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February 1, 2013

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor North
P.O. Box 3265
Harrisburg, PA 17105-3265

Re: Application Of PPL Electric Utilities Corporation Under 15 Pa. C.S. §1511(c) For A Finding And Determination That The Service To Be Furnished By The Applicant Through Its Proposed Exercise Of The Power Of Eminent Domain To Acquire A Right-Of-Way And Easement Over And Across The Lands Of The Property Owners For The Proposed Richfield-Dalmatia 69 kV Transmission Tie Line In Portions of Snyder, Northumberland, and Juniata Counties, Pennsylvania Is Necessary Or Proper For The Service, Accommodation, Convenience Or Safety Of The Public - Docket Nos. A-2011-2267349, etc.

Dear Secretary Chiavetta:

Enclosed for electronic filing is the Motion of PPL Electric Utilities Corporation to Strike Certain Portions of the Reply Exceptions of the Protestants or, in the Alternative, Motion for Leave to Respond for the above-referenced proceeding. Copies will be provided as indicated on the Certificate of Service.

Respectfully submitted,

David B. MacGregor

DBM/jl
Enclosures

cc: Honorable Joel H. Cheskis
Honorable David A. Salapa
Certificate of Service

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing **Motion** has been served upon the following persons, in the manner indicated, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

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Date: February 1, 2013

Jessica R. Rogers, Esquire

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Application Of PPL Electric Utilities Corporation Under 15 Pa. C.S. § 1511(c) For A Finding And Determination That The Service To Be Furnished By The Applicant Through Its Proposed Exercise Of The Power Of Eminent Domain To Acquire A Right-Of-Way And Easement Over And Across The Lands Of The Property Owners For The Proposed Richfield-Dalmatia 69 kV Transmission Tie Line In Portions of Snyder, Northumberland, and Juniata Counties, Pennsylvania Is Necessary Or Proper For The Service, Accommodation, Convenience Or Safety Of The Public	:	Docket Nos. A-2011-2267349, etc.

NOTICE TO PLEAD

YOU ARE HEREBY ADVISED THAT, PURSUANT TO 52 PA. CODE § 5.103(c), ANSWERS TO MOTIONS ARE DUE WITHIN TWENTY (20) DAYS AFTER THE DATE OF SERVICE. YOUR ANSWERS SHOULD BE FILED WITH THE SECRETARY OF THE PENNSYLVANIA PUBLIC UTILITY COMMISSION, P.O. BOX 3265, HARRISBURG, PA 17105-3265. A COPY SHOULD ALSO BE SERVED ON THE UNDERSIGNED COUNSEL.

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Attorneys for PPL Electric Utilities Corporation

Of Counsel:

Post & Schell, P.C.

Date: February 1, 2013

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Application Of PPL Electric Utilities Corporation Under 15 Pa. C.S. § 1511(c) For A Finding And Determination That The Service To Be Furnished By The Applicant Through Its Proposed Exercise Of The Power Of Eminent Domain To Acquire A Right-Of-Way And Easement Over And Across The Lands Of The Property Owners For The Proposed Richfield-Dalmatia 69 kV Transmission Tie Line In Portions of Snyder, Northumberland, and Juniata Counties, Pennsylvania Is Necessary Or Proper For The Service, Accommodation, Convenience Or Safety Of The Public	:	Docket Nos. A-2011-2267349, etc.

MOTION OF PPL ELECTRIC UTILITIES CORPORATION TO STRIKE CERTAIN PORTIONS OF THE REPLY EXCEPTIONS OF THE PROTESTANTS OR, IN THE ALTERNATIVE, MOTION FOR LEAVE TO RESPOND

TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:

PPL Electric Utilities Corporation ("PPL Electric") files, pursuant to the Pennsylvania Public Utility Commission's ("Commission") regulations at 52 Pa. Code §§ 5.103, this motion to strike certain portions of the Reply Exceptions of the Protestants or, in the alternative, to respond to new evidence and argument that Protestants have presented for the first time in their Reply to Exceptions of PPL Electric ("Reply to Exceptions"). In support thereof, PPL Electric states as follows:

I. BACKGROUND

1. On October 11, 2011, PPL Electric filed ten applications under 15 Pa.C.S. § 1511(c) for a finding that its proposed condemnations to acquire rights-of-way and easements for the proposed Richfield–Dalmatia 69 kV Transmission Line, Meiserville 69-12 kV Substation and related 12 kV distribution lines ("Project") is necessary or proper for the service, accommodation, convenience or safety of the public. Protests were filed by 8 property owners. Petitions to intervene were filed by two additional parties, which were granted. The parties served several rounds of written testimony. Evidentiary hearings were held on September 11 and 12, 2012. The record in this proceeding closed on September 12, 2012.

2. Following the submission of briefs, Administrative Law Judges David A. Salapa and Joel H. Cheskis ("ALJs") issued their Recommended Decision ("R.D.") on December 24, 2012. Therein, the ALJs recommended that PPL Electric's Condemnation Applications should be denied. The R.D. concluded that PPL Electric did not prove that the proposed Project was necessary or proper for the service, accommodation, convenience or safety of the public, because the Project was not required based on PJM violations, NERC violations, stress modeling, lack of alternatives, heavy congestion, or load growth. (R.D. at 37). The R.D. also found that the Company's route selection was reasonable. (R.D. at 38).

3. PPL Electric filed Exceptions to the R.D. on January 15, 2013.

4. Protestants filed Reply Exceptions on January 24, 2013.

II. MOTION TO STRIKE

5. In support of its Applications in this proceeding PPL Electric, inter alia, presented evidence that the Dalmatia 36-02 circuit was on the list filed with the Commission pursuant to 52 Pa. Code § 57.195(e) of PPL Electric's worst performing 5% of circuits for 16 out of the last 31

quarters, and that it is a poor performing circuit. Protestants presented no evidence challenging this assertion. On pages 14 through 16, 18 and 19 of their Reply to Exceptions, Protestants, for the first time in this proceeding, contend that the Dalmatia 36-02 12 kV distribution line has not appeared on the list of worst performing circuits in recent years sufficiently to justify the Project. Reply to Exceptions, pp. 14-16, 18, 19. In support of this argument, Protestants cite to and rely upon quarterly reports on reliability filed with the Commission pursuant to 52 Pa. Code § 57.195(e) and in particular information contained in those reports regarding the worst performing 5% of circuits on PPL Electric's system. At no previous point in the proceeding did Protestants dispute PPL Electric's statement that the Dalmatia 36-02 circuit is a worst performing circuit, and the quarterly report information relied upon by Protestants is not part of the record in this proceeding. Protestants raised this issue, and cited extra-record evidence to support it, for the first time in their Reply to Exceptions.

6. It is clearly improper to present new evidence or testimony at the exception stage of a Commission proceeding. The Commission has held that new evidence is generally not admissible during the exceptions stage, because it deprives parties of the opportunity to test the reasonableness of the new evidence or to present evidence in response. *Pa. P.U.C. v. Pennsylvania Gas and Water Company Water Division*, 1988 Pa. PUC LEXIS 511, *10 (Pa. PUC 1988) (the crux of the issue in *Pa. P.U.C. v. National Fuel Gas Distribution Company*, 1986 Pa. PUC LEXIS 25 (Pa. PUC 1986), was that the parties did not have an opportunity to test or respond to information presented at the exception stage.) A party cannot raise new arguments that it failed to raise in its Main Brief during the exceptions stage of a proceeding. *Pa. P.U.C. v. Mechanicsburg Water Company*, 1993 Pa. PUC LEXIS 112 (Pa. P.U.C. July 22, 1993) (presentation of this argument at the exception stage of the proceeding, and not the briefing

stage, is a violation of our regulation at 52 Pa. Code Section 5.501(a)). Further, the Commission has held that use of post-hearing documents to present new evidence in a contested proceeding is a violation of due process. *Enron Capital & Trade Resources Corporation v. The Peoples Natural Gas Company, et al.*, Docket No. R-00973928C0001, 1998 Pa. PUC LEXIS 199 (August 24, 1998).

7. Protestants request that the Commission take judicial notice of quarterly filings regarding worst performing circuits. Protestants attempt to justify their request by comparing it with PPL Electric's citation to the Commission Order at Docket No. L-00030161, which set forth the Commission's reasoning for adopting the electric reliability standards at 52 Pa. Code §§ 57.191 through 57.198. Protestants' comparison is inapposite. PPL Electric cited to a published Commission order to establish the purpose of the Commission's reliability standards. It did not seek to introduce new facts into the record. Citation to Commission orders in a brief or on exceptions is a proper and well-established practice and is fundamentally different from seeking to rely on facts not otherwise in evidence.

8. Further, the taking of judicial notice is not appropriate in Reply Exceptions because the parties have no opportunity to respond to the new evidence. As the Commission has held:

> Pursuant to Section 5.408 of the Code, 52 Pa. Code § 5.408, in order for us to take official or judicial notice of evidence not part of the official record, the party(ies) adversely affected must be afforded the opportunity upon timely notice to review and comment on the material introduced.

Bethlehem Steel Corp. Bar Rod and Wire Division v. Pennsylvania Electric Co., 1990 Pa. PUC LEXIS 153, *28 (Oct. 23, 1990). Protestants would have the Commission take judicial notice of facts at a point in the proceeding, *i.e.*, in Reply Exceptions, where PPL Electric ordinarily has no opportunity to comment. Depriving PPL Electric of the opportunity to comment on the materials

referenced by Protestants would clearly violate PPL Electric's right to due process. *See Dee-Dee Cab, Inc. v. Pa. P.U.C.*, 817 A.2d 593, 598 (Pa. Cmwlth. 2003), *appeal denied*, 575 Pa. 698, 836 A.2d 123 (2003) ("For matters coming before an administrative agency, procedural due process, however, requires that a party be afforded reasonable notice of the issues raised and the agency's rulings on those issues, so that the party has an opportunity to present any response or objection."). The Commission should not take judicial notice as requested by the Protestants.

9. The Commission has held that it is inappropriate to offer public documents into evidence through Exceptions. In *Application of Apollo Gas Co.*, 1994 Pa. PUC LEXIS 45 (Feb. 10, 1994) ("*Application of Apollo*"), the Commission was faced with a situation similar to the one here. In its Exceptions, Equitable Gas Company ("Equitable") argued that the Commission should rely on exhibits filed by Apollo in a separate proceeding before the Commission. The exhibits had not been presented as evidence during the *Application of Apollo* proceeding and were therefore not part of the record evidence. In ruling on Equitable's Exceptions, the Commission held:

> While a litigant may be permitted under Section 5.406 to offer public documents into evidence, that section does not grant a party the right to present such evidence after the record has been closed. The record in the instant proceeding was closed on September 28, 1993. Exhibits C and D which Equitable contends are public records under Section 5.406 were not filed until May 26, 1994, eight months after the close of the record. Inasmuch as Equitable has not shown good cause why this record should be reopened to allow the introduction of these documents, we will grant Apollo's motion and strike Exhibits C and D of Equitable's Exceptions.

Application of Apollo, *13-14. Just as in the Apollo proceeding, the Protestants have requested that the Commission rely on facts taken from a public record. These facts were available to the Protestants the entire time the record in this proceeding was being developed. The record for this proceeding was closed on September 12, 2012. It would be procedurally inappropriate to allow

the Protestants to present these facts more than four months after the record closed, especially when doing so would deny PPL Electric an opportunity to respond.

10. Fact finding must be based exclusively on the evidence admitted to the record in the proceeding. *Kyu Son Yi v. State Board of Veterinary Medicine*, 960 A.2d 864, 870-871 (Pa. Cmwlth. 2008)(holding that extra-record evidence cannot sustain an adjudication). Here, the facts relied upon in the Protestants' Reply to Exceptions are not part of the record in this proceeding. Accordingly, these extra-record materials cannot support a finding of fact in this proceeding.

11. PPL Electric is clearly prejudiced by Protestants' actions. The quarterly reports relied upon by Protestants were not part of the record below, and as a result, PPL Electric had no opportunity to respond to this evidence and the arguments based on it. If PPL Electric had been provided that opportunity, it would have presented evidence demonstrating that the Dalmatia 36-02 circuit is consistently a very poor performing circuit and is far less reliable than the vast majority of PPL Electric's circuits. Due to Protestants' delay, however, PPL Electric was precluded from presenting this evidence. Consequently, it would be improper and contrary to the requirements of due process for the Commission to rely upon the extra-record facts presented for the first time in the Protestants' Reply to Exceptions. Based on the foregoing, the extra-record evidence on pages 14-16, 18 and 19 of the Protestants' Reply Exceptions should be stricken and disregarded by the Commission.

12. In the alternative, if the Commission declines to grant PPL Electric's motion to strike, PPL Electric should be provided with the opportunity to respond to the Protestants' new arguments. Therefore, by way of alternative relief, PPL Electric requests that it be provided an opportunity to respond to Protestants' extra-record evidence as set forth in Section III, below.

III. MOTION FOR LEAVE TO RESPOND

13. If the above Motion to Strike is not granted, PPL Electric requests that it be provided the opportunity to respond to the new evidence and argument presented in Protestants' Reply to Exceptions. The Commission has held that where judicial notice of evidence not part of the official record is taken, parties that are adversely affected must be afforded the opportunity to respond. *Bethlehem Steel Corp. Bar Rod and Wire Division v. Pennsylvania Electric Co.*, 1990 Pa. PUC LEXIS 153, *28 (Oct. 23, 1990); *see also* 52 Pa. Code § 5.408. PPL Electric will be adversely affected if the Commission takes judicial notice of the extra-record evidence included in the Protestants' Reply to Exceptions. The Commission's policy, fundamental fairness and due process require that if the Commission does not strike the extra-record evidence, then PPL Electric should be given the opportunity to respond to the newly presented evidence.

14. PPL Electric has prepared a response to the extra-record evidence included by the Protestants in their Reply to Exceptions, which is attached as Appendix A to this Motion. In its response, PPL Electric shows that the Protestants' extra-record evidence is misleading and does not accurately represent PPL Electric's system planning process or the specific history of the distribution circuit at issue in this proceeding. If the Commission does not grant its Motion to Strike, PPL Electric requests that the Commission accept the attached response.

IV. CONCLUSION

WHEREFORE, PPL Electric Utilities Corporation respectfully requests that the Pennsylvania Public Utility Commission strike the extra-record evidence and related argument on pages 14 through 16, 18, and 19 of the Reply to Exceptions of the Protestants, and that the Pennsylvania Public Utility Commission disregard said portions of pages 14 through 16, 18 and 19 in their disposition of the above-captioned matter. In the alternative, PPL Electric requests that it be permitted to respond to the extra-record materials in Protestants' Reply to Exceptions.

Respectfully submitted,

DBM

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Date: February 1, 2013

Appendix A

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Application Of PPL Electric Utilities Corporation Under 15 Pa. C.S. § 1511(c) For A Finding And Determination That The Service To Be Furnished By The Applicant Through Its Proposed Exercise Of The Power Of Eminent Domain To Acquire A Right-Of-Way And Easement Over And Across The Lands Of The Property Owners For The Proposed Richfield-Dalmatia 69 kV Transmission Tie Line In Portions of Snyder, Northumberland, and Juniata Counties, Pennsylvania Is Necessary Or Proper For The Service, Accommodation, Convenience Or Safety Of The Public	:	Docket Nos. A-2011-2267349, etc.

