



# **PPL Electric Utilities Corporation Implementation Plan**

**Submitted In Response  
To The Recommendations In The  
Focused Management and Operations Audit Report**

**Issued June 2009**

Prepared By The  
Pennsylvania Public Utility Commission  
Bureau of Audits

Docket No. D-2009-2102172

June 24, 2009

## **PUC Audit Implementation Plan**

### **Chapter V – Affiliated Interests and Cost Allocations**

#### **Recommendation V.1**

Submit for Commission review and approval an updated contract or agreement for each affiliate that PPL Electric Utilities receives services from or provides services to, which should include information regarding the services to be received or performed and a description of the cost allocation methodology that will be applied.

#### **Response: Accept**

PPL Electric acknowledges that its approved Affiliated Interest Agreement does not reflect its current corporate structure. Moreover, the Agreement is silent regarding the methodology to be used for allocating indirect costs. The Company agrees that the agreement should be updated to address these issues.

The Audit Report cites Section 2102 of the Public Utility Code, 66 Pa. C.S. §2102, for the proposition that agreements between a regulated utility and its affiliates need to be approved by the Commission. PPL Electric agrees. However, Section 2102(d) also recognizes that a utility may use an “umbrella” affiliated interest agreement to cover a broad class or category of transactions. Where the Commission has approved such an agreement, further Commission approval of the subsidiary or related transactions is not required.

PPL Electric believes that continued reliance on an “umbrella” Affiliated Interest Agreement is appropriate. Use of this type of agreement eliminates the need for filing, review and approval of subsidiary or related transactions. By definition, these transactions cannot vary significantly from the approved Affiliated Interest Agreement, and the need to review each transaction can impose an unnecessary administrative burden on the Commission and the utility.

Pursuant to PPL Electric’s previous comments to implement Recommendation V.1, the Company will file an updated “umbrella” Affiliated Interest Agreement with the Commission consistent with the schedule set forth below in the Implementation Plan. The agreement will include the following changes:

1. The corporate names of PPL Electric and the holding company will be corrected in the agreement. In addition, a list of all current affiliates will be attached to the agreement. In the future, PPL Electric will update that attachment to reflect any changes in those affiliates.
2. The description of services will be expanded and clarified to accurately reflect services that will be provided by PPL Electric to its affiliates, and services that will be provided by the affiliates to PPL Electric.

3. A description of the currently approved three-factor allocation methodology will be included in the agreement.

**Implementation Plan:**

<b>V.1 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
File an updated “umbrella” Affiliated Interest Agreement with the Commission	4Q - 2009 <u>E</u>

**Responsible Manager:** Joseph M. Kleha, Manager – Regulatory Compliance and Rates

## **PUC Audit Implementation Plan**

### **Chapter V – Affiliated Interests and Cost Allocations**

#### **Recommendation V.2**

Compare the internal cost of services provided between PPL Electric Utilities and their corporate affiliates to market rates on a periodic basis and document the actual savings realized from any resultant changes.

#### **Response: Accept**

PPL Electric accepts the recommendation to compare the internal cost of services provided between PPL Electric and its corporate affiliates to market rates on a periodic basis and document the actual savings realized from any resultant changes.

#### **Market Rates**

PPL Electric currently evaluates the cost of services between corporate affiliates and believes that those costs are appropriate and comparable to market rates. Comparing internal costs with market data as part of an overall process to manage affiliate costs is appropriate, but the comparison is not the only consideration. Additional assessments must be undertaken to validate that the market rates obtained are comparable to the affiliate costs that are being assessed. The variables that can affect the comparability of market data include, but are not limited to, the type of services provided by the utility, the corporate structure of the utility, its service area and customer mix, and the regulatory environment within which it operates.

Any comparison of affiliate costs to market rates must recognize that services received from an affiliate may and do provide benefits that cannot be readily quantified. Examples of these benefits include developing and maintaining in-house competencies that serve to mitigate the risk of market-based volatility, as well as the benefit of consistent business practices. A reasonable assessment must take into account these non-quantifiable benefits of obtaining services from affiliate organizations. Accordingly, it may not be appropriate, in many instances, to directly compare market rate data to the cost of services provided by an affiliate.

PPL Services Corporation was established within the PPL Corporation (“PPL”) corporate structure to allow for synergies and efficiencies in providing services to PPL affiliates; the organization continues to provide this benefit. PPL Electric is one of the affiliates that has and continues to receive benefits from this structure.

Most services provided to PPL Electric by its corporate affiliates can be categorized as one of three types: affiliate wages, materials and services procured by the affiliate and passed on to PPL Electric, and purchased power

costs to meet provider of last resort (POLR) load requirements. The existing POLR contract with PPL Energy Plus expires at the end of 2009 and PPL Electric has or is in the process of securing new competitively bid contracts for its POLR load requirements. Materials and services purchased from outside vendors and passed on from PPL Services to its affiliates are by definition procured at market costs. Finally, as indicated in the audit report, wages paid to all PPL affiliates are market-based.

In order to attract and retain quality employees, PPL Services' Human Resources Department performs a bi-annual market comparison to verify that wages and benefits provided to management employees are in line with market rates. Certain other labor costs are governed by a collective bargaining agreement. Generally, PPL cannot change those costs, unless the change is accepted through a process of collective bargaining. In these ways, PPL maintains a market rate-based pay scale.

