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August 1, 2011

Rosemary Chiavetta
Secretary
Pennsylvania Public Utility Commission
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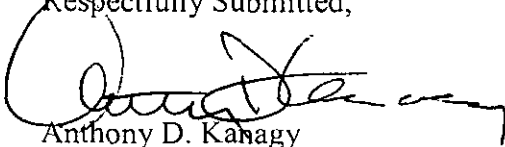
**RE: Petition of PPL Electric Utilities Corporation for Approval of a Smart Meter
Technology Procurement and Installation Plan
Docket No. M-2009-2123945**

Dear Secretary Chiavetta:

On June 24, 2010, the Pennsylvania Public Utility Commission ("Commission") entered an order in the above-referenced proceeding approving PPL Electric Utilities Corporation's ("PPL Electric" or the "Company") Smart Meter Plan with certain modifications. In the Order, the Commission directed PPL Electric to make annual smart meter plan filings on or about August 1 of each year. Pursuant to the June 24, 2010 Order, PPL Electric hereby files its 2011 Annual Smart Meter Plan Filing.

Please direct any questions regarding this matter to the undersigned.

Respectfully Submitted,



Anthony D. Kanagy

ADK/skr
Enclosure
cc: Certificate of Service
Office of Administrative Law Judge

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CERTIFICATE OF SERVICE

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

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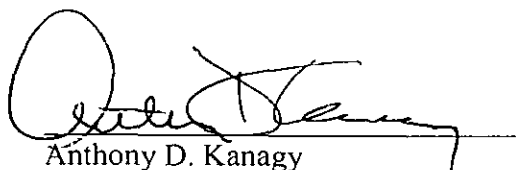
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Before the
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PPL Electric Utilities Corporation
Smart Meter Technology Procurement and Installation Plan

2011 ANNUAL SMART METER PLAN FILING

Docket No. M-2009-2123945

August 1, 2011

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I. INTRODUCTION

In this filing, PPL Electric Utilities Corporation ("PPL Electric" or the "Company") is submitting its 2011 annual smart meter plan update filing as required by the Pennsylvania Public Utility Commission's ("Commission") Order entered on June 24, 2010. *Petition of PPL Electric Utilities Corporation for Approval of Smart Meter Technology Procurement and Installation Plan*, Docket No. M-2009-2123945 ("June 24 Order").

II. BACKGROUND

PPL Electric provides electric distribution, transmission and default generation services to approximately 1.4 million customers in a certificated service territory that spans approximately 10,000 square miles in all or portions of 29 counties in eastern and central Pennsylvania. PPL Electric is a "public utility" and "electric distribution company" ("EDC") as those terms are defined under the Public Utility Code, 66 Pa. Code §§ 102 and 2803.

On August 14, 2009, PPL Electric filed its Smart Meter Plan with the Commission pursuant to Act 129 of 2008, P.L. 1592 ("Act 129") and the Commission's Smart Meter Implementation Order. *Smart Meter Procurement and Installation*, Docket No. M-2009-2092655, Order entered June 24, 2010.

As explained in the Company's Smart Meter filing, PPL Electric already has installed an advanced meter infrastructure ("AMI") system in its service territory. The Company estimated that it would cost between \$380 and \$450 million to replace its existing AMI system. Based on its investigation, the Company indicated that it did not believe that a wholesale replacement of its AMI system would provide sufficient expanded functionality to justify its costs. Therefore, under its Smart Meter Plan, PPL Electric proposed to study, test, and pilot applications that enhanced and expanded upon the capabilities of the Company's existing smart meter system, focusing primarily on those that required a benefit to cost analysis as directed by the Commission Order. In its Smart Meter Plan, PPL Electric also proposed a cost recovery mechanism consistent with the requirements of Act 129 and the Commission's Implementation Order.

On June 24, 2010, the Commission entered its order in the Smart Meter proceeding. In its June 24 Order, the Commission revised certain aspects of the Company's Smart Meter Plan. These included:

- Modifying the Company's proposed cost recovery mechanism and reconciliation period;
- Requiring the Company to file Service Limiting and Pre-Pay Metering Pilot Plans for the Commission's consideration;
- Requiring the Company to continue to identify, test, develop and implement cost-effective means for directly providing metered usage data to customers;

- Requiring the Company to address how its smart meter technology will effectively support the automatic control of a customer's consumption by a customer's chosen third party, in addition to the customer or PPL Electric;
- Requiring the Company to expand its metering capabilities to meet Act 129's requirements;
- Eliminating the Company's proposed Feeder Meter pilot program;
- Requiring the Company to ensure that its pilot programs address the need, ability and cost for sub-hourly metering;
- Requiring the Company to recover smart meter plan costs from Large C&I customers through a fixed customer charge.
- Requiring the Company to allocate non-direct common costs based on the ratio of the number of meters assigned to the class, divided by the number of meters for the entire system.

In its June 24 Order, the Commission also required PPL Electric to file annual smart meter filings with the Commission. Pursuant to the Commission's Order, PPL Electric hereby submits its annual filing. Below, PPL Electric explains the actions that it will take under its Smart Meter Plan in 2011 and 2012. PPL Electric also submits proposed Smart Meter Rider ("SMR") charges to be effective for service rendered on and after January 1, 2012.

III. DISCUSSION

Stakeholder Meetings

PPL Electric has held two stakeholder meetings this year. The first meeting was held on February 17, 2011 and the second meeting was held on June 9, 2011. PPL Electric provided a status update on each of the active pilots/evaluations. Representatives from the Office of Consumer Advocate (OCA), Pennsylvania Utility Law Project (PULP), PP&L Industrial Customer Alliance (PPLICA) and the following Commission offices: Office of Special Assistants (OSA), Bureau of Consumer Services (BCS), Bureau of Conservation, Economics and Energy Planning (CEEP), Bureau of Audits, Bureau of Fixed Utility Services (FUS), attended one or both of the meetings.

Smart Meter Plan Actions for 2011 And 2012

Below, PPL Electric summarizes the actions that it will take under its Smart Meter Plan in 2011 and 2012. The Company notes that these actions, including the timeline for performing these actions, are set forth in additional detail in the following attachments to this updated Plan.

- Attachment 1: Smart Meter Milestone Plan

- Attachment 2: Smart Meter Plan Budget
- Attachment 3: Smart Meter Plan Pilot/Evaluation
- Attachment 4: Smart Meter Rider (2012)

For ease of reference, the Company has followed the order of smart meter requirements as set forth on pages 29-30 of the Commission's Smart Meter Implementation Order, and as set forth on pages 17-32 of the Company's original Smart Meter Plan.

1. Bi-directional data communications.

PPL Electric's currently deployed AMI system is capable of bi-directional communications. Full two-way communication exists today on PPL Electric's power line system and in the wireless-based system used for the Company's customers who are served at higher voltages. The power line system is capable of full communication with each meter communicating daily and hourly usage, momentary voltage losses, potential loss of power and voltage data upon request from the network.

The Company does not expect to conduct specific pilots in this area, but will perform a pilot using in-home displays with home area networks. This pilot is scheduled for 2011 and 2012. This pilot is discussed below under the requirements for open standards and protocols.

2. Recording usage data on at least an hourly basis once per day.

PPL Electric's currently deployed AMI meters record usage data on at least an hourly basis once per day.

3. Providing customers with direct access to and use of price and consumption information.

PPL Electric provides access to price and consumption information to various groupings of customers and to individual customers through the Energy Analyzer, PPL Electric's website, and pulse data. However, the Company proposes to pilot other means of electronic access that include alerts on price and/or consumption. The pilot will be offered to 10,000 customers. Customers will have the option to receive three different types of messages (1) Price to Compare (PTC), (2) Bill to Date (BTD) Notification, and (3) Abnormal Usage (AU) Notification. Customers will be able to receive the notifications through their choice of email, text message and/or an IVR phone call.

- PTC notifications will be sent to enrolled customers each time PPL Electric's Price to Compare changes which will occur quarterly. The first PTC notifications will be sent out in August 2011.
- BTD notifications will be sent to enrolled customers when they exceed their specified threshold for the month. The customers will be able to select a dollar amount that

will trigger a notification through their preferred communication channel – email, text message or an IVR call. The first BTM notifications will be sent out in November 2011.

- AU notifications will be sent to enrolled customers when the Company recognizes abnormal usage for three consecutive days. The first AU notifications will be sent out in January 2012.

The initial phase of the pilot will be rolled out in 2011. Time-of-Use (TOU) customers will be excluded from the BTM notifications in the initial phase of the project due to programming limitations. In 2012, TOU customers will be able to enroll in BTM notifications. In addition, the initial phase pilot will be evaluated based on customer feedback to determine if changes are required to calculations of the AU notifications.

The pilot will provide the Company with an opportunity to further define the costs and benefits of sending price and usage messages to customers. The total estimated cost of this pilot is \$310,621 which includes (1) the evaluation in 2010, (2) two pilot phases in 2011 and 2012 (2) software and licensing (3) evaluation of pilot results, (4) establishment of an implementation plan if so indicated by the evaluation, and (5) reporting of results and proposed implementation plan to the Commission.

In addition to the pilot described above, the Company plans to conduct a pilot that will provide customers with an in-home display that will provide them direct real-time access to their energy consumption and costs. This pilot, as presently scoped, will focus on understanding the technology and benefits of providing customers with direct real-time access to their energy and cost information. This pilot is discussed below under the requirements for open standards and protocols.

4. Providing customers direct information on their hourly consumption.

PPL Electric provides its customers with access to information on hourly consumption from its AMI system. This data is provided on a daily basis to the PPL Electric meter data management system to enable customers to access their individual information on PPL Electric's Energy Analyzer website.

5. Enabling time-of-use rates and real-time price programs.

PPL Electric's currently deployed AMI is capable of providing hourly data to enable the Company to offer TOU rates and real-time price programs to its customers. The existing meter population already is delivering hourly data for billing purposes at a high success rate for TOU applications.

Regarding real-time pricing programs, PPL Electric's currently deployed AMI is capable of accommodating the capture and retrieval of hourly data in accordance with PJM hourly pricing. Beginning January 1, 2010, these programs were offered to Large C&I customers taking delivery at primary voltage and above. Beginning in January 2011, the Company offered this option to all customers with demands that are greater than 500 kW.

6. Supporting the automatic control of the customer's electric consumption.

PPL Electric is in the process of conducting a pilot to use the capabilities of the AMI currently deployed to automatically control individual customer's electric consumption. This will be accomplished by installing load control devices on certain customer equipment, including air conditioning systems and water heaters. Preparation for this pilot began in 2010 and the pilot is underway with an anticipated completion date of September 30, 2011. This pilot will also investigate and report on the feasibility, costs, and benefits of various means by which third parties can exercise control over the load control devices.

The Company solicited over 10,000 customers to participate in this program with the intent to enroll up to 500 customers. Approximately 200 customers expressed interest in the pilot and, currently, there are 170 devices installed in pilot participants' homes. There were 30 customers who expressed interest in the pilot that the Company was unable, after several failed attempts, to reach and, therefore, was unable to install the device and include these customers in the pilot.

The estimated cost of the pilot is \$600,089 and includes, (1) establishment of pilot objectives, (2) invitations to customers to participate in the pilot, (3) purchase of 500 load control devices, (4) installation of 170 load control devices, (5) software, programming and licensing, (6) evaluation of pilot results, (7) establishment of an implementation plan if so indicated by the evaluation, and (8) reporting of results and proposed implementation plan to the Commission. Approximately \$36,851 was spent in 2010 to prepare for the pilot and \$563,238 will be spent in 2011 to conduct the pilot.

If the feasibility of the technology as well as its economic viability is confirmed, wider potential deployment is possible. An enrollment of 5,000 customers annually may result in an estimated implementation cost of \$8,152,696 from 2012 through 2014. However, any expansion of the pilot will need to be coordinated with other programs the Company has undertaken under the energy efficiency and conservation provisions of Act 129.

