Reduced customer count affected by each outage.
	Replace cracked porcelain fused cutouts and lightning arresters.	Completed	6/30/2004	Reduced outage risk.
	Install 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 monitored.
	Transfer lower portion of line to the Richland 36-3 line to reduce the length of line exposure.	Scheduled for	5/31/2005	Reduced outage risk. The scheduled date has been delayed until May 2005 because of right-of-way problems that were encountered.
	Improve sectionalizing capability. Investigating splitting the line to allow back feeding from other half.	In process	12/23/2004	Project design and performance effects being evaluated.
6 Circuit ID: 64202 Kinzer 42-2				
	Circuit outage data analysis.	Completed	8/13/2004	The circuit is on the worst performing list due to a transformer failure at Buck substation and the failure of the S. Akron - Morgantown #2 69kV line. These 2 outages contributed about 50 % of the circuit's total CPI. These events are not expected to occur again and this circuit is expected to fall off the list.
	Continue to monitor performance	Ongoing		
7 Circuit ID: 11506 Freemansburg 15-6				
	Circuit outage data analysis.	Completed	6/11/2004	
	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. Spot 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. Fuse coordination study completed, and Field Services is about to begin installing additional fuses in January.	Completed	12/23/2004	Reduced outage risk. Work completed should lower momentary count, as well as lessen number of customers taken out at a time.

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
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8 Circuit ID: 10702 Catasauqua 7-2

Circuit outage data analysis - WPC not on preceding qtr. list. Field Services and Asset Management investigated the single outage that caused the poor ranking circuit performance.	Completed	12/23/2004	During the Ivan storm a single outage lasted for an extended period of time, the incident was reviewed and investigated at the site of the outage and it was deemed that a similar incident has a very low probability of reoccurring. This outage contributed to 83% of the performance rating this quarter. This circuit should return to it's normal ranking.
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9 Circuit ID: 66504 South Manheim 65-4

Circuit outage data analysis.	Completed	8/25/2004	Monitor future performance
Circuit outage data analysis.	Completed	8/13/2004	Recommended an equipment and vegetation line inspection be performed.
Line inspection-vegetation.	Completed	10/30/2004	Line maintenance inspector identified areas for hot spotting. Work requests have been initiated to perform the work. The work requests have a required date of 01/15/2005.
Line inspection-equipment.	Completed	10/30/2004	Line maintenance inspector identified 40 items for minor maintenance work. Work requests have been initiated to perform the work. The work requests have a required date of 01/15/2005.
Line inspection-equipment. Recommended a line inspection of anderlite brackets on the 65-04 line. An anderlite bracket failure was the cause of a long duration outage which raised the CPI score.	Scheduled for	1/15/2005	
Tree trimming.	Scheduled for	1/15/2005	
Perform 40 minor maintenance items	Scheduled for	1/15/2005	

10 Circuit ID: 40902 Jersey Shore 9-2

Circuit outage data analysis.	Completed	12/17/2004	100% of high CPI on Jersey Shore 9-2 reported during the third quarter of 2004, occurred when 1,700 customers experienced a 24 hour outage on 9-18-04, during hurricane IVAN which were caused by trees off the right of way (not tree trimming related). In addition, crews could not reach the sectionalizing switch to transfer these customers to another 12 kV circuit because the area was flooded and they could not perform work until floodings subsided. The 2004 circuit outage reports do not show any other significant high CPI events on 9-2 during 2004. This circuit is expected to remain on the top 5% worst performing list until the third quarter of 2005; the CPI's are averaged together for one year. No further analysis required.
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<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
11 Circuit ID: 16401 Mt. Pocono 64-1				
	The line was recently thermo-visioned and repairs were made as needed.	Completed	3/31/2004	Reduced outage risk.
	Circuit outage data analysis.	Completed	6/23/2004	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.
	The entire main line will be reconductored under B50921.	Scheduled for	5/31/2005	
	Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/28/2005	
12 Circuit ID: 59401 Richfield 94-1				
	Circuit outage data analysis - WPC not on preceding qtr. list	Completed	12/22/2004	Area hard hit by Hurricane Ivan in the 3rd quarter. Circuit is expected to drop off the list of 5% WPCs.
13 Circuit ID: 10805 Cherry Hill 8-5				
	Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/28/2005	
14 Circuit ID: 47001 Hughesville 70-1				
	Circuit outage data analysis.	Completed	6/30/2004	The Hughesville 70-1 line was reported as having a high CPI during the 2nd quarter of 2004. 50% of this high CPI is due to 90 customers experiencing a 10 hr outage due to inadequate tree trimming on 2-3-2004; and the remaining 50% of the second quarter high CPI occurred on 4-4-2004 when 1050 customers experienced a 7 hr. outage due to vehicle accident. 70-1 is 160 miles in length with heavy tree foliage.
	Review line to determine if additional sectionalizing can be added to minimize the number of customers affected by emergency outages.	Completed	12/17/2004	The 70-1 line was reported by Susquehanna Region as already incorporating sectionalizing devices for each branch according to standards.
	Circuit outage data analysis.	Ongoing	12/31/2004	The Hughesville 70-1 line was reported as having a high CPI during the 3rd quarter of 2004, approximately 200 customers experienced outages ranging from 36 to 68 hrs, plus 2400 customers experienced a 3 hr. outage during hurricane IVAN, 9/17/04 to 9/18/04.
	Perform line maintenance identified by line inspection. Susquehanna Region line maintenance will be performed the first quarter of 2005 on a 3 mile portion of 70-1. Items include replacing deteriorated insulators, replacing hardware and replacing small pieces of wire damaged by lightning strikes. (Work is expected to be completed by 1st quarter 2005.)	Scheduled for	3/31/2005	
	Tree trimming.	In process		Additional hot spotting and/or scheduled mileage work will be done in 2005

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
15 Circuit ID: 12301 Lanark 23-1				
	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.
	64 Animal guards are being installed on transformers on portions of the line with animal problems.	In process		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.
	Split up a long single phase tap into two taps by installing 3 spans of OH line.	In process	9/14/2004	Reduced customer count affected by each outage. Waiting for right-of-way.
	Line inspection-equipment.	In process	12/23/2004	Line inspection to be completed by the end of winter.
16 Circuit ID: 43401 Benton 34-1				
	Circuit outage data analysis.	Ongoing	12/30/2004	The Benton 34-1 line was reported as having a high CPI during the 1st, 2nd, and 3rd quarters of 2004. 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 78 hour outage due to trees off the right of way (not tree trimming related), however, the remaining 100 customers did experienced a 16 to 20 hr outage due to inadequate tree trimming
	Improve sectionalizing capability. Review line to determine if additional sectionalizing can be added to minimize the number of customers affected by emergency outages.	Completed	12/30/2004	Susquehanna Region reviewed line for location to add OCR's, or other sectionalizing devices, no new locations were found.
	Perform line maintenance identified by line inspection. Susquehanna Region will perform a pole by pole inspection of the entire Benton 34-1 line, 128 mile circuit, expected to be completed by the 1st quarter of 2005.	In process	12/31/2004	
17 Circuit ID: 56802 Benvenue 68-2				
	Circuit outage data analysis.	Completed	6/25/2004	A March 2003 ice storm contributed to CPI.
	Circuit outage data analysis.	Completed	12/22/2004	Area hard hit by Hurricane Ivan in the 3rd quarter. Circuit is expected to drop off the list of 5% WPCs. An inaccessible portion of line is to be transferred to another source in the 1st qtr of 2005. The east side of the circuit is to be inspected in 2005.
	Monitor future performance.	Ongoing		

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
18 Circuit ID: 65603 Quarryville 56-3				
	Circuit outage data analysis.	Completed	9/28/2004	Largest interruption on this circuit was a transformer failure at the substation interrupting 2264 customers for 446 minutes. This outage was about 35 % of this circuit's total CPI. This event is not likely to occur again. There also were several local lightning storms that contributed to the CPI.
	Monitor future performance.	Ongoing		This circuit has showed significant improvement this quarter.
19 Circuit ID: 64802 Mt Nebo 48-2				
	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.
	Tree trimming.	Scheduled for	1/15/2005	Tree trimming of the entire circuit is expected to reduce outage risk.
	Install fault indicators to locate source of outages;	In process		
	Monitor future performance.	Ongoing		
20 Circuit ID: 16402 Mt. Pocono 64-2				
	Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/11/2004	Most of the problems were trees outside of the right of way, but there wer some trimming related problems. This circuit did have some hotspot trimming completed earlier in 2004.
	Tree trimming. Overgrown areas will be identified by field engineer for hot spot trimming.	Scheduled for	1/31/2005	Circuit is expected to drop off the list of the top 5% worst performing circuits after tree trimming is completed.
	Monitor future performance	Ongoing		
21 Circuit ID: 56504 Rockville 65-4				
	Three new tap fuses were installed as part of SAIFI initiative.	Completed	12/31/2003	Reduced customer count affected by each outage.
	Line inspection-equipment.	Completed	2/18/2004	Inconclusive. Monitor future performance.
	Circuit outage data analysis.	Completed	6/25/2004	Inconclusive. Monitor future performance. A wind storm in November 2003 contributed to the CPI. Trees-not trimming related caused most of the outages.
	Circuit outage data analysis.	Completed	12/22/2004	Area hard hit by Hurricane Ivan in the 3rd quarter. Circuit is expected to drop off the list of 5% WPCs. Eleven miles to be trimmed in 2005.
	Monitor future performance.	Ongoing		

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
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22 Circuit ID: 26602 Brookside 66-2

Circuit outage data analysis.	Completed	6/15/2004	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	8/25/2004	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. 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.	In process		
Monitor future performance.	Ongoing		

23 Circuit ID: 27101 Greenfield 71-1

Circuit outage data analysis.	Completed	6/15/2004	Major contributor to CPI was the number of cases (73%). The contributing outages (mostly trees outside of the right-of-way and animal contacts, 53%) did not fall into a discernable pattern.
Tree trimming. Tree trimming for this line began 6/21/04.	Completed	11/12/2004	Reduced outage risk.
Line inspection-equipment. Due to the high number of animal contacts (30% of the total CPI) and equipment failures (18% of total CPI) an equipment line inspection will be performed.	Completed	11/30/2004	Several problems were found. Repairs to be made under WR 186259.
Monitor future performance.	Ongoing		
Perform line maintenance identified by line inspection. Maintenance under WR 186259	Scheduled for	1/31/2005	

24 Circuit ID: 53602 Dalmatia 36-2

Circuit outage data analysis - WPC not on preceding qtr. list	Completed	12/22/2004	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.
Monitor future performance.	Ongoing		

25 Circuit ID: 67701 Wernersville 77-1

Circuit outage data analysis.	Completed	9/15/2004	Circuit was reconfigured by transferring 1611 customers of the 2588 customers to a new circuit. This was done during the second quarter of 2004. The calculation for SAIFI uses the old customer count of 2588 customers for the previous three quarters for number of customers out of service but it uses the new customer count of 977 for number of customers on the circuit. This artificially increases SAIFI.
Monitor future performance.	Ongoing		
Circuit outage data analysis - WPC not on preceding qtr. list	Scheduled for	2/28/2005	

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
26 Circuit ID: 45302 West Berwick 53-2				
	Circuit outage data analysis.	Ongoing	12/17/2004	100% of the high CPI during the second quarter 2004 occurred on 6-17-04 when approximately 850 customers experienced outages ranging from 3 to 5 hrs due to trees inadequately trimmed. 100% of the high CPI reported during the 3rd quarter of 2004, on West Berwick 53-2 is due to the 9/18/2004 hurricane IVAN, approximately 1,800 customers experienced outages ranging from 7 hrs to 57 hrs, mainly due to trees off the right of way falling into the over head lines. However, approximately 183 of these 1800 customers experienced a 51 hr outage during the hurricane from trees inadequate trimming.
	Line inspection-vegetation.	Ongoing	12/30/2004	13.4 miles of West Berwick 53-2 urban miles were trimmed in 2002, as well as, 18.6 urban miles were trimmed in 2003; additional hot spotting and/or scheduled mileage work will be done in 2005.
27 Circuit ID: 57502 Lawnton 75-2				
	Circuit outage data analysis - WPC not on preceding qtr. list	Completed	12/22/2004	August 2004, twenty-four cases with 1.8 million cust minutes of interruption caused by a series of F1 tornados.
	Monitor future performance.	Ongoing		
28 Circuit ID: 40201 Bear Gap 2-1				
	Circuit outage data analysis - WPC not on preceding qtr. list	Completed	11/12/2004	Major contributors to CPI were cases of trouble and SAIFI. Three events were responsible for over 40% of the CPI total. Two of these events involved programming problems with the substation OCR, causing the entire line to be lost each time. Training has been completed, and these events are not expected to occur again.
	Tree trimming	Completed	12/31/2004	Reduced outage risk. This circuit is expected to drop off the list of 5% wpc's.
29 Circuit ID: 52403 Green Park 24-3				
	Circuit outage data analysis - WPC not on preceding qtr. list	Scheduled for	2/28/2005	
30 Circuit ID: 59002 Mifflintown 90-2				
	Circuit outage data analysis - WPC not on preceding qtr. list	Completed	12/22/2004	Area hard hit by Hurricane Ivan in the 3rd quarter. Circuit is expected to drop off the list of 5% WPCs.

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
31 Circuit ID: 15701 Tannersville 57-1				
	Circuit outage data analysis.	Completed	6/15/2004	Inconclusive. Monitor future performance. 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	Many tree related outages, some were trimming related.
	Tree trimming. This circuit was scheduled to be trimmed in support of reconductor work to be completed 11/05. This work will be advanced to 1/05.	Scheduled for	1/31/2005	
	1.5 miles of the main line will be reconducted under SP 51216. This circuit will be trimmed as part of the reconductor work.	Scheduled for	11/30/2005	
32 Circuit ID: 57401 Spangler 74-1				
	Tree trimming.	Completed	12/31/2003	Reduced outage risk.
	Load balancing and ground tripping adjustment.	Completed	3/31/2004	Reduced outage risk.
	Circuit outage data analysis.	Completed	6/25/2004	Recent tree trimming, load balancing and ground tripping adjustment expected to improve performance.
	Circuit outage data analysis.	Completed	12/22/2004	Quarterly CPI has improved.
	Monitor future performance. Monitor ground tripping.	Ongoing		
33 Circuit ID: 28301 Newfoundland 83-1				
	Circuit outage data analysis.	Completed	6/25/2004	Major contributor to CPI was the number of cases (30%). The contributing outages (mostly trees) did not fall into a discernable pattern. No outages were trimming related.
	Circuit outage data analysis.	Completed	8/23/2004	Review of circuit outages indicated there were two poor performing single phase taps.
	Tree trimming Hot spot trimming on two poor performing single phase taps.	In process		Reduced outage risk.
	Improve sectionalizing capability. Increase sectionalizing on two poor performing single phase taps beyond OCR 66696N44669.	In process		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 exceeds PPL specifications and installing additional single phase automatic devices could lead to miscoordination and increased outages.
	Monitor future performance.	Ongoing		Trees and animals accounted for over 70% of the outages seen in the past year. This is a heavily forested area where trees outside of the right 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.

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
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34 Circuit ID: 10803 Cherry Hill 8-3

Tree trimming.	Completed	3/31/2004	Reduced outage risk.
Circuit outage data analysis.	Completed	6/11/2004	SAIFI is biggest problem with the Cherry Hill 8-3 line. Circuit breaker failure and terminator failure at the substation were the biggest factors in SAIFI.
Monitor future performance of line.	Ongoing	10/21/2004	
Investigating boarder line agreement with Met Ed Utility. Currently reviewing costs and business plan of creating a substation back up to feed the line in an emergency.	In process	12/23/2004	Currently waiting for a quote to reserve the capacity on the Met Ed system. Plan being evaluated and prepared for implementation upon receipt of costs.

35 Circuit ID: 14403 South Slatington 44-3

Circuit outage data analysis - WPC not on preceding qtr. list	Scheduled for	11/30/2004	
OCR Review	Completed	12/23/2004	An undersized OCR has been replaced with one more capable of handling load issues. This should drive down outage duration for the effected customers.

36 Circuit ID: 13102 Northampton 31-2

Load balancing.	Completed	10/31/2003	Reduced outage risk.
Circuit outage data analysis.	Completed	6/15/2004	Number of cases is the largest factor in CPI with SAIFI a close second. Two OCR failures in 2003 were a major factor in the SAIFI.
An overloaded single phase OCR is being replaced with a larger OCR.	In process	12/19/2004	The OCR is scheduled to be in service by 12/19/2004 .
Monitor future performance of line.	Ongoing		
Electronic OCR should be received and installed in the first quarter of 05.	In process	12/23/2004	Delay in receiving the new OCR has caused the installation date to be delayed.

37 Circuit ID: 54505 Enola 45-5

Circuit outage data analysis - WPC not on preceding qtr. list	Completed	12/22/2004	UG concentric cable failures. Cable in development tested and bad cable scheduled for replacement by end of December 2004.
Monitor future performance.	Ongoing		

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
38 Circuit ID: 42901 Middleburg 29-1				
	Circuit outage data analysis.	In process	12/16/2004	A high CPI for Middleburg 29-1 was reported for the third quarter of 2004. 100% of this high CPI on the Middleburg 29-1 line was a result of hurricane IVAN, 9-18-2004, when 1,300 customers experienced outages ranging in duration from 7 hrs to 32 hours (400 customers). These outages were reported as being caused by trees off the right of way, falling into the over-head lines. This circuit is expected to remain on the top 5% worst performing circuit list until third quarter 2005 since the CPI's are averaged together each quarter for one year.
	Tree trimming. Susquehanna Region will ask a local real estate agent to determine who owns property where trees off the right of way on 29-1 have been a problem, and to obtain their permission for additional right of way, so PPL can trim these trees.	In process	12/16/2004	
39 Circuit ID: 64201 Kinzer 42-1				
	Circuit outage data analysis.	Completed	8/13/2004	The circuit is on the worst performing list due to a transformer failure at Buck substation and the failure of the S. Akron - Morgantown #2 69kV line. These 2 outages contributed about 50 % of the circuit's total CPI. These events are not expected to occur again and this circuit is expected to fall off the list.
	Continue to monitor performance	Ongoing		
40 Circuit ID: 47704 Bloomsburg 77-4				
	Circuit outage data analysis.	Completed	12/30/2004	100% of this high CPI is due to approximately 700 customers experiencing an outage ranging from 4 hrs to 31 hrs, on 9-18-2004 at 7:55 AM. The outage report indicates the reason for the outage was forced pre-arranged, also note on 9-18-04 hurricane IVAN also occurred. This circuit is expected to remain on the top 5% worst performing circuit list until the 3rd quarter 2005. No further action is required.
41 Circuit ID: 60502 North Manheim 5-2				
	Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/28/2005	

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
42 Circuit ID: 67402 Wakefield 74-2				
	Circuit outage data analysis.	Completed	9/15/2004	Largest interruption on this circuit was a transformer failure at a nearby substation interrupting 1284 customers for 73 minutes. This event is not likely to occur again. During a local area lightning storm, two poles close to the substation failed. This event impacted most of the circuit because there was limited tie capability.
	Improve sectionalizing capability.	Scheduled for	5/1/2006	Reduced outage duration. When the two poles failed outside the substation, there was a section of load limiting conductor that prevented restoring customers. This limiting section is scheduled to be reconductored in May 2006.
	Monitor future performance.	Ongoing		
	Circuit outage data analysis - WPC not on preceding qtr. list	Scheduled for	2/28/2005	
43 Circuit ID: 56801 Benvenue 68-1				
	Circuit outage data analysis.	Completed	8/18/2004	Interruptions due to two 69kv outages in May caused by lightning contributed to the CPI. This is not likely to reoccur.
	Circuit outage data analysis.	Completed	12/22/2004	Circuit is expected to drop off the list of 5% WPCs.
	Monitor future performance.	Ongoing		
44 Circuit ID: 45602 Woolrich 56-2				
	Circuit outage data analysis.	Ongoing	12/16/2004	During the second quarter of 2004, 70% of the high CPI was due to a tree falling into Woolrich 56-2 on 6-9-04 and 6-10-04, during local area high winds, approximately 630 customers experienced an outage ranging from 3 hrs to 10 hrs; and 30% of this second quarter high CPI occurred on 3-13 04 when a vehicle caused 384 customers to experience a 4 hr. outage. 100% of this high CPI reported during the 3rd quarter of 2004 is due to approximately 246 customers experiencing lengthy outages ranges from 6 hrs. to 26 hrs. due to hurricane IVAN, 9-18-04. The outage report for 9-18 04 indicated 244 of these 246 customers experienced outages that were actually not tree trimming related, i.e., trees located off the right of way fell into overhead lines. However, on 9-18-04 2 customer's outages for 26 hours were due to trees which were inadequately trimmed.
	Improve sectionalizing capability. Susquehanna Region is working on determining if one additional LBAS sectionalizing switch needs to be added to Woolrich 56-2, this review will be completed by the first quarter of 2005.	In process		
45 Circuit ID: 28001 Tafton 80-1				
	Circuit outage data analysis - WPC not on preceding qtr. list	Scheduled for	2/28/2005	

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
46 Circuit ID: 53901 Halifax 39-1				
	Circuit outage data analysis - WPC not on preceding qtr. list	Scheduled for	2/28/2005	
47 Circuit ID: 50201 Harrisburg 2-1				
	Circuit outage data analysis - WPC not on preceding qtr. list	Completed	12/22/2004	In August 2004, 1.8 million cust minutes of interruption, due to trees-not trimming related caused by a series of F1 tornados.
	Monitor future performance.	Ongoing		
48 Circuit ID: 10903 Coopersburg 9-3				
	Circuit outage data analysis.	Completed	6/15/2004	The number of cases(45%) and SAIF(44%) are the biggest factors in the CPI.
	Load balancing.	Completed	6/11/2004	Reduced outage risk.
	Monitor future performance on line.	Ongoing		
	Changed relay setting at substation.	Completed		Completed on 10/26/04, should reduce momentary outages.
	Circuit outage data analysis. Continuing to monitor and investigate outages.	Ongoing	12/23/2004	Inconclusive. Monitor future performance.
49 Circuit ID: 18502 Canadensis 85-2				
	Circuit outage data analysis - WPC not on preceding qtr. list	Completed	11/11/2004	There were mostly tree related outages on this circuit.
	Improve sectionalizing capability.	Completed	11/16/2004	Additional fusing was added to a poor performing section of the line.
			11/16/2004	
	Tree trimming.	Scheduled for	1/31/2004	
	Monitor future performance.	Ongoing		This circuit is expected to fall off the worst performing circuit list, 3 prior quarter's CPI was well below forth quarter CPI.
50 Circuit ID: 54501 Enola 45-1				
	Circuit outage data analysis - WPC not on preceding qtr. list	Completed	12/22/2004	Area hard hit by Hurricane Ivan in the 3rd quarter. Tree trimming done in 1st qtr 2004.
	Monitor future performance.	Ongoing		

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
51 Circuit ID: 14705 Trexlertown 47-5				
	Circuit outage data analysis.	Completed	8/16/2004	The number of cases increased as did SAIFI. The increase in SAIFI was due to the breaker at the substation opened but nothing was found and an animal took out an OCR which took 1/3 of the customers out of service. The number of cases increased but were caused by multiple problems including animal contacts, equipment failure, UG cable dig-in, and several cases where nothing was found. No pattern has been detected so the line will be monitored for another quarter.
	Circuit outage data analysis.	Completed	12/23/2004	Work done on this line caused other improvements made to appear less beneficial. It is believed that performance should increase from this quarter on.
	Monitor for future performance.	Ongoing		
52 Circuit ID: 52401 Green Park 24-1				
	Circuit outage data analysis.	Completed	8/18/2004	A conductor loop burned opened during switching.
	Circuit 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.
	Monitor future performance.	Ongoing		
53 Circuit ID: 10802 Cherry Hill 8-2				
	Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/28/2005	
54 Circuit ID: 45002 Limestone 50-2				
	Circuit outage data analysis.	Completed	12/16/2004	100% of this high CPI is due to a vehicle accident that occurred on 8/15/2004, approximately 1,900 customers experienced outages ranging from 2.5 hrs to 5.5 hrs. The remaining 2004 outages on 50-2 are not significant. 50% of the 119 miles of 50-2 has been trimmed. The 50-2 circuit is expected to be on the list of 5% worst performing circuit until the third quarter in 2005. No further action required.

- (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 outage causes for the 12 months ended at the current quarter. The top three causes (Equipment Failure, Animals, and Trees – Not Trimming Related), based on 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	Cases of Trouble ³	Percent of Cases of Trouble	Customer Interruptions ⁴	Percent of Customer Interruptions	Customer Minutes	Percent of Customer Minutes
Improper Design	2	0.01%	9	<0.01%	529	<0.01%
Improper Installation	0	0.00%	0	0.00%	0	0.00%
Improper Operation	2	0.01%	5,222	0.36%	95,280	0.04%
Trees - Inadequate Trimming	1,325	7.12%	105,771	7.30%	25,314,795	10.98%
Trees - Not Trimming Related	3,061	16.45%	295,844	20.42%	76,246,926	33.08%
Animals	3,773	20.28%	58,904	4.07%	5,525,623	2.40%
Vehicles	845	4.54%	206,737	14.27%	27,769,651	12.05%
Contact/Dig-in	195	1.05%	10,881	0.75%	1,055,366	0.46%
Equipment Failure	4,996	26.85%	512,617	35.39%	62,959,800	27.31%
Forced Prearranged	904	4.86%	49,278	3.40%	5,692,285	2.47%
Other - Controllable	261	1.40%	11,382	0.79%	1,164,093	0.51%
Nothing Found	1,745	9.38%	104,873	7.24%	11,174,366	4.85%
Other - Public	56	0.30%	2,378	0.16%	331,078	0.14%
Other - Non-Controllable	1,443	7.75%	84,736	5.85%	13,183,465	5.72%
Total	18,608	100.00%	1,448,632	100%	230,513,257	100.00%

³ Cases of Trouble are the number of sustained customer service interruptions (i.e., service outages).

⁴ The data reflects the number of interrupted customers 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 outage causes contributing to the majority of outages:

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

PPL Electric also tracks the effects of significant severe weather events, both PUC-reportable and non-reportable, on reliability performance. During the 12 months ended December 31, 2004, Hurricane Ivan alone was responsible for approximately 1,300 cases of trouble, representing more than 121,000 customer interruptions and affecting about 9% of PPL Electric's customer base. This contributed about 0.09 to SAIFI and 33 minutes to CAIDI for the period.

Trees – Inadequate Trimming: During the second quarter of 2004, PPL Electric adopted an improved tree-trimming specification and shortened maintenance trimming cycles to reverse a gradual increase in outages attributed to inadequate trimming. The shortened cycle times took effect on January 1, 2005 and PPL Electric intends to implement the revised specification in the first quarter of 2005. PPL Electric will monitor the effectiveness of these changes.

During the third quarter of 2004, Hurricane Ivan was responsible for 250 cases of trouble and 17,000 customer interruptions in this category.

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

During the third quarter of 2004, Hurricane Ivan was responsible for over 600 cases of trouble and 68,500 customer interruptions in this category.

Animals: Animals consistently account for more than 20% 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 90% of the cases of trouble are associated with individual distribution transformers. However, when animal outages 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 outages.

Vehicles: Although vehicles cause a small percentage of cases of trouble, they account for a large percentage of customer interruptions and customer minutes because main lines tend to be located along major thoroughfares with higher traffic densities. In addition, vehicle-related cases often result in extended repair times to replace broken poles. Outages due to vehicles are on the rise as a result of more 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 cases of trouble, customer interruptions, and customer minutes. However, approximately 40% of cases of trouble, 53% of customer interruptions and 57% of customer minutes attributed to equipment failure are weather-related and are not considered to be indicators of equipment condition or performance.

During the third quarter of 2004, Hurricane Ivan was responsible for 174 weather-related cases of trouble and 20,000 customer interruptions in this category.

Nothing Found: This 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.

- (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.)*

This information will be provided in PPL Electric's Annual Report.

- (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.)*

This information will be provided in PPL Electric's Annual Report.

- (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.)*

This information will be provided in PPL Electric's Annual Report.

- (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).*

The following table shows the dedicated staffing levels as of the end of the quarter. Job descriptions are provided in Appendix C.

Transmission and Distribution(T&D)	
Lineman Leader	96
Journeyman Lineman	195
Lineman	86
Helper	10
Troubleman	41
T&D Total	428
Electrical	
Leaders	44
Journeyman	115
Electricians	62
Helpers	2
Electrical Total	223
Overall Total	651

Significant staffing variances from the previous quarter result from the return to classes of eighteen (18) students from the LCCC Lineman school initiative temporarily working as helpers and eighteen (18) retirements. Field Services is beginning a hiring process to fill 86 helper-T&D vacancies and 23 helper-Electrical vacancies for a total of 109 helper positions who will ultimately become linemen and electricians after the appropriate training and experience. Field Services is completing an initiative that it began in 2004 to hire experienced journeyman linemen from outside the company. Field Services also has developed a process that will be used to evaluate staffing levels and needs on a regular basis and will employ this process to be certain staffing levels continue to be appropriate.

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

The following table provides the expenditures incurred for contractor services for T&D operation and maintenance that includes the work identified in response to Item (6). PPL Electric does not track hours for all contractors.

	2004 Actual (\$1,000s)
4th Quarter	10,007
YTD Total	32,586

(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 where appropriate.

The following table shows the average response rate for transmission and distribution personnel currently included in PPL Electric's measured callout response program.

October	39%
November	43%
December	40%
Quarter Average	41%
YTD Average	45%

PPL Electric does not currently have a process to track and measure the amount of time it takes to obtain necessary personnel.

PPL Electric's call-out procedure is defined by bargaining unit agreements. Under the agreements, PPL Electric uses a computer-based callout roster to determine the order in which personnel are called to respond to after-hour emergencies in a given geographic area. Personnel are called sequentially. When sufficient personnel cannot be secured from the rosters for that geographic area, rosters from adjacent areas are utilized. There is no electronic link from one roster to another that enables calculation of when the original needed crew size is achieved. PPL Electric can track when personnel were called to provide assistance; and which personnel accepted or refused, but PPL Electric does not record in the callout system when personnel arrived at the crew quarters. Although PPL Electric records when the crew was dispatched to respond to the case of trouble, the two systems currently are independent and cannot be integrated. PPL Electric is evaluating a new call-out system that may allow that integration in the future.

***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 Trouble⁵ - 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.

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

Appendix B

PPL Electric Utilities Corporation Service Interruption Definitions

Trouble Definitions: 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Outages resulting from the lack of adequate tree trimming (within the Right of Way).
35 – Trees – Not Trim Related	Non-Controllable	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• When cars, trucks or other types of vehicles or their cargoes strike facilities causing an interruption.
51 – Contact/Dig-in	Public	<ul style="list-style-type: none">• 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.

Appendix B

60 – Equipment Failure	Controllable	<ul style="list-style-type: none"> • 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 ⁶	Controllable	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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.

⁶ 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 immediately, but are reported as scheduled prearranged when the interruption is postponed.

Appendix B

<p>90 – Other – Controllable (Lineman provides explanation)</p>	<p>Controllable</p>	<ul style="list-style-type: none"> • 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.
<p>96 – Nothing Found</p>	<p>Non-Controllable</p>	<ul style="list-style-type: none"> • When no cause for the interruption can be found. • 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.
<p>98 – Other Public (Lineman provides explanation)</p>	<p>Public</p>	<ul style="list-style-type: none"> • 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.
<p>99 – Other – Non-Controllable (Lineman provides explanation)</p>	<p>Non-Controllable</p>	<ul style="list-style-type: none"> • 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.

Appendix C

***PPL Electric Utilities Corporation
Job Descriptions***

Transmission and Distribution

Helper	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Investigates and resolves trouble calls, voltage abnormalities on transmission and distribution systems associated with but not limited to PPL Electric facilities.

Appendix C

Electrical

Helper	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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:<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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:<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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.

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ORIGINAL

February 1, 2005

Via Federal Express

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

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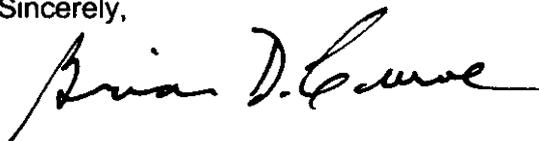
**Re: PUC Docket No. L-00030161
Rulemaking Re Amending Electric Service Reliability Regulations at
52 Pa. Code Chapter 57**

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 2004 Quarterly Reliability Report for the period ending December 31, 2004.

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,

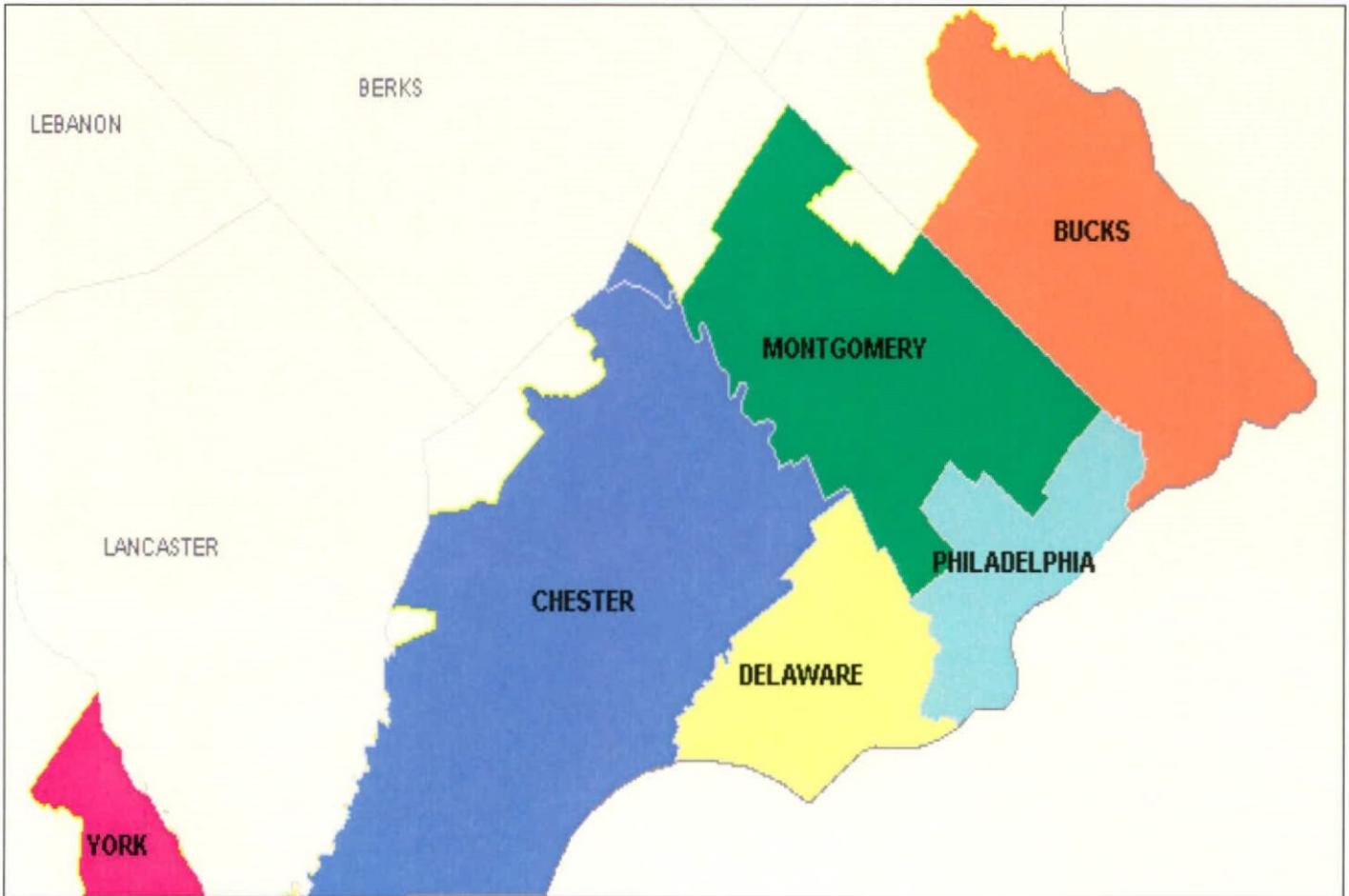


cc: Office of Consumer Advocate
Office of Small Business Advocate

enclosures

WJP/mpb

**PECO Energy Company
Quarterly Reliability Report
For Period Ending December 31, 2004**



February 1, 2005

DOCKETED
AUG 04 2005

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SECRETARY'S BUREAU

PECO Energy ("PECO")
Quarterly Reliability Report for the Period Ending December 31, 2004
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) "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."

PECO experienced no major events in the fourth quarter of 2004. However, a windstorm in December affected 6.5% of PECO's customers; over 100,000 customers. This storm increased SAIFI by 0.065 and CAIDI by 8 minutes.

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	Sustained Customer Hours	Momentary Customer Interruptions	Sustained Customer Minutes	SAIFI	CAIDI	SAIDI	MAIFI
1,602,490	1,574,526	2,777,354	1,489,252	166,641,211	0.98	106	104	0.93

**Data reflects 12 months ending 12/31/2004

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."

PECO's worst performing 5% of circuits for 2004 were selected based on a balanced scorecard including frequency and duration of interruptions and the number of customers experiencing more than three interruptions in a year. Each of these factors was considered from the perspective of its contribution to system totals and on the basis of the individual circuit. The selection process required six factors:

1. Rolled up customer interruptions – a count of all the customer interruptions on a given circuit and on other circuits for which it is a source, due to outages on the given circuit in 12 months. This measure is oriented toward contribution to system SAIFI.