#### Documented Savings from Cost Reduction Initiatives

Because its affiliate transactions are market based as described above, PPL periodically implements cost-saving programs in order to improve efficiency and reestablish an optimal operating baseline. The audit included a review of costs reduction initiatives undertaken by PPL in 2003. PPL incorporated some of those cost reductions into its 2004 operating budgets. The audit report ultimately pointed out that the true impact of these initiatives is actual costs incurred not a change in budget amounts.

The PPL management team consistently seeks opportunities to improve the financial performance of PPL Corporation and its subsidiaries, a process that ultimately benefits ratepayers and shareholders. Management's focus includes all business activities impacting financial performance and is not limited to the reduction of operation and maintenance expenses. As part of the business planning process, PPL's management determines acceptable expenditures based on their value to PPL and the implications to its financial performance. Once the business plan is formalized, management closely monitors actual spending and performance compared to budget in an attempt to maximize PPL's performance. Of course, events happen throughout the year that cause spending to be adjusted as needed to effectively manage the business. Support provided by PPL affiliates is no exception.

In February 2009, PPL implemented a Cost Reduction Initiative (CRI), in which a series of proposed spending cuts or other initiatives to improve performance throughout PPL, were implemented. PPL identified approximately \$5.2 million of affiliate-related savings from PPL Services to PPL Electric. PPL is conducting its operations with those cuts either fully implemented or pending as it proceeds through 2009. Actual results are being closely monitored in relation to the budgeted reductions. Through the end of May 2009, the actual savings realized by PPL Electric from lower affiliate services billed from PPL Services amounted

to \$5.6 million. PPL will continue to monitor actual savings realized throughout the year and provide actual year-end results upon request.

**Implementation Plan:**

<b>V.2 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
Compare the internal cost of services provided between PPL Electric Utilities and their corporate affiliates to market rates on a periodic basis	Ongoing <u>E</u>
Document the actual savings realized	Ongoing <u>E</u>

**Responsible Manager:** Carey Brinckman, Manager - Corporate Budgeting

## PUC Audit Implementation Plan

### Chapter VII – Operations and Electric Reliability

#### Recommendation VII.1

Reevaluate the feasibility of the current distribution line inspection program and consider expanding foot patrols to regions, circuits, or areas that may benefit from a more aggressive approach based on a cost/benefit analysis

#### **Response: Accept**

PPL Electric agrees with Audit Staff's assertion that a robust distribution line inspection program can provide benefits to electric service reliability. PPL Electric believes that its current approach utilizing a Circuit Performance Index (CPI) to prioritize circuits for foot patrols, in conjunction with performing thermography inspections on multi-phase circuits, is a cost - effective means by which to improve reliability. However, PPL Electric will reevaluate its current distribution line inspection program in an attempt to identify additional cost - effective opportunities for improvement that may result in reduced frequency of equipment - related service interruptions. The study will be completed by April 30, 2010. Changes resulting from this study will be integrated into PPL Electric's 2011 - 2015 business plan.

#### **Implementation Plan:**

<b>VII.1 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
Reevaluate the current distribution line inspection program and identify opportunities for improvement.	April 30, 2010 <u>E</u>
Incorporate changes as appropriate into the 2011-2015 business plan.	August 31, 2010 <u>E</u>

**Responsible Manager:** Gerald R. Diehl, Manager - System Maintenance

## **PUC Audit Implementation Plan**

### **Chapter VII – Operations and Electric Reliability**

#### **Recommendation VII.2**

Strive to reduce the number of outages caused by equipment failure and non trimming related trees in order to improve overall SAIDI and SAIFI reliability indices.

#### **Response: Accept**

PPL Electric agrees with the Audit Staff's assertion that electric service reliability can improve by reducing the frequency of interruptions due to equipment failure and trees-not-trimming-related cases of trouble. As a result, for many years, PPL Electric has had in-place, a portfolio of robust and comprehensive inspection and maintenance programs that effectively reduce the likelihood of incurring these two types of outages.

Regarding plans to reduce interruptions due to equipment failure, as it noted in the response to recommendation VII.1, PPL Electric will conduct a cost/benefit analysis of its current distribution line inspection program to identify potential opportunities for improvement that may result in a reduction of cases of equipment failure over time, if successfully implemented.

In addition, PPL Electric recently completed an extensive study of the material condition of its transmission and distribution asset base. As a result of this analysis, several asset categories/types were identified as suitable candidates for proactive replacement due to age, deterioration, and prior poor performance, among other factors. Assuming several key factors, including appropriate rate recovery, are approved and implemented to support this effort, PPL Electric intends to establish proactive equipment replacement programs beginning in 2010 that it believes will, over time, help reduce the frequency of equipment failure interruptions, thereby improving SAIDI and SAIFI reliability indices.

Regarding plans to reduce interruptions due to trees-not-trimming-related, PPL Electric will evaluate the feasibility and value of the following initiatives to reduce the number of cases of trouble due to this cause, thereby improving electric service reliability:

- 1. Consider changing from four-year-urban and six-year-rural trim cycles to four-year-south and five-year-north trim cycles.** The new trim cycles would be based on vegetation growth rates occurring above and below the Blue Mountains, and would more effectively address vegetation mitigation needs on those circuits historically exhibiting the highest number of cases of vegetation-related trouble. Reliability

performance criteria would continue to be factored into the prioritization of the circuits on an annual basis to help ensure vegetation management work occurs in areas that will yield a high return on investment in terms of reliability benefit.