The pilot and implementation costs have changed due to higher than expected equipment costs. Implementation will be dependent on the benefits of the program.

7. Ability to remotely disconnect and reconnect.

This functionality is supported by PPL Electric's current AMI deployment. Remote disconnection and reconnection can be accomplished through the use of a meter with a service disconnect integrated into either the meter or a disconnect collar installed at the customer's premise.

Originally, PPL Electric proposed to conduct a remote disconnection/reconnection pilot in 2011 to connect and disconnect premises where frequent move ins/move outs occur in its service territory. The pilot would enable "hard" blocking of all accounts in the pilot, excluding terminations for non-payment. In order to better define the requirements for the pilot, the Company has undertaken a further evaluation of the costs and benefits of this new functionality within the Company's service territory. Rather than conducting a

pilot in 2011, the Company proposes to complete a more thorough cost benefit analysis of the functionality and conduct a pilot in 2012.

The estimated costs to complete a cost benefit analysis is \$47,050, which includes reviewing: (1) the Company's 2006 pilot, (2) the Company's current processes and annual costs for disconnecting and reconnecting customers, and (3) potential benefits.

If justified by the cost benefit analysis, the estimated cost of the pilot is \$537,248 which includes: (1) establishment of pilot objectives, (2) meter hardware and installation, (3) software and programming, (4) evaluation of pilot results, (5) potential establishment of an implementation plan if required, and (7) reporting of results and proposed implementation plan to the Commission.

If the pilot is successful, wider deployment to an estimated 50,000 customer locations from 2013 to 2014 may result in an estimated implementation cost of \$11,000,000.

8. Ability to provide 15-minute or shorter interval data.

PPL Electric conducted a pilot in 2010 and 2011 to assess the capability to provide 15-minute interval data on a consistent basis using power line meters that have the capability to be configured for 15-minute data collection at the residential and Small C&I customer level. The Company spent \$10,507 in 2011 and projects to spend \$29,939 to complete this pilot and cost benefit evaluation which included: (1) the remote reconfiguration of 500 installed power line meters from 60-minute to 15-minute collection, (2) a scalability test to determine if PPL Electric's power line system can read 15-minute data from all Small C&I accounts (180,000 accounts), (3) evaluation of pilot results, (4) development of recommendations including consideration of process changes necessary to accept customers', EGSs', and/or third parties' requests for 15-minute data, and (5) reporting of results and an implementation plan to the Commission.

The Company's findings from the pilot are outlined within the following questions that were set forth in the Commission's June 24 Order:

- 1. What are the capability and limitations of proposed smart meters to measure and record sub-hourly usage?*

Currently, the Company provides sub-hourly 15-minute interval data for all its large commercial and industrial (C&I) customers. Large C&I customers are defined as C&I customers with a demand of greater than 500 kW.

Currently, small C&I customers are generally provided hourly interval data. Small C&I customers are defined as C&I customers with a demand of less than 500 kW and there are approximately 180,000 such small C&I customers. However, as a result of past participation on now-closed rates and other circumstances, approximately 52,000 of these small C&I customers have a meter that can provide 15-minute interval data without further modification. In order to measure and record sub-hourly usage for all small C&I customers

through the power line carrier system, the Company would need to upgrade the meters of 128,000 customers to newer electronic meters at an estimated cost of \$17.28 million. Because the demand for sub-hourly data among this class of customers is not great, the Company's practice has been to, upon request of the customer, provide KYZ pulse data which can be integrated into 15 minute intervals, or any other length of interval the customer or third-party acting on behalf of the customer may desire.

Residential customers are also provided with hourly interval data. In order to measure and record sub-hourly usage for all residential customers through the power line carrier system, the Company would need to upgrade the meters of approximately 1.3 million customers to newer electronic meters at an estimated cost of \$175.5 million.

2. *What are the capability and limitations of proposed smart meter communication and data storage systems to transmit and store sub-hourly usage information?*

In order to transmit and store sub-hourly usage for all small C&I customers, the Company would need to strategically upgrade and/or modify the existing AMI system including meters, substation equipment and data storage. The estimated cost of upgrading meters is \$17.28 million as discussed in the response to Question 1, above. The additional substation equipment is estimated to cost \$250,000. The additional data storage costs to store 15-minute interval data for 180,000 small C&I customers on the same basis (accessibility, retention times, etc.) are estimated to be \$20,000 per year.

3. *What are the sub-hourly PJM requirements for participation in ancillary service markets?*

The PJM Interconnection ("PJM") identifies three ancillary services markets on its website (<http://www.pjm.com/markets-and-operations/ancillary-services.aspx>). These are:

- Synchronized Reserve,
- Regulation, and
- Black Start Service.

Each of these services and the associated metering requirements are described below.

Synchronized Reserve

Synchronized reserve service supplies electricity if the grid has an unexpected need for more power on short notice. Both generators and loads can participate in the synchronized reserve market. The power output of generating units supplying synchronized reserve can be increased quickly to supply the needed energy to balance supply and demand; demand resources

supplying synchronized reserve can reduce their load quickly in order to maintain the balance between supply and demand. Demand resources providing Synchronized Reserve are required to provide metering information at no less than a one minute scan surrounding a synchronized reserve event. Metering information for demand resources is not required to be sent to PJM in real time. Daily uploads at the close of the next business day after the operating day, if an event has occurred, are sufficient. (PJM Manual 11: **Energy & Ancillary Services Market Operations**; Section 4: Overview of the PJM Synchronized Reserve Market Revision 46; Effective Date: 06/01/2011; pages 63 – 64 and 72)

Regulation

Regulation is necessary to provide for the continuous balancing of resources (generation and interchange) with load and for maintaining scheduled Interconnection frequency at 60 cycles per second (60Hz). PJM commits on-line resources whose output (for generators) or consumption (for loads) is raised or lowered as necessary to follow moment-to-moment changes in generation or load. The resources assigned to provide regulation must be capable of responding to the Area Regulation signal immediately, achieve their bid capability within five minutes and must increase or decrease their outputs at the ramp rates that are specified in the data that is submitted to PJM. Regulation is predominantly achieved using automatic generation control equipment; however, customers ("demand side response resources") can also provide regulation. Resources (either generators or loads) participating in the regulation market will receive from PJM an assigned regulation signal at 10 second intervals and a real-time regulation signal (intended to move the participating resource) at 2 second intervals.

Resources (either generators or loads) participating in the regulation market will send to PJM signals that provide the resource's capability to provide regulation and the real-time regulation that the resource is providing. Both of these signals are calculated every 2 seconds and sent at 2 second intervals. Consumption metering must, therefore, be able to meet the 2 second calculation requirement. (PJM Manual 12: **Balancing Operations**; Section 4: Providing Ancillary Services; Revision 22, Effective Date: 05/13/2011; pages 38-42)

Black Start Service

Black start capability is necessary to restore the PJM transmission system following a blackout. Black Start Service shall enable PJM and Local Control Centers to designate specific generators whose location and capabilities are required to re-energize the transmission system. Black Start Service applies only to generation resources and, therefore, establishes no requirements for consumption metering. (PJM Manual 12: **Balancing Operations**; Section 4: Providing Ancillary Services; Revision 22, Effective Date: 05/13/2011; pages 49)

Although not listed among the ancillary service markets, many retail customers participate in PJM's Demand Response Programs. PJM hosts two different programs – the Emergency Load Response Program and the Economic Load Response Program. In both programs, hourly load data is available within 60 days of the participant's load reduction. (PJM Manual 11: **Energy & Ancillary Services Market Operations**; Section 10: Overview of the Demand Resource Participation; Revision 46, Effective Date: 06/01/2011; pages 103 and 113-117)

4. *What are PPL's incremental smart meter, communication, data storage, and data sharing costs associated with these sub-hourly requirements for ancillary services?*

As noted in the response to Question 3, there are no requirements for sub-hourly data associated with PJM's Black Start Service Market. Also, as noted in the response to Question 3, participation in both the Synchronous Reserve and Regulation Markets require the receipt of a signal, rapid response to that signal, and metering information at intervals of a minute and shorter. It is PPL Electric's understanding that this functionality is typically accomplished through a communication, metering, and control package that is provided by the service provider the customer engages to facilitate his participation. The Company also understands that the communication, metering, and control package is typically a stand-alone package that performs, by design and intent, independently from the Company's metering equipment, that it may include features that are proprietary in nature, and that it is typically provided under the service contract between the customer and the service provider. Accordingly, PPL Electric incurs no incremental smart meter, communication, data storage, and data sharing costs associated with the participation of customers in the PJM ancillary services markets.

Finally, and also noted in the response to Question 3, participation in PJM's demand response programs, although not among the ancillary services markets, does not require data granularity or communication capability beyond that which is already provided by PPL Electric's AML. Nevertheless, the Company is aware that at least some curtailment service providers who facilitate the participation of customers in the demand response markets require sub-hourly data for their own purposes. Upon request of a customer, PPL Electric will provide a KYZ pulse equipped recorder meter to customers that require real-time sub-hourly data. The Company is aware that, while in some cases the desire is driven by a need to track real-time energy consumption and demand, in other cases the pulses are used as direct inputs to an energy management system. The incremental cost associated with each such request is \$475. The Company does not directly charge the requesting customer, but, instead, reflects the cost in its base rates.

5. *What are the incremental equipment and installation costs of pulse data recorders used to measure sub-hourly meter data?*

The incremental equipment and installation costs of providing pulse data for the purpose of measuring sub-hourly usage are discussed, above, in the response to Question 4.

6. *Is a pulse data recorder attached to PPL's meter sufficiently accurate for use by PJM in its ancillary markets, or is redundant metering required to meet PJM standards?*

As discussed, above, in response to Question 4, it is PPL Electric's understanding that participation in PJM's ancillary markets requires functionality beyond the simple measurement of usage and, therefore, does not involve PPL Electric's AMI system. PPL Electric's existing AMI system does meet PJM's requirements for participation in its demand response programs. Redundant metering is not required.

7. *What are the additional customer costs associated with (1) transferring pulse meter information from the meter to inside the customer's premise, (2) processing this data into usable format, (3) communicating the data to a third party or PJM?*

PPL Electric is unable to anticipate and estimate all of the different needs of customers and their third-party consultants regarding meter pulse data. As noted in response to Question 4, above, it is PPL Electric's understanding that while in some cases the desire is driven by a need to track real-time energy consumption and demand, in other cases the pulses are used as direct inputs to an energy management system. Each customer's circumstances are different and costs to transfer pulse meter information from the meter to inside the customer's premise can vary significantly depending on the customer's meter location and needs.

PPL Electric's KYZ pulse equipped recorder meter provides a standard KYZ format and a polling format for direct meter data connections that is consistent with PJM protocols. At this point, the data is in a format that is compatible with standard data integration and control protocols. However, customers, and third-parties acting on behalf of consultants, may have various other requirements, depending upon the market in which they are participating and the nature of their participation.

For example, PPL Electric is working with an entity seeking to place thermal storage heating systems into PJM's regulation market. As described above, this market requires direct telemetering of data and PPL Electric's understanding is that the vendor will be accomplishing this with a single control module that operates the heating system in accordance with the signal

received from PJM, meters the system's use, and provides necessary data to PJM. In this application, PPL Electric's advanced metering infrastructure will not be used to facilitate participation in the regulation market; however, it will be used to permit the customer to utilize the enhanced control capability to also purchase retail electricity in real-time.

The majority of customers that request KYZ pulses are participating in a PJM demand response program through a curtailment service provider (CSP). End-use customers cannot participate in a PJM program on their own unless they register with PJM as a CSP. Many of the CSP's in the market utilize the KYZ pulses to meet their specific needs by connecting the pulses directly to their own computer software. These costs are typically not billed directly to the participating customers, but are instead addressed in their service contract with the CSP.