2. Circuit SAIFI – the 12-month average frequency of interruptions to customers on a given circuit. This measure is oriented toward local frequency of interruptions.
3. Rolled up customer hours of interruption – a count of all the customer hours of interruption on a given circuit and other circuits for which it is a source, due to outages on the given circuit in 12 months. This measure is oriented toward contribution to system SAIDI, which is in turn a weighted contribution to system CAIDI.
4. Circuit SAIDI – the 12-month average total duration of interruptions to customers on a given circuit. This measure is oriented toward local duration of interruptions.
5. Customers with more than 3 interruptions – a count of the number of customers on a circuit who experienced more than three interruptions in a year. This measure is oriented toward contribution to the total number of customers with more than three interruptions on the system.
6. Percent of customers with more than 3 interruptions – the percent of customers on a circuit who experienced more than three interruptions in a year. This measure is oriented toward the local occurrence of repeat interruptions.

Weights were applied to these six factors to combine them into a single score for each circuit. The weights were chosen to index the individual factors to 100, account for differences in range among the factors, and balance system total interruption values with single-circuit interruption values. The circuits were then ranked by this combined score and selected in rank order for remediation in 2004. This ranking system was different from that used at PECO in 2003. Fourteen circuits that were analyzed as part of the 2003 rolling worst circuits program were placed at the top of PECO's 5% worst circuits list for 2004. The resulting list of 111 circuits represents 5% of PECO's total. The reliability index values and remedial efforts reported on all of PECO's quarterly reliability reports for 2004 will refer to these 111 circuits.

Section 57.195(e)(5) "A Rolling 12-month breakdown and analysis of outage causes during the preceding quarter, including the number and percentage of service outages, the number of customers interrupted, and customer interruption minutes categorized by outage cause such as equipment failure, animal contact, tree related, and so forth."

12 Months Ending December 31, 2004					
Cause	Cases of Trouble	% Cases of Trouble	Customer* Interruptions	% Customer Interruptions	Customer Minutes
Animal Contact	726	7.1%	38,199	2.7%	2,700,965
Contact / Dig In	233	2.3%	29,776	2.1%	2,223,158
Equipment Failure	3,321	32.3%	519,422	34.3%	49,545,053
Lightning	896	8.7%	113,817	7.9%	15,668,544
Transmission / Substation	26	0.3%	64,010	3.8%	7,154,857
Vegetation					
Broken / Uprooted	1,878	18.3%	381,292	22.8%	45,263,563
Vegetation – In-growth	890	8.7%	54,462	3.1%	7,946,589
Vehicles	301	2.9%	107,363	6.9%	6,993,315
Unknown	1,249	12.1%	150,003	9.1%	19,801,186
Other	767	7.5%	116,182	7.3%	9,343,981

*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.

The largest contributors to customer interruptions were tree-related incidents and equipment failure. Most customer interruptions caused by trees come from broken branches and trunks or uprooted trees (88%), while in growth accounts for 12% of vegetation-related customer interruptions. The PECO service territory experienced 14 storms containing lightning activity during the 12-month reporting period.

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).”

Information not required for the fourth quarter

Contact Persons:

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April 13, 2005

L-00030161

James J. McNulty, Secretary
Pennsylvania Public Utility Commission
PO Box 3265
Harrisburg, PA 17120

Re: REVISED Joint 4th Quarter 2004 Reliability Report – Pennsylvania Power Company,
Metropolitan Edison Company and Pennsylvania Electric Company
Pursuant to 52 PA Code 57.195(d)

Dear Secretary McNulty,

Enclosed for filing on behalf of the Pennsylvania Power Company, Metropolitan Edison Company and the Pennsylvania Electric Company is an original and six (6) copies of its Revised Page 1 and redlined Revised Page 1 of the previously submitted Joint 4th Quarter 2004 Reliability Report filed with this Commission on February 1, 2005.

This Revised Page 1 reflects two corrections to the original:

1. The addition of the number of customer-minutes of major events has been added to section (1) *Fourth Quarter Major Event Information*, and
2. The number of customers served by each operating company provided in section (2) *Rolling 12-Month System Reliability Performance Indices* has been corrected using the number of customers served based on the FirstEnergy Customer Care System (CCS) as of December 31, 2004.

A copy of this Revised Page 1 and the redlined Revised Page 1 are being submitted electronically to the Office of Consumer Advocate, the Office of Small Business Advocate and the Allegheny Electric Cooperative.

Sincerely,

Eric J. Dickson
Director, Operations Services

DOCUMENT
FOLDER

Attachments

62

Pennsylvania Power Company, Pennsylvania Electric Company
and Metropolitan Edison Company
4th Quarter Report 2004
Reliability Regulations at 52 Pa. Code Chapter 57
Docket No. L-00030161

APR 14 2005

PENNSYLVANIA UTILITY COMMISSION
STAFF BUREAU

The following Joint Report is filed on behalf of Pennsylvania Power Company ("Penn Power"), Pennsylvania Electric Company ("Penelec") and Metropolitan Edison Company ("Met-Ed") for the fourth quarter of 2004.

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

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52 Pa. Code Chapter 57.195(e)

(1) Fourth Quarter Major Event Information

	Customers Affected	Major Event	Description	Customer Minutes
Penn Power		None		
Met-Ed		None		
Penelec	73,000	Duration: 53 hrs. 30 min. Time: Dec. 1 @ 6:30 A.M. to Dec. 3 @ 12:00 P.M.	Heavy rainfall and high winds caused trees to fall onto distribution facilities. Wind gusts exceeded 50 mph. (Approval of major event exclusion pending by the PaPUC)	18,246,893 minutes

(2) Rolling 12-Month System Reliability Performance Indices

The major event criteria are determined by having 10% of Met-Ed, Penn Power or Penelec's customers out of service for 5 minutes or longer. *The 12-month rolling Reliability Performance Indices through December 2004 are as follows:*

	Penn Power			Penelec ⁽¹⁾			Met-Ed		
	Bench-mark	12-Month Stand.	12-Month Actual	Bench-mark	12-Month Stand.	12-Month Actual	Bench-mark	12-Month Stand.	12-Month Actual
SAIFI	1.02	1.22	1.43	1.15	1.38	1.77	1.06	1.27	1.54
CAIDI	92	110	120	115	138	140	127	152	128
SAIDI	94	135	172	132	190	248	135	194	197
Customers Served ⁽¹⁾⁽²⁾	155,000 157,326			581,000 587,010			497,000 525,650		
Number of Sustained Interruptions	2,974			12,361			8,631		
Customers affected	222,425			1,031,525			765,520		
Customer Minutes	26,631,723			144,236,994			97,606,915		

⁽¹⁾ Penelec's reliability performance indices were negatively impacted by 4 significant, but not excludable, storms in May, June and outages resulting from tropical storms Francis and Ivan in September.

⁽²⁾ Source: The FirstEnergy Customer Care System (CCS) as of December 31, 2004.

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AUG 04 2005

Pennsylvania Power Company, Pennsylvania Electric Company
and Metropolitan Edison Company
4th Quarter Report 2004
Reliability Regulations at 52 Pa. Code Chapter 57
Docket No. L-00030161

The following Joint Report is filed on behalf of Pennsylvania Power Company ("Penn Power"), Pennsylvania Electric Company ("Penelec") and Metropolitan Edison Company ("Met-Ed") for the fourth quarter of 2004.

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

52 Pa. Code Chapter 57.195(e)

(1) Fourth Quarter Major Event Information

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Met-Ed		None		
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	Penn Power			Penelec ⁽¹⁾			Met-Ed		
	Bench- mark	12- Month Stand.	12- Month Actual	Bench- mark	12- Month Stand.	12- Month Actual	Bench- mark	12- Month Stand.	12- Month Actual
SAIFI	1.02	1.22	1.43	1.15	1.38	1.77	1.06	1.27	1.54
CAIDI	92	110	120	115	138	140	127	152	128
SAIDI	94	135	172	132	190	248	135	194	197
Customers Served⁽²⁾	157,326			587,010			525,650		
Number of Sustained Interruptions	2,974			12,361			8,631		
Customers affected	222,425			1,031,525			765,520		
Customer Minutes	26,631,723			144,236,994			97,606,915		

⁽¹⁾ Penelec's reliability performance indices were negatively impacted by 4 significant, but not excludable, storms in May, June and outages resulting from tropical storms Francis and Ivan in September.

⁽²⁾ Source: The FirstEnergy Customer Care System (CCS) as of December 31, 2004.

ORIGINAL

WELLSBORO ELECTRIC COMPANY

2004 ANNUAL RELIABILITY REPORT

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1.2.2005

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57.195 Section (a) Item 2

Wellsborough Electric Company

Person whom inquires into this report can be directed to.

Robert S. McCarthy
Vice-President, Engineering and Operations
Phone: 570-724-3516
E-Mail: bobbym@ctenterprises.org
Address: 33 Austin St. Wellsboro, Pa 16901

1/21/2015

57.195 Section (b) Item 1

Wellsborough Electric Company

Programs and Procedures for providing reliable electric service.

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

Currently Wellsboro Electric has twenty voltage regulators in use in our substations, at least six units will be sent in for rebuild and evaluation in 2005.

Thirty percent of all hydraulic oil circuit reclosers in use in our substations are removed from service and rebuilt or testing each year

Infrared 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 infrared imaging.

Wellsboro Electric will visually inspect 2500 poles in 2005, this inspection will include a visual inspection of each pole looking for obvious defects in the pole, crossarms and related equipment, Other utilities that may be attached to each pole will be documented and more importantly the inspection will be looking for National Electrical Safety Code issues for height and clearances.

One Thousand poles will be tested by an outside contractor for determine the internal condition of the pole

7/11/05

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 contact on the unit.

For poly-phase customers and customers on our 4 kV system a conventional transformer is used. On these setups a fused cutout 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 arrester 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 to identify circuits that tree clearing may be needed on, thus allowing us to preplan future trimming needs.

Wellsboro Electric is currently reviewing our current right-of-way program in conjunction with our parent company C&T Enterprises and looking at different options available, currently we are under a time and material contract for 2005, we are reviewing either a performance based contract or a lump sum contract for work to be performed in 2006. We currently perform around forty to fifty miles of line each year.

Wellsboro Electric began a chemical application program in 2004 to treat selected circuits in order to further decrease vegetation related outages and extend the manual tree trimming cycle, manual tree trimming is not only labor extensive but extremely expensive, with the chemical application program in place we should be able to lower the overall costs related to tree trimming. With this program being so new to us, it will take time to gather data to determine the final benefit of this program.

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.

Two distribution circuits are planned to have a fuse coordination and sectionalizing study completed on them in 2005.

57.195 Section (b) Item 2

Wellsborough Electric Company

Major Events

Date	Time of Event	Duration of Event	# Customers Affected	Cause
9/17/04	5:11 PM	24 Hrs 29 Mins	2854	Flooding Heavy Rain
11/7/2004	1:21 PM	1Hr 32 mins	5622	Equipment Failure

57.195 Section(2) Item 3

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

	<u>SAIFI</u>	<u>SAIDI</u>	<u>CAIDI</u>
2002	2.1	294	138
2003	2.5	289	115
2004	3.13	262.6	83.7

2002 DATA

Average Number of Customers Served

	# of Interruptions	# of Customers Interrupted	Total Customer Minutes
Conductor Sag	1	1	49.8
Contamination	3	29	1456.8
Corrosion	1	1	70.2
Decay	4	681	80185.8
Electrical Overload	1	752	57076.8
Equipment	69	1550	241194
Fire	1	86	774
Lightning	45	731	64321.8
Maintenance	25	28	3241.2
Scheduled	36	384	18682.2
Public Activites	2	2	226.2
Animals	83	846	31797
Other, Utilities	1	22	8212.2
Trees	142	1943	337438.2
Unknown	170	1077	76582.2
Vehicles	5	576	55222.8
Wind	18	40	6703.2
	607	8749	983234.4

2003	DATA	Average Number of Customers Served		5798
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 Activities	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	

2004 Outage Data**Average number of customers served****5847**

	Number of Interruptions	# Customers Interrupted	# Customer Minutes
Maintenance	4	283	134965
Scheduled	11	2906	220817
Equipment	27	1997	185873
Other Faulty Equip	10	626	26380.4
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
Fire	1	1	148.8
Other, Utilites	3	5675	182911.8
Unknown	41	3103	321650.8
	221	18333	1529573

57.195 (b) Item 4

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.

2004 CAUSE	Average number of customers served		5847	Customers Affected
	# Of Interruptions	Percentage of Interruptions	Cust Mins	
Scheduled	11	4.98%	220817.2	2906
Maintenance	4	1.81%	134965	283
Equipment	37	16.74%	212250	2623
Corrosion	1	0.45%	34.8	1
Electrical Overload	3	1.36%	31711	544
Deterioration	1	0.45%	18721	193
Lightning	17	7.69%	7684.2	170
Wind	5	2.26%	21130.8	560
Trees	40	18.10%	40007.2	1323
Animals	42	19.00%	11554.8	300
Vehicles	12	5.43%	101001.4	566
Public Activites	3	1.36%	6498	54
Fire	1	0.45%	148.8	1
Other, Utilities	3	1.36%	182971.8	5675
Unknown	41	18.55%	321650.8	3103
	221	100.00%	1311147	18302

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.

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 SECOND CIRCUIT IS ABOUT 40% COMPLETED AT 12-31-04	Study of two circuits	One circuit completed
593.8	Substation Chemical Spraying	Spray 100% of Substations	100% Completed
593.8	Pole Testing VENDOR WAS UNABLE TO SCHEDULE WORK IN 2004	Test 1000 Poles	Not Completed
593.8	Visual Line Inspection	Visual inspection of 2500 Poles	Inspected 2500 poles
593.8	Infrared Imaging ALL SUBSTATION WERE COMPLETED AND THREE PHASE LINES	Perform two days of infared inspection	Two Days Completed
593.1	Tree Trimming	Trim/Clear 30 Circuit miles of Line	35 Miles Trimmed
593.1	Right-of -way clearing (Chemical) ACTUAL AMOUNT COMPLETED IS OVER GOAL DUE TO REALLOCATION OF MONEY FROM MANUAL TRIMMING TO CHEMICAL	Spray 40 acres of right-of-way	Sprayed 114 Acres
593.9	Voltage Regulator rebuilds	Repair/rebuilt three units	Rebuilt/Repaired five units
593.9	Oil circuit breakers(Substations)	Calibrate and test three substation units	Calibrate and tested three units
593.9	OCR Repair/rebuild	Test and rebuilt six single phase units	Calibrated/rebuilt nine units

WELLSBORO ELECTRIC COMPANY
COMPARATIVE STATEMENT OF OPERATIONS & MAINTENANCE EXPENSES

	<u>YTD</u> <u>Dec. 31, 2004</u>	<u>Annual</u> <u>Budget</u>
DISTRIBUTION EXPENSES		
580-Operation, supervision, & engineering	28,986.57	28,550.00
582-Station expense	12.51	3,400.00
583-Overhead line expense	31,650.37	17,800.00
584-Underground line expense	0.00	0.00
585-Street lighting expenses	2,447.68	1,300.00
586-Meter expenses	8,829.89	6,550.00
586.3-Meter expenses-small tools	414.59	600.00
586.4-Meter expenses-outside training	0.00	1,000.00
587-Customer installation expenses	7,955.63	9,650.00
588-Miscellaneous distribution expenses	52,446.59	38,750.00
588.1-Misc dist exp-general meetings	5,515.97	4,400.00
588.2-Misc dist exp-outside training	9,126.04	18,000.00
588.24-Misc dispatch center	0.00	0.00
588.3-Misc dist exp-on call standby	6,037.43	5,400.00
588.4-Misc dist exp-safety meeting training	4,969.67	9,650.00
588.5-Misc dist exp-sick leave	0.00	0.00
588.9-Misc dist exp-staking dept-tools	<u>188.85</u>	<u>1,000.00</u>
Total operations	<u>158,581.79</u>	<u>146,050.00</u>
590-Maintenance, supervision & engineering	16,805.34	27,900.00
591-Maintenance of structures	0.00	0.00
592-Maintenance of station equipment	5,734.08	5,500.00
593-Maintenance of overhead lines	128,425.44	93,600.00
593.1-Maint o/h line-brush contractors	141,414.75	140,000.00
593.2-Maint o/h line-servicemens phone	1,756.84	2,900.00
593.3-Maint o/h line-working off system	0.00	0.00
593.4-Maint o/h line-meals	41.53	500.00
593.5-Maint o/h line-major storm labor	8,864.11	41,500.00
593.6-Maint o/h line-major storm extra crews	1,793.68	0.00
593.7-Maint o/h line-material inventory	0.00	0.00
593.8-Maint o/h line-testing/inspect tools	10,836.89	23,600.00
593.9-Maint o/h line-special equipment repair	13,658.60	11,000.00
594-Maintenance of underground lines	10,297.92	2,250.00
594.4-Maint undgrd lines-materials inventory	0.00	0.00
594.9-Maint undgrd lines-pa one call	1,791.70	1,500.00
595-Maintenance of line transformers	10,972.78	6,900.00
595.8-Maint line transformers-oil disposal	6,970.35	11,000.00
596-Maintenance of street lights	240.78	0.00
597-Maintenance of meters	7,305.93	7,000.00
598-Maintenance of misc dist plant	<u>0.00</u>	<u>0.00</u>
Total maintenance	<u>366,910.72</u>	<u>375,150.00</u>
589-Distribution rents	<u>27,173.39</u>	<u>29,800.00</u>
Total distribution expense	<u>552,665.90</u>	<u>551,000.00</u>

57.195 (b) Item 8

A Comparison of budgeted versus actual T&D capital expenditures for the year being reported on in total and detailed by account code explain any variances of 10% or greater.

	Budget	Actual
New Services	\$ 95,000.00	\$ 100,205.18
Misc. System Improvements/Pole Replacements	\$ 120,000.00	\$ 420,986.94
Hilltop Substation	\$ 100,000.00	
Bodine St. Pole Replacement	\$ 32,000.00	\$ -
Lower Hills Creek Lake	\$ 35,000.00	\$ -
Fischler St. Rebuild	\$ 11,000.00	\$ -
Ives Run Campground	\$ 12,000.00	\$ 43,557.82
West Ave. Rebuild	\$ 18,000.00	\$ -
Charleston Road Pole Replacements	\$ 50,000.00	\$ 37,473.78
Wellsboro Junction	\$ 16,000.00	\$ -
AMR - Turtle Meters	\$ 45,000.00	\$ 40,629.20
Industrial/Commercial Metering	\$ 5,000.00	\$ -
Voltage Capacitors	\$ 3,000.00	\$ 1,200.00
Oil Circuit Reclosers	\$ 12,000.00	\$ 14,625.00
	\$ 554,000.00	\$ 658,677.92

57.195 (b) Item 9

Quantified transmission and distribution inspection and maintenance goals/objectives for the current calendar year detailed by system area.

Year 2005

Substations

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

Distribution System

593.8	Fuse Coordination/Sectionalizing Study	Complete two distribution circuits
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 35 circuit mile of line
593.1	Right-of-Way Chemical Application	Spray 40 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	Mark/Update one distribution circuit

**2005 Engineering and Operations Department Budget
11/17/2004**

Vehicles

		2004 Budget	
184.2	Vehicles Expenses- Repairs, Insurance, Gas, Oil, Etc.		\$ 45,000.00
184.2	Vehicle Expenses, Spot Lights/Traffic Lights		\$ 2,000.00
184.2	Truck 5 - 2000 Ford Service Truck	1199/Month	\$ 14,500.00
184.2	Truck 6 - 2004 Freightliner 55' Bucket Truck	2800/Month	\$ 33,600.00
184.2	Truck 8- 1995 Ford Digger, Lease Payment	3100/Month	\$ 37,200.00
184.2	Truck 10 - 2005 Service Bucket	2100/Month	\$ 25,200.00
184.2	Unit 18- 1995 Allegheny Pole Trailer, Lease Payment	150/Month	\$ 1,800.00
184.2	Unit 20- 1997 CarMart Trailer, Lease Payment	80/Month	\$ 960.00
184.3	Vehicle Expenses- Repairs, Insurance, Gas, Oil, Etc-METER DEPT.		\$ 5,000.00
184.3	Truck 11- Meter Tester, Truck Lease Payment	654/Month	\$ 7,900.00
184.3	Truck 12 - Ford Ranger Lease Payment	654/Month	\$ 7,900.00
184.5	Vehicles Expenses- Repairs, Insurance, Gas, Oil, Etc. Car # 2		\$ 4,500.00
184.5	Car # 2, Vehicle Lease Payment	872/Month	\$ 10,500.00
184.4	Car # 1, Vehicle Lease Payment	927/Month	\$ 11,200.00
184.4	Car # 1, Vehicle Expenses, Repair, Insurance, Gas, Oil Car # 2		\$ 5,000.00
932	General Maintenance Vehicle Expenses Truck 7		\$ 1,500.00
	Truck #13 General Use Vehicle	654/Month	\$ 7,900.00
			\$ 221,660.00

Training & Safety

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			\$ -
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			\$ 3,000.00
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		\$ 1,000.00
588.2	Regulator/ OCR Training	Two Men		\$ 3,000.00

\$ 23,500.00

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
593	Fire Resistant Clothing		\$	3,000.00
588.9	Staking Engineer Budget		\$	1,500.00
586.3	Meter Dept Budget	Tool Budget	\$	700.00
586.4	Meter Dept Training		\$	1,200.00
597	Meter Dept, Turtle Maintenance Agreement		\$	1,500.00
597	Meter Test Set Annual PUC Calibration		\$	1,000.00
588	Eng/Oper Dept. Misc. Printing Expenses		\$	500.00
588	Right of Way Filing Fee's		\$	2,000.00
589	Pole Leasing	WECO on Commonwealth Telephone	\$	23,000.00
589	Right of Way Lease	Rail Crossings	\$	1,400.00
593.8	Rubber Goods/Hotline Equipment Testing		\$	2,500.00
593.8	Rubber Goods/ Hotline Equipment Replacement		\$	3,000.00
593.8	Pole Numbers/ Phase Markers		\$	1,000.00
593.8	Sectionalizing/ Fuse Coordination Study	Two Circuits	\$	3,000.00
593.8	Substation Spraying		\$	600.00
923.2	Misc Engineering Services		\$	5,000.00
593.8	Pole Testing	1000	\$	7,500.00
593.8	Line Inspection	2500 Poles	\$	9,000.00
593.8	Infrared 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 Related		\$	500.00
593.9	Regulator/OCR Repair		\$	5,000.00
593.9	OCR/Relay Calibration/Testing	3/15/05 5475.23	\$	5,000.00
594.9	Pennsylvania One Call Expenses		\$	2,000.00
595.8	Transformer Disposal		\$	9,000.00
595.8	Transformer Repair	3-15-05 180775	\$	3,000.00
588/920.6	VP, Engineering & Operations	Seminars/Meetings	\$	9,000.00
909.6	Customers Meetings	Power Lunch	\$	1,000.00
930.2	Mapping Updates		\$	2,000.00
930.3	VOAM Dues		\$	300.00
930.3	VOAM Expenses	Meetings	\$	250.00
912	Whitneyville Fair Booth		\$	1,000.00
923.2	Quest Tech Line		\$	1,200.00
			\$	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

11/17/2004

WELLSBORO ELECTRIC COMPANY

Engineering & Operations

2005 Capital Budget

A.	New Services	50 New Services	\$	90,000.00	
	Misc. System Improvements		\$	29,000.00	
		Sub-Total	\$	119,000.00	
			\$	110,000.00	
	Pole Replacements	100 Poles	\$	150,000.00	
B.	WECO Projects				
	Hilltop Substation		\$	1,414,000.00	
	Maple Hill	Stringing School	1/0 Alum	\$	25,000.00
	Fischler St. Rebuild	1300'	1/0 Alum	\$	9,000.00
	Route 287 South	2 Mile	1/0 Alum	\$	30,000.00
	East/West Main Circuit	Voltage Conversion		\$	30,000.00
	Meade St.	Voltage Conversion		\$	15,000.00
	Nichols/Water St.			\$	7,000.00
	Construction Estimate			\$	1,790,000.00
C.	Automated Meter Reading System	TURTLE Meters	\$	45,000.00	
D.	Metering				
	Industrial / Commercial Metering	Upgrades/AMR	\$	5,000.00	
	Voltage Monitoring Equipment		\$	1,000.00	
	SCADA		\$	5,000.00	
E.	Misc.				
	Storage Yard	Pole Barn	\$	18,000.00	
	Wire Trailer	Single Reel Trailer	\$	8,000.00	
	Two-Way Radios	Vehicle Repeater	\$	1,500.00	
	Power Tools- Line Trucks	Specialty Tools	\$	6,000.00	
	Computers	Crew Chief Office	\$	1,500.00	
	Sectionilizing Switches		\$	3,000.00	
	Voltage Capacitors	6 units	\$	1,500.00	

Oil Circuit Reclosers

6 Units

\$ - 12,000.00

\$ 107,500.00

Sub Total

\$ 1,897,500.00

Total

\$ 1,897,500.00

WELLSBOROUGH ELECTRIC
COMPANY

QUARTERLY RELIABILITY REPORT
57.195 REPORTING REQUIREMENTS

First Quarter 2005

January thru March 2005

SUBMITTED BY

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

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WELLSBORO ELECTRIC COMPANY
ROLLING TWELVE MONTH INTERRUPTION INDEXES

First Quarter 2005

SAIDI 323

SAIFI 3.66

CAIDI 88.04

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DOCKETED
AUG 04 2005

Wellsboro Electric Company		Reliability Index	SAIDI
MONTH	TOTAL CUST MINUTES	# CUSTOMERS SERVED	
April-04	62972.4	5840	
May-04	225953.4	5843	
June-04	29209.8	5849	
July-04	71643	5849	
August-04	5513.4	5859	
Sept-04	5997.6	5855	
Oct-04	319558	5853	
Nov-04	108986.8	5860	
Dec-04	454973	5869	
Jan-05	588885	5849	
Feb-05	3997.2	5850	
March-05	12511.8	5850	
		70226	
	1890201	Average # Customers Served	5852

Rolling 12 Month Average SAIDI Index

323.00092

APR 1 2 5

WELLSBORO ELECTRIC COMPANY

Reliability Index

SAIFI

Month	# of Customers Interrupted	# of Cust Served
April-04	464	5840
May-04	2001	5843
June-04	367	5849
July-04	836	5849
August-04	64	5859
Sept-04	130	5855
Oct-04	7090	5853
Nov-04	1532	5860
Dec-04	3083	5869
Jan-05	5670	5849
Feb-05	104	5850
March-05	127	5850
		70226
	21468	5852.1667 Avg # of Customers

SAIFI INDEX **3.668385**

Wellsboro Electric Company

Reliability Index CAIDI

Month Total Customer Mins # of Customers Interrupted

April-04	62972.4	464
May-04	225953.4	2001
June-04	29209.8	367
July-04	71643	836
August-04	5513.4	64
Sept-04	5997.6	130
Oct-04	319558	7090
Nov-04	108986.8	1532
Dec-04	454973	3083
Jan-05	588885	5670
Feb-05	3997.2	104
March-05	12511.8	127

1890201

21468

CAIDI INDEX

88.04739

57.195

Reporting Requirements

Section (e) Item (1)

Description of Major Events that occurred during the preceding quarter.

Date	Time of Event	Duration of Event	# Cust Affected Affected	# Customer Hours	Cause
-------------	----------------------	--------------------------	---------------------------------	-------------------------	--------------

No Major Events for First Quarter of 2005

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.

OUTAGES FROM JAN-MARCH 2005

Outage Cause	Number of Customers Affected	Number of Outages	Customer Minutes	Percentage of Outages
Decay	20	1	460.2	4.0%
Corrosion	0	0	0	
Distribution	0	0	0	
Electrical Overload	342	1	33858	4.0%
Equipment	76	4	14998.2	16.0%
Lightning	0	0	0	
Maintenance	0	0	0	
Ice,Sleet,Frost	103	5	11817	20.0%
Other, Deterioration	0	0	0	
Other,Faulty Equipment	3	3	178.2	12.0%
Scheduled	12	1	648	4.0%
Other Utilities	50	1	900	4.0%
Power Supplier	5238	1	539515.8	4.0%
Public Accidents	0	0	0	
Small Animals	1	1	114	4.0%
Trees	0	0	0	
Unknown	55	6	2862	24.0%
Vehicles	1	1	43.2	4.0%
Wind	0	0	0	
	5901	25	605394.6	100.0%

Enclosed is the 2005 first quarter reliability report from Wellsboro Electric Company. Wellsboro Electric had one event in January that caused a increase in our reliability indexes. Our transmission supplier Penelec had a insulator in their Wellsboro Substation that had cracked and needed replaced in order to replace this insulator, Penelec had to terminate all incoming power to the Wellsboro Electric system. A request for exemption from reporting requirements was filed by Wellsboro Electric on the grounds that this planned outage by Penelec was out of the control of Wellsboro Electric. This request was denied by the Commission. This one single event caused an outage to 5238 customers and 8991.93 customer outage hours.



Orange & Rockland
a conEdison, inc. company

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

(845) 577-3341

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April 27, 2005

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APR 28 2005

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

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

Re: Electric Service Reliability Regulations
Docket No. L-00030161

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 2004 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.

Very truly yours,

Timothy T. Garvin
Manager
Performance & Operational Engineering

TTG/dlp

Enclosures

cc: Office of Consumer Advocate
Office of Small Business Advocate
Pennsylvania AFL-CIO

50

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APR 28 2005

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

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

Annual Electric Reliability Report

2004

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DOCKETED
AUG 12 2005

April 30, 2005

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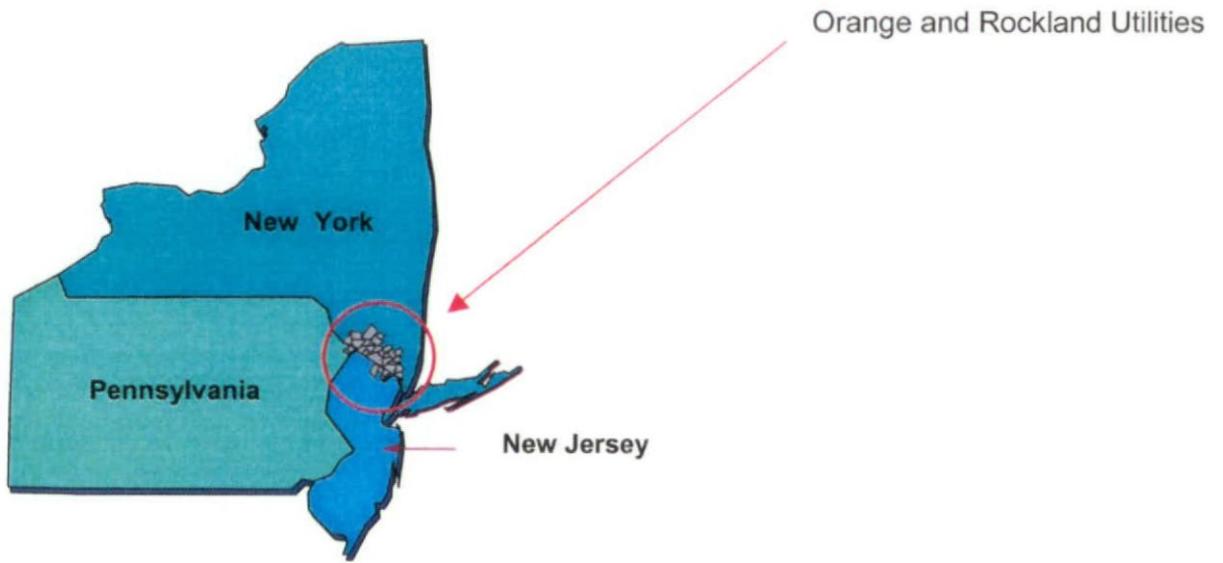
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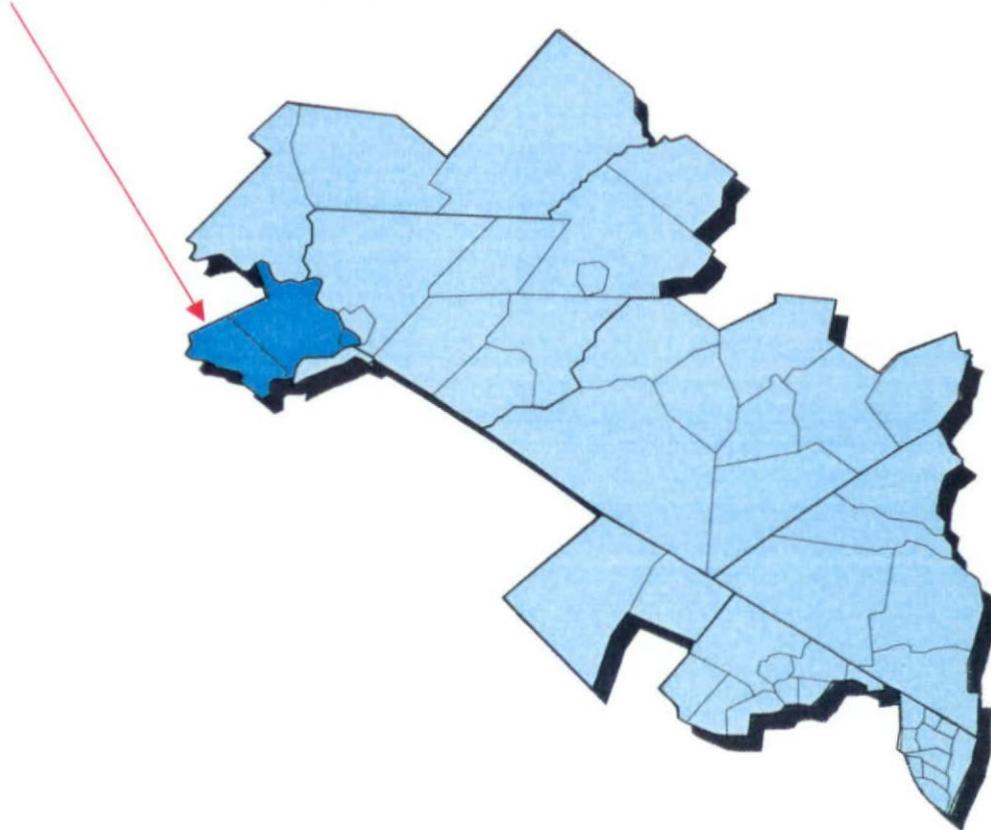
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PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

Geographic Territory

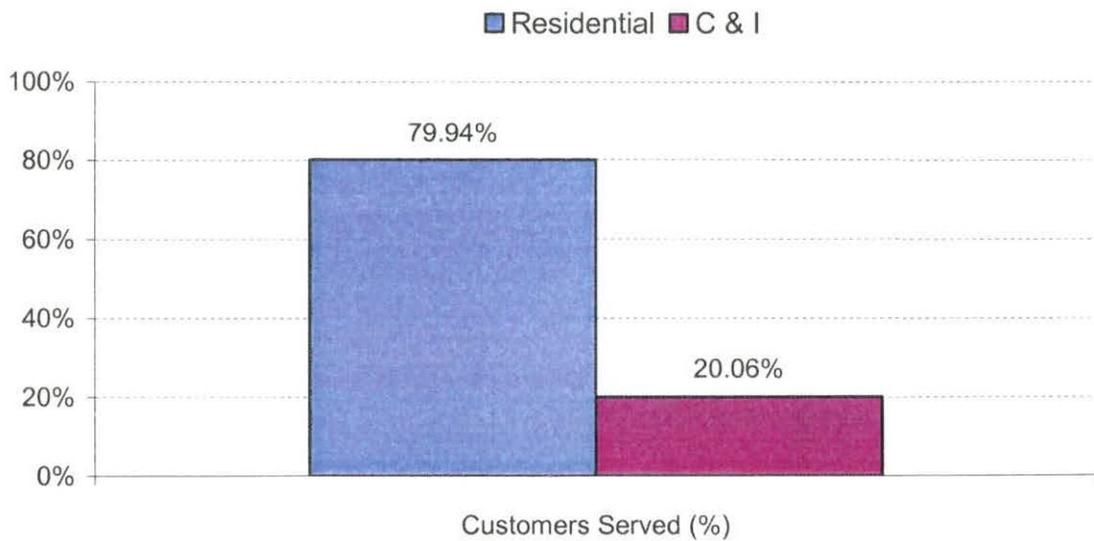
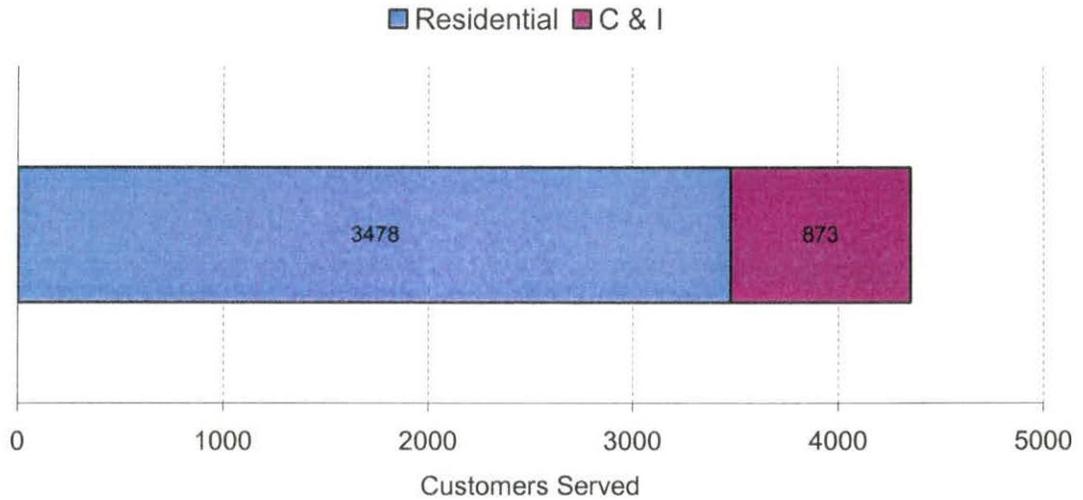


Pike County Light & Power Company



Customers Served

Shown below is the 2004 Customers Served for both Residential and C & I rate codes.