RESPONSE OF PPL ELECTRIC UTILITIES CORPORATION TO EXTRA-RECORD EVIDENCE PRESENTED IN PROTESTANTS' REPLY TO EXCEPTIONS

TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:

In their Reply to Exceptions of PPL Electric ("Reply to Exceptions") Protestants assert that PPL Electric Utilities Corporation ("PPL Electric") has overstated the reliability concerns related to the Dalmatia 36-02 12 kV distribution line, and in particular, has not demonstrated that the Dalmatia 36-02 has not appeared on the list of worst performing circuits in recent years sufficiently to justify the Project. In support of their argument, Protestants cite to and rely upon quarterly reports filed at a separate docket pursuant to the Commission's electric reliability regulations at 52 Pa. Code § 57.195. These reports contain detailed electric distribution reliability information for Pennsylvania Electric Distribution Companies ("EDCs"), including a list of the worst performing 5% of circuits for each EDC. These reports are not part of the record in this proceeding and were presented for the first time

in Protestants' Reply Exceptions. As a result, PPL Electric has had no opportunity to respond to said reports or the arguments regarding these reports advanced by the Protestants. Had the Protestants brought forth these reports and their related arguments in the proceeding below, PPL Electric would have presented additional evidence regarding the proper interpretation of said quarterly reports and the performance history of the Dalmatia 36-02 12 kV line. As explained below, Protestants' arguments based on this extra-record evidence should be rejected because they misconstrue the quarterly reports and thereby distort and misrepresent the performance history of the Dalmatia 36-02 12 kV line and PPL Electric's decision-making process for system reinforcement. As explained below, under any reasonable analysis, the Dalmatia 36-02 line has been and, without remedial action, will continue to be a chronically poor performing circuit, for which prompt remedial action is required.

Pursuant to 52 Pa. Code § 57.195, PPL Electric is required to file quarterly reports with the commission regarding the worst performing 5% of its circuits. These reports identify these worst performing circuits and also contain a plan of action to address this poor performance. In preparing these reports, the Company assesses the performance of all of its approximately 1,100 distribution circuits. Although the Commission only requires reporting and remedial action on the worst performing 5% of circuits, PPL Electric does not and cannot focus exclusively on those circuits in planning for system reinforcements. The worst performing 5% metric is a relative measure of performance, not an absolute measure. Whether a particular circuit appears or does not appear in a particular quarterly report depends both on its own absolute performance and how that performance compares with other distribution circuits on the Company's system. As a result, an individual circuit's absolute performance could remain constant over time, but it may move on or off of the quarterly report because of changes in the relative performance of other distribution circuits on the system. Performance of a particular circuit in a particular quarter can be dramatically affected by local events in a particular geographic area, such as non-reportable storms, floods, lightning, vehicular accidents

and other external causes, or a temporary lack thereof. The occurrence of such local events can cause a circuit to appear on the quarterly report in one quarter, but not in the next quarter. Similarly, a circuit on the list in one quarter may fall off the list in the next quarter due to local events elsewhere on the system, even if there were no change in its absolute level of performance. Therefore, the fact that an individual circuit moves on and off of the quarterly reports is to be expected and does not indicate, in and of itself, that the circuit is not still performing poorly.

To address this issue, the Company's system planning engineers look beyond the worst performing 5% of circuits and focus more broadly on the worst performing 20% of circuits. This takes into account the variance in the relative performance of circuits over time and provides a more rational and logical basis for proper system planning. PPL Electric has found that circuits consistently in the bottom 20% of performance will, over time, likely move into the 5% of worst performing circuits if no remedial action is taken. This is because PPL Electric, consistent with the Commission's regulations, is constantly addressing its worst performing circuits in an attempt to improve their reliability. As the reliability of those circuits improves, the relative performance of the circuits that are not being addressed will likely decline and ultimately appear in the worst performing 5% of circuits. This is particularly true where PPL Electric has already implemented all low-cost solutions on a particular circuit, such as the Dalmatia 36-02 circuit, with little or no reliability improvements. Such circuits require a major project with a long lead time, such as the proposed Project, which will construct a new substation supplied by a new transmission line to significantly improve service reliability. In other words, as poor performing circuits are repaired or replaced their reliability will improve, and the relative performance of the remaining poor performing circuits will decline, and they will ultimately appear and remain as worst performing circuits until remedial action is taken.

The operating history of the Dalmatia 36-02 shows that it is such a circuit. The operating history of the Dalmatia 36-02 is provided in the following table:

TABLE 1

YEAR	QRTR	RANK	CPI
2004	1	144	174.4
2004	2	112	201.5
2004	3	34	294.7
2004	4	24	315.6
2005	1	30	311.4
2005	2	28	308.8
2005	3	29	284.7
2005	4	37	290.3
2006	1	37	319.6
2006	2	30	365.3
2006	3	24	416.9
2006	4	16	424.4
2007	1	10	414.7
2007	2	29	689.9
2007	3	26	643.6
2007	4	24	615.4
2008	1	54	548.1
2008	2	205	193.2
2008	3	325	119.9
2008	4	247	151.3
2009	1	323	101.3
2009	2	334	88
2009	3	87	256.9
2009	4	81	274.1
2010	1	77	295.2
2010	2	124	243.1
2010	3	430	84.7
2010	4	430	81
2011	1	397	95.9
2011	2	191	216.2
2011	3	167	224
2011	4	158	225.7
2012	1	65	337.6
2012	2	41	480
2012	3	102	332.5
2012	4	28	684.5

5% WPC	Submitted to PUC
20% WPC	

PPL Electric calculates percentage by dividing Column C ("Rank") by total number of circuits (1,100).

Whether viewed from the Commission's regulations relating to the worst performing 5% of circuits, or through PPL Electric's system analysis focused on the worst performing 20% of circuits, the table clearly demonstrates that the Dalmatia 36-02 circuit is a very poor performing circuit that requires prompt remedial action.

Based on PPL Electric's standard system planning, which looks at the worst performing 20% of its circuits, over the past 9 years the Dalmatia 36-02 circuit has been one of PPL Electric's worst performing 20% of circuits in 29 of 36 quarters, or more than 80% of the time. Under this standard, there can be no doubt that the Dalmatia 36-02 circuit is a chronically poor performing circuit.

Under the Commission's regulations regarding the worst performing 5% of circuits, the Dalmatia 36-02 line appeared on this worst performing list for 15 consecutive quarters from 2004 to 2008. In response to this consistent extremely poor performance, PPL Electric instituted a number of low-cost solutions, including reclosers and lightning arresters in an effort to improve reliability on this circuit. PPL Electric St. 5-R, p. 3. These efforts did not provide any substantial or lasting improvements, and the line remained on the list of the worst performing 5% of circuits for another five straight quarters. At this point, the Company undertook more aggressive action and constructed a second distribution line from the existing substation to split off a portion of the load and customers served by the Dalmatia 36-02 circuit. This action provided modest improvement in service on the line to the point that it fell off of the worst performing 5% of circuits list, but its performance remained unsatisfactory and further action was clearly required. While relative performance of the line did improve immediately after the line was split in 2008, even at its best performance, the circuit remained in the bottom 40% of all circuits. And, as shown in the table above, starting in 2009, the circuit dropped down into the worst performing 10% of circuits. Performance improved for a short period in late 2010 and early 2011, but by the

second quarter of 2011, the Dalmatia 36-02 began a steady decline in performance. This poor performance continued because the Dalmatia 36-02 continued to serve a large number of customers, and the length of the line continued to be very long, resulting in increased outage exposure. PPL Electric St. 5-R, p. 6. Without further remedial action, it was apparent that this line would continue to move down the list of worst performing circuits until it once again appeared in the worst performing 5% of circuits.

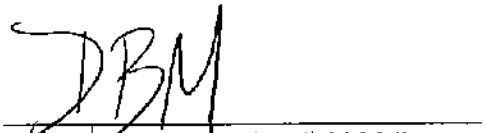
As shown by the circuit's recent performance, this is exactly what has occurred. Starting in Quarter 2 of 2011, the Dalmatia 36-02 reappeared in the worst performing 20% of PPL Electric's circuits, and its performance consistently declined thereafter. In Quarter 1 of 2012, it was in the worst performing 6% of PPL Electric's circuits. In Quarter 2 of 2012, it appeared in the quarterly report as one of the worst performing 5% of circuits. In Quarter 3 of 2012, it was in the worst performing 10% of PPL Electric's circuits. In Quarter 4 of 2012, the Dalmatia 36-02 line again appeared on the worst performing 5% list, and was the 28th worst performing circuit, or in the bottom 2.5% [1]

As fully explained on the record, PPL Electric has no other alternatives that would improve performance on the Dalmatia 36-02 circuit. R.D. at 39. Absent remedial action, the Dalmatia 36-02 will remain a very poor performing circuit and customers in the area will continue to receive less reliable service.

[1] As shown in Attachment A, the Dalmatia 36-02 line is included in the Quarterly Report for Quarter 4 of 2012, which was filed with the Commission on January 31, 2013, on pages 8 and 25.

WHEREFORE, PPL Electric Utilities Corporation respectfully requests that the Pennsylvania Public Utility Commission adopt its response and approve the above-captioned Applications.

Respectfully submitted,



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Of Counsel:

Post & Schell, P.C.

Date: February 1, 2013

VERIFICATION

I, Howard S. Slugocki, being the Supervising Engineer for PPL Electric Utilities Corporation, hereby state that the facts above set forth are true and correct to the best of my knowledge, information and belief and that I expect that PPL Electric Utilities Corporation to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 relating to unsworn falsification to authorities.

Date: February 1, 2013

Howard S. Slugocki
PPL Electric Utilities Corporation
Supervising Engineer

Attachment A

Paul E. Russell
Associate General Counsel

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FEDERAL EXPRESS

January 31, 2013

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, Pennsylvania 17120

Re: PPL Electric Utilities Corporation
Quarterly Reliability Report for the
Period Ended December 31, 2012
Docket No. L-00030161

Dear Ms. Chiavetta:

Enclosed for filing on behalf of PPL Electric Utilities Corporation ("PPL Electric") are an original and five (5) copies of PPL Electric's Quarterly Reliability Report for the Period Ended December 31, 2012. Also enclosed, in a sealed envelope, is a copy of the report containing competitively sensitive and proprietary information. The Company hereby requests that the Commission treat that information, and the report containing the information, as privileged and confidential. 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, 2013, 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 Compliance and Rates at (610) 774-4486.

Very truly yours,

Paul E. Russell

Enclosures

cc: Mr. Darren Gill
Mr. Daniel Searfoorce

PPL Electric Utilities

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

PROPRIETARY AND CONFIDENTIAL

January 2013

PPL Electric Utilities Corporation ("PPL Electric") considers the contents of this report to be competitively sensitive and proprietary. As such, PPL Electric requests that the Pennsylvania Public Utility Commission treat the information contained in this report as privileged and confidential.

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.

During the morning of Monday, October 29, 2012, PPL Electric began to feel the effects of Hurricane Sandy. The heaviest winds were felt within PPL Electric's service territory during the late evening of Monday, October 29, 2012. Hazardous winds continued throughout the following day, with the Lehigh and Northeast regions experiencing the most severe and sustained winds. Various weather stations in Allentown recorded the highest wind gusts in the state ranging from 70 to 81 mph, while gusts above 60 mph were recorded in the Pocono area.

In addition to the hazardous winds, heavy rain blanketed the service territory from Monday night through late Tuesday, October 30, 2012, causing localized flooding and loose soil conditions. Most of PPL Electric's service territory experienced at least 2 inches of rain, while some areas received up to 5 inches. The wind and rain caused large trees and branches from outside PPL Electric's rights-of-way to make contact with transmission and distribution facilities, resulting in many downed conductors and broken poles. In some areas, restoration efforts early in the storm were hampered by the heavy wind because bucket trucks cannot safely operate in winds above 30 mph.

PPL Electric's entire service territory experienced sustained customer service interruptions. The territory experienced a total of 3,819 cases of trouble resulting in 523,936 customer service interruptions. The first case of trouble was reported on Monday, October 29, 2012, at approximately 6:00 AM. New service interruptions continued to be reported throughout the week as a result of multiple embedded service outages, which could not be detected until upstream service outages were restored. A total of 420,115 customers experienced a service interruption lasting longer than six hours; 389,876 customers were without service for more than 12 hours; 267,701 customers were without service for 24 hours or longer. The last customers were returned to service at 8:30 PM on Wednesday, November 7, 2012. Hurricane Sandy is the most damaging storm event to impact PPL Electric's service territory since records have been kept.

Actions taken to minimize the impact of similar future events include:

- Ensuring all PPL Electric employees have a storm role and are appropriately trained to perform that role.
- Ensuring consistent organizational structure across all regional storm rooms.
- Developing pre-defined layouts and improved planning for staging areas.
- Moving to a centralized database for human resource planning.
- In future storms, senior leaders will have the option to disable Estimated Restore Times (ERTs) at the outset of a storm. Customers calling in, using the Outage Center

or receiving multi-channel communications from PPL Electric would be told that estimated restoration times were not yet available. PPL Electric would provide system-wide or region-specific ERTs in those situations, but would not issue local ERTs until an informed, and more accurate, estimate of restoration can be made based on field assessment. In storm situations, the director of system emergency will decide whether to suppress ERTs.

- Implementing technology initiatives on the Outage Management System and the Mobile Operations Management system, along with website upgrades.

- Enhancing coordination with emergency management agencies and critical customers.

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, 2012[1].

SAIFI (Benchmark = 0.98; Rolling 12-month Std. = 1.18)	1.08
CAIDI (Benchmark = 145; Rolling 12-month Std. = 174)	152
SAIDI (Benchmark = 142; Rolling 12-month Std. = 205)	164
MAIFI[2]	4.11
Average Number of Customers Served[3]	1,392,408
Number of Sustained Customer Interruptions (Trouble Cases)	16,383
Number of Customers Affected[4]	1,497,659
Customer Minutes of Interruptions	228,118,697
Number of Customer Momentary Interruptions	5,716,569

During the 4th quarter there was one (1) PUC major event, two (2) PUC Reportable storms, and one (1) other storm that required the opening of one or more area emergency centers to manage restoration efforts.