8. *To the extent a customer requests sub-hourly data, what if any cost recovery charge is appropriate, For example, would it be appropriate to have a customer charge that varies with the level of sub-hourly metering requested, and if so, what would those sub-hourly metering charges be?*

Currently, there is not a customer charge for KYZ pulse data. PPL Electric is not proposing to add a customer charge for this service at this time. However, if the Company is asked to provide sub-hourly data through the current AML system, a customer charge may be required and full recovery for all incremental costs would be necessary.

In terms of benefits, PPL Electric has concluded from its research that its current approach to 15-minute and shorter interval usage data does not limit the ability of customers to access the benefits that may be available to them in the PJM ancillary services and demand reduction markets. PPL Electric understands that 15-minute interval data may have benefits to EGSs and third parties in designing rates and in their management of demand-reduction programs, but has no information to allow it to quantify those benefits. Finally, the Company has, itself, on certain occasions, used higher resolution data captured from a premise for short periods to investigate customer complaints or power delivery issues, rather than dispatching a technician and leaving expensive equipment at the premise. However, the Company is not aware that its current approach creates a barrier to customers achieving such benefits.

The cost/benefit issue is, therefore, to identify the least costly approach to achieving a fixed set of benefits. As noted above, the cost of providing KYZ pulses is approximately \$475 per customer while the cost of upgrading the entire small C&I class of customers to 15-minute capability is \$1,753,000 plus \$20,000 per year. Ignoring the annual cost of \$20,000 and comparing only undiscounted first costs, one would have to anticipate about 3,700 customers (i.e., \$1,753,000/\$475) desiring 15 minute data to economically choose a class wide solution over a customer specific solution. There are 575

customers with KYZ pulse equipped recorder meters, of which 307 customers are in the small C&I class. The Company believes that, on the basis of this information and in consideration of the fact that the need for KYZ pulse data is driven by specific commercial needs, its current approach is more appropriate than incurring the cost of upgrading all of the meters in the small C&I class.

9. On-board meter storage of meter data.

PPL Electric's originally deployed AMI utilizes meters with sufficient storage to provide billing data when required even though only 24 hours of data is stored in the meter itself. Additionally, the infrastructure complies with nationally recognized non-proprietary standards that are referenced in the Implementation Order.

Residential meters that were originally deployed as part of PPL Electric's AMI are capable of storing 24 values of hourly load profile data. The Company's power line communication system acquires that information every 8 hours on a daily basis. Newer meter modules can store over 30 days of hourly values. The Company is upgrading its meter population annually through normal meter purchases related to new construction, meter replacements and customer requests. Because the vendor's standard meter has greater storage capability than those deployed, the meter population is gradually being upgraded with meters capable of storage, at the meter level, of at least 7 days of daily data and over 30 days of hourly data.

A pilot will be conducted to test the ability to acquire any or all of those 30 days of data and revalidate it in the meter data management system (MDMS). Development and planning for this pilot will begin in the second half of 2011 and the pilot is expected to end in late 2012. After further review of the project requirements, the estimated costs to complete changes required in the meter read schedule and validation processes have increased to \$285,630. The pilot includes (1) software application changes and upgrades to the smart meter infrastructure and the MDMS, (2) changes to business processes for validation, editing and estimation of billing and presentation data, (3) software and programming, (4) evaluation of pilot results, (5) development of an implementation plan, and (6) reporting of results and an implementation plan to the Commission.

10. Open standards and protocols that comply with nationally recognized non-proprietary standards.

The Company's current AMI deployment can support the open standards and protocols that are recognized nationally. PPL Electric plans to continue incorporating open standards and protocols into the Company's use of smart meter technology. It will accomplish this by monitoring the progress of Smart Grid Standards as guided by the National Institute of Standards and Technology ("NIST") and incorporating those evolving standards into its smart meter and smart grid system.

At the time the Company initially filed its Smart Meter Plan, the Company planned to explore incorporating IEEE 802.15.4 compliant Zigbee communications into a home

area network through a pilot beginning in 2010 and concluding in 2011. Instead, as the result of technology evolutions since that initial filing, the Company plans to incorporate IEEE 802.11 compliant wireless local area network (WLAN) communications into a home area network pilot. The Company believes that this protocol will be more generally accepted in the future than Zigbee communications. Although PPL Electric does not have specific statistics, it believes many of the Company's customers already have WLAN communications in their home and devices that communicate over WLAN. An update to the Zigbee communication standard is expected to be released in late 2011, and it is anticipated that this new standard will not be backwards compatible with the current standard. Therefore, Zigbee devices on the market today will be obsolete by the end of this year.

The pilot will begin in October 2011 and continue through August 2012. The pilot will provide customers with an in-home display on which they can view their real-time energy usage while they are in their home. There is the potential for future pilots in this area that would incorporate the ability to control customers' end-use devices such as thermostats and appliances, but this initial pilot, as scoped, will focus on understanding the technology and benefits of providing customers with direct real-time access to their energy and cost information.

The estimated cost of this pilot is \$433,761 which includes (1) establishment of pilot objectives, (2) providing price and consumption information to the customer, (3) evaluate bi-directional communications to end-use devices, (4) inviting customers to participate in the pilot, (5) providing the meter and in home display hardware including any equipment installation, (6) software and programming, (7) evaluation of pilot results and development of an implementation plan, and (8) reporting of results to the Commission.

If the pilot confirms the feasibility and economic viability of this approach, then a potential annual deployment to an anticipated 10,000 customer enrollment from 2012-2014 may result in a total estimated implementation cost of \$4,245,000.

11. Ability to upgrade these minimum capabilities as technology advances and becomes economically feasible.

PPL Electric's smart meter infrastructure possesses the ability to upgrade firmware and communication systems for compliance with new standards and protocols. The Company's plan addresses technology advances discussed below.

General Obsolescence and Upgrade Issues

Over the next five years, PPL Electric will conduct technological and economic evaluations on potential applications that can enhance the performance of the existing AMI components, as well as the next generation of smart meter system technologies and Smart Grid integration. These evaluations will consider the obsolescence of the communications infrastructure equipment and meters, and their replacement with new technology that enables PPL Electric to extend the minimum requirements and support

the additional capabilities required by the Commission. Additionally, the Company will consider new applications that complement the capabilities of the existing system.

In 2011, PPL Electric plans to complete a thorough evaluation of the existing power line smart meter infrastructure and its ability to support enhancements that may extend the minimum requirements and support additional requirements. The evaluation will be completed by the end of 2011 and will result in an AMI technology roadmap that will allow the Company to plan for upgrades. The estimated cost for the evaluation is \$265,000. Depending on the outcome of the evaluation, there is a potential cost of \$3,075,000 to deploy upgrades.

In 2010, PPL Electric completed a telecommunications substation modem evaluation to determine the optimal method to bring meter data back to the central processing point from substations. The Company retrieves meter data from the meter to the substation through the power line carrier system. Previously, at the substation, the data was compiled and sent back to the Company through leased telephone lines. The evaluation in 2010 determined that this was not optimal method to collect this data from the substations. This method has long term operational concerns and is very costly. The Company determined that bringing the data back from substations through cellular modems or fiber were the best options. At substations with PPL Smart Grid capabilities, the Company will bring the data back through fiber optic cable already located at the substation for the PPL Smart Grid project. At all other substations, the data will be brought back through cellular modems. This project will be completed by the end of 2011. The total cost of this project is expected to be \$553,785.

In 2011, the Company plans to evaluate adding or replacing equipment to enhance data capture and accommodate new end-use devices. The Company will evaluate the addition of two different pieces of equipment at substations: (1) additional modulation transformer units (MTU) and (2) new Substation Control Processing Assembly (SCPA) G2 boards. Thus far, the Company has completed the MTU evaluation and has determined that it is not cost effective to install additional MTU's at substations with only one MTU. Additional MTU's help the Company continue to obtain meter readings during maintenance at the substation. The Company determined it would be more cost effective to build three mobile MTU trailers that could be installed at the substation when maintenance needs to be performed and removed once the maintenance is completed. This will allow greater flexibility during maintenance at the substation at a reasonable cost. The cost to build the mobile MTU trailers and develop training for installing them at the substation is \$235,800. This work is planned for 2012. Currently, the Company has SCPA 93 boards at substations. These boards process all of the commands and data coming in and out of substations. This technology was developed in 1993. The SCPA G2 board is the next generation technology. The Company plans to evaluate the costs and benefits of the newer technology in the later half of 2011.

In 2012, the Company plans to evaluate operational improvements to the AMI back office system and how the system identifies the path of a meter. The evaluation will cost approximately \$25,000. Depending on the evaluation, there is a potential implementation cost of \$200,000.

The results of all of the evaluations described above could enable PPL Electric to avoid the complete replacement of its AML, which is estimated to cost between \$380 and \$450 million depending on the functionality and system deployed. The Company believes that the implementation costs for simply upgrading its existing AML's meter reading application and associated IT related hardware will be only about \$3 to \$5 million.

Momentary Outage Monitoring

PPL Electric currently captures and reports customer momentary interruption data ("blink counts") which can be used to resolve customer power quality issues. In fact, PPL Electric personnel are currently using these blink counts to resolve customer complaints regarding power quality and reliability. The Company expects to continue the use of these blink counts and become more proactive in understanding emerging power quality issues and in addressing them prior to a customer contacting PPL Electric. This would be accomplished through the aggregation of blink count data in a meaningful way to aid in determining the approximate location of the device that operated to cause the "blinks". This pilot was planned to begin in 2011 with potential implementation of initiatives in 2012. The schedule has changed slightly to begin project planning in late 2011, pilot in early 2012 and implement, if appropriate, in 2013. The objectives of the pilot will be to (1) develop and enhance business processes that actively review customer blink information and (2) assure that automation of the processes is implemented for ease of application of the information for all business users.

The estimated cost to conduct this pilot is \$78,420, which includes, (1) establishment of evaluation objectives, (2) software and IT programming, (3) evaluation of the results, (4) establishment of recommendations for implementation, and (5) reporting results and plans to the Commission. If the pilot is successful, implementation of proactive momentary outage capture will result in an estimated cost of \$86,580 in the 2012 to 2013 period.

Service Limiting/Service Extending

This functionality is supported by PPL Electric smart meter infrastructure. Service extending can be accomplished through the use of a meter with a service disconnect and service limiting intelligence at the customer's premise. This functionality limits the current (amps) level to the premise, thereby allowing essential loads to stay on for the customer. A service extender allows a customer to maintain a minimum level of service rather than termination of service due to non-payment of bills. The Company recognizes that, while this capability was included in the Commission's Tentative Order, the PUC has not required EDCs to evaluate this capability. However, the Implementation Order does not preclude further consideration of this functionality. Therefore, PPL Electric desires to work directly with Commission staff and interested parties on the objectives for a pilot to evaluate a service extending program. The objectives would take into consideration the design guidelines approved by the Commission in its June 20, 1985 Secretarial Letter, which approved BCS's recommendations related to service limiters.

PPL Electric will conduct a pilot to deploy this enhanced capability at 500 customer accounts from 2013 through 2014. This pilot will enable PPL Electric to evaluate the effectiveness and potential benefits of this capability for payment troubled customers, while addressing the public policy issues reflected in the Commission regulations.

The Company will begin developing a project plan and requirements for this pilot in 2012. The estimated cost to begin pilot development is \$10,000.

The expected high level benefits are that service extending (1) maintains service to and reduces revenue loss from customers with an inability to pay their bills, (2) improves customer payment behavior resulting in fewer service terminations, (3) provides basic current (amperage) levels for essential loads to keep customers in service from April 1st to November 30th and (4) lowers costs by reducing the need to dispatch personnel to disconnect and reconnect meters.