2. **Consider “prescriptive clearing” practices along three-phase circuits and single/two-phase circuits exhibiting unsatisfactory reliability performance due to vegetation-related outages.** Prescriptive vegetation maintenance clearing generally includes trimming more frequently and aggressively chronically-problematic three-phase line sections, as well as regularly performing aggressive tree-clearing and removal of hazard trees from a substation to the first major protective device on a three-phase circuit (i.e. “circuit hardening”). Work scope for these activities would be derived by ongoing statistical analysis of tree-caused outages and resultant reprioritization.
  
3. **Enhance vegetation management service contracts to include, among other factors, incentives and penalties based upon resulting reliability performance.** For example, vegetation management contracts would be structured to incorporate key performance indicators (KPIs) relating to PPL Electric’s customer satisfaction levels, such as minimizing customer and property owner complaints. Contractors also would have KPIs linked to SAIFI results.

**Implementation Plan:**

<b>VII.2 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
See implementation plan for VII.1	See VII.1
Incorporate applicable changes resulting from PPL Electric’s study of the material condition of its transmission and distribution asset base into the 2010-2014 business plans.	August 31, 2009 <u>E</u>
Complete executive level reviews on the findings of the vegetation management evaluation.	July 31, 2009 <u>E</u>
Incorporate applicable changes resulting from PPL Electric’s vegetation management evaluation into the 2010-2014 business plans.	August 31, 2009 <u>E</u>
Assemble list of circuits north and south of Blue Mountains and complete circuit trimming priority lists.	September 1, 2009 <u>E</u>
Prepare vegetation management contracts, KPIs, and specifications for 2010. Request bids.	September 1, 2009 <u>E</u>
Award 2010 vegetation management contracts.	November 1, 2009 <u>E</u>
Contract vegetation management planners prepare,	December 31, 2009 <u>E</u>

review and finalize work plans for 2010, based on prescriptive clearing needs.	
Review progress with vegetation management contractors during quarterly meetings.	Quarterly 2010 <u>E</u>
Revisit vegetation management and proactive replacement programs to incorporate any applicable changes to the 2011-2015 business plan.	August 31, 2010 <u>E</u>

**Responsible Managers:** Gerald R. Diehl, Manager - System Maintenance  
Kenneth L. Armstrong, Manager – Vegetation Management

## PUC Audit Implementation Plan

### Chapter VII – Operations and Electric Reliability

#### Recommendation VII.3

Perform an assessment to more fully utilize the capabilities of CASCADE.

#### **Response: Accept**

PPL Electric has made a long-term commitment to the use of CASCADE for many aspects of the overall maintenance strategy. The strategy is evolving and growing as PPL Electric gains experience with the software package and its use within PPL Electric's Maintenance Groups. Although PPL Electric will not implement the full array of features or modules CASCADE offers, the long-term goal is to use those features and modules within CASCADE that provide a meaningful improvement in reliability, performance, and cost benefits.

The topic "*Performance or Trigger based maintenance requirements*" relates to CASCADE features that allow the users to configure a "trigger" that will cause the system to issue a maintenance work request based on any of a number of criteria such as time, wear, performance or failure data. A module within CASCADE called C.A.R.E. is a special add-on package. This package combines several sources of data and predicts maintenance based on complex calculations and algorithms for each device that is being analyzed. This feature can, under special circumstances, realize cost, reliability and performance benefits. Although this feature is of interest to PPL Electric, realizing the potential benefits for implementing this features are still being reviewed.

The use of CASCADE for Transmission Data presently is being evaluated and planned.

In October 2008, a CASCADE application administrator was hired to manage the application, implement features and modules beneficial to PPL Electric's maintenance strategy.

#### **Implementation Plan:**

<b>VII.3 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
Hire a CASCADE application administrator.	October 2008 <b><u>A</u></b>
The use of CASCADE for Transmission Data is being evaluated and is in the planning stages.	June 2009 <b><u>A</u></b>
The use of CASCADE for Transmission Data is operational.	June 2010 <b><u>E</u></b>
Use of CASCADE module called C.A.R.E is being evaluated and is in the planning stages.	October 2009 <b><u>E</u></b>
Use of CASCADE module called C.A.R.E is operational.	October 2010 <b><u>E</u></b>

**Responsible Manager:** Mr. Gerald R. Diehl, Manager - System Maintenance

## Chapter VII – Operations and Electric Reliability

### Recommendation VII.4

Computerize the substation, transmission, and distribution inspection forms and processes.

#### **Response: Accept**

PPL Electric has a 5-year strategy for additional mobile applications and processes. Included in this strategy is the development and/or enhancement of database(s) to store substation, transmission, and distribution inspection results. Electronic inspection forms also will be developed that can be completed in the field by the personnel performing the inspection. The inspection results recorded on the electronic inspection forms will then populate the database(s) through an interface.

#### **Implementation Plan:**

<b>VII.4 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
Develop IT request and high level business case for mobile forms, processes, and associated databases.	October 15, 2009 <u>E</u>
Begin Discovery process to define the scope and functionality of required software, databases, and reporting needs.	January 30, 2010 <u>E</u>
Begin Development of software	April 1, 2010 <u>E</u>
Deploy software and processes to field workers	March 1, 2011 <u>E</u>

**Responsible Manager:** Steve Gelatko, Manager - Technology Development and Applications

## PUC Audit Implementation Plan

### Chapter VII – Operations and Electric Reliability

#### Recommendation VII.5

Strive to reduce the number of customers experiencing multiple service interruptions per year.