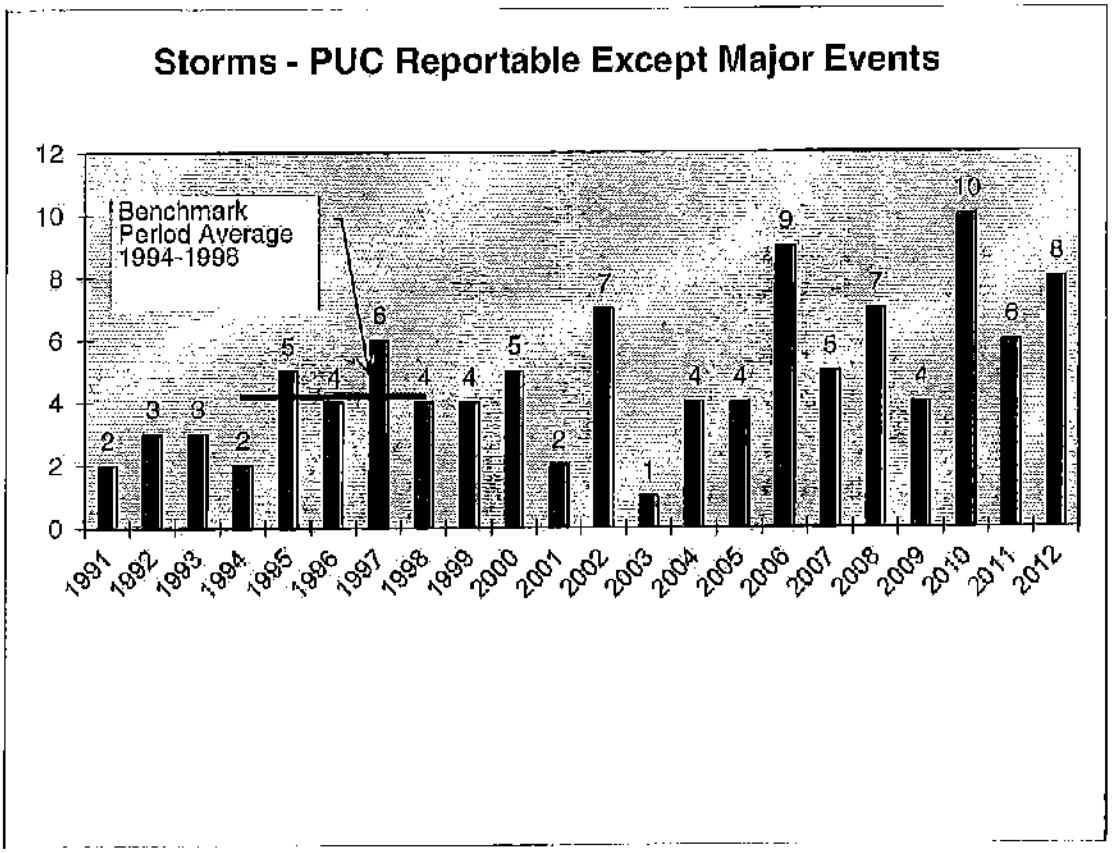
[1] Non-PPL Electric problems are excluded here, but may be found in Item 5.

[2] MAIFI data is obtained at the substation breaker and does not include momentary service interruptions at lower level devices.

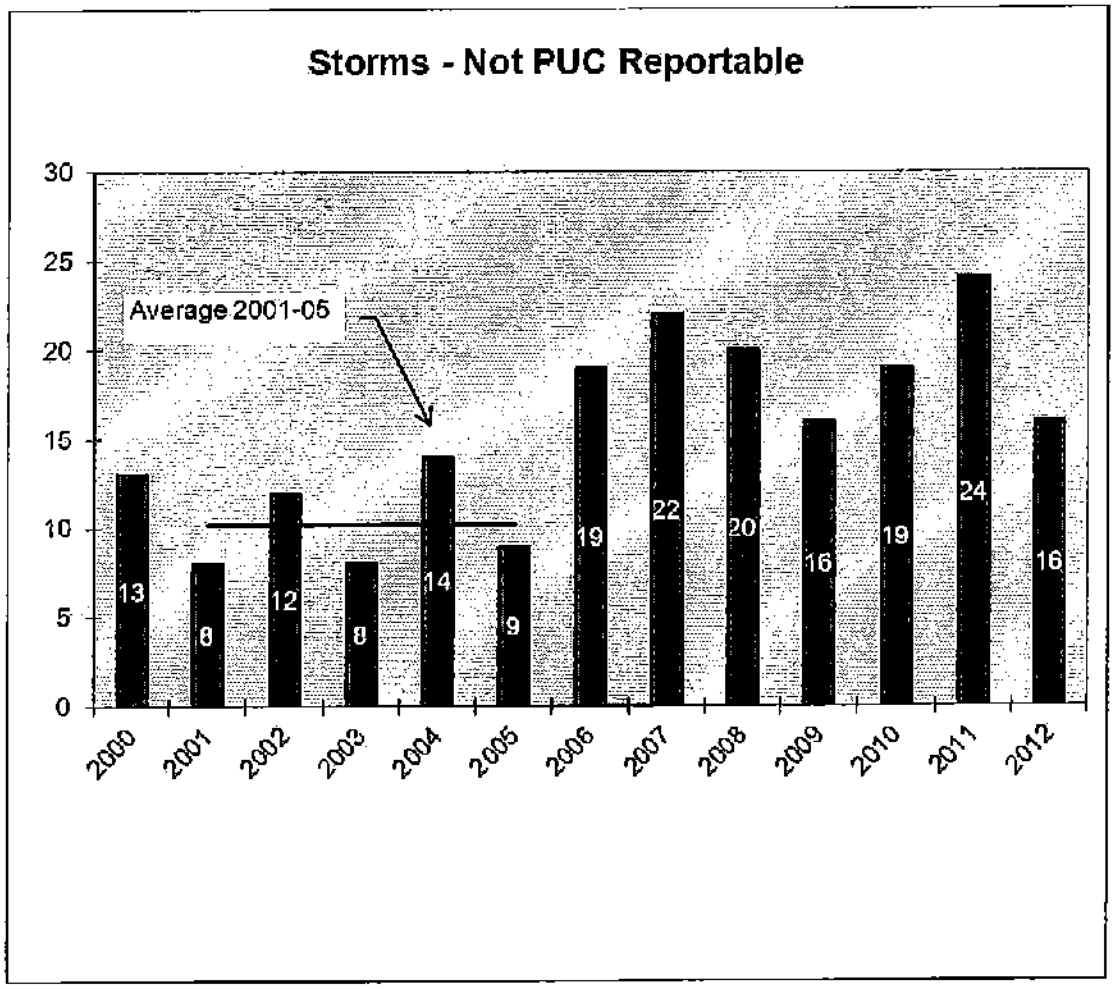
[3] PPL Electric calculates the annual indices using customers served at the end of the period. This is consistent with the method used to calculate PPL Electric's benchmarks.

[4] 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.

Specifically, during the 12-month reporting period, there was one (1) PUC major event and eight (8) PUC-reportable storms (≥ 2,500 customers interrupted for ≥ 6 hours) other than major events.



In addition, there were sixteen (16) storms that were not reportable, but which did require the opening of one or more area emergency centers to manage restoration efforts.



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[5]	Customers	Cases of Trouble[6]	Customer Minutes Interrupted	CPI
1	28701	3.05	1,008.8	3,074.9	1.01	811	17	2,493,758	1,158
2	22601	7.37	136.59	1,006.8	4.87	1,057	57	1,064,190	1,022
3	13902	5.17	124.88	645.00	16.78	1,866	23	1,203,579	996
4	28302	5.34	158.19	844.61	5.14	2,795	90	2,360,693	987
5	11406	3.05	267.55	816.63	4.05	1,015	12	828,881	968
6	55502	4.64	121.11	561.37	1.06	1,593	20	894,270	906
7	45402	5.19	216.81	1,125.0	7.22	1,591	58	1,789,945	904
8	53302	6.05	114.08	690.23	3.07	357	15	246,411	902
9	67803	4.85	233.78	1,134.8	10.04	1,970	35	2,235,668	864
10	24401	2.56	705.90	1,810.1	5.10	1,228	42	2,222,865	823
11	25502	7.59	90.53	686.69	5.88	494	18	339,223	812
12	53901	4.65	120.27	559.07	4.14	1,183	25	661,376	799
13	53601	5.50	74.52	409.64	1.01	1,118	32	457,976	795
14	28402	4.46	190.59	849.97	10.20	1,586	41	1,348,056	792
15	51401	5.20	84.13	437.17	1.00	464	11	202,848	783
16	16802	4.35	128.48	558.49	16.72	859	35	479,745	775
17	28001	4.89	100.30	490.34	1.01	1,772	54	868,876	774
18	18501	3.84	220.37	846.16	3.02	1,453	32	1,229,466	774
19	47502	3.77	239.90	904.04	3.08	786	26	710,576	760
20	11404	5.53	57.27	316.59	3.01	767	9	242,822	752
21	16301	3.58	100.22	358.30	1.00	1,780	29	637,779	750
22	11401	4.77	67.47	321.66	3.98	969	18	311,689	725
23	20403	3.62	109.78	397.57	0.00	1,910	40	759,353	705
24	13503	3.60	141.24	508.18	7.47	1,428	19	725,676	701
25	47704	2.96	506.58	1,499.7	9.26	735	32	1,102,319	691
26	52002	3.66	109.82	401.79	6.01	1,664	20	668,581	690
27	25801	2.99	391.11	1,169.0	0.00	1,811	39	2,117,086	685
28	53602	5.06	69.03	349.11	3.14	2,184	69	762,459	684
29	62604	3.93	97.04	381.11	1.99	1,362	10	519,065	669

[5] MAIFI data is obtained at the substation breaker and does not include momentary service interruptions at lower level devices.

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

WPC Rank	Feeder ID	SAIFI	CAIDI	SAIDI	MAIFI[5]	Customers	Cases of Trouble[6]	Customer Minutes Interrupted	CPI
30	60406	9.53	127.94	1,219.5	2.04	201	1	245,127	665
31	43102	3.27	233.16	763.47	2.00	973	20	742,859	665
32	12102	2.60	307.95	802.12	0.00	1,113	31	892,761	662
33	46602	2.94	376.06	1,103.7	0.00	1,430	57	1,578,334	659
34	43101	3.26	287.04	934.77	1.99	1,438	27	1,344,203	657
35	27501	1.82	751.00	1,370.4	2.13	1,250	16	1,713,023	640
36	43302	5.69	264.36	1,503.0	7.14	175	10	263,036	633
37	28301	4.26	99.96	425.99	7.04	2,821	91	1,201,718	631
38	60502	4.36	110.87	483.30	2.01	1,887	30	911,982	623
39	66703	3.78	228.70	863.72	4.08	1,468	25	1,267,937	623
40	43001	3.89	155.12	604.11	4.08	975	53	589,008	620
41	55507	1.59	108.10	171.93	0.00	1,011	12	173,820	608
42	24402	3.20	243.84	780.98	3.00	493	15	385,025	594
43	26001	3.14	225.72	709.22	5.18	1,359	56	963,835	576
44	16202	2.20	503.43	1,105.2	1.99	1,464	15	1,618,013	566
45	23401	4.38	104.30	456.94	3.35	1,735	54	792,788	565
46	53501	3.90	124.61	485.86	6.18	2,142	40	1,040,702	565
47	16801	3.48	117.72	409.07	6.13	1,600	46	654,515	563
48	22602	4.10	64.14	262.68	6.14	1,538	36	404,002	561
49	22002	4.16	103.09	429.04	1.99	1,397	38	599,364	555
50	28501	1.00	1,267.8	1,267.8	0.00	1	1	1,268	554
51	46503	1.19	1,043.6	1,243.3	3.03	439	9	545,834	552
52	47703	2.73	299.54	817.62	8.02	1,383	43	1,130,764	552
53	56802	5.28	71.83	378.92	10.36	1,400	31	530,482	546
54	64202	3.28	212.04	695.84	3.15	1,019	26	709,065	540
55	11405	3.19	122.17	389.79	6.05	1,859	18	724,612	534
56	67402	2.50	224.77	561.76	14.37	1,322	30	742,643	526
57	24301	2.14	463.63	991.98	3.16	1,691	8	1,677,430	522
58	45501	2.07	434.75	899.03	2.04	1,443	58	1,297,294	515

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

PPL Electric currently is evaluating improvements to its Worst Performing Circuit program.

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

Rank	*Action*	*Status*	*Due/Complete*	*Result*
1	**Circuit ID: 28701 HAMLIN 87-01**			**Location: Pocono** **CPI: 1157**
	7/19/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	8/31/2012	Two major power outages significantly affected this circuit's reliability in the past four quarters which lead to it being one of PPL's top 50 worst performing circuits. On May 14, 2012 a tree from outside PPL's designated right of way caused the 87-1 breaker to trip to lockout. The outage affected a total of 813 PPL customers and lasted 137 minutes which resulted in a total customer minutes interrupted (CMI) value of 75,285. On June 12, 2012, a tree from outside PPL's designated right of way caused the 87-1 circuit breaker trip to lockout. This outage affected 814 PPL customers and lasted 201 minutes which resulted in a total customer minutes interrupted CMI of 58,009. In total, the 87-1 12 kV line had 14 total outages between the months of June 2011 and July 2012. The primary causes of these outages include tree contacts from outside PPL's right of way (4), animal contacts (4), equipment failures (3), and vehicle hits (1).
	1/11/2013: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/20/2013	
	1/28/2013: Tree trimming-selected line segments only (hot spots). Foresters will be spot trimming a section of line beyond the single phase OCR at grid number 64925N45809. This action was taken in response to two breaker outages which were found to be caused by trees contacts downstream of the OCR.	Completed	11/30/2012	Foresters completed their spot trimming beyond the single phase OCR at grid number 64925N45809. There have been no tree related outages in this section of line since the trimming was complete.
	1/28/2013: Tree trimming. PPL will be tree trimming the Hamlin 87-1 circuit in the early part of the 2013 calendar year.	Scheduled for	7/31/2013	
	1/31/2013: Install animal guard(s).	Scheduled for	2/28/2013	Review of animal outage locations to audit and ensure animal guards were installed post restoration.

Rank	*Action*	*Status*	*Due/Complete*	*Result*
2	**Circuit ID: 22601 KIMBLES 26-01**			**Location: Pocono** **CPI: 1021**
	4/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	5/30/2012	Two major power outages significantly affected this circuit's reliability in the past four quarters which lead to it being one of PPL's top 50 worst performing circuits. On December 21, 2011 a tree branch from outside PPL's designated right of way came in contact with the primary conductor tripping the upstream OCR to lockout. The outage affected 1,456 PPL customers and lasted 260 minutes. PPL crews confirmed that all branches were cleared off the line and then closed the circuit breaker restoring all customers. The total customer minutes interrupted (CMI) for the outage was 118,632. On March 31, 2012 a device on the 12kV line caused a fault which resulted in the tripping of the 12kV circuit breaker to lockout. The outage affected 1,456 PPL customers and lasted 497 minutes. The total customer minutes interrupted (CMI) for the outage was 495,393. In total, the 26-1 12kV line experienced 44 total outages between April 2011 and March 2012. The primary causes of these outages include animal contacts (13), equipment failures (12), and tree contacts from outside PPL's right of way (9).
	8/31/2012: Improve sectionalizing capability. The new 69/12 kV Hawley Substation is scheduled to be completed in August 2012. When constructed, the new Hawley Substation will transfer over 700 customers from the Kimbles 26-1 to the new Hawley 12 kV lines. In addition to improving reliability for the transferred customers, the new substation line will reduce outage durations for the remaining customers through expanded sectionalizing capability.	Completed	9/3/2012	The Hawley 69/12kV substation was completed in August 2012. The the new substation transferred approximately 687 customers off the Kimbles 26-1 12kV line.
	1/31/2013: Install animal guard(s).	Scheduled for	2/28/2013	Review of animal outage locations to audit and ensure animal guards were installed post restoration.
	1/31/2013: Line inspection-vegetation.	Scheduled for	2/28/2013	Discuss circuit performance with Vegetation Management to determine if mid cycle corrective action is necessary.