Prepay Metering

Prepay metering will enable a customer to make wise energy consumption decisions based on a "pay-as-you-go" approach. PPL Electric recognizes that, while this capability was included in the Commission's Tentative Order, the Commission has not required EDCs to evaluate this capability in the Implementation Order. However, the Implementation Order does not preclude further consideration of this functionality. In fact, the Commission's proposed revisions to 52 Pa. Code Chapter 56 do include a section on the use of pre-pay meters. PPL Electric desires to work directly with Commission staff and interested parties on the objectives for a pilot to evaluate the benefits of this type of program.

A pilot will be conducted in 2013 that will be offered to 500 residential customers. The program will be non-discriminatory and identified as an energy conservation initiative similar to programs at Salt River Project and Brunswick EMC. These companies have demonstrated that customers become much more aware of their electric consumption if they experience the actual purchase in near real time. Through the planning and pilot implementation the Company will also assure that public policy issues reflected in the Commission regulations are addressed.

The Company will begin developing a project plan and requirements for this pilot in 2012. The estimated cost to begin pilot development is \$10,000.

The expected high level benefits are that pre-pay metering will (1) contribute to a reduction in the customer's energy consumption, (2) enable customers to learn how to manage their electric energy payments, (3) enhance customer payment behavior, and (4) reduce the need to dispatch personnel to disconnect and reconnect, and reduce associated costs.

12.Ability to monitor voltage at each meter and report data in a manner that allows an EDC to react to the information.

PPL Electric collects voltage information as required for specific engineering review. Industrial and commercial meters also offer more precise voltage, current and relational phase-angle information and the Company uses this information to diagnose meter and service issues.

PPL Electric will use the power line carrier (PLC)-based existing smart meter technology and infrastructure to improve the measurement, collection and analysis of voltage information to enhance PPL Electric's distribution system reliability. Also, the Company's wireless based large power meters offer more precise voltage, current and relational phase-angle information and the Company will be enhancing the use of that information for the diagnosis of meter and service issues. To further the use and expansion of these two systems for voltage monitoring and reporting, this enhancement will be implemented in 2010 and 2011 for the large power meters and a pilot will be conducted in 2011 and 2012 with the PLC-based system. The estimated cost of the large power meter information enhancement is \$135,385. The large power meters project was partially completed in 2010 and will be continuing through the end of 2011. Back-end system enhancements not originally contemplated were required to achieve the full benefits of the project.

The Company prepared for the PLC-based pilot in 2010 to better coordinate defining the Company's voltage requirements. Development of the pilot is currently underway and it is expected to launch in November 2011. The Company's Smart Meter Team and its Smart Grid Team are coordinating efforts to determine the most cost-effective approach to meeting the Company's voltage requirements. The estimated cost for the PLC-based pilot is \$136,619 which includes (1) determining the feasibility of gathering this new information by performing an impact analysis on the smart meter infrastructure to ensure there are no performance issues, (2) exporting the data collected into a meter data management system to provide a facility for engineers to access and apply the data in business applications, (3) software and IT programming, (4) establishment of implementation plan, and (5) reporting the results and implementation plans to the Commission. If the PLC-based pilot is successful, it is expected that implementation will occur in 2012 at an estimated cost of \$134,100.

13.Ability to remotely reprogram the meter.

PPL Electric has the ability, with its smart meter infrastructure, to remotely program communication equipment and newer meters in the system. The Company has demonstrated this capability in several applications.

14.Ability to communicate outages and restorations.

The Company's current deployment is integrated with its OMS to permit a more accurate determination of the extent of an outage and provide the ability to restore customers more quickly than would otherwise be possible. As it moves forward with its

Smart Meter Plan, PPL Electric will continue to seek ways to incrementally improve proactive outage detection over the life of the systems.

In 2011, PPL Electric will conduct a pilot to further enhance use of the existing AMI's capabilities. Development of the pilot is currently underway and it is expected to launch in November 2011. The objective of the pilot will be to determine the system-wide feasibility of using the power line system for proactive meter outage detection for the purpose of distribution system health checks and proactive outage detection.

The estimated cost of the evaluation, pilot and implementation is \$175,271, which includes (1) improving the accuracy of existing meter queries ("pings") through the investigation and mitigation of performance issues, (2) integration of SCADA data to proactively "ping" customers' meters to assess service health, and (3) optimize "ping" services to more actively assess outage conditions and dispatch personnel where required. If the pilot is successful, it is expected that implementation will occur in 2012 at an estimated cost of \$29,500. This cost has increased from the Company's original estimate due to higher than expected vendor costs.

15. Ability to support net metering of customer-generators.

The smart meter infrastructure deployed by PPL Electric supports this capability and is utilized today to acquire all the point of contact and generation quantities.

PPL Electric piloted, in 2010 and 2011, the functionality and performance of new bi-directional meters in its infrastructure that measure energy flow at the PPL Electric point of contact. The pilot consisted of 400 bi-directional meters in the power line smart meter system that will provide net energy usage on an interval basis measuring both delivered and received energy flowing to the Company's grid. All residential customers with installed generation now have a bi-directional meter and a process has been established to ensure that customers who install generation in the future receive a bi-directional meter. In addition, the bi-directional meter is now the Company's standard meter for new installations and meter changes. For the remainder of the year, the Company will be exploring the best meter option for small three-phase C&I customers that have generation installed.

Within the pilot, it was determined that minimal changes were required to PPL Electric's MDMS and customer information and billing system to accept delivered and received energy usage. Therefore, the estimated cost to conduct this pilot and implementation is significantly less than previously expected. Total costs in 2010 and 2011 are expected to be \$176,345. This includes (1) upgrading existing net metering customers with the new power line meter, (2) meter hardware and installation, (3) software and IT programming to accept and validate energy data, (4) evaluation of pilot results, and (5) development of an implementation plan.

In addition, the Company has implemented new business processes to ensure that new net metering customers have the correct meter installed and that the meters of existing net metered customers are changed as appropriate. The cost of meter changes will be

recovered through base rate proceedings outside of the plan. This eliminates the need for capital expenditures for these meter changes in 2012 through 2014 in the Smart Meter Plan.

16. Smart Meter Rider

Pursuant to the Commission's June 24 Order, PPL Electric also submits in this filing proposed Smart Meter Rider ("SMR") charges to be effective for service rendered on and after January 1, 2012. A copy of the proposed 2012 SMR with supporting calculations is attached hereto as Attachment 4. Consistent with PPL Electric's tariff and the Commission's June 24 Order, those calculations are based upon an annual budget amount of all costs required for the Company to implement its SMP during the compliance year of January 1, 2012 through December 31, 2012. They also reflect a reconciliation of the Company's SMR charges as of the end of the 12-month period ending June 30, 2011.

IV. CONCLUSION

As explained above, PPL Electric has made several modifications to its original Smart Meter Plan filing in response to the Commission's June 24 Order and, also, in response to technology evolutions that have occurred since the Company initially filed its Plan. PPL Electric is working to ensure that it provides its customers all of the smart meter functionality required under Act 129 in a cost-effective manner.

ATTACHMENT 1

PPL Electric Utilities Smart Meter Milestone Plan

PPL Electric Smart Meter Program Milestone Plan

- [1] Pilot was delayed due to resource constraints with outside vendors.
- [2] Implementation was delayed due to resource constraints with outside vendors.
- [3] Evaluation was added to further evaluate the benefits of remote disconnect/reconnect functionality.
- [4] Pilot is delayed to further evaluate the benefits of remote disconnect/reconnect functionality.

ATTACHMENT 1

PPL Electric Smart Meter Program Milestone Plan																
	2010				2011				2012				2013			
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
6 C(4): Open standards and protocols																
1. In-Home Display/Home Area Network																
- Evaluate available technologies and requirements																
- Conduct Pilot with 500 customers																
- Implementation																
6 C(5): Ability to upgrade these minimum capabilities as technology advances and becomes economically feasible																
1. General Obsolescence and Upgrade Issues																
- Next generation PLC based system evaluation																
- Potential next generation PLC based system implementation																
- Evaluation next generation AML technologies/Smart Grid integration																
- Assessment of existing PLC based functionality																
- Telecommunications Substation Modern evaluation & replacement																
- Real Time Path mapping in PLC based system [5]																
» Evaluate feasibility and potential design																
» Implement/evaluate results of proof of concept design																
» Implement full scale																
- PLC based system enhancements																
a. Consider addition of Modulation Transformer Units(MTU)																
» Evaluate the benefits for additional MTUs																
» Implement additional TWACS Trailers																
b. Consider deployment of SCPA G2 Boards																
» Evaluate the benefits for new SCPA boards																
» Install SCPA boards																
2. Service Extending																
- Conduct pilot - 500 customers [6]																
3. Prepay Metering																
- Conduct pilot - 500 customers [7]																
- Implementation																
4. Momentary Outage Monitoring																
- Conduct pilot																
- Implement recommendations																

[5] Evaluation delayed to leverage findings from Proactive Outage Detection pilot.

[6] Beginning project scoping in 2012.

[7] Beginning project scoping in 2012.

ATTACHMENT 1

[illegible][illegible]

ATTACHMENT 2

PPL Electric Utilities Smart Meter Plan Budget

ATTACHMENT 2

PPL Electric Smart Meter Program Budget	2010	2011	2012	2013	2014	Total
6 B(1): Bidirectional data communications capability						
1. Demonstration of this functionality will be provided in conjunction with home area network pilot to be completed in Section 6 C(4).						
6 B(2): Recording usage data on an hourly basis at least once per day						
1. PPL Electric does not anticipate any incremental costs to be expended except for meter replacement under normal conditions such as damage to the meter, defective meters and customer requests.						
6 B(3): Provide customers with direct access to price and consumption information						
1. Messaging - Price and usage information						
- Evaluate various channels of customer communications	\$18,729					\$ 18,729
- Pilot		\$199,513	\$111,108			\$ 310,621
2. Demonstration of this functionality will be provided in conjunction with home area network pilot to be completed in Section 6 C(4).						
6 B(4): Provide customers with information on their hourly consumption						
1. Work with customers, EGSs and 3rd parties to provide hourly consumption that is in clear and understandable formats. Estimated costs to be quantified later during 30 month grace period.						
6 B(5): Enabling TOU and RTP Price Programs						
1. Demonstration of capability to comply with this requirement for RTP with industrial and commercial accounts 500 KW and greater to be completed in conjunction with work to be done in Section 6 C(2).						
6 B(6): Supporting automatic control if the customer's electric consumption						
1. Load Control Evaluation						
- Conduct pilot of 500 Customer installations	\$36,851	\$563,238				\$ 600,089
- System Implementation			\$2,787,176	\$2,682,760	\$2,682,760	\$ 8,152,696
6 C(1): Remote disconnection and reconnection						
- Conduct pilot- 500 customer installations		\$47,050	\$537,248			\$ 584,298
- Implementation				\$5,500,000	\$5,500,000	\$ 11,000,000
6 C(2): Ability to provide 15 minute or shorter interval data						
1. Performance evaluation of Focus UMT-r meters						
- Conduct pilot with 500 meters	\$10,507	\$29,939				\$ 40,446
6 C(3): On-board meter storage of meter data						
1. Ability to read historical data/process IT						
- Design/development & pilot with Aclara		\$15,630				\$ 15,630
- MDM capability to upload and re-VEE data			\$270,000			\$ 270,000
6 C(4): Open standards and protocols						
1. In-Home Display/Home Area Network						
- Evaluate available technologies and requirements	\$16,761					\$ 16,761
- Conduct Pilot with 500 customers		\$417,000				\$ 417,000
- Implementation			\$1,508,333	\$1,368,334	\$1,368,334	\$ 4,245,001
6 C(5): Ability to upgrade these minimum capabilities as technology advances and becomes economically feasible						
1. General Obsolescence and Upgrade Issues						
- Next generation PLC based system evaluation		\$265,000				\$ 265,000
- Potential next generation PLC based system implementation			\$1,500,000	\$1,500,000		\$ 3,000,000
- Evaluation next generation AMI technologies/Smart Grid integration			\$25,000	\$25,000	\$25,000	\$ 75,000
- Assessment of existing PLC based functionality	\$12,982					\$ 12,982
- Telecommunications Substation Modem evaluation and replacement	\$333,962	\$219,823				\$ 553,785
- Real Time Path mapping in PLC based system						
» Evaluate feasibility and potential design			\$25,000			\$ 25,000
» Implement/evaluate results of proof of concept design			\$50,000			\$ 50,000
» Implement full scale			\$150,000			\$ 150,000
- PLC based system enhancements						