#### **Response: Accept**

PPL Electric agrees with Audit Staff's assertion that reducing the number of customers experiencing multiple interruptions (CEMI) is an important mechanism to increase customer service and satisfaction, as well as improve electric service reliability. To ensure focus on this important component of reliability, PPL Electric has had in-place, for several years, CEMI pay-for-performance goals, and has internally measured, analyzed, and reported-on monthly and annual CEMI results.

To further strengthen PPL Electric's CEMI management capabilities, the 2009 CEMI pay-for-performance goal was enhanced substantially from prior years to incorporate formal CEMI process improvement initiatives. Specifically, the new tier-one CEMI metric includes 13 initiatives that have 2009 target dates and, through May 2009, 8 of the 13 CEMI improvement initiatives have been successfully completed. A description of each initiative and its status through May 2009 has been documented below.

PPL Electric believes that successful achievement of its 2009 initiative-directed CEMI goal ultimately will result in cost-effective benefits to customers by reducing the likelihood of incurring high CEMI performance problems, and by ensuring that timely and informative communications occur between PPL Electric and its customers following high CEMI occurrences.

#### **Implementation Plan:**

<b>VII.5 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
Review year-end 2008 CEMI $\geq$ 10 results by collecting and analyzing detailed interruption information for all 261 customers.	January 30, 2009 <u>A</u>
Establish a cross-functional team to oversee and manage the 2009 CEMI process and convene first monthly meeting.	February 13, 2009 <u>A</u>
Develop and implement automated notification of key PPL Electric personnel when 2009 outages occur for customers who experienced 10 or more outages in 2008.	March 25, 2009 <u>A</u>
Finalize the list of 2009 CEMI Task Force Initiatives.	March 27, 2009 <u>A</u>

Develop a prioritized list of circuit improvement initiatives to address the outages of the 2008 CEMI 10 customers. Identify a subset of the initiatives that can be funded and completed in 2009.	April 9, 2009 <u>A</u>
Establish a preliminary CEMI budget for the 2010-2014 business plan to help ensure funds are available for CEMI circuit performance improvement projects.	May 11, 2009 <u>A</u>
Develop a report and supporting process that identifies rolling, 12-month, "blue-sky" CEMI $\geq 5$ interruptions. Ensure explanatory letters are sent, or phone calls are made to customers, within 2 business weeks.	May 12, 2009 <u>A</u>
Review and revise the current Customer Communication Strategy to ensure it aligns with and supports the CEMI process.	May 12, 2009 <u>A</u>
Develop an improved CEMI process to be implemented by January 1, 2010 – Draft for review with Senior Director P&ES, VP Distribution Operations.	July 17, 2009 <u>E</u>
Develop an improved CEMI process to be implemented by January 1, 2010 – Final Draft for review with the President of PPL Electric.	August 14, 2009 <u>E</u>
Monitor, analyze and report on 2009 interruptions for all 2008 CEMI $\geq 10$ customers. Within one week make phone calls to customers following each 2009 outage they experience.	December 31, 2009 <u>E</u>
Analyze and report monthly on all 2009 CEMI occurrences.	December 31, 2009 <u>E</u>
Complete 90% of the initiatives identified in row #5 (above) by respective target dates.	December 31, 2009 <u>E</u>

**Responsible Manager:** Leonard W. Martin, Manager - System Reliability and Work Scope

## PUC Audit Implementation Plan

### Chapter VII – Operations and Electric Reliability

#### Recommendation VII.6

Create a business case to further identify requirements or resources for integrating the advanced meter infrastructure with the outage management system.

#### **Response: Accept**

Presently, PPL Electric effectively integrates the advanced meter infrastructure (AMI) with outage management system (OMS) to determine outage location and more quickly restore its customers. This has been accomplished through a series of efforts to constantly evaluate and implement methods to further improve the accuracy of AMI data with OMS information on location of the outages.

PPL Electric will evaluate improvements to the utilization of the AMI data with OMS through the development of a business case. The business case will focus on additional improvements identified through the utilization of the AMI data to more accurately pinpoint the location of the outage. This will aid in dispatching crews to the right locations to improve restoration efforts. In addition, PPL Electric plans to investigate methods to proactively identify outages before the customer needs to contact PPL Electric.

#### **Implementation Plan:**

<b>VII.6 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
Evaluate methods for further improving AMI and OMS integration	October 1, 2009 <u>E</u>
Identify which integration methods can be implemented	December 1, 2009 <u>E</u>
Identify resources required to implement and maintain the methods	February 1, 2010 <u>E</u>
Establish implementation plan	June 1, 2010 <u>E</u>

**Responsible Manager:** Matthew Green, OMS Lead –Technical and Business Support

## **PUC Audit Implementation Plan**

### **Chapter VII – Operations and Electric Reliability**

#### **Recommendation VII.7**

Create and adhere to a process for timely notification to all departments of planned and extended unplanned outages.

#### **Response: Accept**

PPL Electric has implemented a process to assure that timely notification is provided to affected departments of planned and extended unplanned outages.