Rank	*Action*	*Status*	*Due/Complete*	*Result*
3	**Circuit ID: 13902 SEIDERSVILLE 39-02**			**Location: Bethlehem** **CPI: 995.**
	7/5/2012: Expanded Operational Review.	Completed	7/31/2012	Developed 7 Work Requests to reduce outage risk and improve circuit performance, including the installation of a LBAS, single and three phase fusing, and transferring of 110 customers to a more reliable, adjacent circuit.
	7/19/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	8/31/2012	Determined that additional three phase sectionalizing and automation will greatly reduce customers affected and restoration times. WO's developed to address these issues.
	7/23/2012: Transferring 110 customers to a more reliable, adjacent circuit. WO# 42073599	Completed	8/30/2012	Reduced customer count affected by each outage.
	7/23/2012: Install LBAS(s). Installing Remote 65537s47000controlled switch to reduce restoration times.	Scheduled for	2/28/2013	
	7/23/2012: Install fuse(s). WO#'s 42075448, 42075446, 42075790, 42075787, 420,75789, 42075788. Fuses to isolate exposed single and 3 phase taps from tripping breaker.	Scheduled for	6/30/2013	
4	**Circuit ID: 28302 NEWFOUNDLAND 83-02**			**Location: Pocono** **CPI: 987.**
	7/19/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	7/24/2012	This circuit has not been on the worst performing circuit list for several quarters. On May 4, 2012 approximately 2,800 PPL customers experieced an outage due to a substation relay malfunction, resulting in a total CMI of 272,000. On March 3, 2012 the OCR at grid number 66457N41772 tripped open due to a downstream vehicle accident. The outage affected 430 customers and resulted in a CMI of 207,000. A new substation and 3 phase tie line are currently under construction that will help mitigate customer exposure to future outages.
	1/28/2013: Improve sectionalizing capability. A new 69/12 kV substation at Ledgedale is currently being constructed and is scheduled to be in service April 2013. When constructed, the Ledgedale Substation project will create greater operational flexibility, reduce outage exposure, and increase automation for customers that are currently on the Newfoundland 83-2 12kV line.	Scheduled for	4/30/2013	
	1/28/2013: Install tie. A new 3 phase tie line between the Newfoundland 83-2 and Tafton 80-1 line is currently being constructed and is expected to be completed by end of April 2013. The new tie will allow greater operational flexibility, reduce outage exposure, and increase ability to remotely isolate and restore customers.	Scheduled for	4/30/2013	

Rank	*Action*	*Status*	*Due/Complete*	*Result*
5	**Circuit ID: 11406 FARMERSVILLE 14-06**			**Location: Bethlehem** **CPI: 967.**
	6/27/2012: Expanded Operational Review.	Completed	10/1/2012	Developed two WO's to reduce outage risk and restoration times.
	6/27/2012: Expanded Operational Review.	Completed	10/1/2012	Developed WO to improve circuit performance.
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/15/2012	Worst Performing Circuits meeting held to discuss fixes to improve reliability. The results of this meeting included a work order written to install a new recloser at 67056S50819. Work order also written for load balancing and a new single phase fuse.
	10/25/2012: Load balancing. WO#: 42073592 @ 67100S50812 . Swap Phase B to A.	Scheduled for	4/5/2013	
	10/25/2012: Install 3 phase OCR(s). WO#: 42073596 - Install new recloser @ 67056S50819	Scheduled for	3/31/2014	
	10/25/2012: Install fuse(s). WO#: 42073597 - Install fuse @ 67454S50472	Scheduled for	12/25/2013	
6	**Circuit ID: 55502 HERSHEY 55-02**			**Location: Harrisburg** **CPI: 906.**
	3/14/2012: Thermographic inspection-OH line. Inspected all 2 and 3 phase primary lines with infrared camera.	Completed	3/14/2012	Reduced outage risk. Problematic vintage of disconnect switches were replaced.
	7/28/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	9/10/2012	The Hershey 55-2 line has approximately 1,600 customers across 38 circuit miles. The largest CPI contributor has been the percentage of customers with greater than 3 interruptions. The circuit breaker experienced four outages in the past year. On 03/10/12, a vehicle struck a pole and interrupted customers for 17 minutes. On 03/31/12, a customer cut a tree down onto the distribution line. On 06/30/12, a tree from outside the trimming right of way fell on the line. On 08/03/12, a tree branch making contact wore down the insulation on a span of XLP conductor and caused a permanent fault.
	10/4/2012: Tree trimming. Trim circuit as part of its four year Vegetation Management schedule.	Scheduled for	5/3/2013	

Rank	*Action*	*Status*	*Due/Complete*	*Result*
7	**Circuit ID: 45402 WEST BLOOMSBURG 54-02**		**Location: Sunbury**	**CPI: 904.**
	11/13/2007: Install 3 phase OCR(s). Replace OCR 37694N30236 with telemetric OCR.	Completed	7/29/2011	Reduced outage duration.
	5/15/2008: Perform line maintenance identified by line inspection. Eliminate exposure of unused 3 phase line by Rte 487 bridge.	Completed	7/29/2011	Reduced outage risk.
	11/26/2008: Install 3 phase OCR(s). Upgrade OCR 38029N29537 with Telemetric VCR.	Completed	7/29/2011	Reduced outage duration.
	4/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	6/14/2012	On February 20, 2012 all of the customers on this circuit were out of service when two conductors came down and contacted the ground at 36113N30401. Restoration was delayed due to switching problems caused by cold load pick-up. On September 15, 2012 and September 27, 2012 the WBLO 54-2 Sect VCR at 37624N30209 tripped and did not reclose due to a Temporarily Cleared Green Tag Permit. There are 748 customers downstream from this device. This Green tag permit was likely taken out during construction of the WBLO 54-2 to WBER 53-3 tie. On May 27, 2011 a transmission outage left all of the customers on this circuit out of service for 4.5 hours.
8	**Circuit ID: 53302 GRATZ 33-02**		**Location: Harrisburg**	**CPI: 901.**
	3/14/2012: Thermographic inspection-OH line. Inspected all 2 and 3 phase primary lines with infrared camera.	Completed	3/14/2012	Reduced outage risk. Replaced 2 overheating loadbreak cutouts (WR 706906, 706907)
	1/11/2013: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/20/2013	

Rank	*Action*	*Status*	*Due/Complete*	*Result*
9	**Circuit ID: 67803 WEST LANCASTER 78-03**			**Location: Lancaster** **CPI: 863.**
	5/19/2008: Monitor future performance. LMI Inspection performed on 2 phase and 3 phase line - 3.7 miles total	Completed	12/30/2011	Reduced outage risk.
	1/6/2011: Expanded Operational Review.	Completed	12/30/2011	No work is needed.
	1/13/2011: Line inspection-equipment.	Completed	7/20/2011	Reduced outage risk.
	1/13/2011: Thermographic inspection-OH line.	Completed	3/31/2011	Reduced outage risk.
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	10/25/2012	Inconclusive. Monitor future performance. The West Lancaster 78-3 line has approximately 1,960 customers across 86 circuit miles. The largest contributor to the CPI (Circuit Performance Index) has been SAIDI. Of the top 10 outages in the past year, four occurred on the same day (July 7, 2012) due to a severe T&L storm. That one storm resulted in a CMI (Customer Minutes Interrupted) of over 975,000. Four of the other outages were caused by trees from outside the trimming right of way. The circuit is due to be trimmed in 2014. The West Lancaster 78-3 line has never been on the Worst Performing Circuit list.
	1/21/2013: Thermographic inspection-OH line. A thermographic inspection on the overhead 2 and 3 phase sections of the circuit is scheduled for the week of January 28, 2013.	Scheduled for	2/1/2013	
	1/28/2013: Improve sectionalizing capability. WO 43001930 – Install manually operated Air Load Break Disconnect Switches (ALDS's) at grid 38703S25381. The switches are scheduled to be installed on 2/13/2013. This will help improve the SAIDI of the circuit.	Scheduled for	2/13/2013	
	1/28/2013: Tree trimming-selected line segments only (hot spots).	Completed	1/24/2013	Reduced outage risk. Hot Spot tree trimming was done on various line sections of the circuit on the following dates: 6/28/2012, 7/21/2012, 7/28/2012, 8/18/2012, 10/05/2012 and 1/24/2013.

Rank	*Action*	*Status*	*Due/Complete*	*Result*
10	**Circuit ID: 24401 TINKER 44-01**			**Location: Pocono** **CPI: 823.**
	4/11/2011: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	5/31/2011	In May 2011, a part of the Tinker 44-1 12kV line load was transferred to the East Carbondale 12-8 12kV line. The reliability was significantly improved for the transferred customers.
	10/17/2011: Evaluate potential ties.	Completed	1/20/2012	Tie line capability is being analyzed between the Tinker 44-1 12kV line and Honesdale 34-1 12kV line. With this tie line capable of making transfers, customers from the Tinker line can be effectively restored during outages.
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/15/2012	Two major power outages significantly affected this circuit's reliability in the past four quarters which lead to it being one of PPL's top 50 worst performing circuits. Both of these outages occurred on July 26, 2012 and were caused by trees that were outside PPL's designated right of way operating the respective upstream OCR to lockout. The first outage affected 836 PPL customers and had a total duration of 1720 minutes. The other outage affected an additional 264 PPL customers and had a total duration of 1540 minutes. The combined customer minutes interrupted (CMI) of the two outages amounted to 1,817,808. In total, the Tinker 44-1 12kV line had 45 total outages between the months of September 2011 and October 2012. The primary causes of these outages include tree contacts from outside PPL's right of way (19), equipment failures (18), and animal contacts (7).
	1/16/2013: Evaluate potential ties. PPL is currently investigating the benefits of constructing a tie line between the Tinker 44-1 and Tinker 44-2 12kV lines. The new tie would allow greater operational flexibility, reduce outage exposure, and increase ability to remotely isolate and restore customers.	Scheduled for	3/1/2013	
	1/28/2013: Tree trimming. PPL will be trimming the entire Tinker 44-1 circuit in the early part of the 2014 calendar year.	Scheduled for	7/31/2014	

Rank	*Action*	*Status*	*Due/Complete*	*Result*
11	**Circuit ID: 25502 MADISONVILLE 55-02**			**Location: Pocono** **CPI: 811.**
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/15/2012	Two major power outages significantly affected this circuit's reliability in the past four quarters which lead to it being one of PPL's top 50 worst performing circuits. The first major outage on the line occurred on July 27, 2012 when the 55-2 breaker tripped to lockout. Due to abnormal sectionalizing of the 12kV system at the time, the outage affected 2,138 PPL customers and lasted 35 minutes. The total customer minutes interrupted for this outage (CMI) was 75,835. The second largest outage occurred on July 15, 2012 when the transmission line feeding the Madisonville substation experienced an outage. This outage affected 506 PPL customers and lasted 133 minutes which resulted in a total CMI of 67,338. In total, the 55-2 12kV line had 13 total outages between the months of September 2011 and October 2012. The primary causes of these outages include equipment failures (5), tree contacts from outside PPL's right of way (4), and animal contacts (3).
	1/28/2013: Install 1 phase OCR(s). PPL will be investigating the replacement of the fuse at grid number 62366N43261 with a single phase OCR to improve future sectionalizing capability.	Scheduled for	12/31/2013	
	1/28/2013: Tree trimming. PPL will be trimming the entire Madisonville 55-2 circuit in the early part of the 2014 calendar year.	Scheduled for	7/31/2014	
	1/28/2013: Install 1 phase OCR(s). PPL will be replacing the fuse at grid number 61639N43545 with a single phase OCR as a result of the 2012 Expanded Operational Review (EOR) of the circuit.	Scheduled for	12/31/2013	
12	**Circuit ID: 53901 HALIFAX 39-01**			**Location: Harrisburg** **CPI: 798.**
	3/14/2012: Thermographic inspection-OH line. Inspected all 2 and 3 phase primary lines with infrared camera.	Completed	3/14/2012	Reduced outage risk. Replace secondary connections at 1 location (WR 711055)
	1/11/2013: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/20/2013	

Rank	*Action*	*Status*	*Due/Complete*	*Result*
13	**Circuit ID: 53601 DALMATIA 36-01**			**Location: Harrisburg** **CPI: 795.**
	10/12/2011: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/21/2011	The Dalmatia 36-1 line is a long distribution circuit in a rural section of PPL territory. The feeder has approximately 1,150 customers across 102 circuit miles. The largest CPI contributors have been the percentage of customers with greater than 3 interruptions. The circuit breaker experienced a single outage on 3/07/11 due to a failed insulator on the main three phase line. In addition to the circuit breaker interruption, an OCR serving 330 customers experienced four interruptions in the past year. The causes include trees trimming related, a vehicle pole hit, and two trees not trimming related. The circuit is currently being trimmed.
	11/21/2011: Tree trimming. Trim the Dalmatia 36-01 line as part of its four year vegetation management cycle.	Completed	12/30/2011	Reduced outage risk.
	12/31/2011: Tree trimming-selected line segments only (hot spots). Trim section of problematic evergreen trees just outside of right of way.	Completed	12/31/2011	Reduced outage risk.
	3/14/2012: Thermographic inspection-OH line. Inspected all 2 and 3 phase primary lines with infrared camera.	Completed	9/14/2012	No trouble spots found.
	7/16/2012: Expanded Operational Review.	Completed	8/31/2012	No new sectionalizing or protection location identified.
	10/4/2012: Patrol three mile section of line along Route 147 near Herndon to identify possible locations for sectionalizing devices.	Completed	1/3/2013	No new sectionalizing locations found. The customer count distribution and most common trouble locations limit potential reliability savings. Three phase outages are limited to 350 customers on this particular 3 mile radial tap.
	1/11/2013: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/20/2013	
	1/28/2013: Evaluate ties. Evaluate the existing load limited tie with Elizabethville Substation to determine if it would be beneficial to reconductor with a larger conductor or construct another tie with an adjacent circuit.	Scheduled for	5/1/2013	

Rank	*Action*	*Status*	*Due/Complete*	*Result*
14	**Circuit ID: 28402 HARTLAND 84-02**			**Location: Central** **CPI: 791.**
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/15/2012	The Hartland 84-2 line has approximately 1590 customers across approximately 80 circuit miles. The largest contributors to circuit performance were SAIDI and the number of customers who experienced more than three outages. The circuit breaker experienced two interruptions. The first was on 3/26/12 and was due to a tree outside the right of way. The second was on 7/7/12 and was due to an equipment issue during inclement weather. A recloser serving approximately half of the customers on the circuit experienced three outages. Two of the outages were due to trees outside the right of way and the third was due to a vehicle.
	1/28/2013: Tree trimming-selected line segments only (hot spots).	Scheduled for	3/31/2013	
	1/30/2013: Improve sectionalizing capability. WR 12031597 was approved to install a new VCR at grid location 44812N30137 to reduce the number of customers impacted by potential outages in the area.	Scheduled for	4/30/2013	The VCR will reduce the number of customers who might be interrupted during future outages in the area.
15	**Circuit ID: 51401 LYKENS 14-01**			**Location: Harrisburg** **CPI: 782.**
	3/14/2012: Thermographic inspection-OH line. Inspected all 2 and 3 phase primary lines with infrared camera.	Completed	3/14/2012	No problems identified.
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/15/2012	The Lykens 14-1 line has approximately 480 customers across 16 circuit miles. The largest CPI contributor has been the percentage of customers with greater than 3 interruptions. The circuit breaker experienced four outages in the past year. Two of the outages were caused by transmission events. On 6/6/12, a cross arm failed on the Sunbury-Dauphin 69 kV line. On 9/7/12, the Sunbury-Dauphin 69 kV line tripped to lock out during a period of heavy rain and wind. The line was closed for test after 6 minutes and held. In addition, two distribution outages occurred in the month of July. On 7/5/12, a tree from outside the trimming right of way interrupted the circuit breaker. On 7/15/12, heavy winds downed a section of three phase conductor.
	1/28/2013: Evaluate existing ties and protection device placement. Although short, this line may benefit from a telemetered recloser and remote operator-controlled switch.	Scheduled for	2/28/2013	
16	**Circuit ID: 16802 WAGNERS 68-02**			**Location: Pocono** **CPI: 774.**
	1/14/2010: Install tie. SP50718 will create a tie to the Lake Harmony 54-3 line, RIS 5/2012. 1000 customers will be transferred from 68-2 to 54-3.	Completed	5/31/2012	Reduced customer count affected by each outage.
	1/11/2013: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/20/2013	