	Residential	(% State)	(% Comp)	C & I	(% State)	(% Comp)	All Customers	(% State)	(% Comp)
Customers Served Pike County	3478	79.9%	1.2%	873	20.1%	0.3%	4351	100.0%	1.5%

Definitions

Customers Served	These customers include both residential and commercial / industrial customers within our electric franchise territory. Excluded from these are all Street lighting (Municipal Street Lighting, Traffic Lights, all Dusk to Dawn Lighting), and all Sales to other Utilities.
Interruption	An interruption is the loss of service for five (5) or more minutes to one or more customers.
Customers Affected	Represents the total number of customers affected as a result of an outage.
Hours of Interruption	Represents the total customer hours of interruption, which is calculated by multiplying the total customers affected during an interruption by the duration (hours/minutes) of the interruption. Hours of Interruption are subject to rounding differences.
O/H Distribution (O/H Dist)	Those interruptions which are caused by incidents occurring in the overhead distribution system.
U/G Distribution (U/G Dist)	Those interruptions which are caused by incidents occurring in the underground distribution system.
Transmission/Substation (Trans/Sub)	Those interruptions which are caused by incidents occurring in the Transmission system or in the Substation system.
Major Event	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. A major event can also be 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, which affects at least one customer. 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.

Definitions

Causes of Interruption

Interruptions are classified by the cause of the interruption and include ten categories.

Animal Contact	Interruptions caused by an animal such as a squirrel, bird, snake, raccoon, etc.
Tree Contact	Interruptions caused by a tree or tree limb coming into contact with the electrical equipment.
Overload	Interruptions caused by an overloaded condition.
Work Error	Interruptions caused by the utility or utility contract personnel such as Company hired tree trimmers.
Equipment Failure	Interruptions caused by the breakdown or failure of company owned equipment.
Non-Company Accident	Interruptions resulting from events not under the control of the utility such as vehicle accidents, vandalism, fires, etc.
Pre-Arranged	Interruptions resulting from actions deliberately taken by the utility with advance notice to the customer(s) affected such as scheduled pre-arranged outages for voltage conversions, etc.
Customers Equipment	Interruptions to customers resulting from the failure of customer(s) equipment.
Lightning	Interruptions resulting from lightning.
Unknown/Other	Interruptions for which the cause is unknown or for which none of the other classifications is appropriate.

Definitions

PERFORMANCE RATIOS

Frequency (SAIFI)	Represents the number of times an average customer is affected by an outage. It is calculated by dividing the total customers affected by the customers served within a specific territory.
Restoration (CAIDI)	Represents the time in minutes (hours) it takes to restore electric service to an average customer that is affected by an outage. It is calculated by dividing the minutes (hours) of interruption by the customers affected. This ratio, however, can be misleading in that reductions can be achieved in both the minutes of interruption and in the customers affected which do show improvements in overall reliability, yet will still result in a higher restoration time.
Duration (SAIDI)	Represents the time in minutes (hours) that an average customer is without electric service over a specific period of time. It is calculated by dividing the customer hours/minutes of interruption over a specified period of time by the customers served over the same period of time. For that same defined period of time, this performance ratio can be calculated by the formula SAIFI * CAIDI.

Overall Current Assessment

Overall Current Assessment

This document constitutes Pike County Light and Power Company's (Pike, O&R, or the Company) Annual Electric Reliability Report for 2004. Overall, the Pike County service territory experienced a frequency (SAIFI) of 0.52 interruptions per customer served, a restoration time (CAIDI) of 172 minutes, and duration (SAIDI) of 90 customer minutes of interruption. (Table 3 – See Without Pre-Arranged and Major Events Section)

The reliability indices, which are based on a three-year average for the total Pike County service territory, are shown in Table 2. A three-year history of three-year averages is tabulated according to the standard reporting requirements initiated by the PUC in 2004. As a reference, the existing 'standard' levels set by the PUC for each of the indices are also listed. The 2004 rolling three-year averages for performance measurement are as follows: SAIFI 0.69, CAIDI 200.9 minutes, and SAIDI 139.5 minutes. SAIFI exceeded the 0.53 standard by 30%, CAIDI bettered the 240-minute standard by 16.6%, and SAIDI exceeded the 127 minute standard by 9.8%.

Orange & Rockland Utilities' "Northern Division" serves Pike County Light and Power, 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 Operating Division". This area is primarily fed from two 34.5 kV radial circuits that back up each other. In 2004 Matamoras Substation was constructed to improve service reliability.

There were five major events affecting Pike County during the year 2004. These events included a motor vehicle accident, tree contact and 3 lightning storms. One of these events consisted of de-energizing many of our customers for a significant flooding condition. Since these five incidents (12 interruptions) met the PUC definition of a major event they have been removed from the performance statistics. These major events are listed in Table 1. The effects of these major events upon the reliability indices are shown in Table 3.

Figures 1, 2, and 3 show performance trends (both with and without major events included) from 2000 through 2004, for the number of interruptions, customers affected, and customer minutes of interruption, respectively, with pre-arranged outages, partial power, and major events removed.

Over a 5-Year period, frequency (SAIFI) has been fairly steady, except for 2002. The 2004 Frequency remained the same as 2003, which is a substantial improvement over 2002, and remains better than the 5-year average. The 2004 Restoration (CAIDI) of 172 minutes is at its best level over the five-year period. The 2004 Duration (SAIDI) showed a second year of improvement, reducing to a level of 90 minutes. (See Table 3)

Figure 4 shows a summary by cause, for the Pike County interruptions experienced in 2004, with pre-arranged outages and major events removed. The major cause is tree contact with 21 interruptions affecting 1,142 customers for a total of 183,518 minutes. This represents approximately half of each category: 48.8% of the number of interruptions, 50.4% of the customers affected, and 47.0% 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.

Pike County Light & Power Company – Annual Electric Reliability Report – 2004

A graphical representation, by cause, is depicted in Figures 5, 6, and 7, which show the annual contribution to the number of interruptions, customers affected, and customer minutes of interruption, respectively, from 2000 through 2004. 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 20. Presently, Pike County has no transmission lines. A capital project was initiated to build a new substation in Matamoras, which was completed in December of 2004.

Major Events

Pike County Light & Power Company – Annual Electric Reliability Report – 2004

Major Events

Date	Cause	Time	Duration (minutes)	Customers Affected	Customer Minutes of Interr	Description
01/28/04	Non-Comp Acc	4:02	44	1,343	59,092	Motor Vehicle Accident
08/11/04	Storm (1 interruption)	2:26	183	2,831	510,845	Lightning Hit Riser Pole
08/20/04	Storm (5 Interruptions)	16:35	2,110	2,312	692,405	Lightning & Tree Contact
09/18/04	Storm (4 Interruptions)	2:51	2,377	1,587	1,153,434	Lightning, Tree & Flooding
09/26/04	Equipment Failure	11:13	620	2,196	1,361,410	Tree Contact
Major Event Total				10,269	3,777,186	

Table 1

Reliability Indices

Pike County Light & Power Company – Annual Electric Reliability Report – 2004

Reliability Indices
2002 - 2004

	Frequency SAIFI (Cust Aff/Cust Srvd)	Restoration CAIDI (Cust Min/Cust Aff)	Duration SAIDI (Cust Min/Cust Srvd)
2002	0.64	234.3	149.6
2003	0.64	96.0	61.4
2004	0.69	200.9	139.5
3-Year Standard	0.53	240	127.0

Table 2

Pike County Light & Power Company – Annual Electric Reliability Report – 2004

Reliability Indices

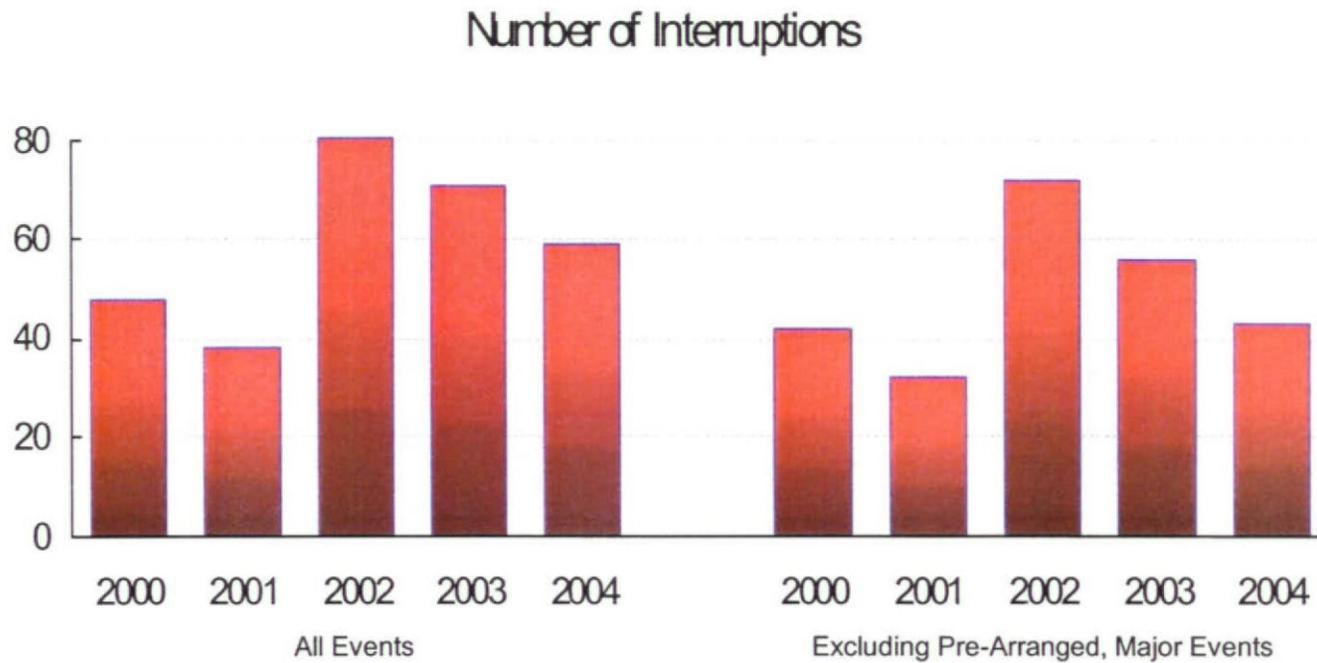
**Effect of Pre-Arranged Outages
and
Major Events Affecting 10 % or more Customers**

Year	Avg Cust Served	Interruptions	Customers Affected	Cust Min of Interruption	Frequency SAIFI (Cust Aff/Cust Srvd)	Restoration CAIDI (Cust Min/Cust Aff)	Duration SAIDI (Cust Min/Cust Srvd)
<u>ALL EVENTS</u>							
2000	4,118	48	10,738	1,506,246	2.61	140	366
2001	4,172	38	10,776	1,567,536	2.58	145	376
2002	4,255	81	17,392	2,006,166	4.09	115	471
2003	4,322	71	16,163	1,815,382	3.74	112	420
2004	4,351	59	13,218	4,199,704	3.04	318	965
5-Year Average					3.22	162	523
<u>PRE-ARRANGED OUTAGES AND MAJOR EVENTS (Affecting 10% or more Customers)</u>							
2000	4,118	6	8,632	754,638	2.10	87	183
2001	4,172	6	9,332	1,278,106	2.24	137	306
2002	4,255	9	12,934	1,009,159	3.04	78	237
2003	4,322	15	13,913	1,400,538	3.22	101	324
2004	4,351	16	10,951	3,809,235	2.52	348	875
5-Year Average					2.63	148	389
<u>WITHOUT PRE-ARRANGED AND MAJOR EVENTS</u>							
2000	4,118	42	2,106	751,608	0.51	357	183
2001	4,172	32	1,444	289,430	0.35	200	69
2002	4,255	72	4,458	997,007	1.05	224	234
2003	4,322	56	2,250	414,844	0.52	184	96
2004	4,351	43	2,267	390,469	0.52	172	90
5-Year Average					0.59	227	134

Table 3

Performance Trends

Performance Trends



The data excludes Partial Powers

Figure 1

Performance Trends

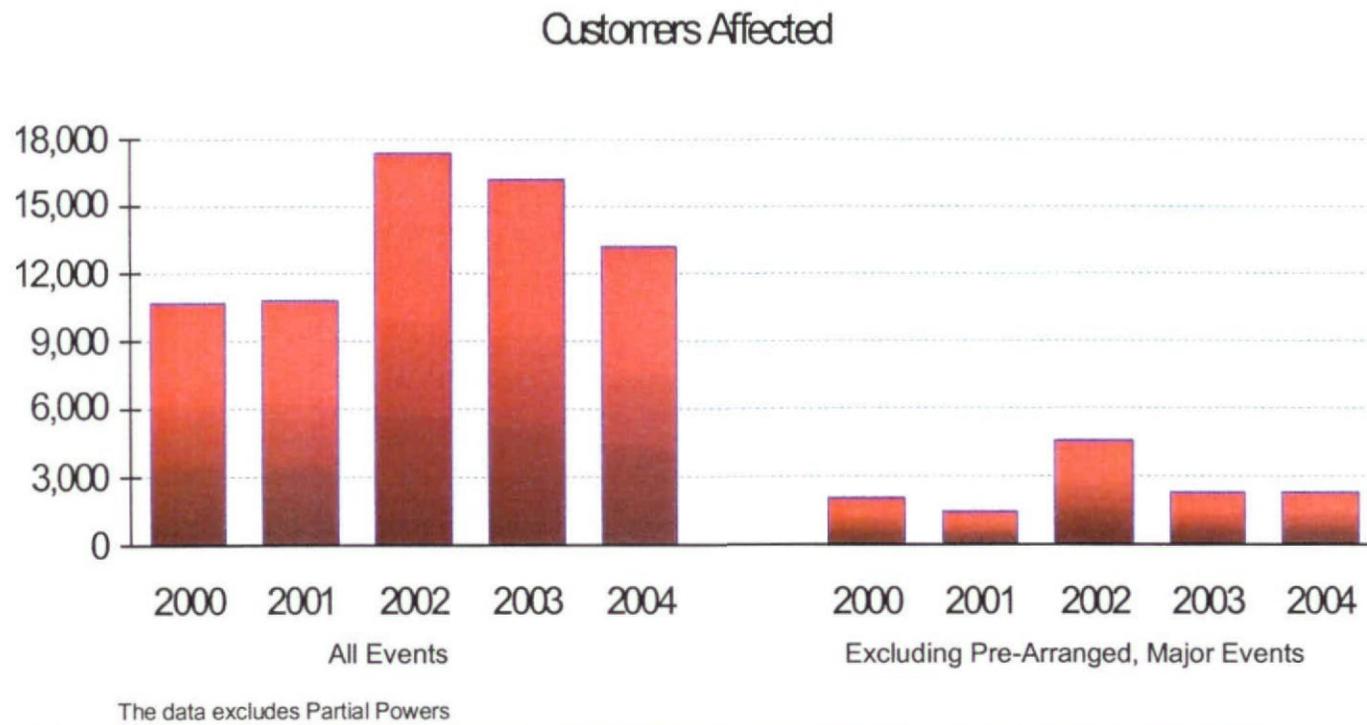
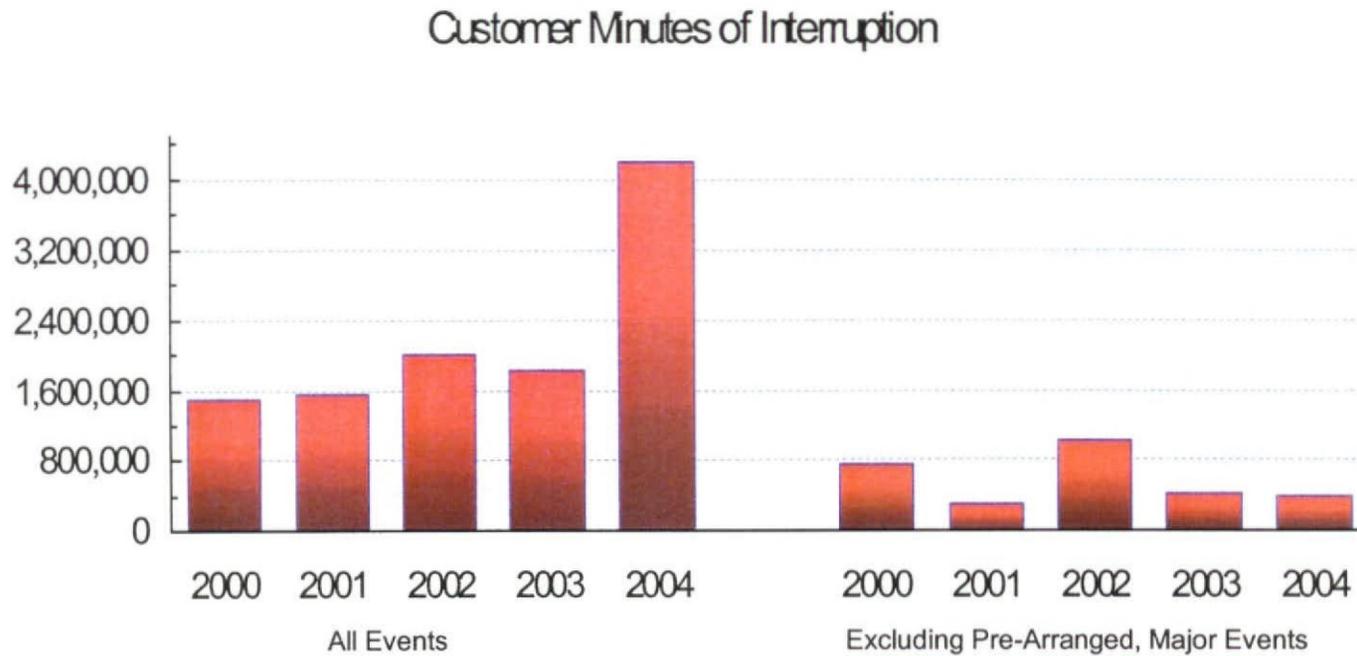


Figure 2

Performance Trends



The data excludes Partial Powers

Figure 3

Causes of Interruptions

Causes of interruptions

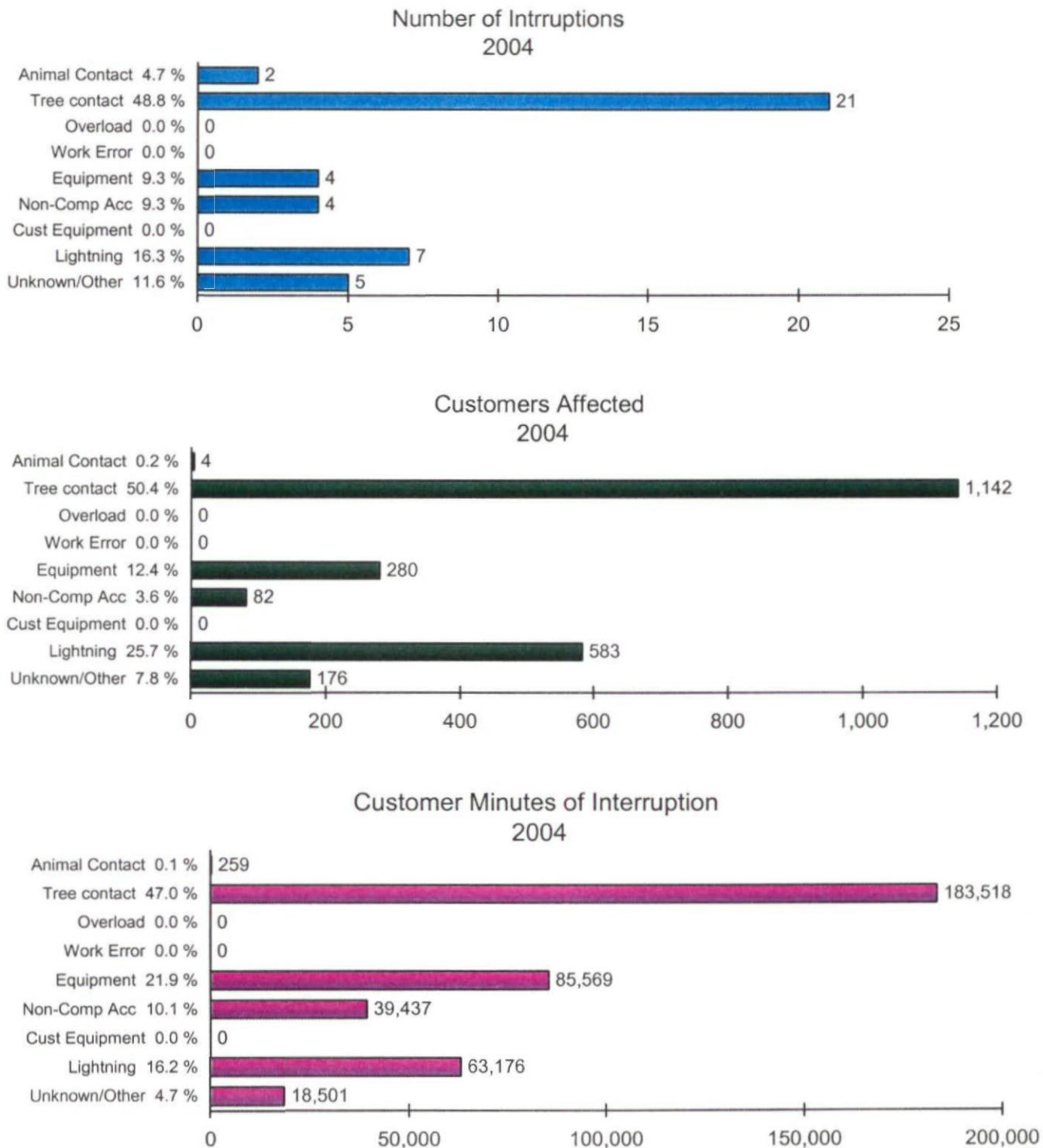
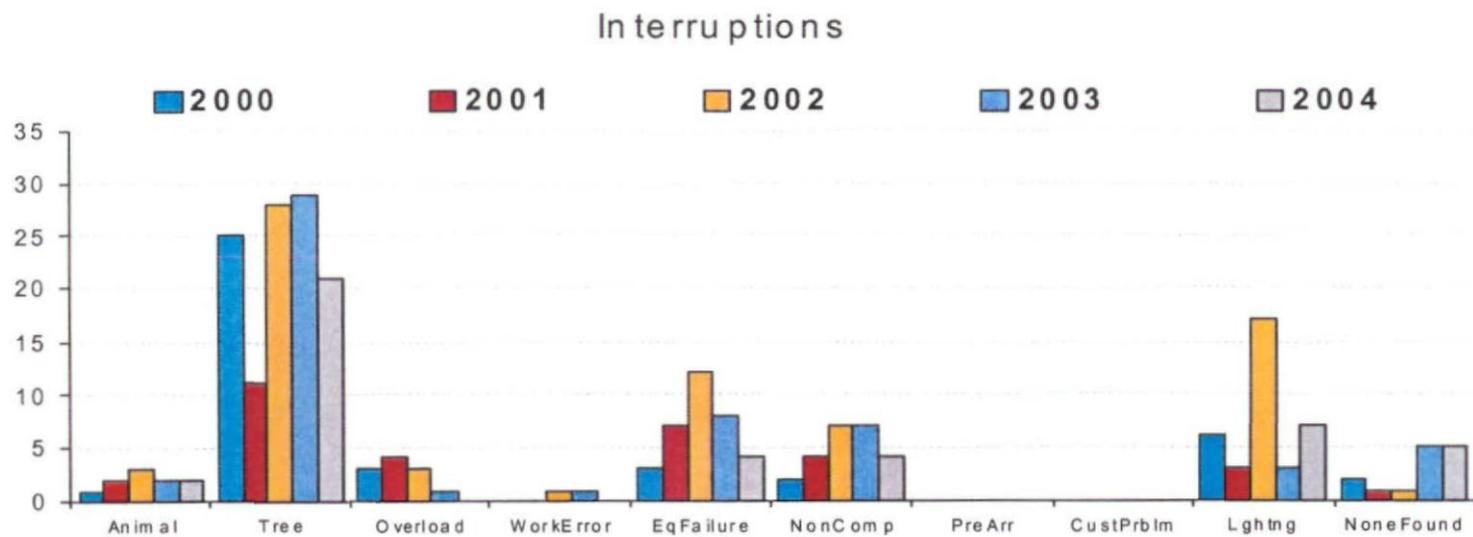


Figure 4

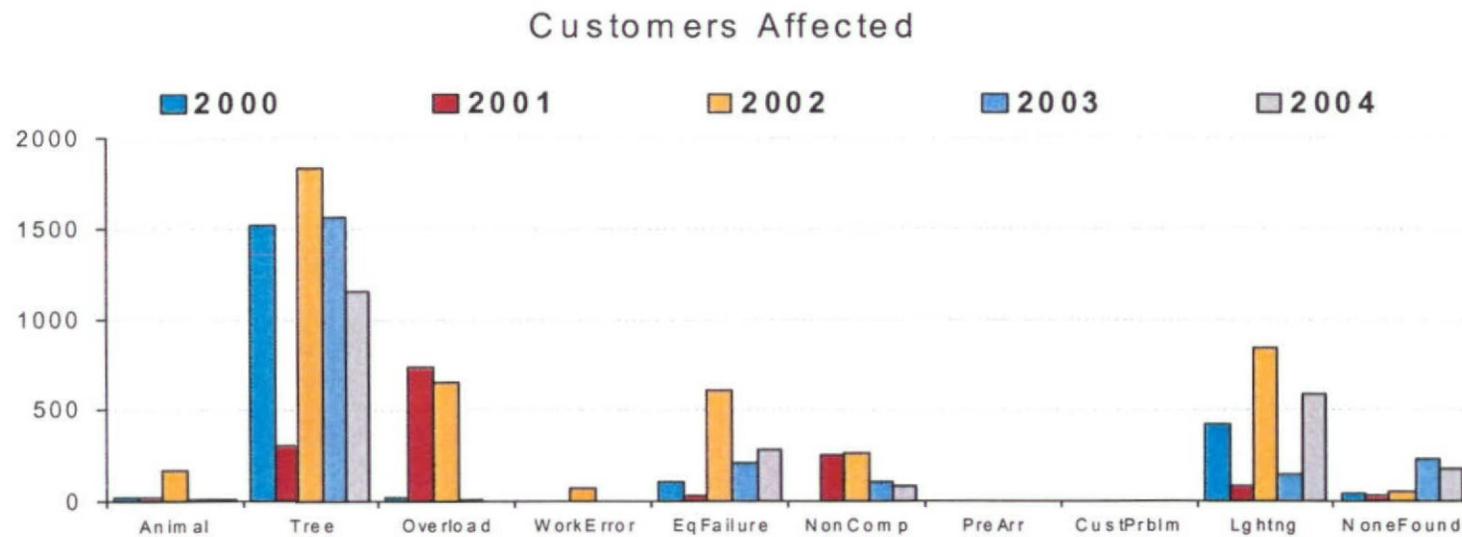
Causes of Interruptions



The data excludes Partial Powers, Pre-arranged Outages, and Major Events.

Figure 5

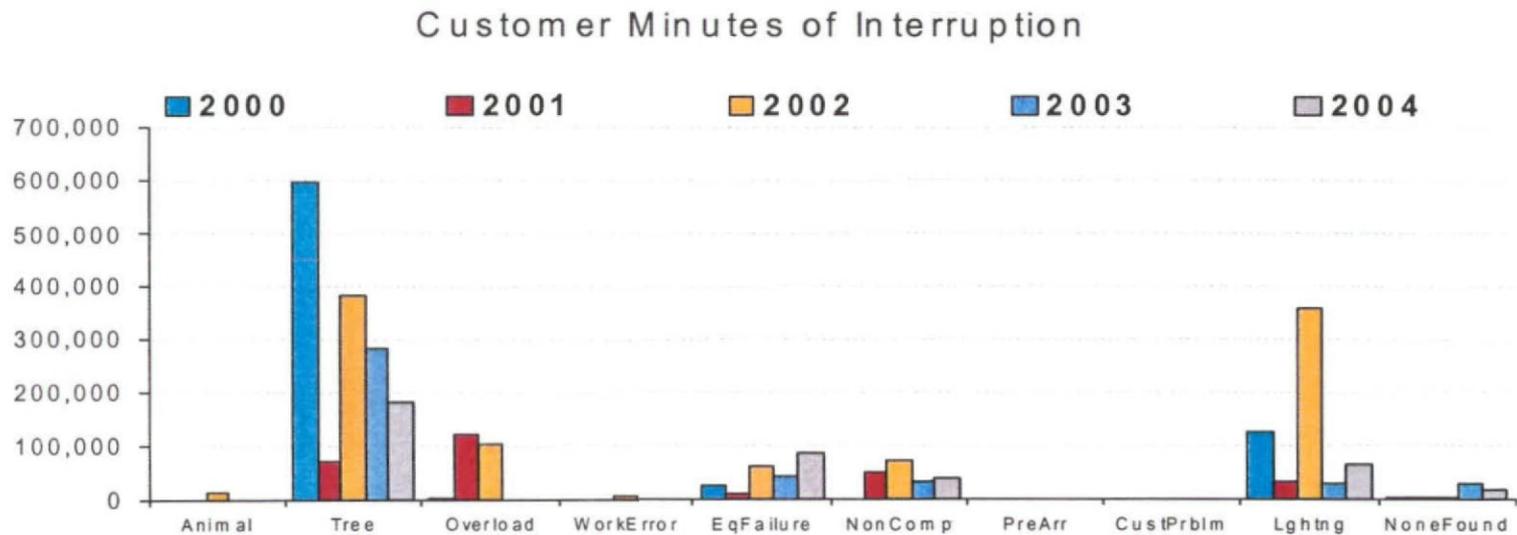
Causes of Interruptions



The data excludes Partial Powers, Pre-arranged Outages, and Major Events.

Figure 6

Causes of Interruptions



The data excludes Partial Powers, Pre-arranged Outages, and Major Events.

Figure 7

**T/D
Inspection/Maintenance
Goals/Objectives**

**T/D
Inspection/Maintenance
Goals/Objectives**

Goals/Objectives vs. Results

Distribution goals and objectives focused on completing all required preventive maintenance, distribution system improvement, and new construction requirements, while meeting established SAIDI, CAIDI, and SAIFI objectives. These goals were met. Pike has no transmission.

**T/D
Capital,
Operation and Maintenance
Expenses**

**T/D
Operation and Maintenance
Expenses**

O&M	Budget \$ 2004	Actual \$ 2004
Total Distribution	572.5	542.8

**T/D
Capital Expenditures**

Capital	Budget \$ 2004	Actual \$ 2004
Electric Distribution Blankets - PA	210.6	248.0
Electric Meter Purchases - PA	46.8	13.8
Cummings Hill Road Conversion - Milford	139.4	210.3
Matamoros Substation	51.7	78.4
Total Distribution	448.5	550.5

**T/D
Inspection and Maintenance
Goals/Objectives
Quantified**

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
- Distribution Line Maintenance
- Infrared Inspection Program
- Underground Cable Rehabilitation and Rebuild Program
- Power Quality
- Mid-point Recloser / Sectionalizing Program

A description and summary of the above mentioned service reliability maintenance and circuit improvement programs are found on the following pages. Presently there are no transmission facilities in Pike County Light & Power Company.

DISTRIBUTION TREE TRIMMING

The distribution tree-trimming program is a vegetation clearance and control methodology based upon a four-year cycle. The circuits to be trimmed each year are selected based upon the actual circuit performance with respect to the tree caused outages and the normal cycle. A computer database, driven by the tree caused outage analysis system, is utilized to prioritize the circuits based on performance. In 2003, the first year of the fourth cycle was started. A recurring tree caused outage program remained in place to identify outage types and locations on a circuit. Two enhancements to the program continued to be implemented. First, a "cycle buster" trimming program was implemented which included a survey to identify potential outages on circuits not scheduled for trimming that year. Second, an outage study and database was utilized to identify the causes and types of tree related outages.

In 2004, all tree outage data continued to be categorized and analyzed for trends related to weather, storms, and clear day outages. This analysis will continue to provide more focused attention on the type of trimming required.

The tree trimming records are maintained for each circuit trimmed, with completion dates and mileage trimmed. Audits are performed on the circuits as the trimming proceeds, to insure that the quality of work and line clearance specifications is being maintained. Audits are also performed on the contractors performing the work.

DISTRIBUTION LINE MAINTENANCE

CAPACITOR MAINTENANCE PROGRAM

All switched capacitor banks are inspected in accordance with the Capacitor Maintenance procedure. Maintenance schedules have been set by the divisions and are tailored to best meet the divisions needs. All deficiencies found as a result of this program are repaired prior to the system peak.

REGULATOR MAINTENANCE PROGRAM

Regulator inspections and functional tests are performed annually in accordance with the Regulator Maintenance Procedure. All deficiencies are corrected prior to the system peak.

RECLOSER SECTIONALIZER MAINTENANCE PROGRAM

Recloser/Sectionalizer inspections and functional tests are performed in accordance with the Recloser/Sectionalizer Maintenance Procedure. A visual inspection is performed annually and a functional test of all line units is performed every third year.

Each Operating Division keeps hard copy maintenance and performance records for the Capacitor, Regulator, and Recloser/Sectionalizer programs. The records kept are for this years and last year's performance and maintenance. Any jobs to repair or replace this type of equipment is detailed and maintained on the work management system.

INFRARED THERMAL INSPECTION PROGRAM

This program is administered annually on all three-phase overhead facilities, and on a three-year cycle for all single-phase overhead facilities. All underground subdivisions operating at 34.5KV are inspected annually. Necessary repairs are prioritized by temperature rise and completed in accordance with the time frame established in the priority rating system.

UNDERGROUND CABLE REHABILITATION AND REBUILD PROGRAM

All underground system outage statistics are analyzed on an individual subdivision basis and a priority listing developed. From this listing it is determined if the cable is to be rehabilitated or rebuilt. Where multiple cable failures have occurred on the same cable section, cables are replaced with EPR insulated cable. Where a subdivision or section thereof shows a high frequency of failure, a decision is made to either rebuild or rehabilitate the cable. If cable rehabilitation is chosen, this is accomplished by injecting silicone fluid into the interstices of the cable, which impregnates the insulation and fills the voids. This process restores the dielectric properties of the deteriorated cable.

Developments that are serviced by underground facilities are selected for cable rehabilitation based upon the following criteria:

1. Is not a three-phase system with three-phase dependent loads.
2. The U/G facilities incorporate a loop-feed scheme.
3. The cable is rated 15 kV.
4. The cable is either 175 mil. or 220 mil., HMWPE or XLPE insulated.

Since there may not be enough underground developments that fit the rehabilitation criteria and have experienced outages due to cable failure, the cable rehabilitation program is implemented as both a reactive and proactive measure to increase customer reliability. Developments that have experienced cable failure(s) are given higher priority list rankings. The higher the priority ranking, the more likely it will be rebuilt instead of rehabilitated.

Developments that are serviced by underground facilities are selected for cable replacement based upon their frequency of cable failures, and either do not fit the criteria for rehabilitation or have been unsuccessfully rehabilitated. Outage statistics are used as an initial guide in identifying underground developments that experience frequent outages. From this selection process, further outage analysis is required to isolate outages that occur only as a result cable failure. A priority list is then constructed, which ranks URD developments according to outage frequency, customers affected, and load.

The scope of work and completion records for all of the underground cable rehabilitation and rebuild projects is maintained on the work management system. The Underground Operating Department also maintains hard copy records of this program.

Power Quality

POWER QUALITY SUMMARY

In 2004, Orange & Rockland continued its Power Quality Initiative to help C&I customers better understand and manage energy usage. A number of services were available to customers, including:

- Monitoring of customer facilities including equipment placement, data collection and interpretation. Expanded service to include monthly reporting was continued in 2004.
- Full site analysis yielding comprehensive protective measures and recommendations.

Additionally, Company engineers completed power quality training courses and seminars to provide better information and review of customer or system problems upon initial and immediate contact with the customer. This serves to provide quicker attention and improved customer service to those customers that may have these types of problems that need a more detailed investigation.

Power Quality Training and Seminars

In 2004, O&R sent a representative to the EPRI PQA 2004 conference. This is EPRI's annual meeting to discuss all aspects of Power Quality. The meeting consisted of tutorials, manufacturer plant tours, exhibits, presentations and technical sessions. Participation in this seminar demonstrates the Company's interest in obtaining the most from its R&D investment in this area, allows the company to see its R&D dollars at work, and keeps the company abreast of any R&D opportunities available.

O&R sent a representative to the Power Systems World Conference. The conference is similar to the EPRI meeting. The main difference is that the EPRI conference concentrates on PQ from the utility view while the Power Systems World conference is more from the customer perspective. We feel this combination gives a broader view of PQ issues.

O&R sent three engineers to a course on "Improving Distribution System Reliability and Power Quality" hosted by EPRI PEAC. The course focused on design and protection methods that can be employed on a distribution system to improve reliability, reduce power quality problems and subsequently reduce customer complaints.

MIDPOINT RECLOSER/SECTIONALIZER PROGRAM

The mid-point sectionalizing program has been implemented since 1988. The program was initiated to reduce the number of customers affected by each interruption. In addition, microprocessor controls provide information to aid in analysis of events on the system. The mid-point reclosers reduce the number of customers affected by a mainline interruption, improve restoration time, and improve circuit reliability. The variables used to prioritize new installations include, number of customers per circuit, circuit length and potential exposure, and circuit performance history. To date, there are 147 devices installed on the O&R 13.2KV and 34.5KV distribution system, 2 of which are in Pike County.