In the 2<sup>nd</sup> quarter of 2008, AMI Operations conducted discussions with the T&D Operations and Distribution Operations groups to establish a process where notification would be provided on planned outages and extended unplanned outages to AMI substation communications equipment. As a result, in the 3<sup>rd</sup> quarter of 2008, the following process was established:

- 1) When an outage is requested by Distribution Operations, the T&D Operations System Operator would accurately indicate in the Automated Work Request (AWR) system when a planned outage would affect the ability for the AMI substation communications equipment to effectively secure meter reads for billing.
- 2) On a daily basis, it is the responsibility of the AMI Operations group to monitor the AWR to identify which equipment was affected and implement proper actions to determine whether billing reads would be missed.
- 3) If it is determined that reads were to be missed, the magnitude and length of time for the outage is determined. The AMI Operations group then works with the System Operator to seek alternative methods to secure the billing reads. These methods include energizing the AMI equipment at night when the reads were collected for billing purposes or switching the meters to another substation source.
- 4) If these solutions are not workable, then the Revenue Assurance group is notified by AMI Operations about the length of the outage and the magnitude of the billing reads that will be missed. The Revenue Assurance organization takes appropriate steps to either suspend the billing on the affected accounts or allow the accounts to estimate, knowing that these accounts would probably not estimate consecutively with a similar issue.
- 5) Unplanned outages are discovered by the AMI Operations group when a large group of meters are failing to communicate at one substation. When this is found, the Group contacts T&D Operations of the nature and extent of the failure. A determination is made as to the magnitude and length of the outage, as well as the effect on billing reads. Then, steps 3 and 4 above are implemented.

PPL Electric’s AMI Operations group periodically monitors this process to assure that planned outages are accurately identified in the AWR, and that unplanned outage notifications are provided by email and/or by phone to the AMI Operations group by T&D Operations.

**Implementation Plan:**

<b>VII.7 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
Monitor performance and recommend corrective actions	Ongoing <u>E</u>

**Responsible Manager:** Sarah Fliszar, Manager – AMR Operations

## PUC Audit Implementation Plan

### Chapter VIII – Public Utility Emergency Preparedness

#### Recommendation VIII.1

Develop a risk management program to effectively identify, assess, and mitigate cyber risks to its IS infrastructure.

**Response: Accept**

PPL Electric's ISD Information Assurance Group (IAG) recognizes the need to implement an IT Risk Management methodology. IAG's 5 - year strategic roadmap includes a focused area around risk management.

**Implementation Plan:**

<b>VIII.1 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
Develop a 5 - year strategic roadmap for the Information Assurance Group, which includes IT Risk Management	March 31, 2009 <u>A</u>
Develop an IT Risk Management methodology	December 31, 2009 <u>E</u>

**Responsible Manager:** Peter C. Johnson, Director – Information Assurance

## **PUC Audit Implementation Plan**

### **Chapter IX – Materials Management**

#### **Recommendation IX.1**

Improve inventory cycle count accuracy.

#### **Response: Accept**

PPL Electric and Logistic Services agree that they need to work together to improve inventory cycle count accuracy at both the major warehouses and the satellite facilities.

Logistic Services has revised the inventory cycle count process and has issued a broader procedure in January 2009 that addresses the management of physical inventory. Every catalog item with a stock location will be counted on either a 12 - month or 24 - month schedule. The role of “physical count schedule coordinator” has been developed to oversee the process to ensure that the scheduled physical inventory counts are current and that the process is being followed. In addition, Logistic Services will use ad hoc cycle counts in an effort to keep new items or relocated items as accurate and up-to-date as possible.

Following the issuance of the new procedure, training was provided to Logistic Services employees involved in the physical counting process. Meetings were held with both PPL Electric and Logistic Services employees to discuss the appropriate way of removing and accounting for material taken from inventory. Also, Logistic Services material handlers were given additional training on using the RF (radio frequency) guns when conducting inventory cycle counts in an effort to further reduce the potential for inaccuracies.

The physical count schedule coordinator will monitor progress/cycle count accuracy improvement and communicate with Logistic Services and PPL Electric management on a quarterly basis (or more frequently if appropriate).

#### **Implementation Plan:**

<b>IX.1 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
Revise inventory cycle count process	March 31, 2009 <u>A</u>
Provide training to PPL Electric and Logistic Services employees	March 31, 2009 <u>A</u>
Monitor progress and take corrective actions as appropriate	Quarterly <u>E</u>

**Responsible Manager:** Jason M. Fedor, Supervisor - Tool and Material Support

## **PUC Audit Implementation Plan**

### **Chapter IX – Materials Management**

#### **Recommendation IX.2**

Provide sufficient lead times for Supply Chain to procure and provision material requests.

#### **Response: Accept**

PPL Electric will provide Logistics Services sufficient lead time (the time between when material is assigned to order and when it has been received at the local service centers) for non - local pick material items, which will provide cost - effective and efficient procurement practices that will maintain and/or improve customer satisfaction levels.

Certain materials such as poles, transformers, arrestors, cross-arms, etc., are local pick items, meaning they are stocked at the local service centers with established inventory levels. These levels are maintained so these materials can be pulled for immediate use. It is not necessary to provide lead time for these material types; therefore, they have been removed from the measurement.

Lead time (days) will be counted from when the material requisition has been assigned to the Material Handler (Work Management requirement # 599) to when the material items have been received.

#### **Implementation Plan:**

<b>IX.2 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
Establish the five day lead time goal	March 31, 2009 <u>A</u>
Identify local pick material items that should not be included in the metric	March 31, 2009 <u>A</u>
Monitor performance and take corrective actions as appropriate	Quarterly <u>E</u>

**Responsible Manager:** Denis Reed, Regional Director - Operations

## **PUC Audit Implementation Plan**

### **Chapter IX – Materials Management**

#### **Recommendation IX.3**

Strive to optimize inventory levels and increase turnover to at least 3.0.