Rank	*Action*	*Status*	*Due/Complete*	*Result*
17	**Circuit ID: 28001 TAFTON 80-01**			**Location: Pocono** **CPI: 774.**
	4/20/2011: Install tie. A new 3 phase tie line (SP 33013) between Tafton 80-1 and the Newfoundland 83-2 line is currently being engineered and is expected to be completed by year end 2011. The new tie will allow greater operational flexibility, reduce outage expcsure, and increase ability to remotely isolate and restore customers.	Scheduled for	4/30/2013	
	1/11/2013: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/20/2013	
18	**Circuit ID: 18501 CANADENSIS 85-01**			**Location: Pocono** **CPI: 773.**
	10/18/2010: Improve sectionalizing capability.	Completed	6/15/2011	Existing air breaks and OCRs were upgraded to automated devices.
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/15/2012	Two major power outages significantly affected this circuit's reliability in the past four quarters which lead to it being one of PPL's top 50 worst performing circuits. On September 18, 2012 a tree from outside PPL's designated right of way came in contact with the primary conductor tripping the 12kV circuit breaker to lockout. The outage affected 1,534 PPL customers and lasted 1842 minutes. On May 4, 2012 the relay controlling the 12kV circuit breaker failed resulting in the breaker operating to lockout. The outage affected 1,463 PPL customers and lasted 98 minutes. PPL crews promptly located the failure and made repairs. The combined customer minutes interrupted (CMI) for the two outages was 972,577. In total, the 85-1 12kV line experienced 27 total outages between the months of September 2011 and October 2012. The primary causes of these outages include tree contacts from outside PPL's right of way (10), equipment failures (7), and animal contacts (4).
	1/16/2013: Improve sectionalizing capability. PPL will be adding automation to this circuit as part of its second phase of Smart Grid due to be complete by end of year 2013. The project will improve reliability on this circuit by both reducing customer outage durations and a customer's exposure to outages.	Scheduled for	12/30/2013	
	1/28/2013: Tree trimming. PPL will be trimming the Canadensis 85-1 circuit in the early part of the 2015 calendar year.	Scheduled for	7/31/2015	

Rank	*Action*	*Status*	*Due/Complete*	*Result*
19	**Circuit ID: 47502 NEW COLUMBIA 75-02**			**Location: Sunbury** **CPI: 760.**
	1/6/2011: Expanded Operational Review. EOR Planned for 2011	Completed	12/31/2011	Reduced outage risk. A crimp in the secondary was discovered on 2/9/11 during Thermographic Inspection. Repairs were made on 5/18/11 under WR 641824.
	1/6/2011: Thermographic inspection-OH line. Thermovision Inspection of 2 and 3 phase sections to be completed early 2011.	Completed	2/8/2011	Reduced outage risk. Completed 2/9/2011 - All necessary repairs completed.
	7/12/2011: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	9/19/2011	This circuit was reviewed at the Susquehanna WPC meeting on 9/19/11. The largest contributor to the circuit performance index was a SAIDI contribution of 42.8%. On April 28, 2011 a microburst took down several spans of three phase circuit which caused the circuit breaker to open. Due to the extensive damage all of the customers on this line were out of service for 1,945 minutes.
20	**Circuit ID: 11404 FARMERSVILLE 14-04**			**Location: Bethlehem** **CPI: 752.**
	8/25/2012: Install 3 phase OCR(s). Install 3-phase VCRs at 67126S49932 (WO 42090312) and 67153S49753 (WO 42090310).	Scheduled for	3/31/2014	
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/28/2013	
	10/25/2012: Intall 1200 kVAR capacitor @ 67473s49784 to improve voltage. WO#: 42071530	Scheduled for	2/28/2013	
21	**Circuit ID: 16301 ALTON PARK 63-01**			**Location: Lehigh** **CPI: 750.**
	6/25/2012: Load balancing. GROUND RELAY TRIP DUE TO IMBALANCE ON 07/20/2012. SUGGESTED PHASE SWAP FROM PHASE B TO PHASE A Alton Park 63- 1 62479S45481 120172854207357 36/25/2012 Phase Swap Alton Park 63-	Completed	7/26/2012	Reduced outage risk. Help alleviate loading on both phase Bs and therefore providing better load balancing and improve reliability. Reduced outage risk by performing a phase swap. (From B to A phase).
	6/25/2012: Load balancing. Alton Park 63- 1 providing better load balancing and improve reliability. Reduced outage risk by	Completed	7/26/2012	Reduced outage risk. Help alleviate loading on both phase Bs and therefore 61994s44999 120186484207752 97/5/2012 RECLOSER performing a phase swap. (From B to C phase).
	10/24/2012: Install animal guard(s). Will Install animal guards on 9 transformers off tap at 62001S45198. WR 12035476.	Scheduled for	5/31/2013	
	1/11/2013: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/20/2013	

Rank	*Action*	*Status*	*Due/Complete*	*Result*
22	**Circuit ID: 11401 FARMERSVILLE 14-01**			**Location: Bethlehem** **CPI: 724.**
	6/25/2012: Expanded Operational Review. Farmersville 14-1 66662S49521 12015916 42070844 6/15/2012 ROC SWITCH	EOR initiated	11/25/2013	Reduced outage duration. Improve Reliability and Outage Duration
	1/11/2013: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/20/2013	
23	**Circuit ID: 20403 ASHFIELD 04-03**			**Location: Central** **CPI: 704.**
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/15/2012	The Ashfield 04-3 circuit has approximately 1900 customers across approximately 127 line miles. The largest contributor to circuit performance has been the number of customers interrupted greater than three times. Four outages were experienced by most of the customers on the circuit. There was one breaker outage and three recloser outages. Each outage was cause by a tree outside the right of way.
	1/16/2013: Evaluate potential ties.	Scheduled for	2/26/2013	
	1/16/2013: Evaluate improved sectionalizing capability	Scheduled for	2/28/2013	
	1/16/2013: Evaluate sectionalizing capability on single phase taps	Scheduled for	2/28/2013	
	1/16/2013: Tree trimming-selected line segments only (hot spots).	Scheduled for	3/31/2013	
24	**Circuit ID: 13503 MCMICHAELS 35-03**			**Location: Pocono** **CPI: 701.**
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/15/2012	Two major power outages significantly affected this circuit's reliability in the past four quarters which lead to it being one of PPL's top 50 worst performing circuits. On August 2, 2012 the OCR at grid number 63182N31101 failed to reclose properly. The resulting outage affected 668 PPL customers and lasted 139 minutes. PPL crews promptly restored all affected customers and replaced the OCR. The total customer minutes interrupted (CMI) of the outage was 92,471. On September 18, 2012 a tree from outside PPL's designated right of way came in contact with the primary conductor tripping the 12kV circuit breaker to lockout. The outage affected 1,487 PPL customers and lasted 1616 minutes. The total customer minutes interrupted (CMI) of the outage was 385,597. In total, the 35-3 12kV line experienced 21 total outages between September 2011 and October 2012. The primary causes of these outages include equipment failures (7), tree contacts from outside PPL's right of way (4), and animal contacts (2).
	1/29/2013: Improve sectionalizing capability. PPL will be adding automation to this circuit as part of its second phase of Smart Grid due to be complete by end of year 2013. The project will improve reliability on this circuit by both reducing customer outage durations and a customer's exposure to outages.	Scheduled for	12/31/2013	

Rank	*Action*	*Status*	*Due/Complete*	*Result*
25	**Circuit ID: 47704 BLOOMSBURG 77-04**			**Location: Sunbury** **CPI: 690.**
	10/12/2011: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	12/1/2011	This circuit was reviewed at the Susquehanna WPC meeting on 12/1/11. The Bloomsburg substation and customers served by this circuit were subjected to major flood conditions. The flooding was caused by record setting rainfalls from tropical storm Lee. Efforts to restore service were hindered since some of PPL's equipment was inaccessible due to flooding and some of our customer's services were under water. No short term plan is required at this time. PPL will continue to monitor this circuit's performance.
	12/30/2011: Install tie. SP 15410 Relieve the Bloomsburg 77-03 Line RIS 11/2014: This project will add a new ROCS device that will allow system operators to remotely transfer customers from the BLOO 47704 to the BLOO 47703 circuit.	Scheduled for	11/30/2018	
26	**Circuit ID: 52002 LINGLESTOWN 20-02**			**Location: Harrisburg** **CPI: 689.**
	3/14/2012: Thermographic inspection-OH line. Inspected all 2 and 3 phase primary lines with infrared camera.	Completed	3/14/2012	No problems identified.
	7/16/2012: Expanded Operational Review.	Scheduled for	12/31/2013	
	7/19/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	9/10/2012	The Linglestown 20-2 line has approximately 1,640 customers across 28 circuit miles. The largest CPI contributor has been the percentage of customers with greater than 3 interruptions. The circuit breaker experienced four outages in the past year. Two of the outages were caused by trees from outside the trimming right of way during PUC reportable storms on 09/07/11 and 06/29/12. Nothing was found during a third storm on 08/05/12. A fourth outage on 06/03/12 was attributed to animal contact in the substation.
	10/4/2012: Tree trimming. Trim circuit as part of its four year vegetation management cycle.	Scheduled for	6/30/2013	
	10/4/2012: Investigate replacing a remote operator controlled switch with a three phase recloser along Old Jonestown Rd.	Canceled	1/3/2013	The affected area is part of the SMART Grid program. Replacing the remote operator controlled switch with a telemetric recloser will provide minimal additional benefit once the automated Distribution Management System goes live.

Rank	*Action*	*Status*	*Due/Complete*	*Result*
27	**Circuit ID: 25801 SULLIVAN TRAIL 58-01**			**Location: Wilkes-Barre** **CPI: 684.**
	7/12/2011: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	8/30/2011	This feeder had 3 tree outages between May 2011 and June 2011, causing it to be on the WPC list for a seventh time. There are over 1,800 customers and 114 line miles on this feeder. Several projects have been identified for analysis by Distribution Planning, which will compare the alternatives of building a 3-phase loop, replacing manual switches with remote-controlled and transferring customers to another feeder to reduce the number of customers on this circuit.
	9/29/2011: Circuit outage data analysis. Several projects will be analyzed by Distribution Planning, which will compare the alternatives of building a 3-phase loop, replacing manual switches with remote-controlled and transferring customers to another feeder to reduce the number of customers on this circuit.	Completed	11/30/2011	It was determined that outage duration could be reduced significantly by installing an additional telemetric recloser and replacing an existing recloser and manual air-break switch with remote-controlled devices. A project has been developed to make these circuit reinforcements.
	1/4/2012: Improve sectionalizing capability. Install additional telemetric recloser and replace existing recloser and manual air-break switch with remote-controlled devices.	Scheduled for	12/31/2013	
	1/16/2013: Evaluate potential ties.	Scheduled for	2/28/2013	

Rank	*Action*	*Status*	*Due/Complete*	*Result*
28	**Circuit ID: 53602 DALMATIA 36-02**			**Location: Harrisburg** **CPI: 684.**
	3/14/2012: Thermographic inspection-OH line. Inspected all 2 and 3-phase primary lines with infrared camera.	Completed	5/22/2012	Reduced outage risk. Replace primary connection at 1 location (WR 710558); Replace 1 pin insulator (WR 710562); Replace secondary stem connectors at 2 locations (WR 711056, 711057)
	7/16/2012: Construct a new 69-12 kV substation in the Meiserville area to reduce customer counts and circuit miles on the Dalmatia 36-02 12kV line. The new substation will also increase transfer capability by providing a new source in the area with remote operator controlled devices. The substation was originally intended to go into service in November 2012 but has been delayed by land acquisitions and condemnation proceedings. If a successful resolution can be reached with outstanding property owners by the early 2013, the new substation will be scheduled for completion by fourth quarter 2014.	Scheduled for	5/30/2014	
	7/16/2012: Expanded Operational Review.	Completed	8/31/2012	No new sectionalizing or protection points identified.
	7/19/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	9/10/2012	The Dalmatia 36-2 line has approximately 2,180 customers across 195 circuit miles. The largest CPI contributor has been the percentage of customers with greater than 3 interruptions. The circuit breaker experienced two outages in the past year when the Sunbury-Dauphin 69 kV line tripped and interrupted a total of 10,220 customers. On 05/18/12, a contractor caused contact on the 69 kV while performing rigging activities. On 06/06/12, a 69 kV cross arm failed and a section of the line. In addition to the two transmission outages, a three phase recloser serving 1,175 customers experienced two interruptions. The causes were attributed to a lightning strike and failed distribution transformer switch.
	1/11/2013: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/20/2013	

Rank	*Action*	*Status*	*Due/Complete*	*Result*
29	**Circuit ID: 62604 ENGLESIDE 26-04**			**Location: Lancaster** **CPI: 668.**
	1/6/2011: Expanded Operational Review. Check one unfused tap. Get rid of double circuit. Check various animal guarding.	Completed	12/30/2011	Reduced outage risk.
	1/13/2011: Line inspection-equipment.	Completed	5/10/2011	Reduced outage risk.
	1/13/2011: Thermographic inspection-OH line.	Completed	3/31/2011	Reduced outage risk.
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	10/26/2012	Inconclusive. Monitor future performance. The Engleside 26-4 line has approximately 1,290 customers across 28 circuit miles. The largest CPI contributor has been the percentage of customers with greater than 3 interruptions. The circuit breaker experienced two outages in the past year. On 06/21/12, the line needed to be de-energized for safety reason and interrupted customers for 67 minutes. On 06/22/12, the circuit breaker experienced an improper operation and interrupted customers for 12 minutes. On 6/10/12, and again on 9/8/12, approximately 1,200 customers were interrupted due to equipment failures. On 7/7/12 during a severe T&L storm, 63 customers were interrupted for 1,500 minutes due to a tree from outside the trimming right of way fell on the line. The circuit is due to be trimmed in 2014. This is the first time the Engleside 26-4 line has been on the worst performing circuit list.
30	**Circuit ID: 60406 DILLERVILLE 04-06**			**Location: Lancaster** **CPI: 664.**
	1/2/2012: Expanded Operational Review.	Completed	4/5/2012	Reduced outage duration. A WO was written to relocate a Tie Load Break Air Switch from a location that obstructed the proper movement and operation of the switch to a more desirable location. Moving this switch will help to restore customers more quickly in the case of an outage. Everthing else on the line was found to be in proper form.
	5/16/2012: Line inspection-equipment.	Completed	10/30/2012	Reduced outage risk. During the line inspection, we found two locations on the OH primary conductor where the Arc Protection Devices (APD's) were missing. A work order was written and the APD's re-installed. Replacing these ADP's will greatly minimize a potential outage due to a lightning strike. A capacitor bank fuse was also found to be open. The capacitor bank was tested, the needed repairs were made, the fuse reclosed, and the bank was placed back in service to help maintain voltage on the line.
	5/16/2012: Thermographic inspection-OH line.	Completed	6/1/2012	Reduced outage risk.
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	10/26/2012	Inconclusive. Monitor future performance. The Dillerville 4-6 line has approximately 184 customers across 33 circuit miles. The largest contributor to the CPI (Circuit Performance Index) is SAIDI. On 9/18/12, the circuit breaker opened and interrupted 1,900 customers due to a tree that fell into the line. At the time, the Dillerville 4-6 line, which usually only supplies 184 customers, was being used to supply an adjacent circuit that had over 1,800 customers in it. The circuit was last trimmed in 2012. The Dillerville 4-6 line has only been on the Worst Performing Circuit list one time over the last 10 years.