**T/D
Capital,
Operation and Maintenance
Expenses
by
FERC Account**

**T/D Operation and Maintenance
Expenses By FERC Account**

	Budget \$ 2005
580000	29.0
581000	4.2
582000	3.4
583000	29.7
584000	(0.3)
586000	40.8
587000	0.8
588000	29.9
589000	0.8
593000	69.5
596000	4.6
597000	3.8
599000	90.0
Total Distribution	306.2

**T/D Capital Expenditures
By FERC Account**

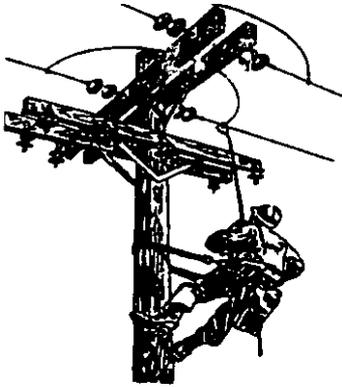
Capital	Budget \$ 2005
Electric Distribution Blankets - New Business	141.6
Electric Distribution Blankets – System Integrity	138.5
Electric Meter Purchases / Installs	71.3
Pike Total 2005 Capital Budget	351.4

**T/D
Inspection and Maintenance
Programs
Significant Changes**

**T/D
Inspection and Maintenance
Programs
Significant Changes**

Inspection & Maintenance Changes

No significant changes



CITIZENS' ELECTRIC COMPANY

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

April 28, 2005

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APR 29 2005

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

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

L-00030161

Dear Secretary McNulty,

Enclosed please find an original and six copies of the 2004 Annual Reliability Report for Citizens' Electric Company.

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

Sincerely,

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

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

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Citizens' Electric Company
Annual Electric Service Reliability Report
2004

Prepared by John A. Kelchner, PE
Sr. Director of Engineering & Operations
570-522-6143

kelchnerj@citizenselectric.com

04/28/2005

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§ 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.

This year, we experienced a fairly typical range of weather conditions. This was a welcome change from the relentless storms and severe weather of 2003. As a result of the more typical weather patterns, our system reliability statistics improved from the prior year. This improvement can also be attributed to some minor enhancements to an already aggressive inspection program conducted throughout the year. Our linemen have been trained to look for problems as they travel throughout our system performing their daily work and as a result, are able to detect problems before outages occur.

In addition to the many inspection and maintenance programs listed below, we are employing technology wherever possible to help us maintain reliability and enhance customer service. As an example, we are continuing the implementation of an Automated Mapping/Facilities Management System. 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.

To help us receive and process customer outage calls more efficiently, we implemented an Interactive Voice Response (IVR) system early this year. This system helps our call center handle overflow calls during times of high call volume, allowing us to more quickly process outage calls from customers. Processing a higher volume of calls helps prevent busy signals and helps us gather valuable outage information more quickly.

Presently, we are deploying an Automatic Meter Reading (AMR) system across our service territory. In addition to the meter reading functionality, this system will enable us to verify line outages and perform quicker assessments of overall system condition during a major event. We expect to use this information to help reduce restoration times and improve dispatch efficiency. Additionally, a significant part of the labor we previously expended reading meters will be redirected to maintenance and inspection activities to ensure continued levels of reliability.

We will continue to refine our maintenance programs to address the issues we believe to be important to sustain long-term reliability and customer satisfaction. Our current maintenance programs are summarized on the following page. Citizens' Electric does not own or maintain any transmission facilities.

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Page 1 of 7

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SECRETARY'S BUREAU

Current Maintenance Programs

Program	Description	Cycle
Infrared Inspection	All substation equipment annually, and 1/3 of all overhead lines	3 years
Vegetation Management	Trees are trimmed throughout our entire distribution system as required.	Annual
Visual Line Inspection	All distribution lines and pole hardware are visually inspected during preparation of tree trimming contract.	Annual
Padmount Equipment Inspection	Padmounted equipment is visually inspected to identify and correct any developing problems or safety concerns.	4 Years
3Ø 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 groundline. 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.	Monthly
Recloser Maintenance	Change oil, check and adjust mechanism, check contacts, test operation.	Manufacturer's Recommendations

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SECRETARY'S BUREAU

§ 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.

Date	Time	Duration (Minutes)	Customers Affected	Cause
2/21/04	15:06	344	6,533	Insulator failure on PPL double-circuit transmission line feeding Citizens' substation.
5/2/04	18:06	55	1,100	Off r/w tree.
6/13/04	16:53	40	1,140	Off r/w tree.
7/8/04	15:50	15	1,140	Customer was attempting to remove limb from off r/w tree that had fallen on telephone line. While pulling on the limb, customer caused pole movement which caused phase wires to contact, causing a lockout at station recloser.
9/9/04	1:25	105	1,100	Equipment failure – suspension insulator

We also experienced an outage affecting more than 10% of our customers on 4/26/04. Exclusion of this outage, caused by equipment failure, was denied and is currently under appeal. The outage was included in all reliability index calculations throughout this report.

Following the transmission outage on 2/21, we expressed concerns to PPL regarding the criticality of the double-circuit transmission lines feeding our substation. They performed additional patrols and maintenance work on the affected circuits to address our concerns.

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

Year	SAIFI	SAIDI	CAIDI	Avg # of Customers Served	# of Interruptions	# of Customers Interrupted	Customer Interruption Minutes
2004	0.39	25	64	6,533	43	2,528	160,675
2003	0.42	30	72	6,447	43	2,685	194,562
2002	0.17	13	78	6,614	44	1,120	86,810
Benchmark	0.21	21	105				
Standard	0.27	33	141				

§ 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 identified service problems shall be reported.

Outage Cause	Number of Interruptions	% of Interruptions	Number of Customers Affected	Customer Minutes
Trees (On r/w)	0	0	0	0
Trees (Off r/w)	4	9	27	3,337
Animals	10	23	163	8,390
Equipment	19	44	1,705	102,248
Weather	7	16	193	22,720
Vehicle	2	5	430	23,650
Other	1	2	10	330
Total	43	100	2,528	160,675

The most frequent outage cause was equipment failure. Excluding the one large event under appeal, the remaining equipment outages generally each affected a small number of customers. When the trend of equipment failures became apparent early in the year, our employees were instructed to more closely scrutinize certain types of equipment (cutouts & arrestors) as they performed their daily assignments. As a result of this enhanced scrutiny, several devices on the verge of failure were discovered. This equipment was promptly replaced and service outages were avoided. During the latter part of the year, the number of equipment failures dramatically declined. It is hoped this indicates that much of the failure prone equipment has been identified and replaced.

§ 57.195(b)(6) 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.

Program	Goal	Completed	Comment
Infrared Inspection	Substation and 1/3 of all overhead lines	100%	
Vegetation Management	Entire System (9 circuits), as needed	100%	
Visual Line Inspection	Entire System (9 circuits)	100%	
Padmount Equipment Inspection	119 Locations	536%	Inspected additional locations to complete backlog from 2003.
3Ø Padmount Transformer Oil Test	27 Transformers	100%	
Line Equipment Inspection	247 locations	100%	
Pole Inspection and Treatment	530	100%	
Danger and Reject Pole Replacement	3	100%	1 Danger and 2 Reject poles were identified and replaced this year.
Substation Equipment Inspection	12 Monthly Inspections	100%	
Recloser Maintenance	3	3	Reclosers inspected, replaced bad arrestors

§ 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.

Program	Budget \$	Actual \$	Comment
Infrared Inspection	N/A	\$2,252	Not budgeted individually. 100% completed.
Vegetation Management	\$64,000	\$55,448.13	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 2004.
Visual Line Inspection	N/A	\$2,051	Not budgeted individually. 100% completed.
Padmount Equipment Inspection	N/A	\$2,255	Not budgeted individually. 536% completed.
3Ø Padmount Transformer Oil Test	N/A	\$1,470	Not budgeted individually. 100% Completed.
Line Equipment Inspection	N/A	\$5,332	Not budgeted individually. 100% completed.
Pole Inspection and Treatment	\$15,300	\$14,524	560 Poles completed (112% of poles planned)
Danger and Reject Pole Replacement	N/A	\$4,688	Not budgeted individually. (Projects 06-C-01-04, 05-C-02-04)
Substation Equipment Inspection	N/A	\$3,547	Not budgeted individually. 100% completed.
Recloser Maintenance	N/A	\$570	Not budgeted individually.

§ 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.

Project	Budget Amount	Actual Expenditures	Variance
Project 02-C-08-04 - Upgrade Hospital Line – Phase 1 – Airport Road	\$90,000	\$93,854	4.3%
Project 06-C-08-04 - Upgrade Hospital Line – Phase 2 – River Road	\$30,400	\$29,510	-2.9%

§ 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 Inspection	119 Locations
3Ø Padmount Transformer Oil Test	28 Transformers
Line Equipment Inspection	250 Locations
Pole Inspection and Treatment	487 poles
Danger and Reject Poles	To be determined from pole inspections
Substation Equipment Inspection	12 Monthly Inspections
Recloser Maintenance	To be determined from counter readings.

§ 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.

(These items are not budgeted by FERC account.)

Program	Budget \$	Comment
Infrared Inspection	N/A	Not budgeted individually
Vegetation Management	\$69,000	
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	\$14,700	
Danger and Reject Poles	\$30,000 (estimated)	Not budgeted Individually
Substation Equipment Inspection	N/A	Not budgeted individually
Recloser Maintenance	N/A	Not budgeted individually

§ 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.

(These items are not budgeted by FERC account.)

Project	Budget Amount
Upgrade Hospital Line – Phase 1 – Airport Road	\$30,000
Reconductor Bucknell Fraternity Road (contingent upon final campus layout from Bucknell)	\$69,400
Install Capacitor on Quarry Line	\$13,020

While we do not individually budget for miscellaneous maintenance projects, we expanded our processes to capture inspection and maintenance expenditures in greater detail in 2004. We remain committed to customer service, reliability, and safety as our top priorities for the year ahead, and beyond.

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

No significant changes.



Orange & Rockland
a conEdison, inc. company
(845) 577-3341

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

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April 28, 2005

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

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PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

Re: First 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 First 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"), and as per your letter dated September 8, 2003, clarifying the quarterly reporting requirement timeframes as set forth in Annex A at Section 57.195(d) of the 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 T. Garvin
Manager
Performance & Operational Engineering
Pike County Light and Power
(Orange and Rockland Utilities, Inc.)

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cc: Office of Consumer Advocate
Office of Small Business Advocate

Enclosures

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

Quarterly Reliability Report

**First Quarter
2005**

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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.

**1st Quarter 2005
Major Events**

<u>Date</u>	<u>Time</u>	<u>Circuit</u>	<u>Cause</u>	<u>Duration</u>	<u>Customers Affected</u>	<u>Cust Min of Interruption</u>
*01/12/2005	11:06	L7-6-34	Storm	Various	468	52,272
03/24/2005	01:32	5-10-34 & L 7-6	Storm	Various	4,212	1,067,666

*Request for Exclusion Submitted.

**1st Quarter 2005
Pre-Arranged Outages**

<u>Date</u>	<u>Time</u>	<u>Circuit</u>	<u>Cause</u>	<u>Duration</u>	<u>Customers Affected</u>	<u>Cust Min of Interruption</u>
02/10/05	10:00	5-10-34	Pre-Arranged	Various	58	5,312
02/15/05	10:00	L7-6-34	Pre-Arranged	234 minutes	73	17,082

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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.

**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 Interruption Rolling 12 Mth
2004	2 nd Qtr	4351.2	53	2,059	355,415
2004	3 rd Qtr	4351.3	41	2,292	396,597
2004	4 th Qtr	4350.5	43	2,267	390,469
*2005	1 st Qtr	4355.8	53	3,084	492,131

*Includes data that has been requested to be excluded for 1st Quarter 2005. If data is excluded, the Interruption data will be reported as:

2005	1 st Qtr	4355.8	51	2,616	439,859
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§ 57.195. (e)(2) continued

**Performance Ratios
Rolling 12-Month Data**

	Frequency SAIFI	Restoration CAIDI (Min)	Duration SAIDI (Min)
Benchmark	0.39	178	69
Rolling 12 Mth Standard	0.53	240	127

Year	Qtr	Frequency SAIFI Rolling 12 Mth	Restoration CAIDI Rolling 12 Mth	Duration SAIDI Rolling 12 Mth
2004	2 nd Qtr	0.47	173	82
2004	3 rd Qtr	0.53	173	91
2004	4 th Qtr	0.52	172	90
*2005	1 st Qtr	0.71	160	113

*Includes data that has been requested to be excluded for 1st Quarter 2005. If data is excluded, the Performance Ratios would be reported as:

2005	1 st Qtr	0.60	168	101
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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 2005
Cause Analysis
Rolling 12 Months data
*Excludes Storms, Major Events, Pre-Arranged**

Cause	Number of Interr	Number of Interr	Customers Affected	Customers Affected	Customer Minutes of Interr	Customer Minutes of Interr
	Rolling 12 Mth	Rolling 12 Mth (%)	Rolling 12 Mth	Rolling 12 Mth (%)	Rolling 12 Mth	Rolling 12 Mth (%)
Animal Contact	2	3.8%	4	0.1%	259	0.1%
Tree contact	26	49.1%	1457	47.2%	226,300	46.0%
Overload	0	0.0%	0	0.0%	0	0.0%
Work Error	1	1.9%	73	2.4%	3,066	0.6%
Equipment	5	9.4%	282	9.1%	86,059	17.5%
Non-Comp Acc	7	13.2%	294	9.5%	79,243	16.1%
Cust Equipment	0	0.0%	0	0.0%	0	0.0%
Lightning	7	13.2%	583	18.9%	63176	12.8%
Unknown/Other	5	9.4%	391	12.7%	34,028	6.9%
All Causes	53	100.0%	3,084	100.0%	492,131	100.00%

*Includes data that has been requested to be excluded for 1st Quarter 2005. If data is excluded, the Performance Ratios would be reported as shown on the next page.

Pike County Light & Power Company – Quarterly Reliability Report – First Quarter 2005

**First Quarter 2005
Cause Analysis
Rolling 12 Months data
Excludes Storms, Major Events, Pre-Arranged

Cause	Number of Interr	Number of Interr	Customers Affected	Customers Affected	Customer Minutes of Interr	Customer Minutes of Interr
	Rolling 12 Mth	Rolling 12 Mth (%)	Rolling 12 Mth	Rolling 12 Mth (%)	Rolling 12 Mth	Rolling 12 Mth (%)
Animal Contact	2	3.9%	4	0.2%	259	0.1%
Tree contact	25	49.0%	1223	46.8%	190,876	43.4%
Overload	0	0.0%	0	0.0%	-	0.0%
Work Error	1	2.0%	73	2.8%	3,066	0.7%
Equipment	5	9.8%	282	10.8%	86,059	19.6%
Non-Comp Acc	7	13.7%	294	11.2%	79,243	18.0%
Cust Equipment	0	0.0%	0	0.0%	-	0.0%
Lightning	7	13.7%	583	22.3%	63,176	14.4%
Unknown/Other	4	7.8%	157	6.0%	17,180	3.9%
All Causes	51	100.0%	2,616	100.0%	439,859	100.00%

**Removes data that has been requested to be excluded, but not yet approved for exclusion by the PUC.



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April 29, 2005

VIA FEDERAL EXPRESS

DOCUMENT
FOLDER

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

A-00030161

**Re: 2004 Annual Reliability Report and
First Quarter 2005 Reliability Report of Allegheny Power**

Dear Secretary McNulty:

Enclosed please find an original and six (6) copies of the 2004 Annual Reliability Report and an original and six (6) copies of the First Quarter 2005 Reliability Report of Allegheny Power. These reports are filed by Federal Express and are deemed filed today, April 29, 2005. Copies have been served on the Office of Consumer Advocate and the Office of Small Business Advocate.

Very truly yours,

John L. Munsch
John L. Munsch
Attorney

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

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**Allegheny Power
Quarterly Report for First Quarter 2005
52 Pa. Code Section 57.192 Reporting Requirements**

**DOCUMENT
FOLDER**

This quarterly report is being submitted according to the proposed format contained in Docket No. L-00030161. The following report provides available information in the proposed format with the understanding that reporting requirements may change.

1. Description of major events during the preceding quarter.
 - a. The following Major Events occurred during the first quarter of 2005. Note that these events are excluded based upon the proposed service-area-wide definition.
 - b. Major events occurred on the following dates. A description of the events is attached as Appendix V in form of final 'Distribution System Outage Reports' reports as previously issued to the Commission.
 - 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 a minor event ('RS Event') in first quarter 2005 characterized by having received a severe weather alert accompanied by at least 5,000 Allegheny Power customers interrupted. The following event occurred in the State College/St. Mary's Service Centers:

1/5 - 10 PA Customers interrupted = 16,735 CMI = 14,673,528

2. Rolling 12-month reliability index values (SAIDI, CAIDI, SAIFI, and, if available, MAIFI) for the electric distribution company's service territory for the preceding quarter.
 - a. The following table provides Pennsylvania's 12-month ending reliability statistics for month ending March 2005.
 - b. 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.

Zone	Incidents	Interrupted Customers	Avg Cust Served	kVA	Calls	CMI	SAIDI	ASAI	CAIDI	SAIFI
Pennsylvania	16,016	786,128	689,409	7,797,394.0	117,168	155,840,060	226	0.999570	198	1.14

3. Rolling 12-month reliability index values for worst performing 5% of the circuits in the system.

DOCKETED
AUG 12 2005

- a. This report provides a listing of all Pennsylvania circuits ranking in the 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.
 - b. 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 IV).
4. Specific remedial efforts taken and planned for the 5% worst performing circuits.
- 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 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.
 - b. In addition to the above-mentioned process, poor performing circuits are ranked by DCII. 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 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.
5. A breakdown and analysis of outage causes during the preceding quarter.
- 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-equipment-related 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	Customers Interrupted 12 Month ending March 05		Customers Minutes Interrupted 12 Month ending March 05	
	Number	Percent	Number	Percent
Animals	32,142	4.1%	4,366,125	2.8%
Overhead Equipment Failure				
Overhead Line Equipment	27,419	3.5%	4,503,872	2.9%
Overhead Line Material	89,764	11.4%	12,207,092	7.8%
Overhead Wire	46,459	5.9%	7,581,157	4.9%
Underground Equipment				
Underground Line Material	2,583	0.3%	320,546	0.2%
Underground Line Equipment	2,094	0.3%	444,854	0.3%
Underground Cable	14,435	1.8%	3,923,780	2.5%
Service Equipment	60	0.0%	21,840	0.0%
Substation Equipment	27,251	3.5%	3,697,860	2.4%
Other	18,986	2.4%	1,575,253	1.0%
Public/Customer	131,677	16.8%	23,335,473	15.0%
Trees				
On Right of Way	4,175	0.5%	986,590	0.6%
Off Right of Way	209,430	26.6%	55,713,926	36.8%
Unknown	69,939	8.9%	9,671,086	6.2%
Weather	109,714	14.0%	27,490,595	17.6%
Total	786,128	100%	155,840,049	100%

6. Quarterly and year-to-date information on progress toward meeting transmission and distribution inspection and maintenance goals/objectives.
 - a. A report attached as Appendix II provides a listing of updates to the planned Ensure Reliable Service work for 2005.
 - 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.

7. Quarterly and year-to-date information on budgeted versus actual transmission and distribution operation and maintenance expenditures.

Category	2005 Budget (\$1,000)	2005 Actual (\$1,000)
Distribution DEPT	-60.03	0.76
Distribution Support DEPT	883.45	791.66
Field Operations DEPT	4,556.15	5,054.38
Forestry DEPT	3,701.49	2,423.30
Transportation DEPT	1.65	16.59
Distribution Subtotal	9,082.70	8,286.70
System Planning DEPT	182.66	214.55
Substations DEPT	1,603.38	1,745.33
System Operations DEPT	1,261.48	1,161.93
Technical Services DEPT	702.57	788.99
Transmission Other DEPT	74.50	-67.83
Transmission Engineering	690.12	569.72
Transmission Projects DEPT	72.26	152.98
Transmission Subtotal	4,586.97	4,565.66
Total T&D O&M	13,669.67	12,852.35

8. Quarterly and year-to-date information on budgeted versus actual transmission and distribution capital expenditures.

Equipment Category	Q1 Budget	Q1 Actual
Distribution Lines	\$ 9,585	\$ 10,943
Distribution Substation	\$ 976	\$ 1,680
EHV Lines	\$ -	\$ -
EHV Substation	\$ -	\$ 27
General Plant	\$ 1,700	\$ 1,084
Sub-transmission Line	\$ 157	\$ 168
Subtotal Distribution	\$ 12,417	\$ 13,902
Transmission Substation	\$ 976	\$ 660
Transmission Line	\$ 505	\$ 738
Subtotal Transmission	\$ 1,480	\$ 1,398
Total T&D	\$ 13,897	\$ 15,300

9. Dedicated staffing levels for transmission and distribution operation and maintenance at the end of the quarter, in total and by specific category.

- a. Staffing levels for the first quarter of 2005 follows:

Position Name	Count
Lead Lineman	115
Lineman A	68
Lineman Apprentice	1
Lineman B	3
Lineman C	1
SS Crew Leader Construction	1
SS Crew Leader Maintenance	14
SS Electrician A	34
SS Electrician Apprentice	11
SS Electrician B	3
SS Electrician C	1
Serviceman A	92
Serviceman Apprentice	9
Serviceman B	3
Utilityman A	7
Utilityman B	2
Total	365

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
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Appendix I – Distribution Circuit Ranking Remedial Actions

<u>ICName</u>	<u>SSName</u>	<u>CktName</u>	<u>2004 RIPInit</u>	<u>2005 RIPInit</u>	<u>Actions Taken or Planned</u>	<u>Status</u>
d	MATEER	DIME RD	63	-	Trees trimmed and sectionalizers added in 2004.	Installation complete. Monitor results.
d	MATEER	SOUTH BEND	24	-	Trees trimmed and sectionalizers added in 2004.	Installation complete. Monitor results.
d	MURRYSVILLE	RUBRIGHT	-	16	Sectionalizers planned for addition in 2005.	Plan work.
d	MURRYSVILLE	WALLACE LANE	-	12	Sectionalizers planned for addition in 2005.	Plan work.
d	TUNNELTON	TUNNELTON_DIST	-	-	Fuse added to tap to isolate customer-caused outages.	Monitor results.
.	BRANCHTON	FORESTVILLE	-	55	Sectionalizers planned for addition in 2005. Tree trimming planned in 2005.	Plan work.
.	BUTLER	CENTER AVE	43	-	Trees trimmed and sectionalizers added in 2004.	Installation complete. Monitor results.
.	HERMAN	HERMAN	50	-	Trees trimmed and sectionalizers added in 2004.	Installation complete. Monitor results.
.	HILLIARDS	HILLIARDS	-	43	Sectionalizers planned for addition in 2005.	Plan work.
.	PARKER	PARKER	-	43	Sectionalizers planned for addition in 2005.	Plan work.
.	SAXONBURG	BUTLER RD	-	22	Sectionalizers planned for addition in 2005.	Plan work.
.	SHERWIN	WEST SUNBURY	-	-	Inspect line. Complete any noted work by 12/1/05.	Plan work.
3roi	CHARLEROI	N. CHARLEROI	21	-	Sectionalizers added in 2004. Tree trimming planned for 2005.	Installation complete. Monitor results.
3roi	SMITHTON	HUTCHINSON	22	-	Sectionalizers added in 2004. Tree trimming planned for 2005.	Installation complete. Monitor results.
3roi	WESTRAVER	WEST NEWTON	21	-	Sectionalizers added in 2004. Tree trimming planned for 2005.	Installation complete. Monitor results.
n	NEW BETHLEHEM	CLIMAX	32	-	Trees trimmed and sectionalizers added in 2004.	Installation complete. Monitor results.
n	SLIGO	REIDSBURG	-	45	Sectionalizers and tree trimming planned for addition in 2005.	Plan work.
n	SLIGO	SLIGO	-	-	Install automated 25kV transfer switch at substation by 12/1/05. Tree trimming planned in 2006.	Plan work.
n	WIDNOON	TIDAL	-	7	Sectionalizers and tree trimming planned for addition in 2005.	Plan work.
ette	HUNTINGDON	SCOTCH HILL	-	7	Sectionalizers planned for addition in 2005. Tree trimming planned in 2006.	Plan work.
ette	LEVELGREEN	COWTOWN	-	17	Trees trimmed in 2004. Sectionalizers planned for 2005.	Plan work.
ette	MURRYCREST	SARDIS ROAD	-	4	Trees trimmed in 2004. Sectionalizers planned for 2005.	Plan work.
ette	ROBBINS	BRADDOCKS TRAIL	5	-	Sectionalizers added in 2004. Plan for a portion of underground replacement. Trim trees in 2006.	Installation complete. Monitor results.
ette	WHITE VALLEY	BORLANDS RD	4	-	Sectionalizers added in 2004. Tie point added to another circuit to pick up customers during outages.	Installation complete. Monitor results.
son	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.
son	FRANKLIN	ROGERSVILLE	-	14	Sectionalizers planned for addition in 2005. Tree trimming planned in 2005.	Plan work.
son	MARIANNA	TEN MILE	-	12	Sectionalizers planned for addition in 2005.	Plan work.
son	RUTAN	BRISTORIA	19	-	Sectionalizers added in 2004. Trees trimmed in 2004.	Installation complete. Monitor results.
ining	TROY HILL	IRON BRIDGE	11	-	Sectionalizers added in 2004.	Installation complete. Monitor results.
je	STAHLSTOWN	STAHLSTOWN	2	-	Sectionalizers added in 2004.	Installation complete. Monitor results.
nnellsburg	WARFORDSBURG	BUCK VALLEY	-	3	Sectionalizers planned for addition in 2005.	Plan work.
nnellsburg	WHITETAIL	RESORT	-	-	Repairs made for conductor slap problem. Tree trimming planned in 2006.	Work complete. Circuit now off 5% list.
mald	PARIS	PARIS	10	-	Sectionalizers added in 2004.	Installation complete. Monitor results.
mald	SMITH	FLORENCE	-	22	Sectionalizers planned for addition in 2005.	Plan work.
College	WATERVILLE	WATERVILLE	-	3	Sectionalizers planned for addition in 2005.	Plan work.
town	LAKE LYNN	FANCY HILL	-	Yes	Reliability initiatives and RIPInit planned for 2005 - device count not known yet. Tree trimming in 2006.	Plan initiatives and work.
town	MERRITTSTOWN	REPUBLIC	19	-	Sectionalizers added in 2004. Tree trimming planned for 2005.	Installation complete. Monitor results.
ington	AMITY	AMITY	-	10	Sectionalizers planned for addition in 2005. Tree trimming planned in 2005.	Plan work.
ington	LAGONDA	CLUB FORTY	12	-	Trees trimmed and sectionalizers added in 2004.	Monitor results.
esboro	CHAMBERS 5	EAST	-	-	Circuit inspected in 2004 (mostly underground). Faulty MOV lightning arrester found as cause of outages.	Monitor results.

1 st qtr	\$3,994,606	\$3,994,606
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11. Monthly call-out acceptance rate for transmission and distribution workers.
- a. Attached as Appendix III 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 does not currently have a means to automatically and consistently record the amount of time to obtain necessary personnel. An upgrade to the Company's outage management system is planned for 2005. This upgrade is expected to provide recording capability for this requirement. Allegheny Power was issued a waiver for this reporting requirement until second quarter 2005 report. Update: *Allegheny Power has contracted the Automated Resource Call Out System (ARCOS) system. AP is currently testing and configuring callout rosters in the system. AP expects to implement a test project in May 2005 and plans full implementation by mid-summer 2005.*
 - d. Please note that callout acceptance rates were unavailable for Electricians were unavailable at the time of report preparation. This chart will be updated as soon as the data becomes available.

Appendix II – Goals Progress

2005 Goals - Pennsylvania - Complete Planned ERS Work				
First Quarter Results				
ERS Program/Project	Unit of Measurement	Target for 2005	Actual Completed	% Completed
Transmission Herbicide Application	# Transmission Lines	20	0	0%
Transmission Lines Trimming and Clearing	# Transmission Lines	36	2	6%
Subtransmission Herbicide Application	# of Subtransmission Lines	47	0	0%
Subtransmission Line Trimming and Clearing	# of Subtransmission Lines	52	3	6%
Distribution Line Trimming, Clearing & Herbicide Applic.	# of Distribution Line Miles	6,089	1,534	25%
Major ERS SS Projects	# Projects	16	5	28%
Major ERS Lines Projects	# Projects	4	2.9	72%
Transmission Comprehensive Patrol	# Transmission Lines	29	1	3%
Transmission General Patrol	# Transmission Lines	120	0	0%
Ground & Footer Inspections	# Transmission Lines	33	6	18%
Pole Inspection	# Poles	38	0	0%
Pole Replacements	# Poles	2	1	50%
Non-Critical Transmission Repairs	# Non-Critical Items	16	3	19%
Subtransmission General Patrol	# Subtransmission Lines	325	0	0%
SS Work (Includes Capital, Planned, & Preventative)	Man-Hours	71,740	12,200	17%
SS Spraying	Man-Hours	2,400	-	0%
Controls Work (Includes Cap., Planned, & Preventative)	Man-Hours	5,209	840	16%
Individual ERS Budget Projects	Man-Hours	14,442	1,722	12%
Small Planning Projects	Man-Hours	30,000	4,798	16%
Pole Inspection	# of Circuits	69	5	7%
Pole Reinforcement	# Poles	18	0	0%
Danger Poles	# Danger Poles	11	6	55%
Reject Poles	# Reject Poles	187	77	41%
AIM Work	Points Completed	1,056	298	28%
RIP Program	Manhours	44,767	15,713	35%
UG Equipment Inspections	# Locations	7,171	3,656	51%
Recloser Inspections	# Reclosers	3,583	2,455	69%
Regulator Inspections	# Regulators	264	145	55%
Capacitors Inspections	# Capacitors	1,309	890	68%
Recloser Replacements	# Reclosers	254	9	4%
UGD Cable Replacement	# Feet	89,000	45,568	51%
Cable Injection	# Feet	19,000	-	0%

Appendix III – Callout Acceptance

Allegheny Power 2005															
(Pennsylvania) Local (UP)															
Linemen															
Service Center	Jan, Feb, Mar			Apr, May, Jun			Jul, Aug, Sep			Oct, Nov, Dec			YTD		
	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	Average
Arnold	705	174	25%	0	0		0	0		0	0		705	174	25%
Boyer	286	128	45%	0	0		0	0		0	0		286	128	45%
Buller	527	223	42%	0	0		0	0		0	0		527	223	42%
Charlton	244	103	42%	0	0		0	0		0	0		244	103	42%
Claring	73	32	44%	0	0		0	0		0	0		73	32	44%
Jeanette	1067	161	15%	0	0		0	0		0	0		1067	161	15%
Jefferson	325	83	26%	0	0		0	0		0	0		325	83	26%
Kittanning	109	60	55%	0	0		0	0		0	0		109	60	55%
Luttrell	298	125	42%	0	0		0	0		0	0		298	125	42%
McGinnysburg	129	72	56%	0	0		0	0		0	0		129	72	56%
McIntosh	111	20	18%	0	0		0	0		0	0		111	20	18%
Pleasant Valley	269	119	41%	0	0		0	0		0	0		269	119	41%
St. Mary's	138	85	62%	0	0		0	0		0	0		138	85	62%
State College	472	153	32%	0	0		0	0		0	0		472	153	32%
Uniontown	506	151	30%	0	0		0	0		0	0		506	151	30%
Washington	460	115	25%	0	0		0	0		0	0		460	115	25%
Waynesboro	415	114	27%	0	0		0	0		0	0		415	114	27%
Total AP Average	6154	1918	31%	0	0		0	0		0	0		6154	1918	31%

Electricians															
Service Center	Jan, Feb, Mar			Apr, May, Jun			Jul, Aug, Sep			Oct, Nov, Dec			YTD		
	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	Average
Arnold	0	0		0	0		0	0		0	0		0	0	
Boyer	0	0		0	0		0	0		0	0		0	0	
Buller	0	0		0	0		0	0		0	0		0	0	
Charlton	0	0		0	0		0	0		0	0		0	0	
Jeanette	0	0		0	0		0	0		0	0		0	0	
Jefferson	0	0		0	0		0	0		0	0		0	0	
Kittanning	0	0		0	0		0	0		0	0		0	0	
Luttrell	0	0		0	0		0	0		0	0		0	0	
Pleasant Valley	0	0		0	0		0	0		0	0		0	0	
St. Mary's	0	0		0	0		0	0		0	0		0	0	
State College	0	0		0	0		0	0		0	0		0	0	
Washington	0	0		0	0		0	0		0	0		0	0	
Waynesboro	0	0		0	0		0	0		0	0		0	0	
Total AP Average	0	0		0	0										

Total Combined AP Average															
	6154	1918	31%	0	0		0	0		0	0		6154	1918	31%

Appendix IV – Sample DCII Calculation

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:

<u>Index</u>	<u>System Average</u>	<u>Sample Circuit Index</u>
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.

$$\begin{aligned}
 \text{Actual SAIFI / System Average SAIFI} &= 2.32 / 0.66 = 3.52 \\
 \text{Actual SAIDI / System Average SAIDI} &= 258.8 / 181.95 = 1.42 \\
 \text{Actual CAIDI / System Average CAIDI} &= 176.23 / 275.71 = 0.64
 \end{aligned}$$

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

$$\begin{aligned}
 \text{SF} &= 1 - (0.3 \times (\text{Actual SAIFI} / \text{Average SAIFI})) = 1 - (0.3 \times 3.52) = -0.0560 \\
 \text{SD} &= 1 - (0.3 \times (\text{Actual SAIDI} / \text{Average SAIDI})) = 1 - (0.3 \times 1.42) = 0.5740 \\
 \text{CD} &= 1 - (0.3 \times (\text{Actual CAIDI} / \text{Average CAIDI})) = 1 - (0.3 \times 0.64) = 0.8080
 \end{aligned}$$

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

$$(\text{SF} + \text{SD} + \text{CD}) / 3 = (-0.0560 + 0.5740 + 0.8080) / 3 = 0.4420$$

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

$$((\text{SF} + \text{SD} + \text{CD}) / 3) \times \text{ASAI} \times 100 = \text{DCII} = 0.4420 \times 0.999769 \times 100 = 44.19$$

Appendix V – Major Event Descriptions

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 2004

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AUG 12 2005

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52 Pa. Code 57.193 (c)
Annual Transmission System Reliability Report

Allegheny Power (AP) is a member of the East Central Area Reliability Coordination Agreement (ECAR). This Regional Reliability Council prepares a semi-annual assessment of the ECAR bulk Transmission system. The purpose of this assessment is to provide insight into the expected performance of the ECAR bulk transmission system under a wide range of system conditions. The 2004 summer assessment is titled “2004 Summer Assessment of Transmission System Performance” (03-TSPP-3). This report will be available upon request from ECAR.

52 Pa. Code 57.195 (b1)

Introduction

Starting on January 1, 2004, Allegheny Power began reporting statistics and excluding Major Events based on a service territory-wide basis as required under revised rules. Major Event exclusions have been reported to the Pennsylvania Public Utility Commission (PUC) and permission received for these exclusions, described later.

On June 9, 2004, AP filed a petition with the PUC to amend its reliability benchmarks. Under assigned Docket No. M-00991220F0003, AP is pursuing a negotiated settlement with interested parties. Negotiations are continuing with progress towards settlement being made. 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.

52 Pa. Code 57.195 (b1)
Assessment and Programs

Assessment

Allegheny Power's distribution system can be characterized as good with fairly consistent statistical results, excluding early data reporting issues previously recognized by the Commission. 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 comprehensive 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.

COM 04-01 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, transmission, and subtransmission lines are patrolled annually to assess vegetation and danger tree conditions.
- All steel poles, towers, and concrete footers are inspected on a ten-year cycle.

COM 04-02 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.

COM 04-03 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.

COM 04-04 Overhead Lines – Distribution Inspection and Maintenance Program for Capacitors

- All distribution line capacitors are visually inspected annually.

COM 04-05 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 is a reliability-based, targeted inspection and maintenance program designed to improve circuit reliability performance.

COM 04-06 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.

COM 04-07 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.

COM 04-09 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).

COM 04-10 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.

COM 04-11 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.

COM 05-01 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. The objectives of this program are outlined as follows:
 - Control customer outage duration and frequency of interruptions resulting from underground cable failures.
 - Manage the liability risk associated with underground cable.
 - Provide a standard methodology throughout Allegheny Power regarding the treatment and replacement of underground primary cable.

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 and sub-transmission circuits are patrolled annually and maintained on an as needed basis.

COM 09-06 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.

COM 09-07 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.

COM 09-08 Vegetation – Planning, Scheduling, Budgeting, Contracting, and Recording Vegetation Management Work on Subtransmission Voltages

- Vegetation management activities follow an as needed basis based on patrols.

COM 09-09 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.

COM 09-13 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.
 - **Circuit that have two or more lockouts** - Any circuit that's has locked out two or more 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 more than two 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 than 25 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:

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)
Major Events

The reliability data included in this document exclude the following Major Events. These events were approved by the PUC for exclusion as shown in Appendix I. Statistics for the Major Events follow:

1. May 21 to May 24, 2004: Thunderstorms, high wind, lightning
 - a. Customers excluded = 86,434 customers interrupted
 - b. Customer minutes excluded = 39,702,186 CMI

2. September 17 to September 21, 2004: Hurricane Ivan - High winds, severe rain, and flooding.
 - a. Customers excluded = 89,063 customers interrupted
 - b. Customer minutes excluded = 62,539,699 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.