#### **Response: Accept**

Supply Chain agrees that optimizing inventory levels will increase turnover and achieve significant savings. Supply Chain intends to take the following actions in an effort to realize improved inventory turnover and associated cost savings.

- 1) Develop an inventory model to support PPL Electric. The inventory model will establish a clear policy of system - wide inventory optimization and its benefits. It will provide guidelines to identify which items are to be stored at satellite locations and which are to be returned to the Central Distribution Facility (CDF) as soon as possible.
- 2) Increase discipline of returning unused or over max inventory to the CDF. This process will shift inventory from satellite locations and concentrate it at the CDF, where it will be more readily used across the system.
- 3) Establish and enforce a process for Supply Chain to identify excess and obsolete material on a quarterly basis. This includes:
  - (a) providing operations personnel with definitions of both "excess" and "obsolete" material in policies and procedures;
  - (b) conducting necessary training on how to identify and treat obsolete and excess material;
  - (c) establishing clear responsibility for disposing of excess and obsolete inventory, and
  - (d) monitoring compliance with the process.
- 4) Include a contractual provision in blanket purchase orders requiring suppliers to take back unused material within a specified time period.
- 5) Implement the improvement measures addressing Recommendation IX.1 (improve inventory cycle count accuracy), and work with PPL Electric (as applicable) to help achieve an improvement in lead times (Recommendation IX.2) and a reduction in the amount of excess material being returned upon completion of a job (Recommendation IX.4).

**Implementation Plan:**

<b>IX.3 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
Improve excess/obsolete material process	March 31, 2009 <u>A</u>
Include material return in BPOs	March 31, 2009 <u>A</u>
Return Over Max inventory to the CDF	September 30, 2009 <u>E</u>
Develop inventory model	December 31, 2009 <u>E</u>

**Responsible Manager:** Mark N. Thomas, Supervisor - Tool and Material Support

## PUC Audit Implementation Plan

### Chapter IX – Materials Management

#### Recommendation IX.4

More closely align material requests with material needs.

#### Response: **Accept**

PPL Electric is working with Logistics Services to provide accurate material requests and more timely material need dates. The key component to improve this is to have the PPL Electric Work Management group plan and schedule work to crews for a minimum of three weeks in the future (three - week lock down of the schedule). This will establish material needs and deliveries that are more closely aligned with the schedule. Thus, a more improved forecast of materials that Logistics Services will provide to PPL Electric, will help it to be more cost - effective and efficient.

#### Implementation Plan:

<b>IX.4 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
Create a report that will list all design type work requests that have a 599 requirement (material requisition) with a scheduled date three weeks in the future (3 <sup>rd</sup> week in the schedule lock down) and was the 599 requirement assigned or not.	July 1, 2009 <u>E</u>
Establish a 'target' percentage of work requests scheduled in week three that has the 599 requirement assigned.	July 15, 2009 <u>E</u>
Monitor performance and take corrective actions as appropriate.	Monthly <u>E</u>

Responsible Manager: Denis Reed – Regional Director - Operations

## PUC Audit Implementation Plan

### Chapter X – Customer Services

#### Recommendation X.1

Expand efforts to reduce customer terminations and bad debt expense by increasing education and customer outreach regarding the termination process particularly for delinquent customers.

#### Response: **Accept**

PPL Electric recognizes that customers in arrears often require more frequent contacts and additional information to keep their account balance from entering the termination process. On an on-going basis, technical and commercial options are reviewed, and when economically feasible, changes are made.

#### Implementation Plan:

<b>X.1 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
Provide a confirmation of re-payment terms to customer upon agreement. PPL Electric began sending agreement confirmation letters to customers who established new agreements or re-activated defaulted agreements to ensure that the customer had a record of the terms and a clear understanding of expectations under the agreement. The confirmations are sent via mail or via e-mail if the customer provides an e-mail address.	April 2009 <u>A</u>
Automate 3-day notice call. The 3-day notice call is completed using a third-party provider who initiates automated calls. The vendor provides records that allow PPL Electric to identify periods where the call campaigns are most successful, and these reports are reviewed periodically to determine if any adjustments to the schedules are needed.	April 2009 <u>A</u>
Initiate additional contacts to customers using automated phone, text and e-mail technologies. PPL Electric will review the technical and commercial options available to use these technologies to contact customers in arrears, and will assess if the technologies are economically feasible. If viable, funding will be obtained and an implementation plan and schedule will be developed.	December 2009 <u>E</u>
Implement a Special Account Team to work with the high balance customers in arrears on a personal basis. The team would handle key credit and collection related activities for these customers and includes both inbound and outbound communications.	March 2010 <u>E</u>

**Responsible Manager:** Bernard J. Molchany, Manager – Revenue Assurance

## PUC Audit Implementation Plan

### Chapter X – Customer Services

#### Recommendation X.2

Strive to improve customer communication efforts and decrease the Company response time to customer's emails.

#### Response: **Accept**

PPL Electric values its relationships with customers and recognizes the important role communication plays in fostering those relationships. New communication channels are being developed, and current communication methods are being leveraged to improve communications with customers.