Rank	*Action*	*Status*	*Due/Complete*	*Result*
31	**Circuit ID: 43102 SOUTH MILTON 31-02**			**Location: Sunbury** **CPI: 664.**
	1/6/2011: Thermographic inspection-OH line. Thermovision inspection of 2 and 3 phase completed early 2010.	Completed	10/27/2011	Reduced outage risk. Minor maintenance repairs completed on three transformers.
32	**Circuit ID: 12102 SO ALLENTOWN 21-02**			**Location: Lehigh** **CPI: 662.**
	6/29/2011: Install animal guard(s).	Completed	6/30/2011	Reduced outage risk.
	6/29/2011: Replace lightning arrestor and transformer connections identified by thermography.	Scheduled for	2/28/2013	Reduced outage risk. WR 445919, 445925, 445931 - complete. WR 445940 deferred, currently awaiting scheduling
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/15/2012	Meeting and walkdown was held to have further discussions on this feeder following the Worst Performing Circuits Meeting. Discussions took place regarding possible ways to relocate the line away from inaccessable railroad tracks and a a wooded area.
	10/11/2012: Tree trimming. Entire circuit is due for tree trimming in 2013.	Scheduled for	12/31/2013	
	10/11/2012: Install LBAS(s). Will install LBAS and fault indicators at two locations, 64198S46318 and 64231S46331. WRs 12033671 and 12033676.	Scheduled for	5/31/2013	
33	**Circuit ID: 46602 LARRYS CREEK 66-02**			**Location: Susquehanna** **CPI: 658.**
	7/6/2010: Install fuse(s).	Completed	3/1/2011	Reduced customer count affected by each outage. Installed fusing to reduce outage exposure. WR 556905 - Install 5 fuses WR 556906 - Install 1 fuse WR 556915 - Install 1 fuse WR 556903 - Install 1 fuse WR 556899 - Install 1 fuse on Pine Run Rd WR 535701 - Install 1 fuse along Spook Hollow Rd WR 556898 - Install 2 fuses on Youngs Rd WR 556897 - Install 1 fuse on Level Corners Rd
	7/7/2010: Relocate inaccessible line.	Scheduled for	3/14/2013	WR 556910 - Relocate Inaccessible Line along Tombs Run Rd.

Rank	*Action*	*Status*	*Due/Complete*	*Result*
34	**Circuit ID: 43101 SOUTH MILTON 31-01**			**Location: Sunbury** **CPI: 657.**
	7/19/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	9/24/2012	On May 8, 2012 and June 22, 2012 all of the customers on this circuit were out of service due to lightning strikes on the SMIL 43101 circuit that caused the 69kV fuses at the SMIL substation to blow. This circuit has not been a WPC before. PPL will continue to monitor this circuit's performance.
	9/28/2012: The SMIL 43101 12kV circuit breaker that failed to trip due to the lightning strikes on May 3, 2012 and June 22, 2012 is scheduled to be replaced in Q1 2013.	Scheduled for	3/31/2013	
	9/28/2012: Line inspection-equipment. On June 29, 2012 this circuit was patrolled by Joe Doyle, Frank Dempsey, and Matt Besz. The patrol revealed that the conductor was "bird caging" in several spots along Route 15. The damaged conductor is scheduled to be replaced in November. A static wire will be mounted above the three phase for lightning protection.	Completed	6/29/2012	
	9/28/2012: Reconductor line. On September 16, 2012 a Helicopter Patrol of the Susquehanna River crossing section of this circuit revealed that the conductor was "bird caging" in several spots and that there were also several broken strands. This conductor is scheduled to be replaced in November 2012.	Completed	12/17/2012	Reduced outage risk.
35	**Circuit ID: 27501 WEISSPORT 75-01**			**Location: Central** **CPI: 640.**
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/15/2012	The Weissport 75-1 circuit has approximately 1270 customers across 23 circuit miles. The largest contributor to circuit performance is SAIDI. There was one significant outage on 7/25/12 that occurred during inclement weather that contributed significantly to the customer minutes interrupted on the feeder.
	1/16/2013: Evaluate potential ties.	Scheduled for	2/25/2013	
36	**Circuit ID: 43302 WATSON 33-02**			**Location: Sunbury** **CPI: 632.**
	10/12/2011: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	12/1/2011	This circuit was reviewed at the Susquehanna WPC meeting on 12/1/11. On April 28, 2011 all of the customers on this circuit as well as 97 customers that are normally served by the NECO 47502 circuit experienced an outage. This outage was caused by trees taking down wires and breaking cross arms. Customers from the NECO 47502 were temporarily transferred to the WATS 43302 since a helicopter crash took down the river crossing on July 19, 2010. Until repairs were made to the NECO 47502 this circuit had increased exposure to trees and load could not be sectionalized and transferred to the NECO 47502. This circuit was never on the WPC list before. PPL will continue to monitor this circuit's performance.

Rank	*Action*	*Status*	*Due/Complete*	*Result*
37	**Circuit ID: 28301 NEWFOUNDLAND 83-01**			**Location: Pocono** **CPI: 631.**
	1/11/2013: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/20/2013	
38	**Circuit ID: 60502 NORTH MANHEIM 05-02**			**Location: Lancaster** **CPI: 623.**
	2/4/2011: Thermographic inspection-OH line.	Completed	2/4/2011	Reduced outage risk.
	2/4/2011: Line inspection-equipment. Line inspection on 2 & 3 phase equipment - 15.6 miles	Completed	2/23/2011	Reduced outage risk.
	1/11/2013: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	1/15/2013	Inconclusive. Monitor future performance. The North Manheim 5-2 line has approximately 1,898 customers across 76 circuit miles. The largest contributor to the CPI (Circuit Performance Index) is SAIDI. Of the top 10 outages in the past year, five outages occured during wind storms and one during a T&L storm. Four of the outages were caused by trees from outside the trimming right of way, two were caused by vehicle hits, two from equipment failures and one where no cause was found. The circuit was trimmed in 2012. The North Manheim 5-2 line was a Worst Performing Circuit for two quarters back in 2008.
39	**Circuit ID: 66703 STRASBURG 67-03**			**Location: Lancaster** **CPI: 623.**
	1/11/2013: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	1/16/2013	Inconclusive. Monitor future performance. The Strasburg 67-3 line has approximately 1,456 customers across 63 circuit miles. The largest contributor to the CPI (Circuit Performance Index) is SAIDI. Of the top 10 outages in the past year, seven outages occured during T&L and/or wind storms. Seven of the outages were caused by trees from outside the trimming right of way, two were caused by equipment failures and one that was outside the control of PPL. The circuit was last trimmed in 2009 and is scheduled to be trimmed again in 2015. The line was a Worst Performing Circuit for two quarters back in 2010.
40	**Circuit ID: 43001 ALLENWOOD 30-01**			**Location: Sunbury** **CPI: 620.**
	4/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	6/14/2012	On December 1, 2012 all of the customers on this circuit were out of service when the Lycoming - Lewisburg 69 kV line went out. All 973 customers on this circuit were transferred to the WATS 33-1 circuit after the OCR at 22908N34599 was bypassed. On December 26, 2012, 542 customers downstream of OCR 20972N34933 experienced an outage when the device operated to lockout. The neutral broke loose and wrapped around the primary.
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	12/14/2012	A transmission outage on October 15, 2011 left all 972 of the customers on this circuit out of service for 1 hour and 15 minutes. The Lycoming 69kV Bus #1 opened on July 15, 2012 and left all 1014 of the customers on this circuit out of service for 2 hours and 45 minutes. On July 26th the OCR at the ALWD sub operated to lockout due to trees, leaving all the customers on this circuit out of service for more than 5 hours.

Rank	*Action*	*Status*	*Due/Complete*	*Result*
41	**Circuit ID: 55507 HERSHEY 55-07**			**Location: Harrisburg** **CPI: 607.**
	9/27/2010: Install 3 phase OCR(s). Install new 3 phase OCR outside of substation. Field to identify location.	Completed	3/9/2011	Reduced outage risk.
	1/26/2011: Thermographic inspection-OH line.	Completed	2/28/2011	Reduced outage risk. Replace secondary stem connectors at 1 location (WR 639934); Replace 1 primary crimp (WR 638574)
	3/14/2012: Thermographic inspection-OH line. Inspected all 2 and 3 phase primary lines with infrared camera.	Completed	3/14/2012	No problems found.
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/15/2012	The Hershey 55-7 line has approximately 1,000 customers across 12 circuit miles. The largest CPI contributor has been the percentage of customers with greater than 3 interruptions. The circuit breaker experienced one interruption in the past year due to a tree from outside the right of way during a storm on 06/29/12. In additional, trees from outside the trimming right of way interrupted a three phase recloser serving 450 customers on 05/27/12 and 10/29/11.

Rank	*Action*	*Status*	*Due/Complete*	*Result*
42	**Circuit ID: 24402 TINKER 44-02**			**Location: Pocono** **CPI: 593.**
	7/12/2011: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	8/31/2011	Inconclusive. Monitor future performance. This circuit has not been on the WPC list for several quarters. On April 13, 2011 498 PPL customers experienced an outage to to a substation power fuse operation. PPL Crews addressed the cause of the operation and restored all affected customers. the total outage CMI was 46,624. Approximately 26 customers experienced an OCR outage on April 28, 2011. Upon crew assesment, a tree was determined to have fallen from outside PPL's right of way and cause the OCR to trip. The outage a total CMI of 20,835.
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/15/2012	Two major power outages significantly affected this circuit's reliability in the past four quarters which lead to it being one of PPL's top 50 worst performing circuits. On June 29, 2012 a tree from outside PPL's designated right of way came in contact with the primary conductor tripping the 12kV circuit breaker to lockout. The outage affected 493 PPL customers and lasted 324 minutes. The total customer minutes interrupted (CMI) of the outage was 124,059. On July 26, 2012 a tree from outside PPL's designated right of way came in contact with the primary conductor tripping the 12kV circuit breaker to lockout. The outage affected 63 PPL customers and lasted 1,452 minutes. The customer minutes interrupted (CMI) of the outage was 91,492. In total, the 44-2 12kV line experienced 14 total outages between September 2011 and October 2012. The primary causes of these outages include tree contacts from outside PPL's right of way (6), equipment failures (4), and animal contacts (4).
	1/16/2013: Evaluate potential ties. PPL is currently investigating the benefits of constructing a tie line between the Tinker 44-1 and Tinker 44-2 12kV lines. The new tie would allow greater operational flexibility, reduce outage exposure, and increase ability to remotely isolate and restore customers.	Scheduled for	3/1/2013	
	1/16/2013: PPL is currently investigating the benefits of constructing a tie line between the Tinker 44-1 and Tinker 44-2 12kV lines. The new tie would allow greater operational flexibility, reduce outage exposure, and increase ability to remotely isolate and restore customers.	Ongoing		

Rank	*Action*	*Status*	*Due/Complete*	*Result*
43	**Circuit ID: 26001 WEST DAMASCUS 60-01**			**Location: Pocono** **CPI: 575.**
	10/21/2010: Improve sectionalizing capability.	Completed	10/21/2011	Upon the completion of the project, the customers have only experienced one fuse related outage in the past three years.
	10/17/2011: Install tie. SP 31105 builds a new 3 phase tie between the West Damascus 60-1 and the West Damascus 60-2 12kV lines. This project will benefit 886 customers and will reduce outage durations and increase operational flexibility and overall reliability in the area.	Scheduled for	5/30/2015	
	10/17/2011: Evaluate potential ties.	Completed	12/30/2012	Upon the complete analysis of the circuits surrounding the 60-1 line, it was decided that reliability for customers on the 60-1 line would see the greatest improvement with a tie to the WDAM 60-2 line instead of the HONE 34-1 line. The tie project was initiated by PPL immediately following this study.
	1/11/2013: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/20/2013	
44	**Circuit ID: 16202 POCONO FARMS 62-02**			**Location: Pocono** **CPI: 565.**
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/15/2012	Two major power outages significantly affected this circuit reliability in the past four quarters which lead to it being one of PPL's top 50 worst performing circuits. On June 10, 2012 a vehicle hit a pole at grid number 65755N38075 tripping the 12kV circuit breaker to lockout. The outage affected 1,462 PPL customers and lasted 1,245 minutes. The total customer minutes interrupted (CMI) of the outage was 26,316. On September 18, 2012 a tree from outside PPL's designated right of way came in contact with the primary conductor tripping the 12kV circuit breaker to lockout. The outage affected 1,654 PPL customers and lasted 1,245 minutes. The customer minutes interrupted (CMI) of the outage was 1,584,337. In total, the 62-2 12kV line experienced 19 total outages between September 2011 and October 2012. The primary causes of these outages include animal contacts (7), equipment failures (4), tree contacts from outside PPL's right of way (2), and vehicle hits (2).
	1/16/2013: Improve sectionalizing capability. PPL will be adding automation to this circuit as part of its second phase of Smart Grid due to be complete by end of year 2013. The project will improve reliability on this circuit by both reducing customer outage durations and a customer's exposure to outages.	Scheduled for	12/30/2013	

Rank	*Action*	*Status*	*Due/Complete*	*Result*
45	**Circuit ID: 23401 HONESDALE 34-01**			**Location: Pocono** **CPI: 564.**
	7/12/2011: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	10/18/2011	Several outages occurred over the rolling four quarters as a result of non trimming related tree contacts. Of these outages, the three that accounted for the largest customer minutes interrupted values occoured in the past four months. On 6/9/11, a tree from outside the right of way contacted the primary wire and caused an outage for 1,805 customers and netted a CMI value of 596,296. Then on 7/29/11, a tree from outside the right of way caused an OCR to trip to lockout. This caused an outage for 751 PPL customers and resulted in a value of 431,575 CMI. On 9/5/11 the same OCR tripped to lockout due to a tree falling on the primary line from outside the right of way . This caused an outage for 751 PPL customers and totaled 166,122 CMI.
	10/17/2011: Evaluate potential ties.	Completed	6/29/2012	PPL is inspecting the capability of the tie line that connects the HONE 34-1 line to the TINK 44-1 line. If the tie line is nearing its capability to transfer in the next few years or reliability could be improved in any way, it is imperative that a project is planned to improve the reliability for the customers on these circuits.
	10/26/2012: Improve sectionalizing capability.	In progress	5/30/2015	
46	**Circuit ID: 53501 ELIZABETHVILLE 35-01**			**Location: Harrisburg** **CPI: 564.**
	3/14/2012: Thermographic inspection-OH line. Inspected all 2 and 3 phase primary lines with infrared camera.	Completed	3/14/2012	Nothing found.
	1/11/2013: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/20/2013	