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. AP experienced 16 such events in Pennsylvania interrupting 171,946 customers and totaling 43,777,232 customer minutes interrupted, as follows:

2/6 - 7:	PA Customers interrupted = 9,536	CMI = 4,260,937
5/14 - 15:	PA Customers interrupted = 525	CMI = 130,416
5/17 - 18:	PA Customers interrupted = 25,599	CMI = 4,429,372
5/18 - 19:	PA Customers interrupted = 683	CMI = 183,468
5/23 - 24:	PA Customers interrupted = 6,670	CMI = 934,548
5/25 - 26:	PA Customers interrupted = 860	CMI = 221,642
6/2:	PA Customers interrupted = 997	CMI = 69,020
6/14 - 15:	PA Customers interrupted = 10,240	CMI = 1,748,699
6/17 - 18:	PA Customers interrupted = 5,587	CMI = 1,473,072
8/4 - 5:	PA Customers interrupted = 8,406	CMI = 1,610,393
8/19 - 20:	PA Customers interrupted = 17,989	CMI = 4,704,545
8/20 - 22:	PA Customers interrupted = 7,749	CMI = 2,228,079
9/8 - 9:	PA Customers interrupted = 19,069	CMI = 4,082,174
9/17-20 (Hurricane Ivan):	PA Customers interrupted = 2	CMI = 96
12/1-3:	PA Customers interrupted = 53,017	CMI = 17,065,856
12/23:	PA Customers interrupted = 5,017	CMI = 634,915

52 Pa. Code 57.195 (b)(3)
Reliability Indices, Performance Measures, and Supporting Data

The following table provides 2004 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
2002	808,281	679,231	161,223,892	238	0.999548	199	1.19
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

The following table provides Allegheny Power’s current benchmarks and standards. 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.

Reliability Indices	Recomputed Benchmark	Rolling 12-Month Standard	Rolling 3-Yr Avg. Standard
SAIFI	0.67	0.8	0.74
CAIDI	178	214	196
SAIDI	119	172	144

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

A summary and review of service territory-wide outage causes follows:

Outage Cause	Incidents 12 Month ending Dec 04		Customers Interrupted 12 Month ending Dec 04		Customers Minutes Interrupted 12 Month ending Dec 04	
	Number	Percent	Number	Percent	Number	Percent
Animals	1,160	7.3%	35,069	4.5%	4,723,046	3.2%
Overhead Equipment Failure						
Overhead Line Equipment	1,223	7.7%	30,632	3.9%	4,880,761	3.3%
Overhead Line Material	1,712	10.8%	90,346	11.5%	12,431,782	8.4%
Overhead Wire	1,273	8.0%	62,875	8.0%	9,779,393	6.6%
Underground Equipment						
Underground Line Material	51	0.3%	2,176	0.3%	229,859	0.2%
Underground Line Equipment	109	0.7%	2,256	0.3%	506,447	0.3%
Underground Cable	407	2.6%	12,494	1.6%	3,346,919	2.2%
Service Equipment	36	0.2%	55	0.0%	20,115	0.0%
Substation Equipment	77	0.5%	25,661	3.3%	3,556,327	2.4%
Other	182	1.1%	15,037	1.9%	1,651,940	1.1%
Public/Customer	1,815	11.5%	123,141	15.7%	21,957,646	14.8%
Trees						
On Right of Way	102	0.6%	7,269	0.9%	1,350,151	0.9%
Off Right of Way	3,539	22.3%	193,615	24.7%	49,008,345	32.9%
Unknown	1,759	11.1%	72,352	9.2%	10,139,226	6.8%
Weather	2,399	15.1%	109,629	14.0%	25,216,599	16.9%
Total	15,844	100%	782,807	100%	148,807,556	100%

Note: Numbers may be off from aggregated totals in summary section above due to rounding.

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. Specifically, circuits were selected based on the following criteria:
 - Circuits with SAIFI greater than 2.0 and more than 300 customer served.
 - Circuits serving over 1,000 customers.
 This initiative involves approximately 145 circuits in Pennsylvania for 2005 with the installation of approximately 2,000 sectionalizing devices.
- 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.
- Circuit Hardening – By conducting main line inspections, this initiative aims to improve reliability through the reduction of circuit lockouts occurring as a result of failures on the main line. Circuits with poor reliability and high

customer density (1500+ customers) are targeted. This program was piloted on 4 circuits in PA in 2003.

52 Pa. Code 57.195 (b)(5)
Remedial Efforts for 5% Worst Performing Circuits

The following five circuits were on the 5% worst performing circuit list as of 9/30/03 and 9/30/04. AP targets the worst performing circuit list as of September 30th each year to allow time to develop 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.

Mateer substation/Dime Road circuit:

The following actions have been or will be taken with respect to this circuit:

- This circuit was a 2004 Reliability Improvement (RIPInit) circuit – sixty-three sectionalizing devices were added to taps to reduce customer exposure to outages.
- The trees on this circuit were trimmed in 2004.
- One circuit lockout caused by ice/snow contributed to forty percent of customer outages in 2004.

Tunnelton substation/ Tunnelton District circuit:

The following actions have been or will be taken with respect to this circuit:

- Nearly 50% of the customer outage time was due to a circuit lockout from a customer-caused outage on their equipment in 2004. The tap has since been fused to isolate the circuit from customer-caused problems.
- Tree trimming was performed in 2002.

Robbins substation/ Braddocks Trail circuit:

The following actions have been or will be taken with respect to this circuit:

- One circuit lockout caused by an off-right-of-way tree contributed sixty-three percent to the customer outages for the year.
- Tree trimming on this circuit is planned for 2006.
- Five sectionalizing devices were added for the 2004 RIPInit action plan.
- A plan is in place to replace and relocate a section of underground outside the substation to improve reliability.

White Valley substation/ Borlands Road circuit:

The following actions have been or will be taken with respect to this circuit.

- Tree trimming on this circuit is planned for 2007.
- Four sectionalizing devices were added for the 2004 RIPInit action plan. One of the sectionalizing devices was a tie point with another circuit to pick up most customers on this circuit to significantly reduce future CAIDI.
- Ninety-three percent of the customer outage time was a result of off right-of-way trees falling during a non-excludable storm in June 2004.

Rutan substation/ Bristoria circuit:

The following actions have been or will be taken with respect to this circuit:

- Nearly fifty percent of the customer outages were a result of a circuit lockout caused by an off-right-of-way tree.
- Tree trimming on this circuit was performed in 2004.
- Nineteen sectionalizing devices were added for the 2004 RIPInit action plan.

52 Pa. Code 57.195 (b)(6)

Transmission and Distribution Inspection/Maintenance Goals Results

Attached as Appendix II is comparison of 2004 T&D goals versus actual results for Ensure Reliable Service (ERS) work. Overall, AP completed over 99% of planned work objectives. Any work not completed by yearend 2004 is scheduled to be completed in 2005. For certain work insufficient contractors were available to complete work towards the end of the year.

52 Pa. Code 57.195 (b)(7)

Transmission and Distribution Budget versus Actual O&M Expenses

Following is comparison of budgeted versus actual 2004 transmission and distribution operations and maintenance expenses. The only significant variances involved Forestry, which actually completed \$13.6 million out of \$14.0 budget for contract tree trimming (the budget below was estimated before circuit details were evaluated and includes corporate overheads). Some categories of actuals differ from budgets due to a mid-year reorganization. Overall AP actual expenses were 98.4% of budget.

T&D Unit	2004 Budget	2004 Actual
Dispatching	\$ 1,494,380	\$ 1,534,890
Forestry	\$ 16,440,612	\$ 14,609,274
Line (Field) Operations	\$ 20,494,482	\$ 22,716,688
Line Services	\$ 5,658,226	-
Transmission Engineering	-	\$ 713,506
Distribution Support	-	\$ 3,092,540
Metering and System Protection	\$ 2,717,844	\$ 505,156
Technical Services	-	\$ 1,150,931
Controls	-	\$ 2,283,009
Projects	\$ 347,250	\$ 700,948
Substations	\$ 9,947,895	\$ 8,731,068
System Operations	\$ 2,478,111	\$ 2,372,411
System Planning	\$ 1,506,802	\$ 1,675,476
Grand Total	\$ 61,085,602	\$ 60,085,897

52 Pa. Code 57.195 (b)(8)

Transmission and Distribution Budget versus Actual Capital Expenditures

Following is comparison of budgeted versus actual 2004 transmission & distribution capital expenditures (\$1,000) followed by an explanation of any significant variances:

Equipment Category	2004 Budget	2004 Actual
Distribution Lines	\$ 40,102	\$ 44,274
Distribution Substation	\$ 11,452	\$ 9,445
EHV Lines	\$ -	\$ 22
EHV Substation	\$ 260	\$ 147
General Plant	\$ 3,951	\$ 1,950
Sub-transmission Line	\$ 2,312	\$ 1,120
Subtotal	\$ 58,077	\$ 56,958
less contribution by others	\$ 10,790	\$ 6,344
Total Distribution	\$ 47,287	\$ 50,614
Transmission Substation	\$ 3,735	\$ 2,096
Transmission Line	\$ 3,671	\$ 3,280
Total Transmission	\$ 7,406	\$ 5,376
Total T&D	\$ 54,693	\$ 55,990

Please note that 2004 expenditures were 2.4% over budget and 2003 expenditures were 13.2% over budget overall. Money may be shifted around between individual line items during the course of the year to better allocate funds as needs arise. In Distribution Substation area, some substation projects were delayed resulting in the delay in purchasing large items such as transformers. Under General Plant category, some technology and facility projects were delayed. Subtransmission lines were delayed due to delays in externally-controlled highway projects. Offsetting these were additional expenditures for distribution lines projects.

52 Pa. Code 57.195 (b)(9)
Transmission and Distribution 2005 Inspection and Maintenance Goals

Following is list of transmission & distribution inspection and maintenance goals for 2005:

2005 Goals - Pennsylvania - Complete Planned ERS Work		
ERS Program/Project	Unit of Measurement	Target for 2005
Transmission Herbicide Application	# Transmission Lines	20
Transmission Lines Trimming and Clearing	# Transmission Lines	36
Subtransmission Herbicide Application	# of Subtransmission Lines	47
Subtransmission Line Trimming and Clearing	# of Subtransmission Lines	52
Distribution Line Trimming, Clearing & Herbicide Applic.	# of Distribution Line Miles	6,089
Major ERS SS Projects	# Projects	16
Major ERS Lines Projects	# Projects	4
Transmission Comprehensive Patrol	# Transmission Lines	29
Transmission General Patrol	# Transmission Lines	120
Ground & Footer Inspections	# Transmission Lines	33
Pole Inspection	# Poles	38
Pole Replacements	# Poles	2
Non-Critical Transmission Repairs	# Non-Critical Items	13
Subtransmission General Patrol	# Subtransmission Lines	325
SS Work (Includes Capital, Planned, & Preventative)	Man-Hours	71,740
SS Spraying	Man-Hours	2,400
Controls Work (Includes Cap., Planned, & Preventative)	Man-Hours	5,209
Individual ERS Budget Projects	Man-Hours	14,442
Small Planning Projects	Man-Hours	30,000
Pole Inspection	# of Circuits	69
Pole Reinforcement	# Poles	4
Danger Poles	# Danger Poles	6
Reject Poles	# Reject Poles	187
AIM Work	Points Completed	1,056
RIP Program	Manhours	44,767
UG Equipment Inspections	# Locations	7,171
Recloser Inspections	# Reclosers	3,583
Regulator Inspections	# Regulators	264
Capacitors Inspections	# Capacitors	1,309
Recloser Replacements	# Reclosers	254
UGD Cable Replacement	# Feet	89,000
Cable Injection	# Feet	19,000

52 Pa. Code 57.195 (b)(10)

Transmission and Distribution 2005 O&M Expense Budget by FERC Account

AP does not budget by FERC account in its current financial reporting system. Following is the 2005 transmission & distribution operations & maintenance expense budget as available from AP's financial reporting system:

2005 Budget	(\$1,000)
Distribution DEPT	(319)
Distribution Support DEPT	3,704
Field Operations DEPT	18,979
Forestry DEPT	14,450
Transportation DEPT	7
Distribution Subtotal	36,820
System Planning DEPT	838
Substations DEPT	7,282
System Operations DEPT	5,515
Technical Services DEPT	3,045
Transmission Other DEPT	205
Transmission Engineering	3,283
Transmission Projects DEPT	357
Transmission Subtotal	20,523
Total T&D O&M	57,343

52 Pa. Code 57.195 (b)(11)

Transmission and Distribution 2005 Capital Expenditure Budget by FERC Account

AP does not budget by FERC account in its current financial reporting system. Following is the 2005 capital expenditure budget as available from AP's capital project system for Pennsylvania.

Equipment Category	2005 Board Approved Budget (\$1,000)
Distribution Lines	\$ 38,339
Distribution Substation	\$ 3,903
EHV Lines	\$ -
EHV Substation	\$ -
General Plant	\$ 6,798
Sub-transmission Line	\$ 626
Subtotal Distribution	\$ 49,666
Transmission Substation	\$ 3,902
Transmission Line	\$ 2,019
Subtotal Transmission	\$ 5,921
Total T&D	\$ 55,587

52 Pa. Code 57.195 (b)(12)

Transmission and Distribution Inspection and Maintenance Program Changes

There have been no changes to existing inspection and maintenance programs previously submitted to the Commission.

Appendix I
Major Event Exclusion Approvals



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

OFFICE OF THE
SECRETARY

JULY 13, 2004

M-0799130E2004

ALLEGHENY POWER
509 CABIN HILL DRIVE
HARRISBURG, PA 17101

ATTN: JAMES P. BARRELL

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

Dear Mr. Barrell:

On June 21, 2004, 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-0799130E.

The request relates to a weather event that Allegheny states caused service interruptions from 2:50 a.m. on May 21, 2004 until 7:35 p.m. on May 24, 2004.

Upon review of the company's filing, it appears that some of the service interruptions described by Allegheny qualify as a major event, as defined in 52 Pa. Code §57.197. However, no notification was provided for notification of customers associated with service outages occurring after 12:00 p.m. on 5/23/04 as part of the stated major event. Therefore, the request for exclusion of service interruptions for reporting purposes is hereby approved with the following modifications: Only customers experiencing service outages directly associated with the weather events of 5/21/04 are to be excluded for reliability reporting purposes.

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 only apply only to the matters and parties specifically and clearly defined under this instant filing.

Sincerely,

James J. McQuay
Secretary

- cc: Tom Sheets, Audits
- George DeRow, Audits
- Wayne Williams, DCS
- Wanda Jones, CTRP
- Betsy Barnes, Law Bureau

Appendix II
Transmission and Distribution Inspection/Maintenance Goals Results

2004 Goals - Pennsylvania - Planned Ensure Reliable Service Work Completed					
Program or Project	Unit of Measurement	Target for 2004	Actual Completed	% Completed	Reason for < 100% Goal Attainment
Transmission Herbicide Application	# Transmission Lines	13	13	100%	N/A
Transmission Lines Trimming and Clearing	# Transmission Lines	31	31	100%	N/A
Subtransmission Herbicide Application	# of Subtransmission Lines	48	48	100%	N/A
Subtransmission Line Trimming and Clearing	# of Subtransmission Lines	67	66	99%	Final work was not completed by yearend but was completed in early 2005.
Distribution Line Trimming, Clearing & Herbicide Applic.	# of Distribution Line Miles	5,636	5,515	98%	Final work was not completed by yearend but was completed in early 2005.
Major ERS SS Projects	# Projects	1	1	100%	N/A
Major ERS Lines Projects	# Projects	2	1.9	95%	Contractors were pulled off the job to assist with the hurricane restoration efforts. Will complete early 2005.
Transmission Comprehensive Patrol	# Transmission Lines	14	14	100%	N/A
Transmission General Patrol	# Transmission Lines	139	139	100%	N/A
Ground & Footer Inspections	# Transmission Lines	13	5	39%	Weather and unavailability of contractors contributed. Will be completed by end of 1st quarter 2005 or when next structured maintenance is performed.
Pole Inspection	# Transmission Lines	10	10	100%	N/A
Critical Transmission Repairs	# Critical Items	2	2	100%	N/A
Priority Transmission Repairs	# Priority Items	7	7	100%	N/A
Non-Critical Transmission Repairs	# Non-Critical Items	34	32	94%	Work was nearly complete. Finish in 1st quarter 2005.
SS Work (Includes Capital, Planned, & Preventative)	Man-Hours	70,498	66,599	94%	Projects varied during the year and required fewer manhours than planned.
SS Spraying	# Substations	710	710	100%	N/A
Controls Work (Includes Cap., Planned, & Preventative)	Man-Hours	13,952	15,180	109%	N/A
Subtransmission General Patrol	# Subtransmission Lines	418	418	100%	N/A
Individual ERS Budget Projects	Man-Hours	9,892	9,852	100%	N/A
Small Planning Projects	Man-Hours	27,077	26,632	98%	Projects completed for fewer than budgeted manhours.
Pole Inspection	# of Circuits	49	49	100%	N/A
Danger Poles	# Danger Poles	93	73	78%	All poles have been secured. Finish in 1st quarter 2005.
Reject Poles	# Reject Poles	235	250	106%	N/A
AIM Work	Points Completed	2,811	2,545	91%	Work was nearly complete. Finish in 1st quarter 2005.
RIP Program	Manhours	18,700	29,714	159%	N/A
UG Equipment Inspections	# Locations	6,729	4,968	74%	Work was nearly complete. Finish in 1st quarter 2005.
Recloser Inspections	# Reclosers	3,498	3,345	96%	Work was nearly complete. Finish in 1st quarter 2005.
Regulator Inspections	# Regulators	214	214	100%	N/A
Capacitors Inspections	# Capacitors	1,208	1,205	100%	N/A
Recloser Replacements	# Reclosers	252	235	93%	Work was nearly complete. Finish in 2005.
Structured Maintenance - Street Lights	# Street Lights	16,776	14,209	85%	Work was nearly complete. Finish in 2005.
UGD Cable Replacement	# Feet	12,200	9,566	78%	Work was nearly complete. Finish in 1st quarter 2005.
Cable Injection	# Feet	100,000	123,602	124%	N/A

Allegheny Power
Quarterly Report for First Quarter 2005
52 Pa. Code Section 57.192 Reporting Requirements

This quarterly report is being submitted according to the proposed format contained in Docket No. L-00030161. The following report provides available information in the proposed format with the understanding that reporting requirements may change.

1. Description of major events during the preceding quarter.
 - a. The following Major Events occurred during the first quarter of 2005. Note that these events are excluded based upon the proposed service-area-wide definition.
 - b. Major events occurred on the following dates. A description of the events is attached as Appendix V in form of final 'Distribution System Outage Reports' reports as previously issued to the Commission.
 - 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.
2. Rolling 12-month reliability index values (SAIDI, CAIDI, SAIFI, and, if available, MAIFI) for the electric distribution company's service territory for the preceding quarter.
 - a. The following table provides Pennsylvania's 12-month ending reliability statistics for month ending March 2005.
 - b. 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.

Zone	Incidents	Interrupted Customers	Avg Cust Served	kVA	Calls	CMI	SAIDI	ASAI	CAIDI	SAIFI
Pennsylvania	16,016	786,128	689,409	7,797,394.0	117,168	155,840,050	226	0.999570	198	1.14

3. Rolling 12-month reliability index values for worst performing 5% of the circuits in the system.
 - a. This report provides a listing of all Pennsylvania circuits ranking in the 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.
 - b. 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 IV).

4. Specific remedial efforts taken and planned for the 5% worst performing circuits.
 - 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 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.
 - b. In addition to the above-mentioned process, poor performing circuits are ranked by DCII. 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 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.

5. A breakdown and analysis of outage causes during the preceding quarter.
 - 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-equipment-related 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	Customers Interrupted 12 Month ending March 05		Customers Minutes Interrupted 12 Month ending March 05	
	Number	Percent	Number	Percent
Animals	32,142	4.1%	4,366,125	2.8%
Overhead Equipment Failure				
Overhead Line Equipment	27,419	3.5%	4,503,872	2.9%
Overhead Line Material	89,764	11.4%	12,207,092	7.8%
Overhead Wire	46,459	5.9%	7,581,157	4.9%
Underground Equipment				
Underground Line Material	2,583	0.3%	320,546	0.2%
Underground Line Equipment	2,094	0.3%	444,854	0.3%
Underground Cable	14,435	1.8%	3,923,780	2.5%
Service Equipment	60	0.0%	21,840	0.0%
Substation Equipment	27,251	3.5%	3,697,860	2.4%
Other	18,986	2.4%	1,575,253	1.0%
Public/Customer	131,677	16.8%	23,335,473	15.0%
Trees				
On Right of Way	4,175	0.5%	986,590	0.6%
Off Right of Way	209,430	26.6%	55,713,926	35.8%
Unknown	69,939	8.9%	9,671,086	6.2%
Weather	109,714	14.0%	27,490,595	17.6%
Total	786,128	100%	155,840,049	100%

6. Quarterly and year-to-date information on progress toward meeting transmission and distribution inspection and maintenance goals/objectives.
 - a. A report attached as Appendix II provides a listing of updates to the planned Ensure Reliable Service work for 2005.
 - b. AP's goals may vary slightly throughout the year as work may be modified to meet new or changing field conditions.

7. Quarterly and year-to-date information on budgeted versus actual transmission and distribution operation and maintenance expenditures.

Category	2005 Budget (\$1,000)	2005 Actual (\$1,000)
Distribution DEPT	-60.03	0.76
Distribution Support DEPT	883.45	791.66
Field Operations DEPT	4,556.15	5,054.38
Forestry DEPT	3,701.49	2,423.30
Transportation DEPT	1.65	16.59
Distribution Subtotal	9,082.70	8,286.70
System Planning DEPT	182.66	214.55
Substations DEPT	1,603.38	1,745.33
System Operations DEPT	1,261.48	1,161.93
Technical Services DEPT	702.57	788.99
Transmission Other DEPT	74.50	-67.83
Transmission Engineering	690.12	569.72
Transmission Projects DEPT	72.26	152.98
Transmission Subtotal	4,586.97	4,565.66
Total T&D O&M	13,669.67	12,852.35

8. Quarterly and year-to-date information on budgeted versus actual transmission and distribution capital expenditures.

Equipment Category	Q1 Budget	Q1 Actual
Distribution Lines	\$ 9,585	\$ 10,943
Distribution Substation	\$ 976	\$ 1,680
EHV Lines	\$ -	\$ -
EHV Substation	\$ -	\$ 27
General Plant	\$ 1,700	\$ 1,084
Sub-transmission Line	\$ 157	\$ 168
Subtotal Distribution	\$ 12,417	\$ 13,902
Transmission Substation	\$ 976	\$ 660
Transmission Line	\$ 505	\$ 736
Subtotal Transmission	\$ 1,480	\$ 1,398
Total T&D	\$ 13,897	\$ 15,300

9. Dedicated staffing levels for transmission and distribution operation and maintenance at the end of the quarter, in total and by specific category.
- a. Staffing levels for the first quarter of 2005 follows:

Position Name	Count
Lead Lineman	115
Lineman A	68
Lineman Apprentice	1
Lineman B	3
Lineman C	1
SS Crew Leader Construction	1
SS Crew Leader Maintenance	14
SS Electrician A	34
SS Electrician Apprentice	11
SS Electrician B	3
SS Electrician C	1
Serviceman A	92
Serviceman Apprentice	9
Serviceman B	3
Utilityman A	7
Utilityman B	2
Total	365

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.

Appendix I – Distribution Circuit Ranking Remedial Actions

<u>CktName</u>	<u>SSName</u>	<u>CktName</u>	<u>2004 RIPlnit</u>	<u>2005 RIPlnit</u>	<u>Actions Taken or Planned</u>	<u>Status</u>
j	MATEER	DIME RD	63	-	Trees trimmed and sectionalizers added in 2004.	Installation complete. Monitor results.
j	MATEER	SOUTH BEND	24	-	Trees trimmed and sectionalizers added in 2004.	Installation complete. Monitor results.
j	MURRYSVILLE	RUBRIGHT	-	15	Sectionalizers planned for addition in 2005.	Plan work.
j	MURRYSVILLE	WALLACE LANE	-	12	Sectionalizers planned for addition in 2005.	Plan work.
j	TUNNELTON	TUNNELTON_DIST	-	-	Fuse added to tap to isolate customer-caused outages.	Monitor results.
.	BRANCHTON	FORESTVILLE	-	55	Sectionalizers planned for addition in 2005. Tree trimming planned in 2005.	Plan work.
.	BUTLER	CENTER AVE	43	-	Trees trimmed and sectionalizers added in 2004.	Installation complete. Monitor results.
.	HERMAN	HERMAN	50	-	Trees trimmed and sectionalizers added in 2004.	Installation complete. Monitor results.
.	HILLIARDS	HILLIARDS	-	43	Sectionalizers planned for addition in 2005.	Plan work.
.	PARKER	PARKER	-	43	Sectionalizers planned for addition in 2005.	Plan work.
.	SAXONBURG	BUTLER RD	-	22	Sectionalizers planned for addition in 2005.	Plan work.
.	SHERWIN	WEST SUNBURY	-	-	Inspect line. Complete any noted work by 12/1/05.	Plan work.
eroi	CHARLEROI	N. CHARLEROI	21	-	Sectionalizers added in 2004. Tree trimming planned for 2005.	Installation complete. Monitor results.
eroi	SMITHTON	HUTCHINSON	22	-	Sectionalizers added in 2004. Tree trimming planned for 2005.	Installation complete. Monitor results.
eroi	WESTRAVER	WEST NEWTON	21	-	Sectionalizers added in 2004. Tree trimming planned for 2005.	Installation complete. Monitor results.
n	NEW BETHLEHEM	CLIMAX	32	-	Trees trimmed and sectionalizers added in 2004.	Installation complete. Monitor results.
n	SLIGO	REIDSBURG	-	45	Sectionalizers and tree trimming planned for addition in 2005.	Plan work.
n	SLIGO	SLIGO	-	-	Install automated 25kV transfer switch at substation by 12/1/05. Tree trimming planned in 2006.	Plan work.
n	WIDNOON	TIDAL	-	7	Sectionalizers and tree trimming planned for addition in 2005.	Plan work.
rette	HUNTINGDON	SCOTCH HILL	-	7	Sectionalizers planned for addition in 2005. Tree trimming planned in 2006.	Plan work.
rette	LEVELGREEN	COWTOWN	-	17	Trees trimmed in 2004. Sectionalizers planned for 2005.	Plan work.
rette	MURRYCREST	SARDIS ROAD	-	4	Trees trimmed in 2004. Sectionalizers planned for 2005.	Plan work.
rette	ROBBINS	BRADDOCK'S TRAIL	5	-	Sectionalizers added in 2004. Plan for a portion of underground replacement. Trim trees in 2006.	Installation complete. Monitor results.
rette	WHITE VALLEY	BORLANDS RD	4	-	Sectionalizers added in 2004. Tie point added to another circuit to pick up customers during outages.	Installation complete. Monitor results.
son	BRAVE	SPRAGG	-	-	High winds caused circuit outage (70% of CM) in Nov. 2003. Tree trimming planned in 2006.	Work complete. Circuit now off 5% list.
son	FRANKLIN	ROGERSVILLE	-	14	Sectionalizers planned for addition in 2005. Tree trimming planned in 2005.	Plan work.
son	MARIANNA	TEN MILE	-	12	Sectionalizers planned for addition in 2005.	Plan work.
son	RUTAN	BRISTORIA	19	-	Sectionalizers added in 2004. Trees trimmed in 2004.	Installation complete. Monitor results.
ming	TROY HILL	IRON BRIDGE	11	-	Sectionalizers added in 2004.	Installation complete. Monitor results.
re	STAHLSTOWN	STAHLSTOWN	2	-	Sectionalizers added in 2004.	Installation complete. Monitor results.
nnellsburg	WARFORDSBURG	BUCK VALLEY	-	3	Sectionalizers planned for addition in 2005.	Plan work.
nnellsburg	WHITETAIL	RESORT	-	-	Repairs made for conductor slap problem. Tree trimming planned in 2006.	Work complete. Circuit now off 5% list.
naid	PARIS	PARIS	10	-	Sectionalizers added in 2004.	Installation complete. Monitor results.
naid	SMITH	FLORENCE	-	22	Sectionalizers planned for addition in 2005.	Plan work.
College	WATERYVILLE	WATERYVILLE	-	3	Sectionalizers planned for addition in 2005.	Plan work.
town	LAKE LYNN	FANCY HILL	-	Yes	Reliability initiatives and RIPlnit planned for 2005 - device count not known yet. Tree trimming in 2006.	Plan initiatives and work.
town	MERRITTSTOWN	REPUBLIC	19	-	Sectionalizers added in 2004. Tree trimming planned for 2005.	Installation complete. Monitor results.
ington	AMITY	AMITY	-	10	Sectionalizers planned for addition in 2005. Tree trimming planned in 2005.	Plan work.
ington	LAGONDA	CLUB FORTY	12	-	Trees trimmed and sectionalizers added in 2004.	Monitor results.
eshoro	CHAMBERS 5	EAST	-	-	Circuit inspected in 2004 (mostly underground). Faulty MOV lightning arrester found as cause of outages.	Monitor results.

Quarter	Contract Dollars - Qtr	Contract Dollars - YTD
1 st qtr	\$3,994,606	\$3,994,606

11. Monthly call-out acceptance rate for transmission and distribution workers.
- a. Attached as Appendix III 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 does not currently have a means to automatically and consistently record the amount of time to obtain necessary personnel. An upgrade to the Company's outage management system is planned for 2005. This upgrade is expected to provide recording capability for this requirement. Allegheny Power was issued a waiver for this reporting requirement until second quarter 2005 report. Update: *Allegheny Power has contracted the Automated Resource Call Out System (ARCOS) system. AP is currently testing and configuring callout rosters in the system. AP expects to implement a test project in May 2005 and plans full implementation by mid-summer 2005.*
 - d. Please note that callout acceptance rates were unavailable for Electricians were unavailable at the time of report preparation. This chart will be updated as soon as the data becomes available.

Appendix II – Goals Progress

2005 Goals - Pennsylvania - Complete Planned ERS Work				
First Quarter Results				
ERS Program/Project	Unit of Measurement	Target for 2005	Actual Completed	% Completed
Transmission Herbicide Application	# Transmission Lines	20	0	0%
Transmission Lines Trimming and Clearing	# Transmission Lines	36	2	5%
Subtransmission Herbicide Application	# of Subtransmission Lines	47	0	0%
Subtransmission Line Trimming and Clearing	# of Subtransmission Lines	52	3	6%
Distribution Line Trimming, Clearing & Herbicide Applic.	# of Distribution Line Miles	6,089	1,534	25%
Major ERS SS Projects	# Projects	16	5	28%
Major ERS Lines Projects	# Projects	4	2.9	72%
Transmission Comprehensive Patrol	# Transmission Lines	29	1	3%
Transmission General Patrol	# Transmission Lines	120	0	0%
Ground & Footer Inspections	# Transmission Lines	33	6	18%
Pole Inspection	# Poles	38	0	0%
Pole Replacements	# Poles	2	1	50%
Non-Critical Transmission Repairs	# Non-Critical Items	16	3	19%
Subtransmission General Patrol	# Subtransmission Lines	325	0	0%
SS Work (Includes Capital, Planned, & Preventative)	Man-Hours	71,740	12,200	17%
SS Spraying	Man-Hours	2,400	-	0%
Controls Work (Includes Cap., Planned, & Preventative)	Man-Hours	5,209	840	16%
Individual ERS Budget Projects	Man-Hours	14,442	1,722	12%
Small Planning Projects	Man-Hours	30,000	4,798	16%
Pole Inspection	# of Circuits	69	5	7%
Pole Reinforcement	# Poles	18	0	0%
Danger Poles	# Danger Poles	11	6	55%
Reject Poles	# Reject Poles	187	77	41%
AIM Work	Points Completed	1,056	298	28%
RIP Program	Manhours	44,767	15,713	35%
UG Equipment Inspections	# Locations	7,171	3,656	51%
Recloser Inspections	# Reclosers	3,583	2,465	69%
Regulator Inspections	# Regulators	264	145	55%
Capacitors Inspections	# Capacitors	1,309	890	68%
Recloser Replacements	# Reclosers	254	9	4%
UGD Cable Replacement	# Feet	89,000	45,568	51%
Cable Injection	# Feet	19,000	-	0%

Appendix III – Callout Acceptance

Allegheny Power 2005															
Pennsylvania Local #102															
Linemen															
Service Center	Jan, Feb, Mar			Apr, May, Jun			Jul, Aug, Sep			Oct, Nov, Dec			YTD		
	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	Average
Arnold	705	174	25%	0	0		0	0		0	0		705	174	25%
Boyce	266	128	45%	0	0		0	0		0	0		266	128	45%
Butler	527	223	42%	0	0		0	0		0	0		527	223	42%
Charlton	244	103	42%	0	0		0	0		0	0		244	103	42%
Clinton	73	32	44%	0	0		0	0		0	0		73	32	44%
Jeannette	1067	161	15%	0	0		0	0		0	0		1067	161	15%
Jefferson	325	83	26%	0	0		0	0		0	0		325	83	26%
Kittanning	109	60	55%	0	0		0	0		0	0		109	60	55%
Laird	298	125	42%	0	0		0	0		0	0		298	125	42%
McGinnishburg	129	72	56%	0	0		0	0		0	0		129	72	56%
Midvale	111	20	18%	0	0		0	0		0	0		111	20	18%
Pleasant Valley	269	119	41%	0	0		0	0		0	0		269	119	41%
St. Mary's	138	85	62%	0	0		0	0		0	0		138	85	62%
State College	472	153	32%	0	0		0	0		0	0		472	153	32%
Uniontown	506	151	30%	0	0		0	0		0	0		506	151	30%
Washington	460	115	25%	0	0		0	0		0	0		460	115	25%
Waynesboro	415	114	27%	0	0		0	0		0	0		415	114	27%
Total AP Average	6154	1918	31%	0	0		0	0		0	0		6154	1918	31%

Electricians															
Service Center	Jan, Feb, Mar			Apr, May, Jun			Jul, Aug, Sep			Oct, Nov, Dec			YTD		
	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	Average
Arnold	0	0		0	0		0	0		0	0		0	0	
Boyce	0	0		0	0		0	0		0	0		0	0	
Butler	0	0		0	0		0	0		0	0		0	0	
Charlton	0	0		0	0		0	0		0	0		0	0	
Jeannette	0	0		0	0		0	0		0	0		0	0	
Jefferson	0	0		0	0		0	0		0	0		0	0	
Kittanning	0	0		0	0		0	0		0	0		0	0	
Laird	0	0		0	0		0	0		0	0		0	0	
Pleasant Valley	0	0		0	0		0	0		0	0		0	0	
St. Mary's	0	0		0	0		0	0		0	0		0	0	
State College	0	0		0	0		0	0		0	0		0	0	
Washington	0	0		0	0		0	0		0	0		0	0	
Waynesboro	0	0		0	0		0	0		0	0		0	0	
Total AP Average	0	0		0	0										

Total Combined AP Average	6154	1918	31%	0	0		0	0		0	0		6154	1918	31%
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Appendix IV – Sample DCII Calculation

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:

<u>Index</u>	<u>System Average</u>	<u>Sample Circuit</u> <u>Index</u>
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.

$$\begin{aligned} \text{Actual SAIFI / System Average SAIFI} &= 2.32 / 0.66 = 3.52 \\ \text{Actual SAIDI / System Average SAIDI} &= 258.8 / 181.95 = 1.42 \\ \text{Actual CAIDI / System Average CAIDI} &= 176.23 / 275.71 = 0.64 \end{aligned}$$

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

$$\begin{aligned} \text{SF} &= 1 - (0.3 \times (\text{Actual SAIFI} / \text{Average SAIFI})) = 1 - (0.3 * 3.52) = -0.0560 \\ \text{SD} &= 1 - (0.3 \times (\text{Actual SAIDI} / \text{Average SAIDI})) = 1 - (0.3 * 1.42) = 0.5740 \\ \text{CD} &= 1 - (0.3 \times (\text{Actual CAIDI} / \text{Average CAIDI})) = 1 - (0.3 * 0.64) = 0.8080 \end{aligned}$$

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

$$(\text{SF} + \text{SD} + \text{CD}) / 3 = (-0.0560 + 0.5740 + 0.8080) / 3 = 0.4420$$

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

$$((\text{SF} + \text{SD} + \text{CD}) / 3) * \text{ASAI} \times 100 = \text{DCII} = 0.4420 * 0.999769 * 100 = 44.19$$

Appendix V – Major Event Descriptions

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.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

CERTIFICATE OF SERVICE

I certify that this 29th day of April 2005, I have served a true and correct copy of the 2004 Annual Reliability Report and the First Quarter 2005 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

Date: April 29, 2005



John L. Munsch
Attorney for
ALLEGHENY POWER



UGI Utilities, Inc.
Hanover Industrial Estates
400 Stewart Road
Post Office Box 3200
Wilkes Barre, PA 18773-3200

(570) 819-1212 Telephone

April 29, 2005

FEDERAL EXPRESS

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APR 29 2005

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

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

Dear Secretary McNulty:

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 March 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. Also included is a breakdown of outages by cause for the 12 months ending March 31, 2005.

Any questions related to the attached report should be directed to Mr. Brian J. Fitzpatrick at (610) 796-3474.

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.

Sincerely,

Robert R. Stoyko
Vice President - Electric Division

DOCUMENT
FOLDER

Attachment

70

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

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APR 29 2005

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



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

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PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

DOCKETED
AUG 04 2005

May 1, 2005

**UGI Utilities, Inc. – Electric Division
System Reliability Report**

§ 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, 2005 are as follows:

Rolling 12-Month Ending March 2005 Reliability Statistics

	SAIFI	SAIDI	CAIDI
Results	0.82	110	134
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

SAIFI

Several severe storms and two incidents of tripped circuit breakers during the first quarter of CY2005 have contributed to the increase in the SAIFI index to the .82 figure as shown above. In comparison, the first quarter of CY2004 was uncharacteristically incident free of severe weather affecting customer outages. The above result is still below the standard and slightly below the benchmark adopted for UGI. As part of normal operations, UGI will continue to monitor SAIFI to ensure that factors within UGI's control do not contribute to a degradation of this index.