In 2009, PPL Electric significantly added to the information made available to customers on its website including hourly meter data, personalized usage data, carbon footprint, and rate calculators, and Act 129 information. Later this year, PPL Electric will launch the first e Power blog as an informal outlet to discuss energy efficiency topics with customers. The blog will be publicized and provide customers with another channel to dialogue with PPL Electric.

PPL Electric formed the e Power Team to provide a 'grassroots' presence at home shows, community events, and retail stores. The e Power Team has targeted school PTA's and senior citizen centers for dialogue with customers. The e Power Team provides customers with printed information and promotes PPL Electric's website and energy efficiency.

PPL Electric will continue to seek and develop new technologies and avenues to communicate more frequently and effectively with customers.

PPL Electric has taken steps to modify its process on how to manage customer e-mail to improve response time and quality.

#### Implementation Plan:

<b>X.2 Implementation Milestones</b>	<b>Date (<u>Actual/Estimated</u>)</b>
Review incoming mail and immediately re-direct items not related to billing or payment arrangements for response from the appropriate business line or department.	December 2008 <b><u>A</u></b>
Modify procedure to include calling customers when the question requires interactive dialog in order to provide a proper response (i.e. payment arrangements and inquires regarding usage)	February 2009 <b><u>A</u></b>
Train additional CSRs to respond to e-mails	February 2009 <b><u>A</u></b>

Train CSRs-Shift (24x7 operations) to respond to specific e-mails such as user name and password reset and simple address corrections.	June 2009 <u>E</u>
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**Responsible Manager:** Thomas C. Stathos, Director – EU Customer Strategy  
Shelley W. Ortiz, Manager - Customer Care

## PUC Audit Implementation Plan

### Chapter XI – Fleet Management

#### Recommendation XI.1

Modify the FleetAnywhere/FleetFocus system to separately track PPL Electric Utilities' vehicle operating, maintenance, and fuel costs from other business lines.

#### **Response: Accept**

Transportation Services has all vehicles and equipment identified by their assigned responsibility center (RC) and collects all costs related to vehicle types regardless of the RC. Transportation Services agrees that all PPL Electric vehicle and equipment costs need to be segregated from other Business Units (BU). This can be accomplished through an accounting structure that continues to itemize all costs identified above, and separates PPL Electric from the other BU.

**Implementation Plan:** PPL Electric's Fleet accounting that collects these costs will remain the same because this fleet is the largest within the corporation. To meet the requirements of the recommendation, accounting for all non - PPL Electric fleets will be changed for collecting their costs.

<b>XI.1 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
Develop new accounting project-id's for non – PPL Electric Fleets	September 2009 <u>E</u>
Communicate the new process to non – PPL Electric Fleet clients	October 2009 <u>E</u>
Change all accounting project-id's for non – PPL Electric Fleet units	December 2009 <u>E</u>
Implement new cost collecting process	January 1, 2010 <u>E</u>

**Responsible Manager:** Wesley Keller, Manager – Transportation Services

## PUC Audit Implementation Plan

### Chapter XI – Fleet Management

#### Recommendation XI.2

Develop and maintain Key Performance Indicators (KPIs) for each vehicle class and track actual performance against the KPIs.

#### **Response: Accept**

Transportation Services will continue implementing process improvements that reduce fleet maintenance and operating costs. It has maintained static vehicle daily rental rates for three consecutive years at a time when material and labor costs have risen. This is done by controlling parts, labor, and contractor costs when performing maintenance on fleet vehicles. All of this is monitored on performance metrics that already are in place. Presently, Transportation Services is recommending a reduction in PPL Electric's fleet units that will meet set usage targets and employees to vehicle ratios.

As stated in the report, there is no application that collects accurate vehicle mileage at set intervals for PPL Electric vehicles and KPI's that require accurate mileage readings. Mileage readings, from all sources, require edit checking before being uploaded into a database. This may require costly system development.

#### **Implementation Plan:**

Transportation Services will implement this recommendation through multiple steps and enhance it over time. Initially, mileage readings will be gathered from multiple sources and manually uploaded into a database until a system driven process can be cost justified.

Starting in July 2009, all PPL Electric light vehicles that use unleaded gasoline will purchase fuel with a WEX fuel card. This process requires a mileage reading at the time of purchase. The majority of the heavy vehicle fleet has mobile PC's with software that can accept mileage readings via data entry by the driver. Mileage readings for the remainder of the fleet can be obtained from another data base that requires data entered for quarterly mileage readings throughout the year.

<b>XI.2 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
Start collecting light vehicle mileage readings	August 2009 <u>E</u>
Start collecting heavy vehicle mileage from mobile PC units	October 2009 <u>E</u>
Start collecting remaining heavy vehicle mileage from quarterly readings	October 2009 <u>E</u>
Develop KPI's for fleet units	April 2010 <u>E</u>

**Responsible Manager:** Wesley Keller, Manager – Transportation Services

## PUC Audit Implementation Plan

### Chapter XI – Fleet Management

#### Recommendation XI.3

Perform, and periodically update, a Lifecycle Cost Analysis to support the life cycles used to determine PPL Electric Utilities' vehicle and equipment purchase cycle matrix.

#### **Response: Accept**

Transportation Services agrees that vehicles and equipment have vastly improved over the past ten years and a new analysis should be performed.

**Implementation Plan:** Transportation Services will develop a new fleet Lifecycle Cost Analysis model before the beginning of the 2010 fleet purchase cycle.