Rank	*Action*	*Status*	*Due/Complete*	*Result*
47	**Circuit ID: 16801 WAGNERS 68-01**			**Location: Pocono** **CPI: 563.**
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/15/2012	Two major power outages significantly affected this circuit's reliability in the past four quarters which lead to it being one of PPL's top 50 worst performing circuits. On July 26, 2012 a tree from outside PPL's designated right of way came in contact with the primary conductor tripping the upstream three-phase OCR to lockout. The outage affected 706 PPL customers and lasted 1,173 minutes. The total customer minutes interrupted (CMI) of the outage was 211,169. On September 18, 2012 a tree from outside PPL's designated right of way came in contact with the primary conductor tripping the 12kV circuit breaker to lockout. The outage affected 1,471 PPL customers and lasted 444 minutes. The customer minutes interrupted (CMI) of the outage was 168,481. In total, the 68-1 12kV line experienced 56 total outages between September 2011 and October 2012. The primary causes of these outages include animal contacts (25), tree contacts from outside PPL's right of way (13), and equipment failures (8).
	1/16/2013: Improve sectionalizing capability. PPL will be adding automation to this circuit as part of its second phase of Smart Grid due to be complete by end of year 2013. The project will improve reliability on this circuit by both reducing customer outage durations and a customer's exposure to outages.	Scheduled for	12/30/2013	

Rank	*Action*	*Status*	*Due/Complete*	*Result*
48	**Circuit ID: 22602 KIMBLES 26-02**		**Location: Pocono**	**CPI: 561.**
	10/15/2010: Improve sectionalizing capability. PPL will be extending a section of single phase from the Bohemia 20-2 and to a portion of the Kimbles 26-2 over to BOHE 20-2	Scheduled for	12/31/2013	
	3/9/2012: Improve sectionalizing capability. The Twin Lakes New Line and Terminal project will relieve around 200 customers from the Kimbles 26-2 line. In addition to the customers transfered, this project will also improve tie and sectionalizing capabilities between the Kimbles 26-2 line and Twin Lakes Substation.	Scheduled for	5/31/2014	
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/15/2012	Two major power outages significantly affected this circuit's reliability in the past four quarters which lead to it being one of PPL's top 50 worst performing circuits. On December 8, 2011 a tree from outside PPL's designated right of way came in contact with the primary conductor tripping the upstream three-phase OCR to lockout. The outage affected 1,091 PPL customers and lasted 923 minutes. The total customer minutes interrupted (CMI) for the outage was 186,490. On September 18, 2012 a tree from outside PPL's designated right of way came in contact with the primary conductor tripping the same three-phase OCR to lockout. The outage affected 1,149 PPL customers and lasted 151 minutes. The total customer minutes interrupted (CMI) for the outage was 166,167. In total, the 26-2 12kV line experienced 39 total outages between September 2011 and October 2012. The primary causes of these outages include tree contacts from outside PPL's right of way (16), animal contacts (13), and equipment failures (4).
	12/31/2012: Tree trimming. The Kimbles substation circuit lines is scheduled for tree trimming in 2012.	Completed	12/31/2012	Tree trimming on all three phase lines was completed before the December 31st required completion date.
	1/16/2013: Install tie. A new 3 phase tie line (SP33607) between the new Twin Lakes 81-1 and the Kimbles 26-2 line is currently being engineered and is expected to be completed in May 2014. The new tie will allow greater operational flexibility, reduce outage exposure, and increase ability to remotely isolate and restore customers.	Scheduled for	5/31/2014	

Rank	*Action*	*Status*	*Due/Complete*	*Result*
49	**Circuit ID: 22002 BOHEMIA 20-02**		**Location: Pocono**	**CPI: 555.**
	4/26/2010: Install tie. SP 33608 will build tie from Bohemia 20-2 to Twin Lakes 81-2. This will create a tie for 1,150 radial customers. Remotely operated devices will be installed.	Scheduled for	5/31/2014	
	4/21/2011: Install new line and terminal. SP33607: A new line and terminal at Bohemia will relieve the 20-2 line and reduce the customer count from 1,400 to 750.	Scheduled for	11/30/2013	
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/15/2012	Two major power outages significantly affected this circuit's reliability in the past four quarters which lead to it being one of PPL's top 50 worst performing circuits. On November 19, 2011 a tree branch from outside PPL's designated right of way came in contact with the primary conductor tripping the 12kV circuit breaker to lockout. The outage affected 1,433 PPL customers and lasted 217 minutes. PPL crews confirmed that all branches were cleared off the line and then closed the circuit breaker restoring all customers. The total customer minutes interrupted (CMI) for the outage was 221,756. On July 17, 2012 a device on the 12kV line caused a fault which resulted in the tripping of the 12kV circuit breaker to lockout. The outage affected 1,389 PPL customers and lasted 144 minutes. The total customer minutes interrupted (CMI) for the outage was 140,827. In total, the 20-2 12kV line experienced 42 total outages between September 2011 and October 2012. The primary causes of these outages include tree contacts from outside PPL's right of way (18), animal contacts (8), and equipment failures (8).
	1/16/2013: Install tie. A new 3 phase tie line (SP33608) between Twin Lakes 81-2 and the Bohemia 20-2 line is currently being engineered and is expected to be completed in May 2014. The new tie will allow greater operational flexibility, reduce outage exposure, and increase ability to remotely isolate and restore customers.	Scheduled for	5/31/2014	
50	**Circuit ID: 28501 FABRI-KAL 85-01**		**Location: Central**	**CPI: 553.**
	4/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	5/30/2012	This circuit serves one customer. The outage was due to a lightning strike in the substation that serves the customer and there is no inherent reliability issue with the circuit.
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	11/15/2012	The FabriKal 85-1 circuit serves one customer. One outage contributed to the performance of this circuit. An issue with substation equipment led to a long duration outage for the single customer served from the substation. This issue has been resolved.
51	**Circuit ID: 46503 LOCK HAVEN 65-03**		**Location: Susquehanna**	**CPI: 552.**
	1/11/2013: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/20/2013	

Rank	*Action*	*Status*	*Due/Complete*	*Result*
52	**Circuit ID: 47703 BLOOMSBURG 77-03**		**Location: Sunbury**	**CPI: 552.**
	8/26/2010: Install tie. A project was placed into the budget to create a tie between Bloomsburg 47703 and Bloomsburg 47704. This will enhance the reliability of both Bloomsburg circuits by providing additional operating flexibility through use of remotely operated interrupting and switching devices.	Scheduled for	11/30/2018	
	11/11/2010: Line inspection-equipment.	Completed	5/2/2011	Reduced outage risk. The line inspection revealed the following problems: 2 blown lightning arrestors, broken strands on the primary, 1 broken wire tie, broken insulators and broken guy wires. The following Work Requests ware completed to fix the problems identified by the inspection: WR 641020 & WR 641068.
	9/16/2011: Raise the control panel for the normally open ROCS device that ties the 47703 to the 47707 circuit. The control panel was under water in the aftermath of Tropical Storm Lee.	Completed	9/30/2011	The control panel for the normally open ROCS device was raised above flood level.

Rank	*Action*	*Status*	*Due/Complete*	*Result*
53	**Circuit ID: 56802 BENVENUE 68-02**			**Location: West Shore** **CPI: 546.**
	4/11/2011: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	5/25/2011	The largest CPI contributor has been the percentage of customers with greater than 3 interruptions. The Benvenue 68-02 line experienced two circuit breaker interruptions when a failed insulator on the Green Park 69kV tap interrupted the JUNI-SDLE 69kV line. In addition, there have been two long duration vehicle pole hits affecting 930 customers. Restoration times were delayed due to traffic caused by the vehicle accidents. The pole that was hit is behind a guard rail and down a steep embankment away from the road. The two accidents are considered to be by chance. Relocating the pole does not provide any clear reliability benefit.
	5/15/2011: Improve sectionalizing capability. Automate tie with the Rockville 65-04 circuit.	Completed	5/20/2011	Reduced outage duration. A telemetric VCR and ROCS device were installed to automate the potential transfer of 750 customers at the end of the
Benvenue				68-02 line.
	8/24/2011: Repair the failed circuit breaker on the Juniata-Shermansdale 69kV line. This line serves approximately 7,500 customers at Benvenue, Green Park, New Bloomfield, Shermansdale, and South Shermansdale substations.	Completed	8/24/2011	Reduced outage risk.
	11/21/2011: Extend single phase approximately 600 feet to serve a development of CEMI customers from a source closer to the substation.	Completed	11/15/2012	Reduced customer count affected by each outage.
	3/12/2012: Tree trimming. Trim circuit as part of its four year vegetation management cycle.	Completed	9/1/2012	Reduced outage risk.
	7/16/2012: Expanded Operational Review.	Completed	12/31/2012	Reduced outage risk. Two phase swaps identified to better balance the circuit breaker: @21645s40893 swap from B phase to A phase (WR 12043978) and @21476s38044 swap from C phase to A phase (WR 12043974).
	7/19/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	9/10/2012	The Benvenue 68-2 line has approximately 1,400 customers across 76 circuit miles. The largest CPI contributor has been the percentage of customers with greater than 3 interruptions. The circuit breaker experienced two outages in the past year. On 04/17/12, a vehicle stuck a pole and tripped the circuit breaker. On 08/03/12 multiple trees from outside the trimming right of way interrupted the circuit breaker. In addition to the circuit breaker outages, a three phase recloser serving 230 customers was interrupted three times. The causes include vehicles (05/08/12), nothing found (07/16/12) and other: non-controllable (07/25/12).
	1/11/2013: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/20/2013	

Rank	*Action*	*Status*	*Due/Complete*	*Result*
54	**Circuit ID: 64202 KINZER 42-02**			**Location: Lancaster** **CPI: 539.**
	1/14/2011: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	2/18/2011	Two of the four significant outages experienced were transmission related (CB failure at Wakefield interrupted the Kinzer 13 circuit and switching error performing AB Maint.)
	1/17/2011: Perform line maintenance identified by line inspection. Perform line inspection on 2 and 3 phase line sections - 16.3 miles	Completed	3/31/2011	Reduced outage risk.
	1/17/2011: Line inspection-equipment. Perform line inspection on 2 and 3 phase line sections - 16.3 miles	Completed	7/12/2011	Reduced outage risk.
	7/12/2011: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	7/12/2011	This circuit experienced a circuit breaker outage due to a vehicle hitting a pole. The total customers interrupted was double the normal, total customers due to the transfer of the ATGL 2-1 line under job W-1326. Other contributors were equipment failures and trees, not trimming related. This circuit is scheduled for tree trimming in 2012.
	1/11/2013: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	1/16/2013	Inconclusive. Monitor future performance. The Kinzer 42-2 line has approximately 1,015 customers across 27 circuit miles. The largest contributor to the CPI (Circuit Performance Index) is SAIDI. Of the top 10 outages in the past year, three outages occurred during T&L and/or wind storms. Three of the outages were caused by trees from outside the trimming right of way, two were caused by vehicles hitting a pole, one was caused from trees that were not adequately trimmed, one was caused by an equipment failure and two where nothing was found. The circuit was last trimmed in 2003, and is scheduled to be trimmed in 2013. The line was a Worst Performing Circuit 9 times over the last 34 quarters, with the last being in 2011.
55	**Circuit ID: 11405 FARMERSVILLE 14-05**			**Location: Bethlehem** **CPI: 534.**
	6/26/2012: WO#: 42073594 - Install ROCS @ 68207S49508	Scheduled for	12/31/2013	
	6/26/2012: Load balancing. WO#: 42073589 - Phase swap @ 68562S49566	Scheduled for	11/25/2013	
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/21/2013	

Rank	*Action*	*Status*	*Due/Complete*	*Result*
56	**Circuit ID: 67402 WAKEFIELD 74-02**			**Location: Lancaster East** **CPI: 526.**
	1/14/2011: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	5/6/2011	Customers experiencing greater than three outages (32%) , SAIDI (34%) and SAIFI (20%) all were contributors to the CPI. This was due to several tree-not trimming and equipment failure related outages. Tree trimming is planned for the line in 2011. This circuit will be discussed on more detail on May 6, 2011 at the worst performing circuit meeting.
	4/20/2011: Line inspection-equipment. Additional Inspection on Multi-phase Equipment	Completed	4/20/2011	Reduced outage risk.
	1/11/2013: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/20/2013	
57	**Circuit ID: 24301 RIVER 43-01**			**Location: Wilkes-Barre** **CPI: 522.**
	1/11/2013: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/20/2013	
58	**Circuit ID: 45501 DERRY 55-01**			**Location: Sunbury** **CPI: 515.**
	12/15/2009: Install tie. Construct a tie between the Derry 55-1 and the Watson 33-4.	Scheduled for	5/31/2013	
	9/26/2010: Install tie. A project was placed into the budget to create a tie between Watson 43304 and Derry 45501. This project is scheduled to go in service in 5/2013.	Scheduled for	5/31/2013	
	10/11/2012: Circuit outage data analysis - WPC not on preceding qtr. list.	Completed	12/14/2012	A transmission outage on October 15, 2011 left all 972 of the customers on this circuit out of service for 1 hour and 15 minutes. The Lycoming 69kV Bus #1 opened on July 15, 2012 and left all 1014 of the customers on this circuit out of service for 2 hours and 45 minutes. On July 26th the OCR at the ALWD sub operated to lockout due to trees, leaving all the customers on this circuit out of service for more than 5 hours.
	1/11/2013: Circuit outage data analysis - WPC not on preceding qtr. list.	Scheduled for	2/20/2013	

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 Failures, Tree Related, and Animals), which are based on the percent of cases of trouble, 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 service interruptions (e.g., trees and equipment failure).

Cause Description	Trouble Cases[7]	Percent of Trouble Cases	Customer Interruptions[8]	Percent of Customer Interruptions	Customer Minutes	Percent of Customer Minutes
Animals	2,888	17.63%	51,003	3.41%	4,166,711	1.83%
Contact/Dig-In	148	0.90%	20,526	1.37%	1,796,313	0.79%
Directed by Non-PPL Authority	171	1.04%	8,209	0.55%	666,646	0.29%
Equipment Failures	5,339	32.59%	526,630	35.16%	63,974,525	28.04%
Improper Design	1	0.01%	1,375	0.09%	205,329	0.09%
Improper Installation	-	0.00%	-	0.00%	-	0.00%
Improper Operation	23	0.14%	20,399	1.36%	725,226	0.32%
Nothing Found	1,373	8.38%	98,557	6.58%	7,387,553	3.24%
Other-Controllable	78	0.48%	4,483	0.30%	322,674	0.14%
Other-Non Control	409	2.50%	92,472	6.17%	8,227,593	3.61%
Other-Public	65	0.40%	7,240	0.48%	563,912	0.25%
Tree Related	5,149	31.43%	503,399	33.61%	121,250,759	53.15%
Vehicles	738	4.50%	163,365	10.91%	18,831,335	8.26%
Total	**16,382**	**100.00%**	**1,497,658**	**100.00%**	**228,118,576**	**100.00%**

[7] Cases of trouble are the number of sustained customer service interruptions (i.e., service outages).