ATTACHMENT 2

PPL Electric Smart Meter Program Budget	2010	2011	2012	2013	2014	Total
a. Consider addition of Modulation Transformer Units(MTU)						
» Evaluate the benefits for additional MTUs		\$17,525				\$ 17,525
» Implement additional TWACS Trailers			\$235,800			\$ 235,800
b. Consider deployment of SCPA G2 Boards						
» Evaluate the benefits for new SCPA boards		\$17,525				\$ 17,525
» Install SCPA boards			\$454,250	\$410,450		\$ 864,700
2. Service Extending						
- Conduct pilot - 500 customers			\$10,000	\$196,250	\$196,250	\$ 402,500
3. Prepay Metering						
- Conduct pilot - 500 customers			\$10,000	\$332,500		\$ 342,500
- Implementation					\$3,250,000	\$ 3,250,000
4. Momentary Outage Monitoring						
- Conduct pilot		\$13,550	\$64,870			\$ 78,420
- Implement recommendations			\$36,580	\$50,000		\$ 86,580
6 C(6): Ability to monitor voltage at each meter						
1. Wireless-based system enhancement	\$71,027	\$64,358				\$ 135,385
2. Voltage measurement/collection/ reporting in PLC-based system						
- Pilot	\$4,329	\$132,290				\$ 136,619
- Full scale implementation			\$134,100			\$ 134,100
6 C(7): Remote programming capability						
To be demonstrated in conjunction with work to be completed in Section 6 C(5).						
6 C(8): Communicate outages and restorations						
1. Proactive outage detection						
- Assess options to determine how to become more proactive with outage detection	\$2,630					\$ 2,630
- Implement pilot		\$172,641				\$ 172,641
- Implement plan			\$29,500			\$ 29,500
6 C(9): Ability to support net metering of customer generators						
1. Evaluate feasibility customer owned generation with TNS						
- Conduct pilot with Focus UMT-r meters - 100 meters	\$77,666					\$ 77,666
- Implementation		\$98,679				\$ 98,679
Program Management	\$395,846	\$433,416	\$433,416	\$433,416	\$433,416	\$ 2,129,510
Total	\$ 981,290	\$ 2,707,177	\$ 8,372,381	\$ 12,498,710	\$ 13,455,760	\$ 38,015,318

ATTACHMENT 3

PPL Electric Utilities Corporation Smart Meter Plan Pilot/Evaluation

6B(1)
Bidirectional Data Communications

Pilot/Evaluation	<ul style="list-style-type: none">• Perform evaluations using in-home displays with home area networks in coordination with the pilot referenced in section 6C(4)
Estimated Cost of Pilot/Evaluation	<ul style="list-style-type: none">• Estimated cost of this pilot is outlined in Section 6C(4)
Pilot/Evaluation Plan	<ul style="list-style-type: none">• Pilot description is outlined in Section 6C(4)
High Level Benefits	<ul style="list-style-type: none">• Benefits are described in Section 6C(4)

6B(2)

Recording hourly usage data on at least an hourly basis

Pilot/Evaluation	<ul style="list-style-type: none">• None to be performed, because PPL Electric's existing power line and large power smart meter systems already meet this requirement.
Estimated Cost of Pilot/Evaluation	<ul style="list-style-type: none">• Not applicable.
Pilot/Evaluation Plan	<ul style="list-style-type: none">• Continue to deploy meters for new construction, upon customer request, and to replace damaged and defective meters.
High Level Benefits	<ul style="list-style-type: none">•

6B(3)

Provide customers with direct access to and use of price and consumption information

Pilot/Evaluation	<ul style="list-style-type: none">• Perform pilot using in-home displays with home area networks in coordination with the pilot referenced in section 6C(4).• Another initiative is intended to evaluate and pilot various communication mediums. PPL Electric already provides electronic access to price and consumption information today via their website and through EDI transactions. However, the Company would like to experiment with enhancements that include alerts on price and/or consumption, as well as rate comparisons. These proposed pilot evaluations would include tests of communication channels such as near real-time email, phone messages, and text messages to customers.
Estimated Cost of Pilot/Evaluation	<ul style="list-style-type: none">• \$329,350 to evaluate and pilot various communications mediums
Pilot/Evaluation Plan	<ul style="list-style-type: none">• Evaluation of available technologies in 2010• Pilot in 2011 and 2012 of the following:<ul style="list-style-type: none">◦ Messaging to multiple communication channels◦ Deployment of software and required licensing from chosen vendor
High Level Benefits	<ul style="list-style-type: none">• Customers will derive increased understanding and awareness of energy usage, which lead to better energy management.

6B(4)

Provide customers with information on their hourly consumption

Pilot/Evaluation	<ul style="list-style-type: none">• PPL Electric provides its customers with information on hourly consumption from its AMI. This data is provided on a daily basis to the PPL Electric meter data management system that enables customers to access their individual information on the web.• The Company also provides hourly consumption through EDI transactions to EGS's and third parties.• No pilot currently is planned.
Estimated Cost of Pilot/Evaluation	<ul style="list-style-type: none">• N/A
Pilot/Evaluation Plan	<ul style="list-style-type: none">• No pilot currently is planned.
High Level Benefits	<ul style="list-style-type: none">• If a future pilot is required, benefits will need to be determined and reported back to the Commission.

6 B(5)
Enabling TOU and RTP Programs

Pilot/Evaluation	<ul style="list-style-type: none">• In 2010, conduct a performance evaluation with the Company's AMI to determine the feasibility of collecting and delivering 15-minute data at a high success rate for RTP billing for large power customers greater than 500 KW in demand. This evaluation will be conducted in coordination with Evaluation #1 discussed in Section 6C (2). Due to billing system limitations for real-time pricing, PPL Electric determined that it was most cost effective to read the accounts with greater than 500 kW demand with the large power meter wireless system. This amounted to 320 accounts and was completed in 2010 outside of the Plan.
Estimated Cost of Pilot/Evaluation	<ul style="list-style-type: none">• N/A
Pilot/Evaluation Plan	<ul style="list-style-type: none">• N/A
High Level Benefits	<ul style="list-style-type: none">• N/A

6 B(6)

Supporting the automatic control of the customer's electric consumption

Pilot/Evaluation	<ul style="list-style-type: none">• PPL Electric will be conducting a pilot to further extend the benefits of the currently deployed AMI to demonstrate how it meets this minimum requirement. This will be accomplished by installing load control devices on air conditioning systems and water heaters. Pilot planning began in 2010 and the pilot will be completed in 2011.
Estimated Cost of Pilot/Evaluation	<ul style="list-style-type: none">• \$600,089
Pilot/Evaluation Plan	<ul style="list-style-type: none">• Establish pilot objectives• Invite 500 customers to participate in the pilot• Purchase and install load control devices• Develop/implement required software and IT programming changes and licensing• Evaluate pilot results• Establish potential implementation plan• Report results and proposed implementation plan to the Commission
High Level Benefits	<ul style="list-style-type: none">• Allows customer to take advantage of TOU rate options• Enables customers to shed load during periods of peak pricing• Provides capability for PPL Electric to shed load during emergency load reduction events called by PJM to maintain system reliability
Potential Implementation	<ul style="list-style-type: none">• If the pilot is successful, then a potential deployment with an anticipated 5,000 customer enrollment annually may result in total estimated implementation cost of \$8,152,696 from 2012-2014.

6C(1)**Ability to remotely disconnect and reconnect**

Pilot/Evaluation	<ul style="list-style-type: none">• PPL Electric will conduct an evaluation in 2011 to determine the costs and benefits of remote disconnect/reconnect functionality within their service territory.• If justified by the cost benefit analysis, the pilot will be conducted in 2012 and would enable "hard" blocking of all accounts in the pilot, excluding terminations for non-payment, and all connects and reconnections.
Estimated Cost of Pilot/Evaluation	<ul style="list-style-type: none">• \$584,298
Pilot/Evaluation Plan	<ul style="list-style-type: none">• Establish pilot objectives• Identify locations for pilot meter installs• Purchase of meter hardware and installation• Develop/implement required software and IT programming changes and licensing• Evaluate pilot results• Establish potential implementation plan• Report results and proposed implementation plan to the Commission
High Level Benefits	<ul style="list-style-type: none">• Contributes to the reduction in consumption on inactive meters• Eliminates need to dispatch personnel to disconnect and reconnect• Provides ability to comply with Commission regulations in normal connect/disconnect situations• Provides ability to enable cold load pickup resulting from emergency load reductions or in large storm restoration effort• Automates the process for completing connects and disconnects• Has the potential to support emergency load reductions as directed by PJM and/or PPL Electric's Systems Operations especially where automatic switching is not available.
Potential Implementation	<ul style="list-style-type: none">• If the pilot is successful, then a potential deployment to an estimated 50,000 customer locations from 2013 - 2014 may result in total estimated implementation cost of \$11,000,000.

6C(2)**Ability to provide 15-minute or shorter interval data**

Pilot/Evaluation	<ul style="list-style-type: none">• A pilot was conducted 2010 and 2011 to determine the feasibility of providing 15-minute interval data in the power line smart meter infrastructure using installed meters that have the capability to be configured for 15-minute data collection at the small commercial customer level. In addition, a scalability test was completed to determine if PPL Electric's power line system can handle reading 15-minute data from all small commercial accounts without significant investment into the power line system.• Based on the pilot, a cost benefit analysis was completed to determine the economic viability of implementing 15-minute interval data to all small commercial customers through the Company's power line carrier system.
Estimated Cost of Pilot/Evaluation	<ul style="list-style-type: none">• \$40,446
Pilot/Evaluation Plan	<ul style="list-style-type: none">• Remote reconfiguration of installed smart meters from 60 minute interval data to 15-minute interval data collection• Scalability test• Evaluate pilot results• Cost Benefit Analysis• Development of recommendations• Report results and an implementation plan to the Commission.
High Level Benefits	<ul style="list-style-type: none">• Determine the most cost-effective method for providing customers with interval data to meet the needs of customers, third-party aggregators and EGS's
Potential Implementation	<ul style="list-style-type: none">• The Company proposes to maintain its current process of providing customers with 15-minute interval data upon request through KYZ pulses. Expected costs are \$9,500 per year.

6C(3)**On board meter storage of meter data**

Pilot/Evaluation	<ul style="list-style-type: none">• A pilot will be conducted to test the ability to acquire any or all of those 30 days of data and revalidate it in the meter data management system (MDMS). Pilot planning will begin in 2011 and the pilot will be conducted in 2012 and 2013.
Estimated Cost of Pilot/Evaluation	<ul style="list-style-type: none">• \$285,630
Pilot/Evaluation Plan	<ul style="list-style-type: none">• Implement software application changes and upgrades to the smart meter infrastructure and the MDMS• Implement changes to business process for validation, editing and estimation of billing and presentation data• Develop/implement required Company software and IT programming changes• Evaluate pilot results• Development of a potential implementation plan• Report results and proposed implementation plan to the Commission.
High Level Benefits	<ul style="list-style-type: none">• Tests the operation and performance of the meters' extended memory capabilities• Demonstrates the ability to support the on-board storage capability• Provides the ability to re-acquire lost data for more accurate billing information and data presentment
Potential Implementation	<ul style="list-style-type: none">• None planned, except for deploying normally purchased new meters to meet this requirement going forward in the smart meter plan. This plan will provide smart meters for new construction, customer requests, and replacement of damaged and defective meters.