SAIDI

The SAIDI value for the 12 months ending March 31, 2005 was 110. This remains well below both the standard and benchmark adopted for UGI.

**UGI Utilities, Inc. – Electric Division
System Reliability Report**

CAIDI

The CAIDI result of 134 for the 12 month period ending March 31, 2005 continues to remain below the benchmark and standard.

UGI Utilities, Inc - Electric Division
System Reliability - Raw Data
April 2004 - March 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		
	TCI	TCB	TMCI
April-04	1,299	61,778	177,383
May-04	4,989	61,705	771,748
June-04	5,078	61,671	518,961
July-04	3,020	61,660	446,480
August-04	11,711	61,708	1,452,849
September-04	3,685	61,727	1,001,526
October-04	2,435	61,768	171,534
November-04	4,925	61,882	692,946
December-04	2,193	61,946	434,069
January-05	7,931	61,975	506,291
February-05	648	61,936	72,894
March-05	2,505	61,956	527,916

TCI: Total Customers Interrupted
TCB: Total Customers
TMCI: Total Customer Minutes Interrupted

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

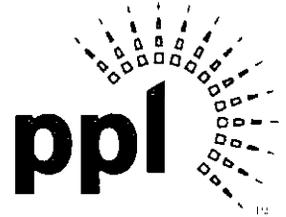
UGI Utilities, Inc - Electric Division
System Reliability - Outage by Cause Analysis
April 2004 - March 2005

§ 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 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	10.61%	63	1,275	83,815
Construction Error	1.52%	9	226	75,337
Customer Problem	1.18%	7	16	1,879
Equipment Failure	32.49%	193	15,963	1,053,670
Structure Fire	1.18%	7	668	35,827
Lightning	9.09%	54	13,355	1,824,551
Motor Vehicle	5.72%	34	2,584	591,706
Public	4.88%	29	1,840	141,957
Trees	24.92%	148	13,093	2,761,202
Unknown	5.72%	34	411	65,479
Weather/Wind	1.52%	9	668	104,177
Weather/Ice	0.34%	2	22	4,205
Other	0.84%	5	298	30,792
Total	100.00%	594	50,419	6,774,597

Paul E. Russell
Associate General Counsel

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



FEDERAL EXPRESS

April 29, 2005

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

**Re: Quarterly Reliability Report for the
Period Ended March 31, 2005
Docket No. L-00030161**

**DOCUMENT
FOLDER**

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 March 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 April 29, 2005, 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.

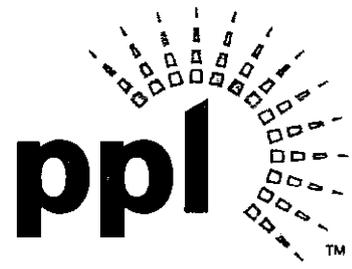
Very truly yours,

Paul E. Russell

Enclosures

cc: Elizabeth H. Barnes, Esquire

73



PPL Electric Utilities

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

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DOCKETED
AUG 04 2005

April 2005

- (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 was one Commission-approved major event during the first quarter of 2005. The data for this event is excluded from the calculation of the indices.

January 6-16, 2005: A series of winter storms brought a mix of snow, sleet and freezing rain to PPL Electric's Lehigh, Northern, Central, and Susquehanna regions. Ice began to build on trees, tree limbs and wires, reaching 1 inch or more in many areas. Most of the service interruptions were caused by the weight of the accumulated ice, exacerbated by wind, prolonged sub-freezing temperatures, breaking branches and trees that fell down over wires and poles.

First trouble case reported:	Thursday, January 6, 2005 at 12:17 AM
Last trouble case restored:	Sunday, January 16, 2005 at 3:39 PM
Total trouble cases:	1,895
Total customer service interruptions:	238,154

The following modified procedures have been adopted in order to avoid or minimize the effect of similar events in the future:

For the first time, PPL Electric conducted a formal survey of over 2,000 employees who were directly or indirectly involved in the January 2005 ice storm restoration, from the executive staff to linemen and helpers. The purpose of this survey was to solicit ideas from employees on how the Company can improve its performance in the future, and identify any gaps that may now exist in the storm restoration process.

As a result of this survey and an after-storm critique, PPL Electric identified opportunities for a renewed emphasis on training for specialized assignments, the need to update certain employee rosters for support functions, and the need to improve its processes for determining and communicating estimated customer restoration times. These initiatives already have begun.

Due to the nature and duration of the event, PPL Electric's customer outreach program arranged for meals, both hot and cold, to be delivered to community shelters, as well as personal items to help customers get through the recovery. In certain areas, PPL Electric's employees went door-to-door to inform customers of the restoration status, determine any special needs, and to supply food, water, and other items.

- (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.**

The following table provides data for the 12 months ended March 31, 2005:

SAIFI (Benchmark = 0.98; Rolling 12-month Std. = 1.18)	1.086
CAIDI (Benchmark = 145; Rolling 12-month Std. = 174)	163
SAIDI (Benchmark = 142; Rolling 12-month Std. = 205)	177
MAIFI	5.149
Average Number of Customers Served¹	1,334,663
Number of Sustained Customer Interruptions (Trouble Cases)	18,734
Number of Customers Affected²	1,448,919
Customer Minutes of Interruptions	235,588,855
Number of Customer Momentary Interruptions	6,872,162

¹ 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.

² 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	Customers	Cases of Trouble ³	Customer Minutes Interrupted	CPI
1	55001	5.35	198	1,060	20.00	2,679	134	2,838,415	580
2	28302	4.67	185	865	3.00	2,743	104	2,373,195	475
3	10702	0.04	2,212	93	4.00	1,832	8	170,298	441
4	13806	0.14	2,196	308	0.00	228	3	70,263	429
5	59301	3.18	687	2,183	3.13	1,566	59	3,418,700	399
6	11506	4.27	335	1,433	4.00	1,233	69	1,766,883	399
7	10802	0.57	1,611	924	2.00	1,032	25	953,968	391
8	42201	6.03	320	1,926	8.00	1,762	39	3,393,237	383
9	12301	3.08	177	547	2.00	1,702	90	931,310	379
10	40902	1.35	871	1,180	13.00	2,180	62	2,572,484	375
11	64802	5.29	217	1,147	0.00	1,236	53	1,417,320	373
12	10805	6.10	436	2,657	2.00	1,085	25	2,882,349	372
13	59401	2.04	374	763	3.00	2,481	85	1,893,084	365
14	16101	1.19	377	447	3.00	2,458	97	1,099,394	365
15	43401	2.15	414	889	9.00	1,490	73	1,323,885	346
16	59002	5.11	189	966	11.00	2,505	46	2,418,967	343
17	16401	7.28	78	571	10.00	665	23	379,727	343
18	65603	2.79	425	1,183	17.00	2,228	59	2,636,779	335
19	64202	4.17	264	1,101	9.00	973	48	1,071,420	327
20	47001	3.54	252	892	8.00	2,359	57	2,105,026	325
21	67402	4.91	131	642	15.00	1,262	46	809,979	324
22	26602	3.43	146	502	7.00	2,927	66	1,468,874	324
23	45302	4.90	310	1,518	6.00	1,520	32	2,307,017	322
24	28301	1.50	181	271	1.00	2,771	90	751,797	321
25	27101	2.68	177	475	5.00	2,624	73	1,246,278	320

³ Cases of trouble are the number of sustained customer service interruptions.

WPC Rank	Feeder ID	SAIFI	CAIDI	SAIDI	MAIFI	Customers	Cases of Trouble ³	Customer Minutes Interrupted	CPI
26	47704	3.26	612	1,999	7.00	677	32	1,353,282	319
27	45402	3.34	283	945	12.00	1,546	54	1,461,271	316
28	60502	5.30	45	236	9.00	2,261	42	534,473	312
29	15701	3.75	59	222	9.00	2,149	63	477,045	312
30	53602	2.28	167	381	0.00	2,723	76	1,038,111	311
31	57502	4.78	313	1,497	8.01	1,430	29	2,140,458	310
32	23002	2.56	424	1,083	5.00	2,243	52	2,429,288	308
33	52403	3.24	162	525	5.00	1,101	60	578,217	305
34	10803	4.02	711	2,858	5.00	138	8	394,360	304
35	10108	0.50	1,490	745	0.00	2	1	1,490	303
36	45602	4.28	191	818	0.00	1,136	42	929,309	302
37	56802	2.21	182	403	12.00	2,136	72	860,583	301
38	40201	3.44	173	594	11.00	1,563	55	928,626	301
39	53901	3.09	137	424	5.00	2,653	62	1,125,823	300
40	14403	3.30	149	491	6.00	2,460	58	1,208,204	299
41	26002	3.04	182	554	1.00	951	59	526,596	299
42	13102	2.48	179	445	2.00	1,846	67	820,625	298
43	46302	1.89	274	518	8.00	1,731	68	896,255	297
44	11001	3.76	289	1,086	3.00	847	37	920,108	289
45	54505	5.37	90	485	21.00	929	28	450,198	287
46	56504	1.25	414	520	8.00	1,956	63	1,016,627	287
47	28402	3.96	115	454	11.00	1,508	46	684,250	286
48	18502	2.79	95	265	0.00	1,755	64	464,393	286
49	55101	4.52	161	731	16.00	522	34	381,419	285
50	15601	1.81	179	324	8.00	2,325	71	754,410	284
51	56801	3.82	60	229	20.00	2,127	50	486,791	281
52	28001	2.17	213	461	3.00	1,707	62	786,671	280
53	15802	0.01	1,442	19	1.00	383	2	7,212	279
54	43202	1.51	183	277	8.00	2,037	72	565,115	276

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 duration, 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 that would reduce the incidence or duration of service interruptions.

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

Rank	Action	Status	Date	Result
1 Circuit ID: 55001 Newport 50-1				
	Improve sectionalizing capability. Three tap fuses were installed.	Completed	12/31/2003	Reduced customer count affected by each outage
	Circuit outage data analysis.	Completed	6/25/2004	Vehicles and an ice storm in January 2004 contributed to the CPI.
	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	3/18/2005	The quarterly CPI has decreased 79% from the 3rd to the 4th quarter.
	Monitor future performance.	Ongoing		
2 Circuit ID: 28302 Newfoundland 83-2				
	Circuit outage data analysis.	Completed	6/15/2004	Major contributors to CPI were number of cases and SAIF I. 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.	In progress	9/30/2005	
	Line inspection-equipment. Field engineer will identify targeted areas for line inspection.	In progress	6/30/2005	
	Continue to monitor future performance.	Ongoing		The contributing CPI by quarter has dropped 32% from the second quarter to the fourth quarter. The downward trend is expected to continue.
3 Circuit ID: 10702 Catasauqua 7-2				
	Circuit outage data analysis - WPC not on preceding qtr. list. Field Services and Asset Management investigated the single outage that caused the poor ranking circuit performance.	Completed	12/23/2004	During the Ivan storm a non-trimming related tree outage lasted for an extended period of time, the incident was reviewed and investigated at the site of the outage and it was deemed that a similar incident has a very low probability of reoccurring. This outage contributed to 83% of the performance rating this quarter. This circuit should return to it's normal ranking.
	Monitor future performance.	Ongoing	3/31/2005	Circuit Performing as usual previous to the single extended outage. Expected to drop off the list by Q3 2005.

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
-------------	---------------	---------------	-------------	---------------

4 Circuit ID: 13806 Salisbury 38-6

			4/11/2005	
	Monitor future performance.	Ongoing	4/11/2005	Circuit expected to fall off list in Q3 of 2005.
	Circuit outage data analysis - WPC not on preceding qtr. list. Field Services and Asset Management investigated the cause of this circuit's appearance on the worst performing list.	Completed	12/23/2004	During the Ivan storm a tree branch broke free and caused an extended outage that was difficult to get to and fix. After visiting the site and reviewing the cause it is believed that there is a low probability of this incident repeating.

5 Circuit ID: 59301 McAlisterville 93-1

	Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	12/22/2004	Area hard hit by Hurricane Ivan in the 3rd quarter. Circuit is expected to drop off the list of 5% WPCs. Circuit trimmed in December 2004.
	Circuit outage data analysis.	Completed	3/18/2005	The quarterly CPI has decreased 83% from the 3rd to the 4th quarter.
	Monitor future performance.	Ongoing		

6 Circuit ID: 11506 Freemansburg 15-6

	Circuit outage data analysis.	Completed	6/11/2004	
	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. Spot 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. Fuse coordination study completed, and Field Services is about to begin installing additional fuses in January.	Completed	12/23/2004	Reduced outage risk. Work completed should lower momentary count, as well as lessen number of customers taken out at a time.
	Monitor future performance. Performance appears to have improved and monitoring will continue.	Ongoing	3/31/2005	Inconclusive. Monitor future performance. Trimming and other minor work should begin to show performance improvements.

7 Circuit ID: 10802 Cherry Hill 8-2

	Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/28/2005	
	Developing plan to improve SCADA performance at Cherry Hill Substation. Meeting with Verizon this quarter to upgrade communications at the substation and estimate costs.	In progress	3/31/2005	Reduced outage duration.

8 Circuit ID: 42201 Shenandoah 22-1

	Circuit outage data analysis - WPC not on preceding qtr. list	Scheduled for	5/31/2005	
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<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
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9 Circuit ID: 12301 Lanark 23-1

	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.
	64 Animal guards are being installed on transformers on portions of the line with animal problems.	In progress	3/28/2005	Reduced outage risk. Project nearly complete.
	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.
	Split up a long single phase tap into two taps by installing 3 spans of OH line.	In progress	3/28/2005	Reduced customer count affected by each outage. Construction planned for August.
	Line inspection-equipment.	Completed	3/28/2005	
	Load growth in this area requires about 2,200 KVA be transferred from this circuit to South Allentown (21-02). South Allentown (21-02) is currently being trimmed and the new sections added to this circuit from Lanark 23-01 will also be trimmed.		3/28/2005	

10 Circuit ID: 40902 Jersey Shore 9-2

	Circuit outage data analysis.	Completed	12/17/2004	100% of high CPI on Jersey Shore 9-2 reported during the third quarter of 2004, occurred when 1,700 customers experienced a 24 hour outage on 9-18-04, during hurricane IVAN which were caused by trees off the right of way (not tree trimming related). In addition, crews could not reach the sectionalizing switch to transfer these customers to another 12 kV circuit because the area was flooded and they could not perform work until floodings subsided. The 2004 circuit outage reports do not show any other significant high CPI events on 9-2 during 2004. This circuit is expected to remain on the top 5% worst performing list until the third quarter of 2005; the CPI's are averaged together for one year. No further analysis required.
	PPL reviewed animal guard practices.	Completed	3/9/2005	It was agreed that whenever an animal outage is discovered, a work request would be initiated if an animal guard were not installed prior to returning the customers to service.
	Monitor future performance.	Ongoing	3/23/2005	No further action was deemed necessary to improve this circuit's performance. The circuit is expected to drop off the 5% list in Q3 2005, when the IVAN outages are no longer included.

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
11 Circuit ID: 64802 Mt Nebo 48-2				
	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.
	Tree trimming	Scheduled for	1/15/2005	Tree trimming of the entire circuit is expected to reduce outage risk. Tree trimming for the entire circuit should be completed by 7/1/2005.
	Install fault indicators to locate source of outages;	In progress	4/1/2005	
	Monitor future performance.	Ongoing		
12 Circuit ID: 10805 Cherry Hill 8-5				
	Circuit outage data analysis - WPC not on preceding qtr. list	Scheduled for	2/28/2005	
	Developing plan to improve SCADA performance at Cherry Hill Substation. Meeting with Verizon this quarter to upgrade communications at the substation and estimate costs.	In progress	3/31/2005	Reduced outage duration.
13 Circuit ID: 59401 Richfield 94-1				
	Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	12/22/2004	Area hard hit by Hurricane Ivan in the 3rd quarter. Circuit is expected to drop off the list of 5% WPCs.
	Circuit outage data analysis.	Completed	3/18/2005	The quarterly CPI has decreased 79% from the 3rd to the 4th quarter. Circuit trimmed in 2004.
	Monitor future performance.	Ongoing		
14 Circuit ID: 16101 Bingen 61-1				
	Tree trimming Spot trimming.	Completed	3/31/2004	Reduced outage risk.
	Circuit outage data analysis.	Completed	6/11/2004	Number of cases and SAIFI are the two biggest factors in the CPI. There is no detectable pattern. Cases alone contribute 60% of this circuit's performance issues, with SAIFI contributing just under 30%.
	New Sectionalizing : Replace 1 fused cutout with an OCR and install 2 fused cutouts to reduce the length of line on a sectionalizing device. Install a 3 phase loadbreak airswitch to enable customers to be restored quicker during an outage.	Completed	7/19/2004	Reduced customer count affected by each outage.
	Replace cracked porcelain fused cutouts and lightning arresters.	Completed	6/30/2004	Reduced outage risk.
	Install 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 monitored.
	Transfer lower portion of line to the Richland 36-3 line to reduce the length of line exposure.	Scheduled for	5/31/2005	Reduced outage risk. The scheduled date has been delayed until May 2005 because of right-of-way problems that were encountered.
	Improve sectionalizing capability. Investigating splitting the line to allow back feeding from other half.	Completed	2/28/2005	Inconclusive. Monitor future performance. Majority of performance problems occur on fused taps. Load pick up is not the primary performance issue.

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
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15 Circuit ID: 43401 Benton 34-1

	Circuit outage data analysis.	Ongoing	12/30/2004	The Benton 34-1 line was reported as having a high CPI during the 1st, 2nd, and 3rd quarters of 2004. 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 78 hour outage due to trees off the right of way (not tree trimming related), however, the remaining 100 customers did experienced a 16 to 20 hr outage due to inadequate tree trimming.
	Improve sectionalizing capability. Review line to determine if additional sectionalizing can be added to minimize the number of customers affected by emergency outages.	Completed	12/30/2004	Susquehanna Region reviewed line for location to add OCR's, or other sectionalizing devices, no new locations were found.
	Perform line maintenance identified by line inspection. Susquehanna Region will perform a pole by pole inspection of the entire Benton 34-1 line, 128 mile circuit, expected to be completed by the 1st quarter of 2005.	In progress	4/13/2005	Nearly completed. It is expected to be fully completed by 4/15/05
	Hot Spot Trimming	Completed	12/30/2004	Reduced outage risk.
	Monitor future performance.	Ongoing	3/23/2005	

16 Circuit ID: 59002 Mifflintown 90-2

	Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	12/22/2004	Area hard hit by Hurricane Ivan in the 3rd quarter. Circuit is expected to drop off the list of 5% WPCs.
	Circuit outage data analysis.	Completed	3/18/2005	The quarterly CPI has decreased 83% from the 3rd to the 4th quarter. Rural trimming done in 2001 and urban trimming done in 2003.
	Monitor future performance.	Ongoing		

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
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17 Circuit ID: 16401 Mt. Pocono 64-1

	The line was recently thermo-visioned and repairs were made as needed.	Completed	3/31/2004	Reduced outage risk.
	Circuit outage data analysis.	Completed	6/23/2004	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.
	The entire main line will be reconductored under B50921.	Scheduled for	5/31/2005	
	Circuit outage data analysis - WPC not on preceding qtr. list	Completed	2/28/2005	
	Line inspection-equipment. A portion of the line along Rt 314 (three phase branch off main line) will be inspected. This portion of the line already had maintenance work completed in January 2005 to fix galloping conductors.	Scheduled for	5/31/2005	

18 Circuit ID: 65603 Quarryville 56-3

	Circuit outage data analysis.	Completed	9/28/2004	Largest interruption on this circuit was a transformer failure at the substation interrupting 2264 customers for 446 minutes. This outage was about 35 % of this circuit's total CPI. This event is not likely to occur again. There also were several local lightning storms that contributed to the CPI.
	Monitor future performance.	Ongoing		Circuit has continued to show improvement this quarter and is expected to fall off the WPC list.

19 Circuit ID: 64202 Kinzer 42-2

	Circuit outage data analysis.	Completed	8/13/2004	The circuit is on the worst performing list due to a transformer failure at Buck substation and the failure of the S. Akron - Morgantown #2 69kV line. These 2 outages contributed about 50 % of the circuit's total CPI. These events are not expected to occur again and this circuit is expected to fall off the list.
	Continue to monitor performance	Ongoing		23% of this circuit's CPI was attributed to two failed poles during a wind storm.

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
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20 Circuit ID: 47001 Hughesville 70-1

	Circuit outage data analysis.	Completed	6/30/2004	The Hughesville 70-1 line was reported as having a high CPI during the 2nd quarter of 2004. 50% of this high CPI is due to 90 customers experiencing a 10 hr outage due to inadequate tree trimming on 2-3-2004; and the remaining 50% of the second quarter high CPI occurred on 4-4-2004 when 1050 customers experienced a 7 hr. outage due to vehicle accident. 70-1 is 160 miles in length with heavy tree foliage.
	Review line to determine if additional sectionalizing can be added to minimize the number of customers affected by emergency outages.	Completed	12/17/2004	additional sectionalizing devices have been added which should improve line performance
	Circuit outage data analysis.	Completed	12/31/2004	The Hughesville 70-1 line was reported as having a high CPI during the 3rd quarter of 2004, approximately 200 customers experienced outages ranging from 36 to 66 hrs, plus 2400 customers experienced a 3 hr. outage during hurricane IVAN, 9/17/04 to 9/18/04.
	Perform line maintenance identified by line inspection. Susquehanna Region line maintenance will be performed the first quarter of 2005 on a 3 mile portion of 70-1. Items include replacing deteriorated insulators, replacing hardware and replacing small pieces of wire damaged by lightning strikes.	Completed	3/31/2005	
	Tree trimming.	Scheduled for	6/30/2005	Additional hot spotting and scheduled mileage work will be done in 2005. The 13.3-mile urban section is scheduled to be trimmed by the second quarter of 2005.
	Monitor future performance.	Ongoing	3/23/2005	PPL will continue to monitor this circuit's performance.

21 Circuit ID: 67402 Wakefield 74-2

	Circuit outage data analysis.	Completed	9/15/2004	Largest interruption on this circuit was a transformer failure at a nearby substation interrupting 1284 customers for 73 minutes. This event is not likely to occur again. During a local area lightning storm, two poles close to the substation failed. This event impacted most of the circuit because there was limited tie capability.
	Improve sectionalizing capability.	Scheduled for	5/1/2006	Reduced outage duration. When the two poles failed outside the substation, there was a section of load limiting conductor that prevented restoring customers. This section is scheduled to be reconducted in May 2006.
	Monitor future performance.	Ongoing		
	Circuit outage data analysis - WPC not on preceding qtr. list	Scheduled for	2/28/2005	This circuit is expected to fall off the WPC list by the end of the second quarter in 2005.

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
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22 Circuit ID: 26602 Brookside 66-2

	Circuit outage data analysis.	Completed	6/15/2004	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	8/25/2004	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. 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	1/30/2004	Several maintenance items were identified. A WR was initiated to address these problems.
	Monitor future performance.	Ongoing		

23 Circuit ID: 45302 West Berwick 53-2

	Circuit outage data analysis.	Ongoing	12/17/2004	100% of the high CPI during the second quarter 2004 occurred on 8-17-04 when approximately 850 customers experienced outages ranging from 3 to 5 hrs due to trees inadequately trimmed. 100% of the high CPI reported during the 3rd quarter of 2004, on West Berwick 53-2 is due to the 9/18/2004 hurricane IVAN, approximately 1,800 customers experienced outages ranging from 7 hrs to 57 hrs, mainly due to trees off the right of way falling into the over head lines. However, approximately 183 of these 1800 customers experienced a 51 hr outage during the hurricane from trees inadequate trimming.
	Line inspection-vegetation.	Ongoing	3/23/2004	13.4 miles of West Berwick 53-2 urban miles were trimmed in 2002, as well as, 18.6 urban miles were trimmed in 2003; additional hot spotting and/or scheduled mileage work will be done in 2005. The 60 miles of trimming will be completed by Q3 of 2005.
	Line inspection-equipment.	Completed	1/31/2005	line inspection was conducted in January on 47 miles of this circuit. There were 16 items identified for repair/replacement, and work requests will be written for each. Work request will be written by March 31, with the line work completed by June 30.
	Monitor future performance.	Ongoing	3/23/2005	Scheduled tree trimming and other in-progress work is expected to improve this circuit's performance. PPL will continue to monitor this circuit's performance in the future. This circuit is expected to drop off the 5% list after the Q3 of 2005.

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
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24 Circuit ID: 28301 Newfoundland 83-1

	Circuit outage data analysis.	Completed	6/25/2004	Major contributor to CPI was the number of cases (30%). The contributing outages (mostly trees) did not fall into a discernable pattern. No outages were trimming related.
	Circuit outage data analysis.	Completed	8/23/2004	Review of circuit outages indicated there were two poor performing single phase taps.
	Tree trimming. Hot spot trimming on two poor performing single phase taps.	In progress		Reduced outage risk.
	Improve sectionalizing capability. Increase sectionalizing on two poor performing single phase taps beyond OCR 66696N44669.	Completed	12/31/2004	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.
	Monitor future performance.	Ongoing		Trees and animals accounted for over 70% of the outages seen in the past year. This is a heavily forested area where trees outside of the right 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.

25 Circuit ID: 27101 Greenfield 71-1

	Circuit outage data analysis.	Completed	6/15/2004	Major contributor to CPI was the number of cases (73%). The contributing outages (mostly trees outside of the right-of-way and animal contacts, 53%) did not fall into a discernable pattern.
	Tree trimming. Tree trimming for this line began 6/21/04.	Completed	11/12/2004	Reduced outage risk.
	Line inspection-equipment. Due to the high number of animal contacts (30% of the total CPI) and equipment failures (18% of total CPI) an equipment line inspection will be performed.	Completed	11/30/2004	
	Monitor future performance.	Ongoing		
	Perform line maintenance identified by line inspection. Maintenance under WR 186259	Ongoing		

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26 Circuit ID: 47704 Bloomsburg 77-4

Circuit outage data analysis.	Completed	12/30/2004	100% of this high CPI is due to approximately 700 customers experiencing an outage ranging from 4 hrs to 31 hrs, on 9-18-2004 at 7:55 AM. The outage report indicates the reason for the outage was forced pre-arranged, also note on 9-18-04 hurricane IVAN also occurred. This circuit is expected to remain on the top 5% worst performing circuit list until the 3rd quarter 2005.
Perform line maintenance identified by line inspection.	Completed	3/23/2005	C-tag pole replacements have been done on this line, and a section of 3-phase line was converted to 1-phase in an effort to improve the performance.
Improve sectionalizing capability.	Scheduled for	6/30/2005	Additional sectionalizing will be looked into, including installing two air breaks to restore some customers when a tree comes down over the line.
Monitor future performance.	Ongoing	3/23/2005	This circuit's CPI was due maily to two severe weather systems, and is expected to drop when these events fall off the third quarter of 2005. Additionally, work identified and in-progress is expected to help the circuit's performance. This circuit will be continued to be monitored in the future.

27 Circuit ID: 45402 W. Bloomsburg 54-2

Circuit outage data analysis - WPC not on preceding qtr. list	Scheduled for	5/31/2005	
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28 Circuit ID: 60502 North Manheim 5-2

Line inspection-equipment.	Completed	12/31/2004	50 minor maintenance items were found from the line inspection. Work requests have been initiated to address the minor maintenance items and should be completed by 9/30/2005.
Circuit outage data analysis - WPC not on preceding qtr. list	Scheduled for	2/28/2005	

29 Circuit ID: 15701 Tannersville 57-1

Circuit outage data analysis.	Completed	6/15/2004	Inconclusive. Monitor future performance. 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	Many tree related outages, some were trimming related.
Tree trimming. This circuit was scheduled to be trimmed in support of reconductor work to be completed 11/05. This work will be advanced to 1/05.	Scheduled for	1/31/2005	
1.5 miles of the main line will be reconducted under SP 51216. This circuit will be trimmed as part of the reconductor work.	Scheduled for	11/30/2005	

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
30 Circuit ID: 53602 Dalmatia 36-2				
	Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	12/22/2004	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.
	Circuit 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 trimming planned for 2006.
	Monitor future performance.	Ongoing		
31 Circuit ID: 57502 Lawnton 75-2				
	Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	12/22/2004	August 2004, twenty-four cases with 1.8 million cust minutes of interruption caused by a series of F1 tornados.
	Circuit outage data analysis.	Completed	3/18/2005	The quarterly CPI has decreased 82% from the 3rd to the 4th quarter.
	Monitor future performance.	Ongoing		
32 Circuit ID: 23002 St. Johns 30-2				
	Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	5/31/2005	
33 Circuit ID: 52403 Green Park 24-3				
	Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	3/18/2005	This circuit is to be trimmed by the end of 2005. Circuit is expected to drop off the list of 5% WPCs.
	Monitor future performance.	Ongoing		
34 Circuit ID: 10803 Cherry Hill 8-3				
	Tree trimming.	Completed	3/31/2004	Reduced outage risk.
	Circuit outage data analysis.	Completed	6/11/2004	SAIFI is biggest problem with the Cherry Hill 8-3 line. Circuit breaker failure and terminator failure at the substation were the biggest factors in SAIFI.
	Monitor future performance of line.	Ongoing	10/21/2004	
	Investigating border line agreement with Met Ed Utility. Currently reviewing costs and business plan of creating a substation back up to feed the line in an emergency. Additional load development is causing this plan to be re-evaluated. New PPL served substation also being evaluated.	In progress	12/23/2004	Currently waiting for a quote to reserve the capacity on the Met Ed system. Plan being evaluated and prepared for implementation upon receipt of costs.
	Developing plan to improve SCADA performance at Cherry Hill Substation. Meeting with Verizon this quarter to upgrade communications at the substation and estimate costs.	In progress	3/31/2005	Reduced outage duration.

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
35 Circuit ID: 10108 Allentown 1-8				
	Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	5/31/2005	
36 Circuit ID: 45602 Woolrich 56-2				
	Circuit outage data analysis.	Completed	12/16/2004	During the second quarter of 2004, 70% of the high CPI was due to a tree falling into Woolrich 56-2 on 8-9-04 and 6-10-04, during local area high winds, approximately 630 customers experienced an outage ranging from 3 hrs to 10 hrs; and 30% of this second quarter high CPI occurred on 3-13-04 when a vehicle caused 384 customers to experience a 4 hr. outage. 100% of this high CPI reported during the 3rd quarter of 2004 is due to approximately 246 customers experiencing lengthy outages ranges from 6 hrs. to 26 hrs. due to hurricane IVAN, 9-18-04. The outage report for 9-18-04 indicated 244 of these 246 customers experienced outages that were actually not tree trimming related, i.e., trees located off the right of way fell into overhead lines. However, on 9-18-04 2 customer's outages for 26 hours were due to trees which were inadequately trimmed.
	Tree trimming	Ongoing	3/23/2005	6 miles (urban) of the line were trimmed in 2003. The 62 rural miles are scheduled for 2007
	Improve sectionalizing capability. Susquehanna Region is working on determining if one additional LBAS sectionalizing switch needs to be added to Woolrich 56-2, this review will be completed by the second quarter of 2005.	In progress	6/30/2005	The field is looking to install a set of loadbreak disconnects on the three-phase line to reduce the number of customers exposed to a problem area. This job is expected to be done by the second quarter of 2005.
	Monitor future performance.		3/23/2005	PPL will continue to monitor this circuit's performance.
37 Circuit ID: 56802 Benvenue 68-2				
	Circuit outage data analysis.	Completed	6/25/2004	A March 2003 ice storm contributed to CPI.
	Circuit outage data analysis.	Completed	12/22/2004	Area hard hit by Hurricane Ivan in the 3rd quarter. Circuit is expected to drop off the list of 5% WPCs. An inaccessible portion of line is to be transferred to another source in the 1st qtr of 2005. The east side of the circuit is to be inspected in 2005.
	Monitor future performance.	Ongoing		
38 Circuit ID: 40201 Bear Gap 2-1				
	Circuit outage data analysis - WPC not on preceding qtr. list	Completed	11/12/2004	Major contributors to CPI were cases of trouble and SAIFI. Three events were responsible for over 40% of the CPI total. Two of these events involved programming problems with the substation OCR, causing the entire line to be lost each time. Training has been completed, and these events are not expected to occur again.
	Tree trimming	Completed	12/31/2004	Reduced outage risk. This circuit is expected to drop off the list of 5% wpc's.

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
39 Circuit ID: 53901 Halifax 39-1				
	Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	3/18/2005	Tree trim the west shore portion of the circuit scheduled for summer 2005.
40 Circuit ID: 14403 South Slatington 44-3				
	Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	11/30/2004	
	OCR Review	Completed	12/23/2004	An undersized OCR has been replaced with one more capable of handling load issues. This should drive down outage duration for the effected customers.
	Tree trimming. This circuit has been added to the list for trimming next year.		3/28/2005	
	Load balancing.	Ongoing	3/28/2005	
	Several OCRs on circuit are being upgraded due to load and additional sectionalizing also in progress.	Ongoing	3/28/2005	
41 Circuit ID: 26002 West Damascus 60-2				
	Circuit outage data analysis.	Completed	6/15/2004	Major contributors to CPI were the number of cases and SAIFI. BLGR-WDAM 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 review and increase sectionalizing on two poor performing single phase taps.	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.
	Monitor future performance.	Ongoing		
	Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	5/31/2005	

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
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42 Circuit ID: 13102 Northampton 31-2

	Load balancing.	Completed	10/31/2003	Reduced outage risk.
	Circuit outage data analysis.	Completed	6/15/2004	Number of cases is 55% of the CPI with SAIFI a close second. Two OCR failures in 2003 were a major factor in the SAIFI.
	An overloaded single phase OCR is being replaced with a larger OCR.	In progress	12/19/2004	The OCR is scheduled to be in service by 12/19/2004 .
	Monitor future performance of line.	Ongoing		
	Electronic OCR should be received and installed in the first quarter of 05.	In progress	12/23/2004	Delay in receiving the new OCR has caused the installation date to be delayed.
	Circuit outage data analysis.	Ongoing	3/31/2005	Inconclusive. Monitor future performance. Electronic OCR to be installed May of 2005. Based on current performance, this circuit should fall off the list by Q3 2005.

43 Circuit ID: 46302 Rohrsburg 63-2

	Circuit outage data analysis.	Completed	12/30/2004	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 experiencing outages, short or long in duration has not been reported for the 1st and 2nd quarters in 2004. However, it was reported on 2/21/2004, 19 customers experienced a 5 hr. outage due to equipment failure and on 6-17-2004, 24 customers experienced outages ranging from 7 hrs to 12 hrs due to equipment failure.
	Improve sectionalizing capability. Review line to determine if additional sectionalizing can be added to minimize the number of customers affected by emergency outages.	Completed	12/30/2004	The line was reviewed and no new locations for new sectionalizing device were found.
	Circuit outage data analysis - WPC not on preceding qtr. list	Scheduled for	5/31/2005	

44 Circuit ID: 11001 East Greenville 10-1

	Circuit 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.
	Protection Scheme re-evaluated	Completed	10/18/2004	Reduced customer count affected by each outage. This should reduce customer outage exposure.
	Improve sectionalizing capability. Additional fuses will be added as well.	In progress	12/23/2004	Project being developed to resectionalize trouble spots, and add better fusing scheme to limit customer exposure. Project should be implemented early in 2005.
	Circuit outage data analysis - WPC not on preceding qtr. list	Scheduled for	5/31/2005	

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
45 Circuit ID: 54505 Enola 45-5				
	Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	12/22/2004	UG concentric cable failures. Cable in development tested and bad cable scheduled for replacement by end of December 2004.
	Circuit outage data analysis.	Completed	3/18/2005	The quarterly CPI has decreased 85% from the 3rd to the 4th quarter. Major portion of cable replacement completed in Dec 2004. Another section of cable is being tested. Circuit is expected to drop off the list of 5% WPCs.
	Monitor future performance.	Ongoing		
46 Circuit ID: 56504 Rockville 65-4				
	Three new tap fuses were installed as part of SAIFI initiative.	Completed	12/31/2003	Reduced customer count affected by each outage.
	Line inspection-equipment.	Completed	2/18/2004	Inconclusive. Monitor future performance.
	Circuit outage data analysis.	Completed	6/25/2004	Inconclusive. Monitor future performance. A wind storm in November 2003 contributed to the CPI. Trees-not trimming related caused most of the outages.
	Circuit outage data analysis.	Completed	12/22/2004	Area hard hit by Hurricane Ivan in the 3rd quarter. Circuit is expected to drop off the list of 5% WPCs. Eleven miles to be trimmed in 2005.
	Circuit outage data analysis.	Completed	3/18/2005	The quarterly CPI has decreased 81% from the 3rd to the 4th quarter. Tree trimming is on going.
	Monitor future performance.	Ongoing		
47 Circuit ID: 28402 Hartland 84-2				
	Circuit outage data analysis - WPC not on preceding qtr. list	Scheduled for	5/31/2005	
48 Circuit ID: 18502 Canadensis 85-2				
	Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/11/2004	There were mostly tree related outages on this circuit.
	Improve 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.
	Monitor future performance.	Ongoing		This circuit is expected to fall off the worst performing circuit list in 3rd qtr of 2005, when the 3rd Qtr 2004 is no longer considered in the calculation. The 4th quarter CPI contribution is significantly lower than the the 3rd quarter (40 vs. 100) and the trend is expected to continue.
49 Circuit ID: 55101 Wertsville 51-1				
	Circuit outage data analysis - WPC not on preceding qtr. list	Scheduled for	5/31/2005	

<i>Rank</i>	<i>Action</i>	<i>Status</i>	<i>Date</i>	<i>Result</i>
50 Circuit ID: 15601 N. Stroudsburg 56-1				
	Circuit outage data analysis.	Completed	6/23/2004	Inconclusive. Monitor future performance. Major contributor to CPI was the number of cases. There were several burned loops on the line and quite a few animal contacts.
	Line inspection-equipment.	Ongoing	3/31/2005	
	Monitor Performance	Ongoing		
	Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	5/31/2005	
51 Circuit ID: 56801 Benvenue 68-1				
	Circuit outage data analysis.	Completed	8/18/2004	Interruptions due to two 69kv outages in May caused by lightning contributed to the CPI. This is not likely to reoccur.
	Circuit outage data analysis.	Completed	12/22/2004	Circuit is expected to drop off the list of 5% WPCs.
	Monitor future performance.	Ongoing		
52 Circuit ID: 28001 Tafton 80-1				
	Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	2/28/2005	31% of the outages on 2004 were caused by trees, 23% due to equipment failure.
	Tree trimming.	In progress	6/30/2005	
	Line inspection-equipment.	Scheduled for	6/30/2005	
	Continue to monitor future performance.	In progress	3/21/2005	This circuit is expected to fall from the worst performing list after it is trimmed and work identified from the inspection completed.
53 Circuit ID: 15802 Westgate 58-2				
	Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	5/31/2005	
54 Circuit ID: 43202 Millville 32-2				
	Circuit 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 first quarter of 2004, on 2-6-2004, approximately 254 customers experienced a 1 hr. outage, nothing found was reported. During the second quarter of 2004, 82 customers experienced a 4 hr. outage due to a vehicle accident and on 5-10-2004, 11 customers experienced a 8 hr. outage due to equipment failure.
	Improve sectionalizing capability. Review line to determine if additional sectionalizing can be added to minimize the number of 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.
	Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	5/31/2005	

- (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 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 ⁴	Percent of Trouble Cases	Customer Interruptions ⁵	Percent of Customer Interruptions	Customer Minutes	Percent of Customer Minutes
Improper Design	2	0.01%	9	0.00%	529	0.0%
Improper Installation	0	0.00%		0.00%	0	0.0%
Improper Operation	2	0.01%	5,222	0.36%	95,280	0.0%
Trees - Inadequate Trimming	1,463	7.81%	114,345	7.89%	28,241,732	12.0%
Trees - Not Trimming Related	3,401	18.15%	321,175	22.17%	85,559,726	36.3%
Animals	3,427	18.29%	56,395	3.89%	5,299,006	2.2%
Vehicles	844	4.51%	205,404	14.18%	26,357,535	11.2%
Contact/Dig-in	189	1.01%	13,583	0.94%	1,146,533	0.5%
Equipment Failure	5,100	27.22%	489,881	33.81%	59,487,624	25.3%
Forced Prearranged	796	4.25%	47,496	3.28%	5,300,688	2.2%
Other - Controllable	269	1.44%	10,908	0.75%	1,067,054	0.5%
Nothing Found	1,762	9.41%	103,472	7.14%	10,515,111	4.5%
Other - Public	60	0.32%	13,793	0.95%	1,502,065	0.6%
Other - Non-Controllable	1,419	7.57%	67,236	4.64%	11,015,972	4.7%
Total	18,734	100.00%	1,448,919	100.00%	235,588,855	100.00%

⁴ Trouble cases are the number of sustained customer service interruptions (i.e., service outages).