[8] 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 has experienced an elevated level of both reportable and non-reportable storms during this reporting period.

Tree Related: Although their effect on reliability is significant, tree outages not related to trimming generally are caused by trees falling from outside of PPL Electric's rights-of-way, and generally are not controllable. For trees within the right-of-way, PPL Electric is currently analyzing and re-evaluating its trimming strategy.

Animals: Animals accounted for about 17.6% of PPL Electric's cases of trouble. Although this represents a significant number of cases, the effect on SAIFI and CAIDI is small because approximately 81% of the number of cases of trouble was associated with individual distribution transformers. However, when animal contacts affect substation equipment, the effect may be widespread and potentially can interrupt thousands of customers on multiple circuits. In addition to guarding new distribution transformers and substations, in 2009, PPL Electric initiated distribution and substation animal guarding programs to focus systematically on protecting existing facilities most at risk of incurring animal-caused interruptions.

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

Equipment Failure: Equipment failure is one of the largest single contributors to the number of cases of trouble, customer interruptions and customer minutes. However, approximately 42% of the cases of trouble, 43% of the customer interruptions and 58% of the customer minutes attributed to equipment failure were weather-related and, as such, are not considered to be indicators of equipment condition or performance. In 2009, to help reduce the risk of incurring interruptions due to equipment failures, PPL Electric initiated an Asset Optimization Strategy project to assess equipment health and generate a long-term plan for proactive infrastructure replacement and enhanced maintenance practices. It is anticipated that, over time, this strategy will improve reliability performance as it pertains to PPL Electric's distribution, substation and transmission assets.

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

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.)*

Inspection & Maintenance Goals/Objectives	Annual Budget	4th Quarter		Year-to-date	
		Budget	Actual	Budget	Actual
Transmission					
Transmission C-tag poles (# of poles)	240	70	87	240	242
Transmission arm replacements (# of sets)	50	8	77	50	130
Transmission air break switch inspections (# of switches)	64	23	6	64	16
Transmission lightning arrester installations (# of sets)	0	0	0	0	1
Transmission pole inspections (# of poles)	0	0	0	0	0
Transmission reclearing (# of miles) BES Only	637.34	0	0	637.34	637.34
Transmission reclearing (# of miles) 69 kV	865.95	327.04	346.91	865.95	865.95
Transmission reclearing (# of miles) 138 kV	296.60	130.21	86.49	296.60	296.60
Transmission danger tree removals-Bulk Power (# of trees)	N/A	70	87	240	242
Substation					
Substation batteries (# of activities)	885	28	192	885	854
Circuit breakers (# of activities)	1495	539	277	1495	1502
Substation inspections (# of activities)	5227	1240	1254	5227	5200
Transformer maintenance (# of activities)	2186	640	433	2186	2224
Distribution					
Distribution C-tag poles replaced (# of poles)	2,126	309	304	2,126	1,895
C-truss distribution poles (# of poles)	6,092	2,057	1,171	6,092	5,206
Capacitor (MVAR added)	80	3	7	80	81
OCR replacements (# of)	644	96	77	644	593
Distribution pole inspections (# of poles)	90,000	22,482	17,710	90,000	89,894
Distribution line inspections (# of miles)	5,040	1,509	1,431	5,040	6,705
Group re-lamping (# of lamps)	26,869	2,000	1,607	26,869	26,869
Test sections of underground distribution cable	493	100	178	493	515
Distribution tree trimming (# of miles)	7087.50	1652.76	1818.48	7087.50	7025.79
LTN manhole inspections (# of)	132	41	7	132	133
LTN vault inspections (# of)	774	200	95	774	804
LTN network protector overhauls (# of)	71	34	12	71	78
LTN reverse power trip testing (# of)	141	28	4	141	127

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, which includes the work identified in response to Item (6).

	4th Quarter		Year-to-date	
Activity	**Budget ($000)**	**Actual ($000)**	**Budget ($000)**	**Actual ($000)**
Provide Electric Service	2,316	1,950	9,132	9,823
Vegetation Management	10,907	14,058	43,674	47,573
Customer Response	17,095	41,153	64,865	92,481
Reliability & Maintenance	17,396	14,855	68,994	63,465
System Upgrade	74	1,061	979	1,828
Customer Services/Accounts	33,532	31,371	128,684	126,273
Others	16,593	15,349	63,880	60,500
Total O&M Expenses	**97,913**	**119,797**	**380,208**	**401,943**

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 ("T&D") activities.

	4th Quarter		Year-to-date	
	Budget ($000)	**Actual ($000)**	**Budget ($000)**	**Actual ($000)**
New Service/Revenue	15,947	21,813	71,080	80,008
System Upgrade	77,315	113,368	262,272	268,412
Reliability & Maintenance	52,208	53,811	206,174	200,930
Customer Response	2,747	13,457	9,790	20,399
Other	7,091	9,000	25,159	21,793
Total	**155,308**	**211,449**	**574,475**	**591,542**

9) ***Dedicated staffing levels for transmission and distribution operation and maintenance at the end of the qaarter, 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	74
Journeyman Lineman	218
Journeyman Lineman-Trainee	79
Helper	23
Groundhand	4
Troubleman	50
T&D Total	**448**
Electrical	
Elect Leaders-UG	5
Elect Leaders-Net	8
Elect Leaders-Sub	25
Journeyman Elect-UG	27
Journeyman Elect-Net	15
Journeyman Elect-Sub	57
Journeyman Elect Trainee-UG	1
Journeyman Elect Trainee-Net	14
Journeyman Elect Trainee	20
Helper	11
Laborer-Network	0
Laborer-Substation	0
Electrical Total	**183**
Overall Total	**631**

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 the response to Item (6). PPL Electric does not track hours for all contractors.

	2012 Actual ($000)
4th Quarter	22,296
YTD Total	**87,218**

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.

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.

The following table[9] shows the average response rate[10] for T&D personnel currently included in PPL Electric's measured call-out response program.

October	52%
November	48%
December	53%
Quarter Average	**51%**
YTD Average	**58%**

The following table shows the amount of time it takes to obtain necessary personnel[11]:

	Callout Events	Workers Accepting	Average Response Time/Crew Call-out (Minutes)	Average Response Time/Worker (Minutes)
October	118	287	25.0	10.3
November	98	206	25.3	12.0
December	137	329	28.2	11.8
Quarter	**353**	**822**	**26.3**	**11.3**
YTD	**1,874**	**4,205**	**24.0**	**10.7**

[9] The statistics provided are based upon data available at the end of the quarter. Data corrections and additions made after the quarter's end may result in slight changes to the statistics.

[10] The response rate includes call-outs of T&D maintenance workers for customer service interruptions and other work.

[11] The time to obtain personnel includes only call-outs of T&D maintenance workers for customer service interruptions in non-storm conditions. It includes the time to use multiple rosters, when necessary, to obtain needed resources.

Appendix A

PPL Electric Utilities Corporation
Worst Performing Circuit Definition

PPL Electric uses a Circuit Performance Index (CPI) to define the worst performing circuits on its system. The CPI covers about 1,100 feeders across the PPL Electric service area.

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

- SAIDI - 35%
- SAIFI - 30%
- Fraction of customers interrupted more than three times - 20%
- Fraction of customers with an interruption over four hours - 15%

Major Events, momentary service interruptions, and planned pre-arranged jobs are excluded.

The CPI values are obtained by multiplying the individual feeder statistics by coefficients based on the 5-year period, 2001-2005. Average values over this period were:

- SAIDI – 121.9 per customer per year
- SAIFI – 0.929 per customer per year
- Fraction of customers interrupted more than three times - 4% per feeder per year
- Fraction of customers with an interruption over four hours - 10% per feeder per year

A hypothetical feeder with the values of SAIDI, SAIFI, and the fraction of customers interrupted more than three times, and the fraction of customers with an interruption over four hours, equal to the 5-year averages would have a CPI value of 100. Any variations in the values of the above criteria would affect the CPI values in accordance with the weighting factors.

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 four general classifications: Controllable, Non-Controllable, Public and Non-PPL Electric. The definitions of the cause codes are:

10 – Improper Design	Controllable	• When an employee or agent of PPL Electric is responsible for an error of commission or omission in the engineering or design of the distribution system. (Facility Records personnel use only)
11 – Improper Installation	Controllable	• When an employee or agent of PPL Electric is responsible for an error of commission or omission in the construction or installation of the distribution system. (Facility Records personnel use only)
12 – Improper Operation	Controllable	• When an employee or agent of PPL Electric is responsible for an error of commission or omission in the operation or maintenance of the distribution system. (Facility Records personnel use only)
30 – Trees – Trimming Related[12]	Controllable	• Outages resulting from conductors contacted by tree growth within the clearance zone defined by the current trimming specification (within the Rights-of-Way).
35 – Trees – Not Trimming Related	Non-Controllable	• Outages due to trees, but not related to lack of proper tree trimming maintenance. This includes danger timber blown into PPL Electric facilities, and trees or limbs felled by the public.
40 – Animals	Controllable	• Any outage caused by an animal directly or indirectly coming in contact with PPL Electric facilities. This includes birds, squirrels, raccoons, snakes, cows, etc.
41 – Vehicles	Public	• When cars, trucks or other types of vehicles or their cargoes strike facilities causing a problem.

[12] The title and description of this code have been revised for clarity. The purpose and application of the code have not changed.

51 – Contact/Dig-in	Public	• When work in the vicinity of energized overhead facilities results in interruptions due to accidental contact by cranes, shovels, TV antennas, construction equipment (lumber, siding, ladders, scaffolding, roofing, etc.). • When contact is made by a non-employee with an underground facility causing interruption.
60 – Equipment Failure	Controllable	• Outages resulting from equipment failures caused by corrosion or contamination from build-up of materials, such as cement dust or other pollutants. • Outages resulting from a component wearing out due to age or exposure, including fuse tearing or breaking. • Outages resulting from a component or substance comprising a piece of equipment failing to perform its intended function. • Outage resulting from a failure that appears to be the result of a manufacturer's defect or can not be described by any other code indicating the specific type of failure.
77 – Non-PPL Electric Problem – Other	Non-PPL Electric	• Where no PPL Electric or customer facilities were affected, and no repair or restoration was carried out on PPL Electric equipment.
78 – Non-PPL Electric Problem – Customer Facility	Non-PPL Electric	• Where no PPL Electric facilities were affected, and no repair or restoration was carried out on PPL Electric equipment.
80 – Scheduled Outage[13]	Controllable	• Interruptions under the control of a PPL Electric switchman or direction of a PPL Electric System Operator for the purpose of performing scheduled 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.

[13] 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 a scheduled outage when the interruption is postponed.

85 – Directed by Non-PPL Electric Authority	Non-Controllable	• Interruptions under the control of a PPL Electric switchman or direction of a PPL Electric System Operator for the purpose of dropping load or isolating facilities upon request during emergency situations. • Interruptions which cannot be postponed or scheduled for a later time, and include situations like load curtailment during system emergencies, and requests of civil authorities such as fire departments, police departments, civil defense, etc. for interruption of PPL Electric facilities.
90 – Other – Controllable (Lineman provides explanation)	Controllable	• Interruptions caused by phase to phase or phase to neutral contacts, resulting from sleet or ice dropping off conductors, galloping conductors, or any other phase to phase or phase to neutral contact where weather is a factor. • Interruptions resulting from excessive load that cause that facility to fail. • When restoration of service to a facility, which had been interrupted for repairs or other reasons, causes an additional interruption to another facility which had not been involved in the initial interruptions. • Controllable interruptions or Power Service Problems whose cause is not described by one of the previous controllable cause codes.
96 – Nothing Found	Non-Controllable	• 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 thunder and lightning, when a line fuse blows or a single phase OCR locks open. • When closed for test, the fuse holds or the OCR remains closed. A patrol of the tap reveals nothing.
98 – Other Public (Lineman provides explanation)	Public	• All outages resulting from gunfire, civil disorder, objects thrown, or any other act intentionally committed for the purpose of disrupting service or damaging company facilities.

99 – Other – Non-Controllable (Lineman provides explanation)	Nan-Controllable	• Any outage occurring because of a fire, flood or a situation that develops as a result of a fire or flood. Do not use when facilities are de-energized at the request of civil authorities. • When an interruption is caused by objects other than trees, such as kites, balls, model airplanes, roofing material, or fences, being accidentally blown or thrown into overhead facilities. • All problems caused by contact of energized equipment with facilities of other attached companies or by trouble on customer owned equipment. • Interruptions or power service problems whose cause is not described by one of the previous non-controllable cause codes, but is not affected by a PPL Electric employee's decisions.

Appendix C

PPL Electric Utilities Corporation
Job Descriptions

Transmission and Distribution

Grnundhand	• Performs manual labor and assists employees in higher job classifications.
Helper	• Perfnrms semi-skilled labor at any work location on de-energized overhead and underground transmission, and distribution facilities to prepare the cmployee for entrance into the Journcyman Lineman Apprenticeship Prngram.
Journeyman Liocman	• 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.
Journcyman Linc/man-Trainee	• 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.
Lineman Leader	• Responsible for completing assigned work by directing one or multiple groups of employees involved in the maintenance, operation, and construction activities of the transmission and distribution systems associated with, but not limited to, PPL Eleciric facilities. • Engnge in and perform work along with providing the necessary leadership, all-around knowledge, initiative, judgment, and cxperience to produce a quality job. • Performs all the direct duties of the Journeyman Lineman when not acting as a Lineman Leader.
Troubleman	• Investigates and resolves trouble calls, voltage abnormalities on transmission and distribution systems associated with, but not limited to, PPL Electric facilities.

Appendix C

Electrical

Electrician Leader - Substation - Network - Underground	• 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 prnviding the necessary leadership, all-around knowledge, initiative, judgment, and experience to produce a quality job. • Performs all direct dutics of the Journeyman Electrician when not acting as a leader.
Helper - Suhstation - Network - Undergrnund	• Performs manual labor at any work location including those areas cnntaining non-exposed energized electrical equipment, and to prepare the employee for entrance into thc Apprenticeship Program.
Laborer - Substation - Network - Underground	• Performs manual labor and assists employees in higher job classifications.
Journeyman Electrician - Substation - Network - Underground	• Normally under limited supervision performs and is responsible for work associated with, but not limited to, PPL Electric facilities involving the highest degree of skill in construction and maintenance work associated with substations, LTN or underground distribution and transmission. • Uses microprocessor based equipment for troubleshooting and revising relay logic and its control systems related to the Field Services electrical discipline.
Journeyman Electrician - Trainee - Substation - Network - Underground	• Normally under limited supervision performs and is responsible for work associated with, but not limited to, PPL Electric facilities involving the highest degree of skill in construction and maintenance work associated with suhstations, LTN or underground distribution and transmission. • Uses micruprocessor based equipment for troubleshooting and revising relay logic and its control systems related to the Field Services electrical discipline.