6C(4)**Open standards and protocols that comply with nationally recognized non-proprietary standards**

Pilot/Evaluation	<ul style="list-style-type: none">• Conduct a home area network pilot trial beginning in 2010 and concluding in 2011 to develop the appropriate technology that meets customer requirements and expectations. The pilot will incorporate IEEE 802.11 compliant wireless local area network (WLAN) communications.
Estimated Cost of Pilot/Evaluation	<ul style="list-style-type: none">• \$433,761
Pilot/Evaluation Plan	<ul style="list-style-type: none">• Establish pilot objectives• Provide price and consumption information to the customer to aid in making energy efficient buying decisions• Evaluate bidirectional communications to the end-use devices• Invite 500 customers to participate in the pilot• Provide the meter and home display hardware including any equipment installation• Develop/implement any required software and IT programming changes• Evaluate pilot results• Development of a potential implementation plan• Report results and proposed implementation plan to the Commission
High Level Benefits	<ul style="list-style-type: none">• Contributes to the reduction of energy consumption through "conservation smart" automated home controls• Provides the basic hardware foundation for special rate initiatives such as critical peak pricing• Enables the customer to understand and control their energy consumption.
Potential Implementation	<ul style="list-style-type: none">• If the pilot is successful, then a potential annual deployment to an anticipated 10,000 customer enrollment from 2012 - 2014 may result in a total estimated implementation cost of \$4,245,001.

6C(5)

Ability to upgrade these minimum capabilities as technology advances and becomes economically feasible

Pilot/Evaluation	General Obsolescence and Upgrade Issues <ul style="list-style-type: none">• Over the next 5 years, PPL Electric will conduct technological and economic evaluations that can enhance the performance of the existing AMI components as well as on next generation smart meter system technologies and Smart Grid integration over the next five years. These evaluations will consider obsolescence of the communications infrastructure equipment and meters, replacement with new technology that enable PPL Electric to extend the minimum requirements and support the additional capabilities.
Estimated Cost of Pilot/Evaluation	<ul style="list-style-type: none">• \$463,032
Pilot/Evaluation Plan	<ul style="list-style-type: none">• Evaluate the existing power line smart meter infrastructure in 2011 that extend the minimum requirements and support the additional capabilities, as well as the proposed enhancements• Evaluate Smart Grid Integration over the period from 2011 to 2014 that extend the communication infrastructure's capability to backhaul AMI/Smart Grid data more effectively• Consider additional or new smart meter infrastructure equipment to enhance data capture and accommodate new end use devices• Continually evaluate the next generation of AMI technologies for applicability at PPL Electric.• Periodically report results and potential implementation plans to the Commission.
High Level Benefits	<ul style="list-style-type: none">• Effectively manage obsolescence of existing smart meter infrastructure• Positions PPL Electric for additional capabilities including Smart Grid related applications and operations• Improves efficiency in backhauling advanced meter data,• Avoids an investment of \$380 to \$450 million to deploy a new smart meter system and meters resulting in lower cost recovery from customers.
Potential Implementation	<ul style="list-style-type: none">• If the evaluations result in recommendations to implement technologies that improve system performance, the potential cost to deploy is estimated at \$4,804,285.

6C(5)

Ability to upgrade these minimum capabilities as technology advances and becomes economically feasible

Pilot/Evaluation	Service Limiting/Service Extending <ul style="list-style-type: none">• PPL Electric will conduct a pilot to deploy this enhanced capability at 500 customer accounts from 2013 through 2014. This pilot will enable PPL Electric to evaluate the effectiveness and potential benefits of this capability for payment-troubled customers, while addressing the public policy issues dealing with Commission regulations. Pilot planning will begin in 2012.
Estimated Cost of Pilot/Evaluation	<ul style="list-style-type: none">• \$402,500
Pilot/Evaluation Plan	<ul style="list-style-type: none">• Establish pilot objectives• Deploy at 500 selected customer locations• Purchase and installation of meter hardware with an integrated disconnect and service extending feature• Develop/implement required software and IT programming changes• Evaluate pilot results• Development of recommendations for implementation• Periodically report results and a proposed implementation plan.
High Level Benefits	<ul style="list-style-type: none">• Maintain service to and reduce revenue loss from customers with an inability to pay their bills• Improves customer payment behavior resulting in lower service termination and revenue loss• Provides basic current (amperage) levels for essential loads to keep customers in service from April 1 through November 30 resulting in a lower revenue loss• Lowers costs by reducing the need to dispatch personnel to disconnect and reconnect because the customer possesses the control to disconnect/reconnect safely when the current threshold is exceeded.
Potential Implementation	<ul style="list-style-type: none">• If the pilot is successful and approval is provided by the Commission, implementation will occur beyond the 5-year plan.

6C(5)

Ability to upgrade these minimum capabilities as technology advances and becomes economically feasible

Pilot/Evaluation	Pre-pay Metering <ul style="list-style-type: none">• PPL Electric will conduct a pilot in 2013 that will be offered to 500 residential customers. The program will be non-discriminatory and promoted as an energy conservation initiative similar to programs at Salt River Project and Brunswick EMC. These companies have demonstrated that customers become much more aware of their electric consumption if they experienced the actual purchase in near real time. Through the planning and pilot implementation the Company also will assure that public policy issues dealing with Commission regulations are addressed.• Pilot planning will begin in 2012.
Estimated Cost of Pilot/Evaluation	<ul style="list-style-type: none">• \$342,500
Pilot/Evaluation Plan	<ul style="list-style-type: none">• Establish pilot objectives• Invite 500 customer to participate in pilot• Purchase and installation of meter hardware with an integrated disconnect and in-home display• Develop/implement required software and IT programming changes• Evaluate pilot results• Development of recommendations for implementation• Periodically report results and a proposed implementation plan.
High Level Benefits	<ul style="list-style-type: none">• Contributes to reduction in the customer's energy consumption• Enables customers to effectively learn how to manage their electric energy payments• Enhances customer payment behavior• Reduces the need to dispatch personnel to disconnect and reconnect because the customer possesses the control to disconnect/reconnect safely when payment credits expire/recharged.
Potential Implementation	<ul style="list-style-type: none">• If the pilot is successful, PPL Electric expects to offer an opt-in program to all customers with an expected enrollment of 10,000 customers in 2014. The cost to implement this program is estimated at \$3,250,000.

6C(5)

Ability to upgrade these minimum capabilities as technology advances and becomes economically feasible

Pilot/Evaluation	Momentary Outage Monitoring <ul style="list-style-type: none">• PPL Electric plans to conduct a pilot in 2012 to further refine the use of momentary interruption (blink count) information to determine how blink information can be provided proactively. This would be accomplished through the aggregation of blink count data in a meaningful way to aid in determining the approximate location of the device that operated.
Estimated Cost of Pilot/Evaluation	<ul style="list-style-type: none">• \$78,420
Pilot/Evaluation Plan	<ul style="list-style-type: none">• Develop and enhance business processes that actively review customer blink information• Determine the most likely location of a momentary operation• Ascertain how the customer blink information can be incorporated into PPL Electric's outage management system to refine PPL Electric's outage detection analysis and post outage restoration• Assure that automation of the processes is implemented for ease of application of the information for all business users.• Develop/implement required software and IT programming changes• Evaluate the results• Development of recommendations for potential implementation• Report results and implementation plan to the Commission
High Level Benefits	<ul style="list-style-type: none">• Enables proactive messaging to Company engineers when the blink counts reach a specific threshold limit• Alerts the engineer that an issue may be occurring at the customer location or the feeder servicing that customer or group of customers• Enables engineers to take action to begin their investigation and contact the customer(s) to query if they are experiencing any issues as well as informing them that PPL Electric is working on it• Identifies and resolves device issues which have frequent momentary operations• Improves satisfaction of customers who experienced significant numbers of momentary interruptions.
Potential Implementation	<ul style="list-style-type: none">• If the pilot is successful, implementation of proactive momentary outage capture will result in an estimated cost of \$86,580 in the 2012 to 2013 period.

6C(6)**Ability to monitor voltage at each meters and report data in a manner that allows an EDC to react to the information**

Pilot/Evaluation	<ul style="list-style-type: none">• In 2010, PPL Electric began implementing an enhancement that applies more precise voltage, current and relational phase angle information from the Company's large power meters for diagnosing meter and service issues. Implementation will be completed in 2011.• The pilot will be conducted in 2011 and 2012 to further the measurement, collection and analysis of voltage information to enhance PPL Electric's distribution system reliability using the power line AMI system. In 2010, the Company began preparing for the pilot by evaluating their voltage requirements and needs.
Estimated Cost of Pilot/Evaluation	<ul style="list-style-type: none">• Large power meter information enhancement - \$135,385• PLC based pilot - \$136,619
Pilot/Evaluation Plan	<ul style="list-style-type: none">• Determine the feasibility of gathering this new information by performing an impact analysis on the AMI to ensure there are no performance issues• Export the data collected into a meter data management system which provides a facility for engineers to access and apply the data in business applications• Develop/implement required software and IT programming changes• Establish implementation plan• Reporting results and implementation plans to the Commission.
High Level Benefits	<ul style="list-style-type: none">• Application of voltage profiling information at a customer, transformer and circuit level will provide information on the health of an entire circuit• Use of this information will alert PPL Electric to customer voltage problems, thereby increasing customer satisfaction by correcting voltage issues on a proactive basis• Applications of voltage, current and relational phase angles information will proactively aid identification of defective metering equipment to avoid revenue loss• Will provide pertinent information to a smart grid strategy that will enable PPL Electric to reduce voltage when needed to maintain distribution system reliability• Will provide a framework for an accurate operational model, which will provide faster customer restoration, and more efficient system utilization.
Potential Implementation	<ul style="list-style-type: none">• If the PLC based pilot is successful, it is expected that implementation will occur in 2012 at an estimated cost of \$134,100.

6C(7)

Ability to remotely reprogram the meter

Pilot/Evaluation	<ul style="list-style-type: none">• PPL Electric will be evaluating ways to continue refining the power line smart meter infrastructure's remote programming capabilities. These evaluations are associated with the work described in Section 6C(5).
Estimated Cost of Pilot/Evaluation	<ul style="list-style-type: none">• The costs to complete these evaluations are included in Section 6C(5).
Pilot/Evaluation Plan	<ul style="list-style-type: none">• Demonstrate enhanced ability to reprogram meters• Upgrade the system's equipment firmware to improve performance• Consider potential equipment hardware upgrades to accommodate enhanced functionality.• Reporting results and implementation plans to the Commission.
High Level Benefits	<ul style="list-style-type: none">• Benefits are similar to that described in Section 6C(5).
Potential Implementation	<ul style="list-style-type: none">• Embedded in that described in Section 6C(5).

6C(8)

Ability to communicate outages and restorations

Pilot/Evaluation	<ul style="list-style-type: none">• PPL Electric will define roadmaps and conduct a pilot to further enhance use of the existing AMI's capabilities in 2012.• The objective of the pilot will be to determine the system-wide feasibility of using the power line system for proactive meter outage detection for the purpose of distribution system health checks and active outage detection.
Estimated Cost of Pilot/Evaluation	<ul style="list-style-type: none">• \$175,271
Pilot/Evaluation Plan	<ul style="list-style-type: none">• Establish pilot objectives• Demonstrate improvement in the accuracy of existing pings through the investigation and mediation of performance issues• Optimize ping services to more actively assess outage conditions and dispatch personnel where required• Reporting results and implementation plan to the Commission.
High Level Benefits	<ul style="list-style-type: none">• Implements proactive pinging of customers' meters to determine their outage status will help reduce outage times for customers, specifically for smaller outages, or outages where a customer would not normally report that they are out of service• Ability to know outage types and locations will more quickly allow PPL Electric to report that information to customers who do call in• Will provide a framework for more quickly performing proactive outage notification feature in the future for customers to elect that option.
Potential Implementation	<ul style="list-style-type: none">• If the pilot is successful, it is expected that implementation will occur in 2012 at an estimated cost of \$29,500. This cost has increased due to higher than expected vendor costs.