⁵ 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.

PPL Electric also tracks the effects of significant severe weather events, both PUC-reportable and non-reportable, on reliability performance. During the 12 months ended March 31, 2005, Hurricane Ivan alone was responsible for approximately 1,300 cases of trouble, representing more than 121,000 customer interruptions and affecting about 9% of the PPL Electric customer base. This contributed about 0.08 to SAIFI and 32 minutes to CAIDI for the period.

Trees – Inadequate Trimming: In 2004, PPL Electric adopted an improved tree-trimming 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.

During the third quarter of 2004, Hurricane Ivan was responsible for 250 cases of trouble and 17,000 customer interruptions in this category.

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

During the third quarter of 2004, Hurricane Ivan was responsible for over 600 cases of trouble and 68,500 customer interruptions in this category.

Animals: Animals consistently account for more than 18% 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 90% of the number of cases of trouble are 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 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 more 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 40% of the cases of trouble, 48% of the customer interruptions and 55% of the customer minutes attributed to equipment failure are weather-related and are not considered to be indicators of equipment condition or performance.

During the third quarter of 2004, Hurricane Ivan was responsible for 174 weather-related cases of trouble and 20,000 customer interruptions in this category.

Nothing Found: This 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.

(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.)*

The following table provides the requested data.

Inspection & Maintenance Goals/Objectives	Annual Budget	1 st Quarter		Year-to-date	
		Budget	Actual	Budget	Actual
Transmission					
Transmission C-tag poles	210	39	33	39	33
Transmission arm replacements (# of sets)	1,200	159	57	159	57
Transmission lightning arrester installations (# of structures)	14	2	0	2	0
Transmission air break switch inspections	60	12	7	12	7
Foot Patrols (# of miles)	1,750	632	405	632	405
Transmission tree trimming(# of linear feet)	205,300	86,050	70,612	86,050	70,612
Transmission herbicide (# of acres)	7,006	200	159	200	159
Substation					
Substation batteries (# of activities)	821	620	617	620	617
Circuit breakers (# of activities)	3,310	857	729	857	729
Substation inspections (# of activities)	3,567	984	1,009	984	1,009
Transformer maintenance (# of activities)	1,938	649	463	649	463
Distribution					
Distribution C-tag poles replaced(# of poles)	1,500	477	409	477	409
C-truss distribution poles (# of poles)	300	0	12	0	12
Capacitor (MVAR added)	80	26	19	26	19
OCR replacements (# of)	510	158	295	158	295
Test sections of underground distribution cable	720	180	194	180	194
Distribution pole inspections	63,748	0	82	0	82
Group relamping	18,500	4,625	1,953	4,625	1,953
Distribution tree trimming (# of miles)	4,531	1,175	969	1,175	969
Distribution herbicide (# of acres)	928	30	0	30	0

- (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.)*

The following table provides the operation and maintenance expenses for PPL Electric, as a whole, and includes the work identified in response to Item (6).

Activity	1 st Quarter		Year-to-date	
	Budget (\$1,000s)	Actual (\$1,000s)	Budget (\$1,000s)	Actual (\$1,000s)
Provide Electric Service	2,708	2,959	2,708	2,959
Vegetation Management	2,821	2,054	2,821	2,054
Customer Response	12,776	29,528	12,776	29,528
Reliability & Maintenance	12,452	11,191	12,452	11,191
System Upgrade	1,632	1,116	1,632	1,116
Customer Services/Accounts	19,810	18,772	19,810	18,772
Others	11,516	13,079	11,516	13,079
Total O&M Expenses	63,715	78,699	63,715	78,699

- (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.)*

The following table provides the capital expenditures for PPL Electric, as a whole, which includes transmission and distribution activities.

	1 st Quarter		Year-to-date	
	Budget (\$1,000s)	Actual (\$1,000s)	Budget (\$1,000s)	Actual (\$1,000s)
New Service/Revenue	18,332	19,752	18,332	19,752
System Upgrade	10,917	8,635	10,917	8,635
Reliability & Maintenance	7,886	7,328	7,886	7,328
Customer Response	644	3,377	644	3,377
Other	1,849	1,073	1,849	1,073
Total	39,628	40,165	39,628	40,165

- (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).*

The following table shows the dedicated staffing levels as of the end of the quarter. Job descriptions are provided in Appendix C.

Transmission and Distribution(T&D)	
Lineman Leader	91
Journeyman Lineman	198
Lineman	81
Helper	10
Troubleman	42
T&D Total	422
Electrical	
Leaders	44
Journeyman	111
Electricians	61
Helpers	3
Electrical Total	219
Overall Total	641

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

The following table provides the expenditures incurred for contractor services for T&D operation and maintenance, and includes the work identified in response to Item (6). PPL Electric does not track hours for all contractors.

	2005 Actual (\$1,000s)
1st Quarter	5,814
YTD Total	5,814

- (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 where appropriate.**

The following table shows the average response rate for transmission and distribution personnel currently included in PPL Electric's measured callout response program.

January	41%
February	44%
March	44%
Quarter Average	43%
YTD Average	43%

PPL Electric currently does not have a process to track and measure the amount of time it takes to obtain necessary personnel.

PPL Electric's call-out procedure is defined by bargaining unit agreements. Under the agreements, PPL Electric uses a computer-based callout roster to determine the order in which personnel are called to respond to after-hour emergencies in a given geographic area. Personnel are called sequentially. When sufficient personnel cannot be secured from the rosters for that geographic area, rosters from adjacent areas are utilized. There is no electronic link from one roster to another that enables calculation of when the original needed crew size is achieved. PPL Electric can track when personnel were called to provide assistance; and which personnel accepted or refused, but PPL Electric currently does not have an automated method to calculate elapsed time per callout.

PPL Electric is in the process of installing a new callout system with complete conversion to the new system by the second quarter of 2005. PPL Electric plans to develop the necessary reporting capability using the new system and the recently approved EAPA definitions by the end of 2005.

***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 Trouble⁶ - 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.

⁶ Cases of trouble are the number of sustained customer service interruptions.

Appendix B

PPL Electric Utilities Corporation Service Interruption Definitions

Trouble Definitions: 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Outages resulting from the lack of adequate tree trimming (within the Right of Way).
35 – Trees – Not Trim Related	Non-Controllable	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• When cars, trucks or other types of vehicles or their cargoes strike facilities causing an interruption.
51 – Contact/Dig-in	Public	<ul style="list-style-type: none">• 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.

Appendix B

60 – Equipment Failure	Controllable	<ul style="list-style-type: none"> • 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 ⁷	Controllable	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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.

⁷ 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 immediately, but are reported as scheduled prearranged when the interruption is postponed.

Appendix B

<p>90 – Other – Controllable (Lineman provides explanation)</p>	<p>Controllable</p>	<ul style="list-style-type: none"> • 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.
<p>96 – Nothing Found</p>	<p>Non-Controllable</p>	<ul style="list-style-type: none"> • When no cause for the interruption can be found. • 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.
<p>98 – Other Public (Lineman provides explanation)</p>	<p>Public</p>	<ul style="list-style-type: none"> • 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.
<p>99 – Other – Non-Controllable (Lineman provides explanation)</p>	<p>Non-Controllable</p>	<ul style="list-style-type: none"> • 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.

Appendix C

***PPL Electric Utilities Corporation
Job Descriptions***

Transmission and Distribution

Helper	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Investigates and resolves trouble calls, voltage abnormalities on transmission and distribution systems associated with but not limited to PPL Electric facilities.

Appendix C

Electrical

Helper	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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:<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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:<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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.



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April 29, 2005

~~CONFIDENTIAL~~

Via Federal Express

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

RECEIVED

APR 29 2005

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 Energy's 2004 Annual Reliability Report for the period ending December 31, 2004.

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,

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cc: Office of Consumer Advocate
Office of Small Business Advocate

enclosures

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APR 29 2005

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

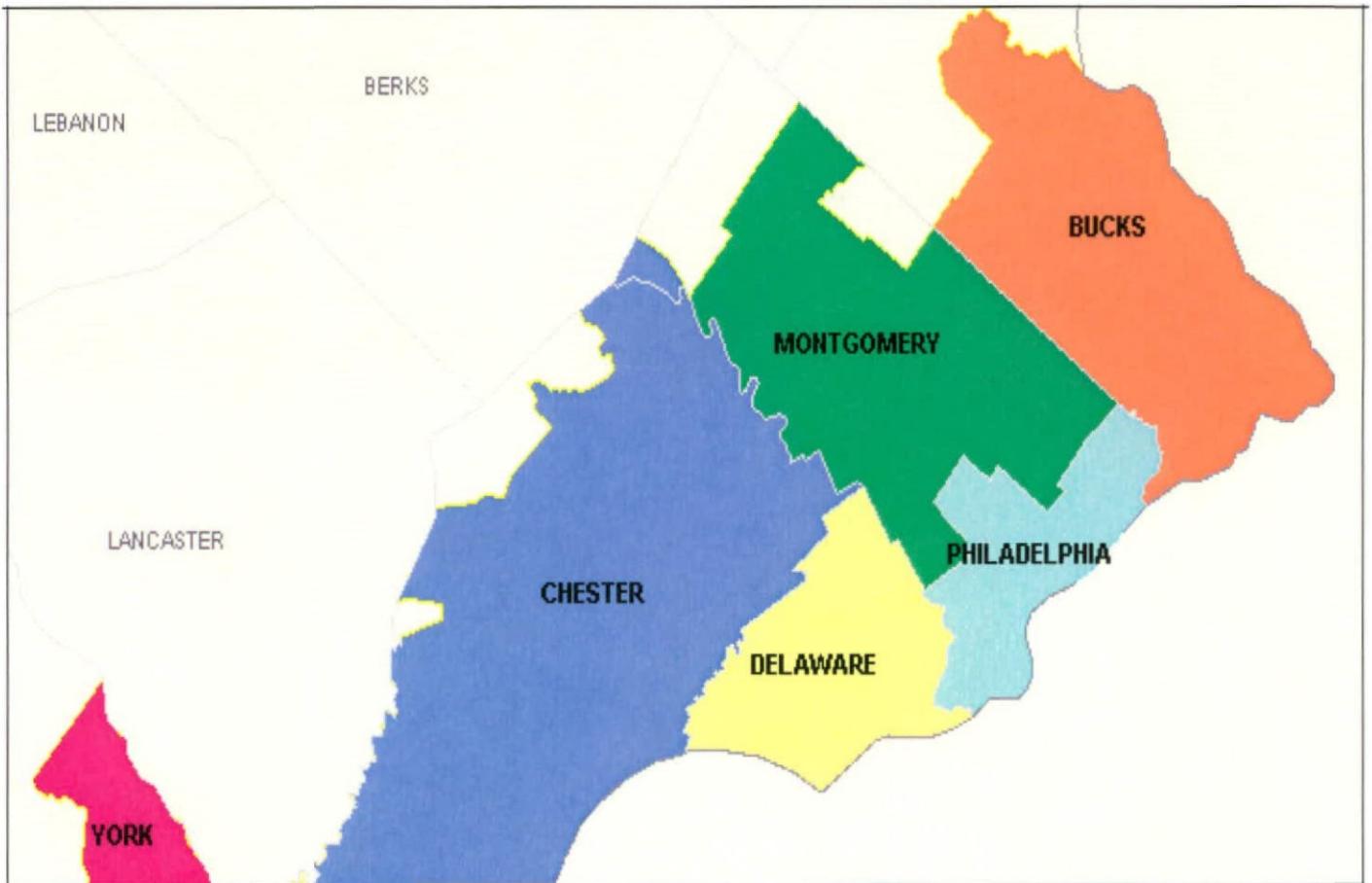
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An Exelon Company

2004 Electric Distribution Company Annual Reliability Report

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April 30, 2005 **DOCKETED**
AUG 12 2005

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:

PECO Energy's reliability performance in 2004 was good. The SAIFI of 0.98 was below the Benchmark and the Standard, and the best since the pre-competition baseline period, which began in 1994. The CAIDI of 106 and the SAIDI of 104 were both 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

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. 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.

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 2004

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
2004	0.98	106	104	0.93
2003	1.00	103	103	1.00
2002	1.11	104	116	1.19
2001	1.21	117	141	0.94

	SAIFI	CAIDI	SAIDI	MAIFI
2002 – 2004 Average	1.03	104	108	1.04
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 2002 to 2004 were all better than the respective Standards, and in addition were better than the benchmarks.

	2004	2003	2002	2001
Number of customers served *	1,602,490	1,602,490	1,592,875	1,591,952
Sustained customer minutes	166,641,211	165,300,000	183,994,440	224,153,128
Number of customers affected	1,574,526	1,600,471	1,760,839	1,921,762
Number of customer momentary interruptions	1,489,252	1,595,298	1,892,308	1,488,565

* Customers served at year-end. 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.

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	726	7.1%	38,199	2.4%	2,700,965
Contact / Dig In	233	2.3%	29,776	1.9%	2,223,158
Equipment Failure	3,321	32.3%	519,422	33.0%	49,545,053
Lightning	896	8.7%	113,817	7.2%	15,668,544
Transmission / Substation	26	0.3%	64,010	4.1%	7,154,857
Vegetation Broken / Uprooted	1,878	18.3%	381,292	24.2%	45,263,563
Vegetation In-Growth	890	8.7%	54,462	3.5%	7,946,589
Vehicles	301	2.9%	107,363	6.8%	6,993,315
Unknown	1,249	12.1%	150,003	9.5%	19,801,186
Other	767	7.5%	116,182	7.4%	9,343,981

The largest contributors to customer interruptions were equipment failure and tree-related incidents. Most customer interruptions caused by trees come from broken branches and trunks or uprooted trees (88%), while ingrowth accounts for 12% of vegetation-related customer interruptions. The PECO service territory experienced 14 storms containing lightning activity during the 12-month reporting period.

Section 57.195(b)(5): *“The reports shall include... a list of 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 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:

- Bryn Mawr 142
- Buckingham 342
- Buckingham 372
- Concord 347
- Grays Ferry 141
- Lenape 343
- Lenape 352
- Line 1100CL
- Line 14100CL
- Middletown 132
- Middletown 349
- Newlinville 344
- Newlinville 352
- Perkiomen 363
- Whitemarsh 141

As of the date of this report, analysis of these circuits continues. Additional information on efforts taken and planned for these circuits will be included in future quarterly reliability reports.

Following are the efforts taken to date and planned for these circuits:

Bryn Mawr 142:

Completed

- Performed regularly scheduled tree clearance

Planned:

- Install new 3-phase mid-circuit reclosers
- Install new single phase recloser
- Complete reliability corrective work orders

Buckingham 342:

Completed

- Replaced 3-phase mid-circuit reclosers
- Installed new underground cable
- Inspected circuit visually and with thermographic camera
- Completed reliability corrective work orders

Planned:

- Complete reliability corrective work orders
- Inspect circuit backbone for vegetation issues and correct as needed

Buckingham 372:

Completed:

- Corrected 3-phase mid-circuit recloser operation
- Completed reliability corrective work orders
- Inspected circuit visually and with thermographic camera

Planned:

- Upgrade lightning protection
- Complete reliability corrective work orders
- Inspect circuit backbone for vegetation issues and correct as needed

Concord 347:

Completed:

- Completed reliability corrective work orders
- Inspected circuit visually and with thermographic camera
- Replaced 3-phase mid-circuit recloser

Planned:

- Upgrade fusing
- Complete reliability corrective work orders
- Inspect circuit backbone for vegetation issues and correct as needed

Grays Ferry 141:

Completed:

- Installed faulted circuit indicators

Planned:

- Install new 3-phase mid-circuit reclosers
- Upgrade fusing
- Upgrade switches
- Complete reliability corrective work orders
- Inspect circuit backbone for vegetation issues and correct as needed

Lenape 343:

Completed:

- Replaced 3-phase mid-circuit reclosers
- Completed reliability corrective work orders
- Inspected circuit visually and with thermographic camera

Planned:

- Install new 3-phase mid-circuit recloser
- Upgrade fusing
- Complete reliability corrective work orders

Lenape 352:

Completed:

- Ensured proper operation of 3-phase tie reclosers on loss of potential
- Inspected circuit visually and with thermographic camera

Planned:

- Perform regularly scheduled tree clearance (will continue into 2006)

Line 1100CL:

Completed:

- Performed regularly scheduled tree clearance
- Inspected circuit visually and with thermographic camera

Planned:

- Upgrade fusing
- Check/Repair motor operated switch
- Inspect reclosers
- Complete reliability corrective work orders

Line 14100CL:

Completed:

- Inspected circuit visually and with thermographic camera
- Installed new 3-phase mid-circuit recloser
- Completed reliability corrective work orders
- Corrected operation of automated switch

Planned:

- Upgrade lightning protection
- Complete reliability corrective work orders
- Inspect circuit backbone for vegetation issues and correct as needed

Middletown 132:

Completed:

- Completed reliability corrective work order

Planned:

- Perform regularly scheduled tree clearance.
- Upgrade fusing
- Complete reliability corrective work orders

Middletown 349:

Completed:

- Performed corrective maintenance on 3-phase recloser

Planned:

- Perform regularly scheduled tree clearance

Newlinville 344:

Completed:

- Replaced 3-phase mid-circuit recloser

Planned:

- Activate 3-phase tie recloser
- Inspect circuit backbone for vegetation issues and correct as needed
- Complete reliability corrective work orders

Newlinville 352:

Completed:

- Replaced 3-phase mid-circuit recloser
- Performed corrective maintenance on 3-phase reclosers

Planned:

- Install single-phase recloser
- Complete reliability corrective work orders

Perkiomen 363:

Completed:

- Performed regularly scheduled tree clearance.
- Installed 34 kV switch.
- Performed corrective maintenance on 3-phase reclosers.

Planned:

- Complete reliability corrective work orders

Whitemarsh 141:

Completed:

- Installed new 3-phase reclosers.

Planned:

- Inspect circuit backbone for vegetation issues and correct as needed.
- Upgrade fusing.

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 2004

Program	Planned	Revised	Completed
Manhole Inspections	2,077	2,077	2,159
Circuit Patrol & Thermography	920	920	933
Recloser Inspections	353	262	270
Center City Network Inspections	211	550	562
T&S Maintenance	4,337	3,971	4,096
T&S Testing	1,348	909	1,349

The Original Planned, Revised Plan (as communicated to the PUC in a meeting in Harrisburg on 12/7), and Completed 2004 Tasks were communicated as follows:

Recloser Inspections: PECO has been replacing oil filled reclosers with solid dielectric reclosers on system over the last few years. PECO currently installs solid dielectric reclosers with vacuum interrupters that comprise 62% of the system population. They require less maintenance than oil-insulated switchgear since they are not susceptible to dielectric contamination and also have a longer contact life. In 2004 the maintenance cycle for solid insulated equipment changed from 2 yrs to 4 yrs.

Network Inspections: In 2004 tracking of the program changed from manhole counts to task counts to ensure closer tracking of program completion. This accommodated the completion of multiple tasks at different times within a given manhole. Program requirements did not change.

The Original Planned, Revised Plan (as communicated to the PUC in a meeting in Harrisburg on 12/7), and Completed 2004 Tasks for T&S were communicated as follows:

T&S Maintenance: In 2003 the frequency for maintenance of transmission related equipment was revised to align with PJM guidelines for relay testing (4 year periodicity). In 2003 the frequency for Unit Transformer diagnostic testing was revised to align with a condition directed maintenance program with intrusive maintenance driven from data results. Implementation of the frequency changes during 2004 resulted in the need to complete fewer tasks during 2004. Tracking of task completion for substation inspections was revised in March to ensure accuracy of program completion tracking. This change had originally been anticipated to begin in January. Beginning in June 2004 a project started to re-evaluate all of the existing maintenance programs. The project resulted in the development of new Performance Centered Maintenance (PCM) Templates that incorporate company best practices and include Original Equipment Manufacturer (OEM) recommendations.

T&S Testing: In 2003 the frequency for Unit Transformer relay testing was revised to align with the maintenance tasks driven by condition directed maintenance. In 2004 relay calibration and trip testing tasks were separated from a single work order task per relay system into two work order tasks. This was the basis for the 2004 plan. Work orders generated prior to 2004 still combined the two activities into one task resulting in fewer tasks counted toward completion of the program. The program requirements did not change.

Vegetation Management Preventive Maintenance Program

	Planned	Completed
Distribution Lift & Manual Trimming	2,096	1,950
Transmission Trim & Remove	221	243

The Distribution Lift & Manual Trimming program ended up 146 miles or approximately 7% behind schedule. An aggressive plan was implemented in January 2005 and the miles were recovered within the first quarter of 2005.

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).”*

PECO Energy’s 2005 Transmission and Distribution Inspection and Maintenance Plan

Maintenance Program	Units (Planned)
Manhole Inspections	2,534
Circuit Patrol & Thermography	736
Recloser Inspections	209
Center City Network Inspections	318
T & S Maintenance	4,097
T & S Testing	948

Vegetation Management Preventive Maintenance Program

	Miles Planned
Distribution Lift & Manual Trimming	2,737
Transmission Trim & Remove	198

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 2004



An Exelon Company

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Director
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Philadelphia, PA 19103

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

April 29, 2005

Via Federal Express

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

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APR 29 2005

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 Energy's 2004 Quarterly Reliability Report for the period ending March 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,

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

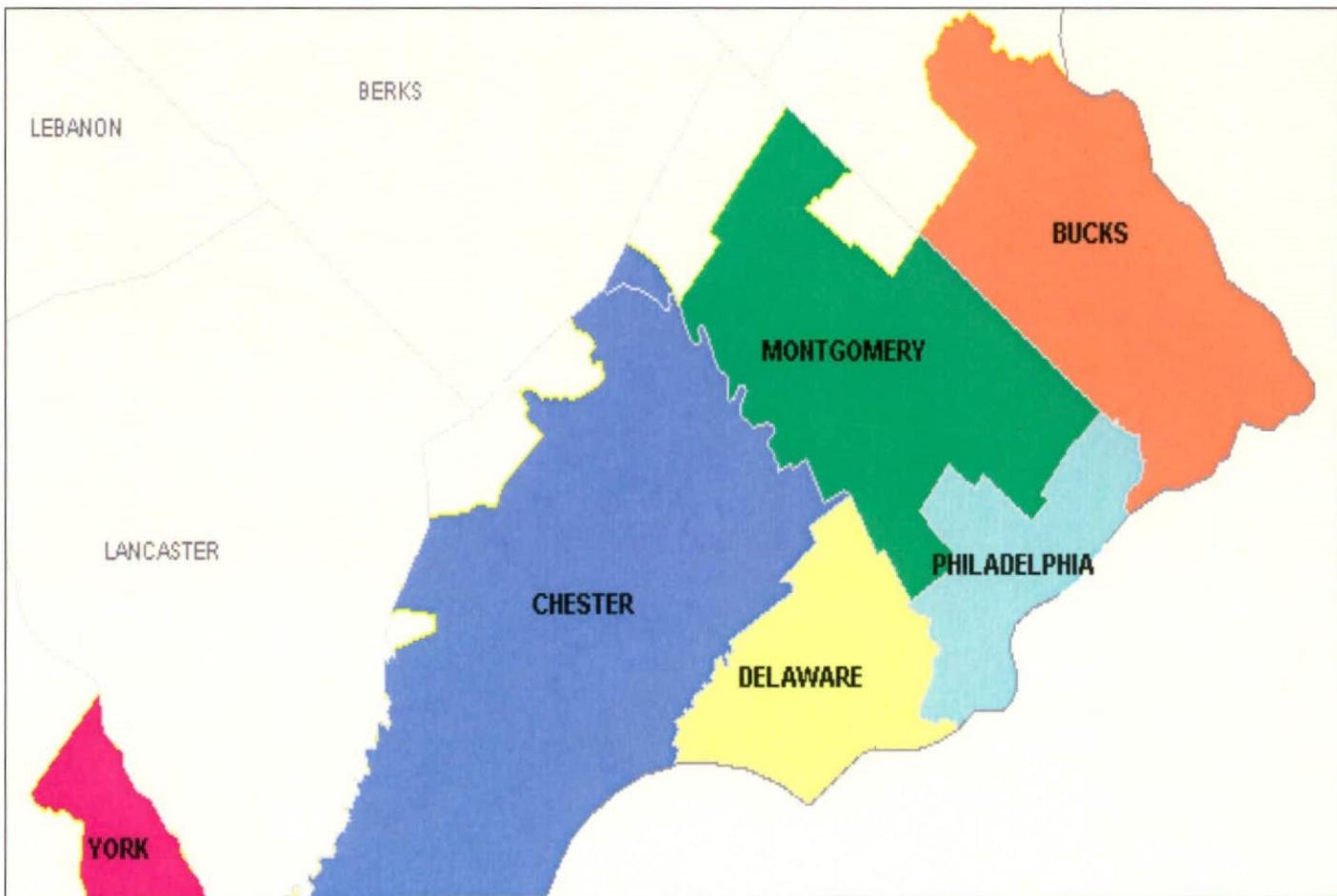
enclosures

WJP/mpb

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



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May 1, 2005

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AUG 04 2005

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APR 29 2005

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

PECO Energy ("PECO")
Quarterly Reliability Report for the Period Ending December 31, 2004
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) "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."

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

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	Sustained Customer Hours	Momentary Customer Interruptions	Sustained Customer Minutes	SAIFI	CAIDI	SAIDI	MAIFI
1,617,945	1,583,809	2,789,490	1,559,950	167,369,370	0.98	106	103	0.96

**Data reflects 12 months ending 3/31/2005

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) "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."

12 Months Ending March 31, 2005					
Cause	Cases of Trouble	% Cases of Trouble	Customer* Interruptions	% Customer Interruptions	Customer Minutes
Animal Contact	679	6.6%	36,859	2.3%	2,586,742
Contact / Dig In	285	2.8%	20,929	1.3%	1,995,973
Equipment Failure	3,342	32.4%	538,603	34.0%	50,229,401
Lightning	897	8.7%	113,886	7.2%	15,679,290
Transmission / Substation	22	0.2%	44,582	2.8%	5,672,828
Vegetation Broken / Uprooted	1,902	18.5%	384,364	24.3%	46,936,163
Vegetation – In-growth	908	8.8%	56,031	3.5%	8,015,195
Vehicles	306	3.0%	110,890	7.0%	7,194,749
Unknown	1,218	11.8%	161,552	10.2%	19,974,522
Other	744	7.2%	116,113	7.3%	9,084,508

*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. Most customer interruptions caused by trees come from broken branches, trunks or uprooted trees (87% of vegetation-related customer interruptions), while ingrowth accounts for 13%.

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 Preventive Maintenance Program – status as of 03/31/2005					
	1 st Quarter Tasks		YTD Tasks		2005 Total Planned
	Planned	Complete	Planned	Complete	
Manhole Inspections	283	417	283	417	2534
Circuit Patrol & Thermography	221	593	221	593	736
Recloser Inspections	0	13	0	13	209
Center City Network Inspections	192	244	192	244	318
T&S Maintenance	1114	988	1114	988	4097
T&S Testing	237	414	237	414	948
Totals	2047	2558	2047	2558	8842

Vegetation Management Preventive Maintenance Program – status as of 03/31/05					
	1 st Quarter Miles		YTD Miles		2005 Total Planned
	Planned	Complete	Planned	Complete	
Distribution Lift and Manual Trimming	764	772	764	772	2737
Transmission Trimming and Removals	52	54	52	54	198
Totals	816	826	816	826	2935

Contact Persons:

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Duquesne Light

A DQE Company

Rates and Regulatory Affairs Unit
411 Seventh Avenue 8-4
Pittsburgh, Pennsylvania 15219

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MAY 02 2005

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PENNSYLVANIA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

May 2, 2005

VIA OVERNIGHT MAIL DELIVERY:

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

DOCUMENT
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L-00030161

Re: Reliability Report – Year Ended December 31, 2004

Dear Mr. McNulty:

On December 28, 2004, Duquesne filed with the Commission a Petition for Protective Order Pertaining to Information contained in its Quarterly and Annual Reliability Reports. Pending Commission action upon that request, Duquesne is submitting an original and six (6) copies of its report for the year ended December 31, 2004, in two versions, both included under this transmittal letter. The first version contains only that information for which Duquesne did not request confidential 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.

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 or nkrajovic@duqlight.com.

Sincerely,

Nancy J. D. Krajovic
Manager, Regulatory Affairs

Enclosures

- c: Mr. K. F. Cadden, Bureau of CEEP w/ enclosures
- Mr. B. J. Loper, Bureau of CEEP "
- Mr. I. A. Popowsky, Consumer Advocate "
- Mr. W. R. Lloyd, Small Business Advocate "

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DUQUESNE LIGHT COMPANY
ANNUAL RELIABILITY REPORT 2004
APRIL 30, 2005

ORIGINAL

57.195 REPORTING REQUIREMENTS

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

Jeffrey L. Coward - General Manager, Asset Management
(412) 393-8944, jcoward@duqlight.com

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

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- (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.

Three major events occurred in 2004, on May 21, June 14 and September 17, affecting approximately 13%, 10% and 14% of our customer load, respectively. The September 17 event included torrential rains, high winds and widespread flooding associated with Hurricane Ivan.

Year 2004 also included thirteen additional storms that caused extensive damage to overhead equipment, but did not affect enough customers to qualify for exclusion as major events.

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.

DOCKETED
AUG 19 2005

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 tree-related 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.

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) 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.

May 21, 2004, 05:00

Total number of customers affected: 142,000

Caused by severe thunderstorms, damaging lightning, heavy rains, hail and wind gusts in excess of 55 mph

Restoration for the last customer affected by this storm was at 0600 hours on Sunday, May 23, 2004

June 14, 2004, 19:30

Total number of customers affected: 101,000

Caused by severe thunderstorms, damaging lightning, heavy rains and high winds

Restoration for the last customers affected was at 0100 hours on June 16, 2004

September 17, 2004, 13:46

Total number of customers affected: 143,801

Caused by torrential rains, high winds and widespread flooding

Final customer restorations completed at 03:40 hours on September 21, 2004

Modified Procedures

23KV Distribution System Protection

Duquesne Light developed a program to modify the protection schemes of our 23 KV distribution system, and to survey overhead circuits in order to select locations for installation of branch fuses. In conjunction with the fuse installations, we will modify the substation breaker settings to allow the branch fuses to clear faults on lateral branches. This will enable troubleshooters to locate faulted sections more quickly. This program was implemented in 2004. Lateral fuses were installed on thirty 23 KV distribution circuits. In combination with the lateral fuse installations, overhead infrared surveys are performed on the circuits to identify loose connectors, jumpers and other line equipment with the potential to fail in the future.

- (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
2002	121	1.32	92	*
2003	110	1.3	85	*
2004	95	1.03	92	*
3 Year Average	109	1.22	90	*
Benchmark	126	1.17	108	NA
Standard for 3 Year Avg.	153	1.29	119	NA

* Sufficient information to calculate MAIFI is unavailable.

****NOTE:** A portion of the June 14, 2004 major event is under appeal with the Commission. The Commission's initial ruling (M-00991220F2004, July 28, 2004) stated that "no justification was provided for inclusion of customers associated with service outages occurring after 4:45 p.m. on June 15, 2004 as part of the claimed major event. Therefore the request for exclusion of service interruptions for reporting purposes is hereby approved with the following modifications. Only customers experiencing service outages directly associated with the weather events of June 14, 2004 are to be excluded for reliability reporting purposes."

The outages occurring after 4:45 p.m. on June 15, 2004 totaled 39,232 KVA and 7,797,454 KVA-minutes. If Duquesne Light's appeal is upheld by the Commission, the Benchmarks and Standards will be the following:

RELIABILITY BENCHMARKS AND STANDARDS

Duquesne Light Company

System Performance Measures with Major Events Excluded

Year	SAIDI	SAIFI	CAIDI	MAIFI
2002	121	1.32	92	*
2003	110	1.3	85	*
2004	94	1.02	92	*
3 Year Average	108	1.21	90	*
Benchmark	126	1.17	108	NA
Standard for 3 Year Avg.	153	1.29	119	NA

* Sufficient information to calculate MAIFI is unavailable.

Formulas used in calculating the indices

$$\text{SAIFI} = \frac{(\text{Total KVA interrupted}) - (\text{KVA impact of major events})}{\text{System Connected KVA}}$$

$$\text{SAIDI} = \frac{(\text{Total KVA-minutes interrupted}) - (\text{KVA-minute impact of major events})}{\text{System Connected KVA}}$$

$$\text{CAIDI} = \text{SAIDI/SAIFI}$$

Data used in calculating the indices

2004

Total KVA interrupted for the period:	8,929,966 KVA
Total KVA-minutes interrupted:	1,196,244,898 KVA-Minutes
System connected load as of 9/30/04:	6,386,215 KVA
May 21, 2004 major event:	814,316 KVA (13% of system load) 137,141,850 KVA-minutes
June 14, 2004 major event:	620,309 KVA (10% of system load) 112,078,821 KVA-minutes
September 17, 2004 major event:	906,344 KVA (14.2% of system load) 338,257,694 KVA-Minutes

2003

Total KVA interrupted for the period:	9,981,201 KVA
Total KVA-minutes interrupted:	1,112,237,215 KVA-Minutes
System connected load as of 12/31/03:	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

2002

Total KVA interrupted for the period:	9,128,821 KVA
Total KVA-minutes interrupted:	1,146,186,681 KVA-Minutes
System connected load as of 12/31/02:	6,262,938 KVA
May 31, 2002 major event:	859,089 KVA (14% of system load) 386,563,442 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.

January 1, 2004 through December 31, 2004

Cause	No of Outages	Outage Percentage	KVA Total	KVA Percentage	KVA-Minute Total	KVA-Minute Percentage
Storms	908	27.6%	2,823,726	31.6%	447,440,473	37.4%
Tree Growth and Contact	178	5.4%	311,709	3.5%	32,174,122	2.7%
Tree (Falling Limb or Tree)	530	16.1%	1,563,518	17.5%	280,093,558	23.4%
Equipment Failures	862	26.2%	2,676,464	30.0%	241,103,745	20.2%
Overload	151	4.6%	76,886	0.9%	6,049,620	0.5%
Vehicles	136	4.1%	243,128	2.7%	24,110,309	2.0%
All Other	528	16.0%	1,234,537	13.8%	165,273,073	13.8%
Total	3,293	100%	8,929,966	100%	1,196,244,898	100%

(b)(5) A list of 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.