<b>XI.3 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
Develop and perform a new fleet Lifecycle Cost Analysis	January 2010 <u>E</u>

**Responsible Manager:** Wesley Keller, Manager – Transportation Services

## **PUC Audit Implementation Plan**

### **Chapter XI – Fleet Management**

#### **Recommendation XI.4**

Expediently implement the recommendations contained in the Transportation Manpower/Maintenance Strategy.

#### **Response: Accept**

Transportation Services already started tracking mechanic direct labor hours and shows the information on a monthly performance indicator that compares it to the best in class utility standard of hours per Maintenance Repair Unit (MRU).

**Implementation Plan:** This recommendation can be attained through attrition of mechanics by either retirements or transfers out of the department.

<b>XI.4 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
Reduce mechanic positions through attrition and meet utility standard.	December 2010 <u>E</u>

**Responsible Manager:** Wesley Keller, Manager – Transportation Services

## PUC Audit Implementation Plan

### Chapter XII – Human Resources

#### Recommendation XII.1

Complete efforts to develop, document, and implement an effective, ongoing succession plan for all PPL Electric Utilities executive management positions.

**Response: Accept**

#### **Implementation Plan:**

<b>XII. 1 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
Succession Plan for the President of PPL Electric	July 2008 <u>A</u>
Emergency Succession Plan direct reports of the President of PPL Electric	January 2009 <u>A</u>
Talent Assessment of all Base Pay Salary Group 14 and above	February 2009 <u>A</u>
Implemented rotational assignments within PPL Electric based on the Talent Assessment	March 2009 <u>A</u>
Succession candidates identified for key senior leader positions in PPL Electric	May 2009 <u>A</u>
Competency Assessments completed for succession candidates	June 2009 <u>A</u>
Development goals and plans completed for succession candidates	June 2009 <u>A</u>
Develop goals and plans completed for future talent pool identified through Talent Assessment	September 2009 <u>E</u>
On-going review of succession planning process driven by Corporate schedule for executive succession planning	Ongoing <u>E</u>

**Responsible Manager:** Cynthia J. Wukitsch, Director-Talent Management & Diversity  
Linda Greenwald, Director-Human Resources – PPL Electric

**PUC Audit Implementation Plan**

**Section XIII – Diversity**

**Recommendation XIII.1**

Strive to attain full utilization of women and minorities in all job categories.

**Response: Accept**

**Implementation Plan:**

<b>XIII.1 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
2009 PPL Electric Affirmative Action Plan, including underutilization, reviewed with key Senior Leaders in Electric	May 2009 <u>A</u>
Ensure consideration of female/minority employees during succession planning discussions.	May 2009 <u>A</u>
Track and report female/minority progress and outreach initiatives to PPL Electric senior management on a quarterly basis.	Quarterly <u>E</u>
Create a standard process to inform hiring managers when existing vacancy is in an underutilized job group.	August 2009 <u>E</u>
Review key job documents (where underutilized) to ensure the position is accurately described.	October 2009 <u>E</u>
Participate in at least three (3) minority/female outreach efforts during 2009; such as: <ul style="list-style-type: none"> <li>• Monster Leadership Development Program</li> <li>• INROADS</li> <li>• Career Fairs/On-Campus interviews at Historically Black Colleges &amp; Universities or Hispanic Serving Institutions</li> <li>• Network events (Society for Women Engineers, Society for Black Engineers, etc.)</li> <li>• Military Recruitment</li> </ul>	December 2009 <u>E</u>

**Responsible Manager:** Cynthia J. Wukitsch, Director-Talent Management and Diversity  
 Linda Greenwald, Director-Human Resources – PPL Electric

## **PUC Audit Implementation Plan**

### **Chapter XIII – Diversity**

#### **Recommendation XIII.2**

Increase the emphasis on procurement from minority owned and persons with disabilities owned businesses within PPL Electric Utilities' supplier diversity program and set realistic annual and long range target levels.

#### **Response: Accept**

Supply Chain plans to develop a more comprehensive methodology of properly identifying the various classifications of suppliers. This should enable more accurate and appropriate reporting for the PUC, as well as the SBA.

Supply Chain traditionally has had goals to increase the percentage of bid opportunities and spend with diverse suppliers. Supply Chain intends to establish a small group from its management team to identify appropriate and realistic goals for the buying professionals. The intent will be to more closely align sourcing opportunities and buyer performance so as to measure improvement. As explained previously, however, it has been and continues to be very challenging to identify minority, women, and persons with disabilities - owned business entities who are established in some of PPL Electric's major spend categories (wire and cable, poles, transformers) and able to compete successfully.

Supply Chain is continuing its efforts to attract diverse suppliers by attending various regional trade shows. It recently conducted a mass mailing to all PPL Electric suppliers in its database to verify their appropriate classification. It also has established the category for "persons with disabilities owned business" enterprise. In addition, Supply Chain will be providing the PPL Electric buying staff with the names of potential diverse suppliers based on some specific commodities within their areas of responsibility.

#### **Implementation Plan:**

<b>XIII.2 Implementation Milestones</b>	<b>Date (<u>A</u>ctual/<u>E</u>stimated)</b>
Conduct mailing to verify supplier classifications	June 30, 2009 <u>A</u>
Establish classification methodology	September 30, 2009 <u>E</u>
Sourcing Management to develop buyer goals	December 31, 2009 <u>E</u>

**Responsible Manager:** Joseph R. Zelechowski, Director - Supply Chain