6C(9)**Ability to support net metering of customer generators**

Pilot/Evaluation	<ul style="list-style-type: none">• PPL Electric piloted, in 2010 and 2011, the functionality and performance of the new bi-directional meters in its infrastructure that measure energy flow at the PPL Electric point of contact. The pilot will consist of using 400 bi-directional meters in the power line smart meter system that will provide net energy usage on an interval basis measuring delivered and received energy flowing to the PPL Electric grid. The pilot customers will be existing net metering customers with older vintage meters.
Estimated Cost of Pilot/Evaluation	<ul style="list-style-type: none">• \$77,666
Pilot/Evaluation Plan	<ul style="list-style-type: none">• Identify approximately 400 existing net metering customers and replace their meter to the new standard power line meter• Meter hardware and installation• Develop/implement required software and IT programming changes for the AMI and MDMS• Evaluate pilot results• Establish an implementation plan• Report results and implementation plan to the Commission.
High Level Benefits	<ul style="list-style-type: none">• Supports the functional operation and performance capabilities of the power line smart meter infrastructure and bi-directional meters• Meets the intent of the Commission's Net Metering tariffs• Provides a feasible and economical meter solution to monitor AEPS renewable energy requirements through measurement of the generation output of applicable generation sources.
Potential Implementation	<ul style="list-style-type: none">• Implementation was completed to fully support net metering for customers with generation installed. Implementation costs are estimated at \$98,679 in 2011. This included meter changes. Within the pilot, it was determined that minimal changes were required to the Company's MDMS, customer information and billing systems. Therefore, the implementation costs are significantly less than expected.

ATTACHMENT 4
Smart Meter Rider (2012)



PPL Electric Utilities Corporation

GENERAL TARIFF

**RULES AND RATE SCHEDULES
FOR ELECTRIC SERVICE**

In the territory listed on pages 4, 4A, and 4B
and in the adjacent territory served.

ISSUED: August 1, 2011

EFFECTIVE: January 1, 2012

DAVID G. DeCAMPLI, PRESIDENT
Two North Ninth Street
Allentown, PA 18101-1179

NOTICE

THIS TARIFF MAKES (CHANGES) IN EXISTING RATES. SEE PAGE TWO.

LIST OF CHANGES MADE BY THIS SUPPLEMENT

CHANGES:

Smart Meter Rider (SMR)
Page No. 19Z.14

The charges under the SMR are set forth for the period January 1, 2012 through December 31, 2012.

PPL Electric Utilities Corporation

Supplement No. 107
Electric Pa. P.U.C. No. 201
Ninety-Fourth Revised Page No. 3
Canceling Ninety-Third Revised Page No. 3

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PPL Electric Utilities Corporation

Supplement No. 107
Electric Pa. P.U.C. No. 201
Second Revised Page No. 19Z.14
Canceling First Page No. 19Z.14

SMART METER RIDER (CONTINUED)

SMART METER RIDER CHARGE

Charges under the SMR for the period January 1, 2012 through December 31, 2012, as set forth in the applicable Rate Schedules.

Customer Class	Large C&I	Small C&I	Residential
Rate Schedule / Charge	LP-4, IS-P (R), LP-5, LP-6, LPEP, IS-T (R), and L5S	GS-1, GS-3, IS-1 (R), BL, GH-1 (R), and GH-2 (R)	RS, RTS (R), and RTD (R)
	\$0.219/Bill (I)	\$0.00005/KWH (I)	\$0.00033/KWH (I)

Small I&C – Street Lights									
Rate Schedule/ Charge	SA	SM (R)		SHS		SE	TS (R)	SI-1 (R)	
	\$/Lamp (I)	Nominal Lumens	\$/Lamp (I)	Nominal Lumens	\$/Lamp (I)	\$/KWH (I)	\$/Watt (I)	Lumens	\$/Lamp (I)
0.003	0.003	3,350	0.002	5,800	0.001	0.00005	0.00004	600	0.001
		6,650	0.004	9,500	0.002			1,000	0.002
		10,500	0.005	16,000	0.003			4,000	0.006
		20,000	0.008	25,000	0.006				
		34,000	0.014	50,000	0.009				
		51,000	0.020						

(I) Indicates Increase (D) Indicates Decrease

Issued: August 1, 2011

Effective: January 1, 2012

PPL ELECTRIC UTILITIES CORPORATION
SCHEDULE 1 - COMPUTATION OF PROPOSED SMART METER RIDER
COMPUTATION PERIOD: JANUARY 1, 2010 THROUGH DECEMBER 31, 2012

Line No.		Total	Residential	Small Commercial & Industrial	Large Commercial & Industrial
1	Smart Meter Rider Charge		(A)	(A)	(B)
2	SMc = Smart Meter Cost	\$ 4,857,814	\$ 4,364,841	\$ 489,913	\$ 3,060
3	Es = Experienced Net Over/(Under) Collection, including interest through June 30, 2011*	(31,011)	(24,587)	(6,309)	(115)
4	Total Smart Meter Rider Charge (Line 2 + Line 3)	<u>4,826,803</u>	<u>4,340,254</u>	<u>483,604</u>	<u>2,945</u>
5	S = Projected Total Delivered KWH Sales to Customers	<u>36,952,300,000</u>	<u>14,341,905,000</u>	<u>11,207,460,000</u>	<u>11,402,935,000</u>
6	N = Number of bills per year				15,420 (E)
7	$\frac{1}{(1-T)}$ = (T = 5.9% Gross Receipts Tax)	x	1.0627		
8	SMR = Smart Meter Rider (\$/ KWH)				
	Rate (\$/KWH) (w/o GRT)		\$ 0.00031	0.00004	0.20591 (C)
	Rate (\$/KWH) (w/ GRT)		\$ 0.00033	0.00005	0.21882 (D)

(A) SMR = (SMc/S-Es/S)x1/(1-T)

(B) SMR = (SMc/N-Es/N)x1/(1-T)

(C) Rate (\$/Bill) (w/o GRT)

(D) Rate (\$/Bill) (w/ GRT)

(E) Number of customers x 12

* See Appendix 1.

**Smart Meter Program
Schedule 2 - Revenue Requirement**

		<u>2010</u>	<u>2011</u>	<u>2012</u>
Residential				
Rate Base				
Net Plant ¹		\$ 329,235	\$ 1,973,896	\$ 9,039,831
ADIT ¹		\$ (66,520)	\$ (553,530)	\$ (1,662,276)
Rate Base ¹		262,715	1,420,366	7,377,555
Rate Base ²		262,715	830,064	4,550,473
Return On Investment	8.27%	21,727	68,646	376,324
Income Taxes	46.22%	10,043	31,730	173,949
O&M		455,881	685,963	421,992
Deferred Income Tax Expense		66,520	487,010	1,108,746
Depreciation Expense		7,478	75,772	373,060
Residential Revenue Requirement		\$ 561,649	\$ 1,349,122	\$ 2,454,070
Small C&I				
Rate Base				
Net Plant ¹		\$ 117,115	\$ 302,623	\$ 715,961
ADIT ¹		\$ (20,679)	\$ (61,724)	\$ (124,038)
Rate Base ¹		96,436	240,898	591,923
Rate Base ²		96,436	173,660	434,415
Return On Investment	8.27%	7,975	14,362	35,926
Income Taxes	46.22%	3,686	6,638	16,606
O&M		66,553	98,902	60,774
Deferred Income Tax Expense		20,679	41,045	62,314
Depreciation Expense		3,463	14,524	36,465
Small C&I Revenue Requirement		\$ 102,357	\$ 175,471	\$ 212,086
Large C&I				
Rate Base				
Net Plant ¹		\$ 847	\$ 1,944	\$ 1,968
ADIT ¹		\$ (144)	\$ (347)	\$ (381)
Rate Base ¹		703	1,597	1,587
Rate Base ²		703	1,162	1,597
Return On Investment	8.27%	58	96	132
Income Taxes	46.22%	27	44	61
O&M		696	655	650
Deferred Income Tax Expense		144	203	34
Depreciation Expense		22	95	143
Large C&I Revenue Requirement		\$ 947	\$ 1,093	\$ 1,020

**Smart Meter Program
Schedule 2 - Revenue Requirement****Total**

Rate Base			
Net Plant ¹	\$ 447,197	\$ 2,278,462	\$ 9,757,760
ADIT ¹	(87,343)	(615,601)	(1,786,695)
Rate Base ¹	359,854	1,662,861	7,971,065
Rate Base ²	359,854	1,004,887	4,986,485
Return On Investment	29,760	83,104	412,382
Income Taxes	13,756	38,413	190,616
O&M	523,130	785,520	483,416
Deferred Income Tax Expense	87,343	528,258	1,171,094
Depreciation Expense	10,964	90,391	409,667
Total Revenue Requirement	\$ 664,953	\$ 1,525,686	\$ 2,667,175

1. Based on December 31, 2010 balance.

2. 2010 Rate Base reflects the balance at December 31, 2010; 2011 Rate Base reflects a 13-month average balance for the period December 31, 2010 through December 31, 2011. 2012 Rate Base reflects a 13-month average balance for the period December 31, 2011 through December 31, 2012.