Circuit	Remedial Actions Planned or Taken
23620 Raccoon	Capacitors added to circuit in 2003. Vegetation Management completed 10/15/04. Breaker settings modified. Circuit D23662 is being designed to reduce exposure and KVA load on this circuit. It will be energized from Crescent in 2007. Overload relief for two step-down transformer areas is scheduled for design in 2005 and construction in 2006.
23622 Raccoon	As part of the 2003 circuit ownership program, identified and repaired failed lightning arresters and replaced faulty strain insulators. Infrared inspection completed 6/29/04, and identified hot spots were repaired 8/23/04. Facilities inspections started and Underground Maintenance Plan currently in development. Overload relief for two step-down transformer areas is scheduled for design in 2005 and construction in 2006.
23635 Ambridge	Vegetation Management completed in 2003. Targeted for 2005 lateral line fusing project to eliminate instantaneous breaker trips and reduce momentaries, which will allow faster problem resolution and reduce circuit exposure to vegetation issues.
23660 Phillips	The slow responding Phillips – Sheffield breaker on circuit 22848 caused the breaker on 23660 to clear several times dropping D23660. The slow responding breaker was replaced in November 2003. Lateral fuses installed 9/13/04. Infrared inspection completed 8/6/04, identified hot spots repaired 8/25/04. A normally-open tie sectionalizer is to be installed near Gringo Substation in 2005.
23670 Montour	New circuit Findlay D23613 is being installed to reduce exposure and connected KVA on this circuit. Rights of way to be acquired by 6/05, and construction to be completed by 12/05.
23674 Montour	Under 2003 circuit ownership program, identified and repaired failed lightning arresters and replaced faulty strain insulators.
23675 Montour	New circuit Findlay D23613 is being installed to reduce exposure and connected KVA on this circuit. Overload relief projects for stepdown transformers completed 9/18/03. Rights of way to be acquired by 6/05, and construction to be completed by 12/05.
23681 Woodville	Overloaded step-down transformers on this circuit were relieved in July 2003. Investigated circuit load block sizes for possible reconfiguration. Load blocks and circuit configuration were determined to be appropriate.
23704 North	Vegetation Management completed in 2003. New Wildwood substation is being planned near this circuit, which will allow reduced exposure and connected KVA on this circuit. The expected cut-in date for Wildwood Substation is 6/07.
23710 Pine Creek	New circuit Pine Creek D23718 is planned to reduce exposure and connected KVA on this circuit. The expected cut-in date for this project is 11/30/05.
23711 Pine Creek	New Wildwood substation is scheduled for cut-in during June, 2007 which will provide load relief to this circuit. Reducing exposure should improve circuit performance.
23715 Pine Creek	New Wildwood substation is scheduled for cut-in during June, 2005. This circuit is not part of the present scope of work but can be added to the project if necessary. This will reduce exposure and \ connected KVA and thereby improve reliability. Vegetation Management line clearance work was 99% complete as of 12/17/04. The remaining 1% consisted of a refusal property. This situation has been mitigated and VM work will be completed by 2/4/05.
23716 Pine Creek	Vegetation Management line clearance 100% complete as of 12/17/04. New Wildwood substation is scheduled for cut-in during June, 2007, which could then be utilized to reduce load and exposure if warranted. It is assumed that upon completion of infrared inspection and Vegetation Management, the reliability will improve. Infrared inspection done 6/30/04, identified repairs scheduled for January 2005 were delayed and will be completed in May 2005.
23750 Dravosburg	Vegetation Management completed in 2003. Replacement of a manually operated tie switch with a remotely controlled automatic sectionalizer was completed 11/22/04.
23760 Wilmerding	New Port Perry substation is being built near this circuit, which will provide new circuit Port Perry D23970 to greatly reduce this circuit's exposure and connected KVA. Lateral fuses installed 6/1/04. Infrared inspection completed 6/17/04, identified hot spots repaired 8/24/04. Circuit 23970 expected cut-in date is 6/30/05.
23840 Arsenal	Extended circuit Arsenal D23844 to reduce exposure and connected KVA from this circuit. Vegetation Management line clearance work for this circuit will be completed by 2/28/05.
23870 Mt Nebo	Repaired sectionalizer that had misoperated. Vegetation Management completed in 2003. New circuit Mount Nebo D23871 is planned to reduce exposure and connected KVA on this circuit. Lateral fuses installed 2/5/04. Infrared inspection done 7/15/04; identified hot spots repaired 8/23/04.
23880 Rankin	New Homestead substation is being built near this circuit in 2004, and will provide new circuits to greatly reduce this circuit's exposure and connected load. Circuit 23937 was cut in 6/30/04 and provided immediate load relief. Circuit 23936 was cut in November 2004 and will provide additional load relief by 6/30/05.
23920 Logans Ferry	Vegetation Management completed in 2002. Lateral fuses installed 2/23/04. Infrared inspection 6/17/04. Identified hot spots repaired 9/1/04. Future distribution circuits out of Logans Ferry Substation for the Oakmont elimination and proposed California Substation will greatly reduce exposure and connected KVA. The expected cut-in date for California Substation is June, 2006.
23953 Evergreen	Repositioned a sectionalizer in October 2003 to divide connected load on two load blocks. A replacement of a sectionalizer with a recloser, and the installation of an additional sectionalizer was completed 7/28/04.



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Rates and Regulatory Affairs Unit
411 Seventh Avenue 8-4
Pittsburgh, Pennsylvania 15219

MAY 02 2005

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PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU
May 2, 2005

VIA OVERNIGHT MAIL DELIVERY:

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

6-00030161

Re: Reliability Report – Quarter Ended March 31, 2005

Dear Mr. McNulty:

On December 28, 2004, Duquesne filed with the Commission a Petition for Protective Order Pertaining to Information contained in its Quarterly and Annual Reliability Reports. Pending Commission action upon that request, Duquesne is submitting an original and six (6) copies of its report for the quarter ended March 31, 2005, in two versions, both included under this transmittal letter. The first version contains only that information for which Duquesne did not request confidential 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.

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 or nkrajovic@duqlight.com.

Sincerely,

Nancy J. D. Krajovic
Manager, Regulatory Affairs

Enclosures

c: Mr. K. F. Cadden, Bureau of CEEP w/ enclosures
Mr. B. J. Loper, Bureau of CEEP "
Mr. I. A. Popowsky, Consumer Advocate "
Mr. W. R. Lloyd, Small Business Advocate "

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**DUQUESNE LIGHT COMPANY
QUARTERLY RELIABILITY REPORT
May 1, 2005**

RECEIVED

MAY 02 2005

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

57.195 Reporting Requirements

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

Jeffrey L. Coward - General Manager, Asset Management
(412) 393-8944, jcoward@duqlight.com

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

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AUG 19 2005

(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 first quarter of 2005.

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

RELIABILITY 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	*
2005 1Q (Rolling 12 mo)	85	0.93	91	*

* Sufficient information to calculate MAIFI is unavailable.

****NOTE:** A portion of the June 14, 2004 major event is under appeal with the Commission. The Commission's initial ruling (M-00991220F2004, July 28, 2004) stated that "no justification was provided for inclusion of customers associated with service outages occurring after 4:45 p.m. on June 15, 2004 as part of the claimed major event. Therefore the request for exclusion of service interruptions for reporting purposes is hereby approved with the following modifications. Only customers experiencing service outages directly associated with the weather events of June 14, 2004 are to be excluded for reliability reporting purposes."

The outages occurring after 4:45 p.m. on June 15, 2004 totaled 39,232 KVA and 7,797,454 KVA-minutes. If our appeal is upheld by the Commission, the Benchmarks and Standards will be the following:

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	*
2005 1Q (Rolling 12 mo)	84	0.93	91	*

* Sufficient information to calculate MAIFI is unavailable.

(e)(2) (continued)

Data used in calculating the indices

Total KVA interrupted for the period:	8,693,469	KVA
Total KVA-minutes interrupted:	1,167,696,596	KVA-Minutes
System connected load as of 3/31/05:	6,800,954	KVA
May 21, 2004 major event:	814,316 KVA (13% of system load)	137,141,850 KVA-minutes
June 14, 2004 major event:	620,309 KVA (10% of system load)	112,078,821 KVA-minutes
September 17, 2004 major event:	906,344 KVA (14.2% of system load)	338,257,694 KVA-Minutes

Formulas used in calculating the indices

$$\text{SAIFI} = \frac{\text{(Total KVA interrupted)} - \text{(KVA impact of major events)}}{\text{System Connected KVA}}$$

$$\text{SAIDI} = \frac{\text{(Total KVA-minutes interrupted)} - \text{(KVA-minute impact of major events)}}{\text{System Connected KVA}}$$

$$\text{CAIDI} = \text{SAIDI/SAIFI}$$

(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 electric distribution company defines its worst performing circuits shall be included.

Rank	Circuit	Connected KVA	KVA Min Interrupted	KVA Interrupted	SAIDI	SAIFI	CAIDI
1	22869 Midland-Cooks Ferry	34,326	43,281,363	170,847	1,261	4.98	253
2	23620 Raccoon	39,826	19,197,299	27,783	482	0.70	691
3	23840 Arsenal	42,005	5,664,516	76,519	135	1.82	74
4	23783 Valley	38,192	8,429,279	105,605	221	2.77	80
5	22565 Parkview-Blaw Knox	14,682	7,197,720	100,961	490	6.88	71
6	23920 Logans Ferry	39,493	7,627,131	91,527	193	2.32	83
7	22563 Pine Creek-Blaw Knox	12,269	2,990,091	37,210	244	3.03	80
8	23630 Sewickley	32,967	7,475,170	22,689	227	0.69	329
9	23670 Montour	32,800	4,096,906	48,751	125	1.49	84
10	23704 North	32,282	13,647,626	113,463	423	3.51	120
11	22860 Valley-Morado No. 2	10,685	4,820,754	13,915	451	1.30	346
12	23710 Pine Creek	29,470	8,467,626	61,275	287	2.08	138
13	23760 Wilmerding	39,320	7,936,605	90,329	202	2.30	88
14	23870 Mt. Nebo	30,546	12,300,893	59,676	403	1.95	206
15	23622 Raccoon	37,650	7,549,957	139,351	201	3.70	54
16	23715 Pine Creek	31,490	4,114,960	55,968	131	1.78	74
17	23635 Ambridge	30,062	7,080,941	109,486	236	3.64	65
18	22862 Ambridge-Sewickley No.3	16,242	4,987,902	21,217	307	1.31	235
19	22854 Phillips-Aliquippa	11,117	10,801,670	21,926	972	1.97	493
20	23683 Woodville	43,880	15,459,993	84,570	352	1.93	183

Circuit performance is based on an annual statistical evaluation performed by SGS Statistical Services. Scores are assigned to each circuit based on time-weighted, multi-year 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 (e)(3) above.

Rank	Circuit	Remedial Actions Planned or Taken
1	22869 Midland-Cooks Ferry	Lateral fuses installed 5/30/04. Infrared inspection survey 7/28/04; all identified hot spots repaired 8/23/04.
2	23620 Raccoon	Vegetation Management completed 10/15/04. Breaker settings modified. Circuit D23662 is being designed to reduce exposure and KVA load on this circuit. It will be energized from Crescent in 2007. Lateral fusing and infrared survey planned for 2005. Overload relief for two step-down transformer areas is scheduled for design in 2005 and construction in 2006.
3	23840 Arsenal	Extended circuit Arsenal D23844 to reduce exposure and connected KVA from this circuit. Vegetation Management line clearance work completed first quarter 2005. Lateral fusing and infrared survey planned for 2005.
4	23783 Valley	Vegetation Management scheduled for 2006. Lateral fuses installed 2/19/04. Infrared survey done 9/7/04; identified hot spots repaired 9/13/04.
5	22565 Parkview-Blaw Knox	Under review for remediation.
6	23920 Logans Ferry	Vegetation Management completed in 2002. Lateral fuses installed 2/23/04. Infrared inspection 6/17/04. Identified hot spots repaired 9/1/04. Future distribution circuits out of Logans Ferry Substation for the Oakmont elimination and proposed California Substation will greatly reduce exposure and connected KVA. The expected cut-in date for California Substation is June, 2006.
7	22563 Pine Creek-Blaw Knox	Under review for remediation.
8	23630 Sewickley	Vegetation Management completed 2003; scheduled for 2007. Infrared survey done 8/10/04; identified hot spots repaired 9/30/04.
9	23670 Montour	New circuit Findlay D23613 is being installed to reduce exposure and connected KVA on this circuit. Rights of way to be acquired by 6/05, and construction to be completed by 12/05. Lateral fusing and infrared survey planned for 2005.
10	23704 North	Vegetation Management completed in 2003. New Wildwood substation is being planned near this circuit, which will allow reduced exposure and connected KVA on this circuit. The expected cut-in date for Wildwood Substation is 6/07. Lateral fusing and infrared survey planned for 2005.
11	22860 Valley-Morado No. 2	Vegetation Management scheduled for 2005. Under review for additional remediation.
12	23710 Pine Creek	New circuit Pine Creek D23718 is planned to reduce exposure and connected KVA on this circuit. The expected cut-in date for this project is 11/30/05.
13	23760 Wilmerding	New Port Perry substation is being built near this circuit, which will provide new circuit Port Perry D23970 to greatly reduce this circuit's exposure and connected KVA. Lateral fuses installed 6/1/04. Infrared inspection completed 6/17/04, identified hot spots repaired 8/24/04. Circuit 23970 expected cut-in date is 6/30/05.
14	23870 Mt. Nebo	Repaired sectionalizer that had misoperated. Vegetation Management completed in 2003. New circuit Mount Nebo D23871 is planned to reduce exposure and connected KVA on this circuit. Lateral fuses installed 2/5/04. Infrared inspection done 7/15/04; identified hot spots repaired 8/23/04.
15	23622 Raccoon	As part of the 2003 circuit ownership program, identified and repaired failed lightning arresters and replaced faulty strain insulators. Infrared inspection completed 6/29/04, and identified hot spots were repaired 8/23/04. Facilities inspections started and Underground Maintenance Plan currently in development. Overload relief for two step-down transformer areas is scheduled for design in 2005 and construction in 2006.
16	23715 Pine Creek	New Wildwood substation is scheduled for cut-in during June, 2005. This circuit is not part of the present scope of work but can be added to the project if necessary. This will reduce exposure and connected KVA and thereby improve reliability. Vegetation Management completed 2/4/05. Lateral fusing and infrared survey planned for 2005.
17	23635 Ambridge	Vegetation Management completed in 2003. Targeted for 2006 lateral line fusing project to eliminate instantaneous breaker trips and reduce momentaries, which will allow faster problem resolution and reduce circuit exposure to vegetation issues.
18	22862 Ambridge-Sewickley No.3	Vegetation Management completed 2003; scheduled for 2007.
19	22854 Phillips-Aliquippa	Vegetation Management scheduled for 2005. Under review for additional remediation.
20	23683 Woodville	Lateral fuses installed 2/19/04. Infrared survey done 9/7/04; identified hot spots repaired 9/13/04. Vegetation Management scheduled for 2006.

(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.

April 1, 2004 through March 31, 2005

Cause	No of Outages	Outage Percentage	KVA Total	KVA Percentage	KVA-Minute Total	KVA-Minute Percentage
Storms:	893	27.9%	2,780,230	32.0%	443,326,799	38.0%
Trees (Contact):	171	5.3%	253,513	2.9%	27,452,303	2.4%
Trees (Falling):	526	16.4%	1,483,614	17.1%	269,873,629	23.1%
Equipment Failures:	904	28.2%	2,773,097	31.9%	246,954,644	21.1%
Overloads:	145	4.5%	76,356	0.9%	6,021,783	0.5%
Vehicles:	145	4.5%	277,015	3.2%	28,462,004	2.4%
Other:	420	13.1%	1,049,644	12.1%	145,605,434	12.5%
Totals:	3,204	100.0%	8,693,469	100.0%	1,167,696,596	100.0%

(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.

	Accepts	Refusals	Total	Percentage
January	143	195	338	42%
February	74	70	144	51%
March	105	139	244	43%

The data to report "the amount of time it takes to obtain the necessary personnel" is not currently available.

Duquesne worked with the Energy Association of Pennsylvania and the PUC to define the requirements of this measure, to ensure that all Pennsylvania EDCs are reporting in the same manner and using the same definitions.

EAP submitted the final draft definition to the Commission staff for approval at the end of April 2005. When the definition and calculation methods have been finalized and approved by the Commission staff, we will develop a plan to collect and report the required data.

FirstEnergy

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76 South Main Street
Akron, Ohio 44308

May 2, 2005

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MAY 02 2005

Mr. James J. McNulty, Secretary
Pennsylvania Public Utility Commission
P.O. Box 3265
Harrisburg, PA17120

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

L-00030161

Re: Joint Annual Service Reliability Report for 2004 – Pennsylvania Power Company,
Metropolitan Edison Company and Pennsylvania Electric Company
Pursuant to 52 Pa. Code § 57.195(b)

Dear Secretary McNulty,

Enclosed for filing on behalf of Pennsylvania Power Company, Metropolitan Edison Company and Pennsylvania Electric Company (collectively, "Companies") are an original and six (6) copies of their Joint Annual Service Reliability Report for 2004.

This report is being provided on a confidential basis to the Commission, pursuant to its request in furtherance of its regulatory oversight responsibilities. This report contains proprietary, privileged and confidential information not for public disclosure. This report should not be placed in any Commission file that is open to the public or any non-Commission personnel. On December 22, 2004, the Companies filed an Application for Protective Order at Docket No. L-00030161. This Application is still pending. Should the Application be granted, the Companies will then file public and proprietary versions for their reports.

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

Sincerely,



Eric J. Dickson
Director, Operation Services

Attachment

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Pennsylvania Power Company, Pennsylvania Electric Company
and Metropolitan Edison Company
Annual Reliability Report 2004
Reliability Regulations at 52 Pa. Code Chapter 57.195(b)

The following Joint Report is submitted to the Pennsylvania Public Utility Commission ("PaPUC") on behalf of Pennsylvania Power Company ("Penn Power"), Pennsylvania Electric Company ("Penelec"), and Metropolitan Edison Company ("Met-Ed") (collectively, "Companies") for 2004.

I) Overview

The Companies are dedicated to providing safe, reliable and economic electric service to our customers. We strive to minimize the frequency and duration of customer interruptions through system planning and design, maintenance programs, distribution circuit reliability analysis, emergency preparedness and response to outages.

In addition to dedicated programs, procedures, and staff, the Companies support reliability through information systems, technology and organizational structure. We operate a Regional Dispatch Office (RDO) in Reading, Pennsylvania for Penelec and Met-Ed and one in Youngstown, Ohio for Penn Power that monitors and controls the electric supply system for the Companies' service area. The RDO houses facilities for the communication of operating data used to monitor the condition of our electrical system. The center is equipped with software that integrates customer interruption reports, geographical information, resource management and outage analysis software for timely evaluation and response to interruptions.

Current Program for Providing Reliable Electric Service:

FirstEnergy has developed Preferred Practices to standardize inspection and maintenance procedures across all FirstEnergy companies to ensure that our facilities are maintained to acceptable levels. Penelec, Met-Ed and Penn Power perform inspections in the following areas:

Vegetation Management

Vegetation management activities include tree pruning, tree removal, and mechanical and chemical brush control. Transmission circuits are currently maintained from a vegetation management perspective on a 5-year cycle. Distribution circuits in each of the Companies are maintained on a 4-year cycle. In response to the four hurricanes that struck portions of Florida in the Fall of 2004, some of FirstEnergy's vegetation management subcontractors requested and were granted permission to temporarily dispatch crews to perform restoration work in Florida. As a result, approximately 400 miles of the distribution work plan was completed in early 2005. The 2004 carry-over work will not affect the 2005 work schedule.

Transmission Inspections

Transmission inspections consist of an aerial patrol for all transmission circuits conducted twice per year. In addition, a comprehensive inspection is conducted on approximately 25% of the transmission circuits each year. The comprehensive inspection is an extensive visual inspection of each structure conducted while hovering from a helicopter.

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Distribution Inspections

Distribution inspections are performed on a regular basis as required by FirstEnergy's Distribution Preferred Practices. These practices were implemented to identify and repair equipment prior to failure since equipment condition has a direct effect on reliability. In addition, Met-Ed, Penn Power and Penelec evaluate equipment conditions per circuit by utilizing engineering review, load studies, weather events and historical data. This data is then analyzed and projects are submitted for future improvements

Line reclosers and circuit breakers are inspected periodically to record the number of counter operations. Counter reading data has been integrated into a reliability metric called Circuit Reliability Index ("CRI") that combines the information from momentary and sustained interruptions into a single measure for each distribution circuit.

Circuit Reliability Index

CRI is a tool used to evaluate circuit reliability performance. This index is an algorithm consisting of four reliability measurements (SAIFI, CAIDI, MAIFI and Lockouts) combined into one overall indicator. Outage data is reviewed monthly by Met-Ed, Penn Power and Penelec to identify distribution circuits that do not meet standards.

In order to monitor circuit performance, reports are generated monthly showing 12-month rolling average and year-to-date CRI values for every distribution circuit. FirstEnergy produces a monthly CRI report, which reflects the PAPUC criteria, showing the number of circuits that exceed the 130 value and percentage of circuits at or below 130.

2) **Major Events – 2004** A major event is determined by having 10% of Met-Ed, Penn Power or Penelec’s customers out of service for 5 minutes or longer as defined in 52 Pa. Code § 57.192. This annual report for 2004 is based on the exclusion of major events on an individual operating company basis and is consistent with the major events reported in each of the 2004 quarterly reports. The major events are as follows:

	Customers Affected	Major Event	Duration	Customer Minutes	Description
Penn Power					
	24,000	April 21 @ 8:53 P.M. to April 22 @ 4:00 A.M.	7 hrs. 7 min.	2,811,181	69 kV pole fire
	17,600	April 22 @ 9:41 A.M. to April 22 @ 10:35 A.M.	54 min.	767,444	69 kV switch failure
	32,000	May 21 @ 8:00 A.M. to May 25 @ 12:00 P.M.	100 hrs.	17,181,053	High winds and thunderstorms
	18,200	June 1 @ 4:00 P.M. to June 2 @ 11:00 P.M.	31 hrs.	2,251,638	Thunderstorms
	34,800	June 14 @ 6:00 P.M. to June 17 @ 10:00 P.M.	76 hrs.	15,547,546	High winds and thunderstorms
Penelec					
	73,000	Dec. 1 @ 6:30 A.M. to Dec. 3 @ 12:00 P.M.	53 hrs. 30 min.	18,246,893	Heavy rain and high winds w/ gusts over 50 mph
Met-Ed					
	58,400	Sept. 18 @ 0:05 A.M. to Sept. 21 @ 8:30 P.M. except for customers who could not be reconnected for safety reasons due to flooding.	92 hrs. 25 min.	33,225,279	Heavy rainfall and gusting winds from Tropical Storm Ivan. Flooding delayed restoration in several areas.

3) Rolling 12-Month System Reliability Performance Indices from 2002 – 2004:

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

The major storm criteria are determined by having 10% of Met-Ed, Penn Power or Penelec's customers out of service for 5 minutes or longer.

<i>Penn Power:</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>
SAIFI	1.22	1.51	1.43
CAIDI	151	127	120
SAIDI	185	192	172
MAIFI	3.82	3.50	3.69
Cust. Min.	28,539,779	29,951,120	26,631,723
Cust. Affected	189,094	234,912	222,425
Minutes of Interruption	701,654	662,355	557,129
Cust. Served	154,374	155,900	157,326 ⁽²⁾
<i>Penelec:</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>
SAIFI	1.88	1.60	1.77
CAIDI	142	149	140
SAIDI	268	239	248
MAIFI ⁽¹⁾	2.18	6.81	5.85
Cust. Min.	156,047,391	141,215,128	144,236,994
Cust. Affected	1,095,073	955,682	1,031,525
Minutes of Interruption	2,524,310	2,247,107	2,853,387
Cust. Served	584,900	585,100	587,010 ⁽²⁾
<i>Met-Ed:</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>
SAIFI	1.51	1.23	1.54
CAIDI	136	114	128
SAIDI	206	140	197
MAIFI ⁽¹⁾	2.17	6.40	3.48
Cust. Min.	105,084,980	77,666,000	97,606,915
Cust. Affected	770,090	629,637	765,520
Minutes of Interruption	2,052,950	1,784,164	1,811,003
Cust. Served	510,066	511,900	525,650 ⁽²⁾

⁽¹⁾ MAIFI information for Met-Ed and Penelec for 2002 is based on information from equipment with SCADA controls only. Operations of breakers and reclosers during major events are included in all MAIFI numbers above.

⁽²⁾ Source: The FirstEnergy Customer Care System (CCS) as of December 31, 2004.

4) Outage Cause Information:

Cause	Penelec				Met-Ed				Penn Power			
	Customer Minutes	Number of Outages	Customers Affected	% By Cause – Based on Number of Outages	Customer Minutes	Number of Outages	Customers Affected	% By Cause – Based on Number of Outages	Customer Minutes	Number of Outages	Customers Affected	% By Cause – Based on Number of Outages
ANIMAL	2,060,284	1,007	25,893	8.1	4,275,569	1,284	52,194	14.9	1,026,189	318	13,317	10.7
BIRD	527,473	179	11,531	1.4	283,656	43	6,176	0.5	531,662	144	4,265	4.8
CONTAMINATION	5,617,969	839	37,010	6.8	13,565	15	114	0.2	175	2	2	
CUSTOMER EQUIPMENT	653,506	43	5,142	0.3	24,506	20	88	0.2	17,933	10	180	0.3
EQUIPMENT FAILURE	25,413,831	3,055	230,442	24.7	18,729,385	1,990	183,505	23.1	3,366,291	330	51,643	11.1
FIRE	2,114,006	81	14,931	0.7	103,228	13	552	0.2	53,019	8	574	0.3
FORCED OUTAGE	1,975,735	108	50,266	0.9	1,441,511	53	20,637	0.6	288,542	39	5,804	1.3
HUMAN ERROR - COMPANY	48,037	8	2,164	0.1	190,665	15	5,960	0.2	1,918	4	31	0.1
HUMAN ERROR -NON-COMPANY	736,514	116	8,455	0.9	469,742	89	9,324	1.0	190,096	25	2,719	0.8
ICE	1,484,634	176	9,092	1.4	239,099	27	1,955	0.3	408,852	20	2,220	0.7
LIGHTNING	14,963,533	1,689	95,963	13.7	17,867,479	1,424	126,166	16.5	2,928,276	515	32,186	17.3
LINE FAILURE	15,424,944	651	131,882	5.3	7,490,677	506	48,848	5.9	3,229,886	226	20,961	7.6
OBJECT CONTACT WITH LINE	529,290	65	8,001	0.5	385,295	15	4,019	0.2	147,733	20	1,201	0.7
OTHER ELECTRIC UTILITY	21,750	2	177	0.0	453	2	2	0.0	0	0	0	0.0
OTHER UTILITY-NON ELEC	19,234	4	386	0.0	159,458	5	3,807	0.1	15,642	1	99	0.0
OVERLOAD	2,164,787	325	27,666	2.6	2,185,034	179	17,693	2.1	700,579	156	6,681	5.2
PREVIOUS LIGHTNING	1,030,970	214	6,411	1.7	1,903,328	203	10,297	2.4	237,710	82	1,698	2.8
SWITCHING ERROR	174,930	10	6,183	0.1	4,278	1	186	0.0	0	0	0	0.0
TREES/NOT PREVENTABLE	24,556,081	1,176	115,693	9.5	18,716,006	1,018	109,878	11.8	6,620,756	436	41,131	14.7
TREES/PREVENTABLE	9,749,117	369	39,038	3.0	4,350,685	358	28,753	4.1	336,943	48	2,727	1.6
UG DIG-UP	322,483	42	3,432	0.3	145,467	52	586	0.6	36,511	19	248	0.6
UNKNOWN	8,067,222	1,042	76,761	8.4	3,355,260	660	39,826	7.6	794,470	242	8,914	8.1
VANDALISM	322,732	21	2,591	0.2	839	8	10	0.1	14,392	2	25	0.1
VEHICLE	8,169,985	432	52,597	3.5	9,706,128	389	73,215	4.5	2,088,630	121	13,942	4.1
WIND	18,087,947	707	69,818	5.7	5,565,602	262	21,729	3.0	3,595,518	206	11,857	6.9
TOTAL	144,236,994	12,361	1,031,525	100.0	97,606,915	8,631	765,520	100.0	26,631,723	2,974	222,425	100.0

5 List of the Worst 5% Performing Circuits for a Year or More:

Each of the Companies' worst performing circuits is listed with remedial action planned/taken in Attachment A of this Joint Report.

6 Transmission and Distribution Inspection and Maintenance Information for 2004:

Annual Reliability Report 2004						
Program/Project	Penn Power		Penelec		Met-Ed	
<i>Vegetation Management</i> ⁽³⁾						
	Transmission (Acres)	Distribution (Miles)	Transmission (Acres)	Distribution (Miles)	Transmission (Acres)	Distribution (Miles)
Scheduled (Annual)	380	755	5,269	4,932	1,255	3,598
Completed	626	924	5,660	4,932	2,096	3,598
Transmission						
	Planned	Completed	Planned	Completed	Planned	Completed
Aerial Patrols (2/yr)	2	2	2	2	2	2
Groundline Inspections	278	278	2,305	2,305	934	934
Substation						
General Inspections	1,018	1,012	5,479	5,479	2,580	2,580
Transformers ⁽⁴⁾	82	82	347	347	164	164
Breakers ^(4,5)	312	311	636	606	621	295
Relay Schemes ^(4,5)	166	161	1,044	1,008	892	469
Distribution						
Recloser Inspection (Qtrly)						
1st	606	606	728	728	709	709
2nd	606	606	728	728	709	709
3rd	606	606	728	728	709	709
4th	606	606	728	728	709	709
Capacitor Inspection (Annual)	258	258	1,861	1,861	3,814	3,814
Radio-Controlled Switch Inspections	Not Applicable ⁽⁶⁾	Not Applicable ⁽⁶⁾	1,368	1,368	30	30

⁽³⁾ FirstEnergy's vegetation management program was implemented in 2002 in both Penelec and Met-Ed to ultimately achieve a 4-year distribution and a 5-year transmission cycle. Met-Ed and Penelec anticipated achieving the 4 and 5-year clearance cycles by year-end 2004. In response to the four hurricanes that struck portions of Florida in Fall 2004, some of FirstEnergy's vegetation management subcontractors requested and were granted permission to temporarily dispatch crews to perform restoration work in Florida. As a result, approximately 400 miles of the distribution work plan were completed in early 2005.

⁽⁴⁾ Previous data in prior reports included multiple tests to transformers, breakers and relay schemes, including generating stations, portable substations, and some customer-owned substations. The current data reflects inspections performed only on transformers, breakers, and relay schemes in operating company-owned transmission and distribution substations. Also, in 2004, transformer inspections were performed on a substation basis, i.e. one inspection per substation. In 2005, the inspection results reflect an inspection performed on each individual transformer.

⁽⁵⁾ Planned breaker and relay testing was not completed due to outage scheduling issues and a significant increase in corrective maintenance work that was identified during preventive maintenance inspections.

⁽⁶⁾ Penn Power does not have radio-controlled switches on distribution circuits

7) Budgeted vs. Actual T&D Operation & Maintenance Expenditures:

2004 T&D O&M					
Company	PUC Category	2004 Actuals	2004 Budget	Variance %	Notes
Met-Ed	Corrective Maintenance	11,298,000	10,236,900	10%	
	Preventive Maintenance	2,420,118	3,039,103	-20%	
	Storms	3,752,812	4,232,361	-11%	B
	Vegetation Management	11,324,893	10,975,000	3%	
	Misc	6,489,198	1,817,897	257%	A
	Operations	12,844,744	12,960,061	-1%	
Met-Ed Total		48,129,765	43,261,322	11%	
Penelec	Corrective Maintenance	12,306,935	10,443,748	18%	C
	Preventive Maintenance	2,332,137	2,609,439	-11%	
	Storms	4,863,309	5,198,056	-6%	
	Vegetation Management	10,816,116	12,026,243	-10%	
	Misc	8,108,362	3,167,375	156%	A
	Operations	18,664,958	15,730,014	19%	A
Penelec Total		57,091,817	49,174,875	16%	
Penn Power	Corrective Maintenance	1,452,148	2,328,883	-38%	D
	Preventive Maintenance	401,422	211,689	90%	E
	Storms	356,980	2,097,937	-83%	D
	Vegetation Management	2,424,765	3,091,996	-22%	F
	Misc	2,694,741	1,076,131	150%	A
	Operations	4,606,799	1,387,922	232%	A
Penn Power Total		11,936,855	10,194,557	17%	
Grand Total		117,158,436	102,630,755	14%	

Variance Explanations:

- A - The 2004 actuals have been reclassified by FERC accounts. The 2004 budget has not been reclassified due to system restrictions in SAP. As such, the budget and actuals do not match in several categories.
- B - Met-Ed's storm costs were lower than anticipated.
- C - Penelec costs for unscheduled repair of distribution facilities were higher than budget.
- D - Penn Power's storm costs and corrective maintenance costs were lower than anticipated.
- E - Penn Power's Preventive Maintenance actuals were higher than anticipated.
- F - Penn Power's Vegetation Management is under budget primarily due to a change in accounting practices for treatment of priority trees.

Table Notes:

O&M data ties to preliminary FERC data with the exception of expenses related to the Regional Transmission Organization (RTO) of which the Companies are transmission owners - PJM and MISO.

8) Budgeted vs. Actual T&D Capital Expenditures:

2004 T&D Capital (net of CIAC)				
Company	PUC Category	YTD December Actuals	Total Year Budget	Variance %
Met-Ed	New Business	25,105,302	20,181,213	24%
	Reliability	8,475,973	3,436,638	147%
	Capacity	6,502,343	11,388,732	-43%
	Misc	3,503,462	10,501,275	-67%
	Forced	5,316,376	4,806,438	11%
	Vegetation Management	1,817,196	0	-
Met-Ed Total		50,720,653	50,314,296	1%
Penelec	New Business	18,705,694	13,971,342	34%
	Reliability	15,012,646	27,168,491	-45%
	Capacity	3,335,972	1,660,489	101%
	Misc	7,118,562	2,275,934	213%
	Forced	6,638,372	15,859,863	-58%
	Vegetation Management	1,152,963	0	-
Penelec Total		51,964,209	60,936,120	-15%
Penn Power	New Business	7,394,140	3,917,550	89%
	Reliability	4,053,530	1,350,479	200%
	Capacity	3,581,010	5,901,819	-39%
	Misc	1,296,512	511,275	154%
	Forced	2,358,954	2,355,767	0%
	Vegetation Management	137,571	0	-
Penn Power Total		18,821,716	14,036,890	34%
Grand Total		121,506,578	125,287,306	-3%

General Variance Explanations:

- Penelec – Capital labor is under budget due to project delays, an early focus on inspection programs and over 30 recent employee retirements that were not anticipated.
- Penn Power- Capital is over budget primarily due to more expended on commercial new business and storm activity follow-up work.

Table Notes:

- Capital data excludes facilities (i.e. buildings).
- Capitalizing priority tree costs began after 2004 budget was developed.

9) Inspection and Maintenance Goals for 2005

Inspection & Maintenance Information - 2005						
Program/Project	Penn Power		Penelec		Met-Ed	
	Transmission	Distribution	Transmission	Distribution	Transmission	Distribution
Scheduled (Annual)	203 Miles	1,035 Miles	430 Miles	3,910 Miles	169 Miles	2,974 Miles
Transmission						
Aerial Patrols (2/yr)	2/yr		2/yr		2/yr	
Groundline Inspections (Poles)	1,385		3,459		1,332	
Substation						
General Inspections	1,020		5,450		2,580	
Transformers	288		769		245	
Breakers	115		832		702	
Relay Schemes	129		1,124		1,190	
Distribution						
Recloser Inspection (Qtrly)	606/Qtr.		740/Qtr.		691/Qtr.	
Capacitor Inspection (Annual)	258		1,852		3,814	
Radio-Controlled Switches (twice/year)	Not Applicable ⁽⁷⁾		734/half		15/half	
Pole Inspections	11,200		55,217		28,950	

Table Notes:

2005 transmission tree trimming reflects corridor miles, as opposed to acres reported previously, for ease of reporting. The miles shown reflect the completion of 1/5th of the transmission R/W for each company.

10 & 11) Budgeted Transmission & Distribution Operation & Maintenance and Capital Expenditures for 2005

2005 Budget Expenditures		
Company	Operation & Maintenance	Capital
Met-Ed		
Transmission	4,608,494	9,376,626
Substation	5,205,579	4,935,591
Distribution	37,623,102	52,110,489
Penelec		
Transmission	5,477,247	8,065,375
Substation	6,275,713	7,201,231
Distribution	40,380,528	50,781,400
Penn Power		
Transmission	4,638,521	4,148,464
Substation	1,580,886	1,017,379
Distribution	10,119,474	10,807,565

⁽⁷⁾ Penn Power does not have radio-controlled switches on distribution circuits.

12) Significant changes to the T&D Inspection and Maintenance Program Previously Submitted to the Commission: *No significant changes have been made since the Commission was last notified.*

**Worst Performing Circuits
2004**

Attachment A

Operating Company	Substation	Circuit	Remedial Actions Taken/Planned
Met-Ed	BIRDSBORO	00756-1	A circuit inspection, comprehensive tree trimming, spot engineering patrol and relay setting changes were completed. All repairs identified were completed in 2004 except 4 pole replacements and two guy repairs.
Met-Ed	SHAWNEE SUB	00895-3	Comprehensive tree trimming, installation of a sectionalizer, additional fusing, upgrading one parallel step bank, installing a second step transformer and misc. equipment repairs were completed. Installation of an electronic recloser, two capacitor banks, extending three-phase to relieve load on an overloaded step bank and voltage regulators are planned to be completed in 2005.
Penelec	HONEY GROVE	00134-83	Spot storm non-preventable tree trimming complete. Circuit expected to drop off of the Worst Performer List in May 2005.
Penelec	EMLENTON	00322-51	Work completed in March 2005 includes: 2 pole replacements, 3 recloser installations, 7 sectionalizer installations and the coordination of 64 cutouts.
Penelec	LAKE COMO	00788-65	Work completed in March 2005 includes: 4 taps fused.
Penn Power	W Washington St.	D-315	A snow plow damaged a transformer and underground cable. Repairs were made to equipment.