PPL Electric Utilities Corporation

Residential Revenue Requirement Calculation		Actual 2010 YTD through Dec	Actual 2011 YTD through Jun	2011 Projection Jul-Dec	2011 Budget	2012 Budget	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10
01 - Load Control Pilot	Capital	\$ 12,016	\$ 269,199	\$ 294,037	\$ 563,230	\$ 2,787,176	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 3,250	\$ 4,501	\$ 3,200	\$ 2,859	\$ 2,698	\$ 4,083	\$ 5,640	\$ (24,262)
01 - Load Control Pilot	Expense	24,835	-	-	-	-	-	-	3,365	0,375	4,827	3,854	1,871	2,482	1,382	758	121	202
02 - Customer Owned Generation Pilot	Capital	62,257	79,153	6,975	86,128	-	184	184	184	184	3,715	1,017	2,850	4,856	8,006	9,280	19,179	12,681
02 - Customer Owned Generation Pilot	Expense	5,530	-	-	-	-	-	-	409	1,587	1,851	1,070	87	-	342	-	384	-
03 - IIR/IRAN Evaluation and Pilot	Capital	-	148,682	260,542	410,424	1,506,333	-	-	-	-	-	-	-	-	-	-	-	-
03 - IIR/IRAN Evaluation and Pilot	Expense	16,761	575	-	575	-	-	-	217	887	1,518	887	2,473	2,670	1,958	1,882	2,285	2,024
04 - Price and Usage Information Evaluation	Capital	119	32,693	140,127	172,820	95,875	-	-	-	95	682	694	2,821	1,457	814	2,801	2,395	3,943
04 - Price and Usage Information Evaluation	Expense	16,228	1,315	-	1,315	-	-	-	-	-	-	-	-	-	-	-	-	-
05 - Telecommunication Substation Modern Pilot and Implementation	Capital	250,908	117,549	74,804	192,153	-	510	510	21,131	1,294	3,474	1,477	36,112	87,088	2,195	6,701	45,142	54,278
05 - Telecommunication Substation Modern Pilot and Implementation	Expense	32,015	-	-	-	-	1,419	1,148	3,471	2,684	632	1,077	1,074	1,137	1,703	1,531	-	16,140
06 - Enhance Site Scan Implementation	Capital	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06 - Enhance Site Scan Implementation	Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07 - Voltage Monitoring Pilot	Capital	2,413	28,410	67,232	115,642	117,220	-	-	-	-	306	172	514	654	248	337	16	187
07 - Voltage Monitoring Pilot	Expense	1,371	(41)	-	(41)	-	-	-	-	-	50	-	149	182	50	207	-	654
08 - Next Generation Technology	Capital	-	362	-	362	1,311,181	-	-	-	-	-	-	-	-	-	-	-	-
08 - Next Generation Technology	Expense	11,346	6,330	224,951	231,281	21,853	-	-	509	512	379	601	948	1,524	2,574	2,909	1,032	-
09 - Proactive Outage Detection Evaluation	Capital	-	18,287	126,799	148,086	25,787	-	-	-	-	-	-	-	-	-	-	-	-
09 - Proactive Outage Detection Evaluation	Expense	2,299	2,820	-	2,820	-	-	-	-	-	355	373	302	271	238	624	135	-
10 - Remote Interval Data Pilot	Capital	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 - Remote Interval Data Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11 - Remote Disconnection/Reconnection Pilot	Capital	-	79	-	79	499,820	-	-	-	-	-	-	-	-	-	-	-	-
11 - Remote Disconnection/Reconnection Pilot	Expense	-	24,797	16,253	41,051	-	-	-	-	-	-	-	-	-	-	-	-	-
12 - On-board Meter Data Storage Pilot	Capital	-	-	13,663	13,663	236,013	-	-	-	-	-	-	-	-	-	-	-	-
12 - On-board Meter Data Storage Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 - Real Time Pathmapping Evaluation	Capital	-	-	-	-	174,824	-	-	-	-	-	-	-	-	-	-	-	-
13 - Real Time Pathmapping Evaluation	Expense	-	-	-	-	21,853	-	-	-	-	-	-	-	-	-	-	-	-
14 - PLC-Based System Enhancement Evaluation	Capital	-	-	-	-	903,187	-	-	-	-	-	-	-	-	-	-	-	-
14 - PLC-Based System Enhancement Evaluation	Expense	-	8,006	22,631	30,639	-	-	-	-	-	-	-	-	-	-	-	-	-
15 - Momentary Outage Monitoring Pilot	Capital	-	-	11,844	11,844	88,680	-	-	-	-	-	-	-	-	-	-	-	-
15 - Momentary Outage Monitoring Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 - Service Enhancer Pilot	Capital	-	-	-	-	10,000	-	-	-	-	-	-	-	-	-	-	-	-
17 - Service Enhancer Pilot	Expense	-	-	-	-	10,000	-	-	-	-	-	-	-	-	-	-	-	-
18 - Pre-Pay Metering Pilot	Capital	-	-	-	-	378,493	-	-	45,448	27,238	15,730	25,146	16,804	16,852	18,038	120,718	3,241	58,500
18 - Pre-Pay Metering Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Priority Management - Smart Meter Team	Expense	345,484	136,162	242,065	378,287	378,493	-	-	-	-	-	-	-	-	-	-	-	-
Total		\$ 792,695	\$ 672,643	\$ 1,633,753	\$ 2,406,398	\$ 7,880,887	\$ 4,651	\$ 4,380	\$ 76,838	\$ 44,058	\$ 36,673	\$ 40,680	\$ 68,483	\$ 121,053	\$ 39,206	\$ 151,832	\$ 81,453	\$ 123,477
Capital							\$ 3,232	\$ 3,232	\$ 23,853	\$ 4,016	\$ 10,754	\$ 7,167	\$ 42,711	\$ 95,254	\$ 13,146	\$ 20,381	\$ 69,983	\$ 42,082
Expense							\$ 1,419	\$ 1,148	\$ 52,085	\$ 40,042	\$ 25,919	\$ 33,513	\$ 25,782	\$ 25,799	\$ 26,058	\$ 131,251	\$ 11,471	\$ 80,494
Rate Base							\$ 3,223	\$ 6,427	\$ 30,178	\$ 34,015	\$ 44,548	\$ 51,445	\$ 83,748	\$ 166,210	\$ 200,265	\$ 219,459	\$ 288,004	\$ 329,235
Net Plant							(902)	(1,808)	(3,081)	(4,315)	(5,835)	(7,400)	(10,194)	(16,123)	(22,258)	(29,411)	(42,263)	(56,520)
ADIT							\$ 2,321	\$ 4,619	\$ 27,117	\$ 29,700	\$ 36,714	\$ 44,045	\$ 63,554	\$ 172,087	\$ 178,007	\$ 190,048	\$ 245,742	\$ 262,715
Monthly Rate Base																		
Return On Investment (2010 - actual, 2011-13 mo. Ave.)		8.27%					\$ 192	\$ 362	\$ 2,243	\$ 2,458	\$ 3,202	\$ 3,843	\$ 6,910	\$ 14,232	\$ 14,721	\$ 15,717	\$ 20,323	\$ 21,727
Income Taxes		40.22%					\$ 60	\$ 177	\$ 1,037	\$ 1,135	\$ 1,480	\$ 1,684	\$ 3,194	\$ 6,578	\$ 6,805	\$ 7,265	\$ 9,394	\$ 10,043
O&M							\$ 1,410	\$ 1,148	\$ 52,985	\$ 40,042	\$ 25,919	\$ 33,513	\$ 25,782	\$ 25,799	\$ 26,058	\$ 131,251	\$ 11,471	\$ 80,494
Deferred Income Tax Expense							\$ 802	\$ 906	\$ 1,253	\$ 1,254	\$ 1,519	\$ 1,566	\$ 2,793	\$ 5,630	\$ 6,135	\$ 7,163	\$ 12,851	\$ 24,256
Depreciation Expense							\$ 9	\$ 27	\$ 102	\$ 180	\$ 221	\$ 270	\$ 409	\$ 702	\$ 1,080	\$ 1,158	\$ 1,437	\$ 1,751
Residential Revenue Requirement							\$ 2,610	\$ 2,640	\$ 57,619	\$ 45,087	\$ 32,341	\$ 40,678	\$ 39,088	\$ 53,331	\$ 54,812	\$ 162,573	\$ 55,476	\$ 138,272

Residential Revenue Requirement Calculation		Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11
01 - Load Control Pilot	Capital	\$ 10,324	\$ 24,533	\$ 112,305	\$ 85,864	\$ 11,183	\$ 6,181	\$ 143,781	\$ 8,781	\$ 8,781	\$ 8,781	\$ 8,781	\$ 115,152
01 - Load Control Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-
02 - Customer Owned Generation Pilot	Capital	9,458	7,774	7,012	3,830	4,001	47,078	1,183	1,183	1,183	1,183	1,183	1,183
02 - Customer Owned Generation Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-
03 - IHD/HAN Evaluation and Pilot	Capital	2,252	3,509	3,963	123,425	7,488	6,204	22,788	97,966	118,410	10,116	10,116	10,116
03 - IHD/HAN Evaluation and Pilot	Expense	576	-	-	-	-	-	-	-	-	-	-	-
04 - Price and Usage Information Evaluation	Capital	1,289	5,603	6,591	3,889	10,403	4,848	22,888	33,982	20,870	20,870	20,870	20,870
04 - Price and Usage Information Evaluation	Expense	1,189	85	61	-	-	-	-	-	-	-	-	-
05 - Telecommunication Substation Modern Pilot and Implementation	Capital	5,668	10,547	7,076	20,775	48,738	8,747	7,260	13,466	13,466	13,466	13,466	13,467
05 - Telecommunication Substation Modern Pilot and Implementation	Expense	-	-	-	-	-	-	-	-	-	-	-	-
06 - Enhance Site Scan Implementation	Capital	-	-	-	-	-	-	-	-	-	-	-	-
06 - Enhance Site Scan Implementation	Expense	-	-	-	-	-	-	-	-	-	-	-	-
07 - Voltage Monitoring Pilot	Capital	2,802	3,012	8,800	(1,095)	8,082	7,889	35,082	12,066	12,066	9,338	9,338	9,338
07 - Voltage Monitoring Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-
08 - Next Generation Technology	Capital	382	-	-	-	-	-	-	-	-	-	-	-
08 - Next Generation Technology	Expense	-	136	66	1,070	4,528	523	9,811	42,909	50,595	9,811	92,923	9,811
09 - Protective Outage Detection Evaluation	Capital	150	45	318	124	12,472	5,178	62,615	13,397	13,397	13,397	13,397	13,397
09 - Protective Outage Detection Evaluation	Expense	408	469	1,432	992	884	(1,164)	-	-	-	-	-	-
10 - 15-minute Interval Data Pilot	Capital	-	-	-	-	-	-	-	-	-	-	-	-
10 - 15-minute Interval Data Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-
11 - Remote Disconnection/Reconnection Pilot	Capital	1,423	3,420	5,306	(8,398)	3,280	(4,958)	-	-	-	-	-	-
11 - Remote Disconnection/Reconnection Pilot	Expense	-	-	-	8,557	2,071	14,189	2,709	2,709	2,709	2,709	2,709	2,709
12 - On-board Meter Data Storage Pilot	Capital	-	-	-	-	-	-	-	2,733	2,733	2,733	2,733	2,733
12 - On-board Meter Data Storage Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-
13 - Real Time Pathmapping Evaluation	Capital	-	-	-	-	-	-	-	-	-	-	-	-
13 - Real Time Pathmapping Evaluation	Expense	-	-	-	-	-	-	-	-	-	-	-	-
14 - PLC-Based System Enhancement Evaluation	Capital	-	-	-	-	-	-	-	-	-	-	-	-
14 - PLC-Based System Enhancement Evaluation	Expense	-	630	242	759	2,959	3,418	3,772	3,772	3,772	3,772	3,772	3,772
15 - Momentary Outage Monitoring Pilot	Capital	-	-	-	-	-	-	-	2,369	2,369	2,369	2,369	2,369
15 - Momentary Outage Monitoring Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-
17 - Service Extender Pilot	Capital	-	-	-	-	-	-	-	-	-	-	-	-
18 - Pre-Pay Meters Pilot	Capital	-	-	-	-	-	-	-	-	-	-	-	-
Program Management - Smart Meter Team	Expense	27,201	17,342	30,859	27,328	13,445	19,919	44,071	52,712	48,187	37,975	20,058	30,081
Total		\$ 72,052	\$ 88,238	\$ 184,190	\$ 285,087	\$ 127,272	\$ 117,818	\$ 355,939	\$ 288,126	\$ 307,829	\$ 138,502	\$ 210,899	\$ 234,957
Capital		\$ 42,726	\$ 67,584	\$ 151,428	\$ 248,350	\$ 103,587	\$ 80,950	\$ 295,576	\$ 185,935	\$ 193,257	\$ 82,238	\$ 82,238	\$ 188,584
Expense		\$ 29,337	\$ 18,673	\$ 32,761	\$ 36,711	\$ 23,685	\$ 36,868	\$ 80,363	\$ 102,191	\$ 114,273	\$ 54,267	\$ 128,483	\$ 46,373
Rate Base		\$ 309,971	\$ 435,238	\$ 583,763	\$ 828,110	\$ 924,716	\$ 1,000,172	\$ 1,289,208	\$ 1,407,266	\$ 1,651,593	\$ 1,724,133	\$ 1,796,210	\$ 1,973,890
Net Plant		\$ (73,803)	\$ (82,437)	\$ (125,053)	\$ (197,822)	\$ (210,843)	\$ (217,080)	\$ (315,842)	\$ (368,993)	\$ (430,518)	\$ (455,048)	\$ (482,814)	\$ (553,530)
ADIT		\$ 296,168	\$ 352,802	\$ 458,728	\$ 628,288	\$ 713,873	\$ 782,492	\$ 973,368	\$ 1,098,273	\$ 1,221,075	\$ 1,269,085	\$ 1,313,603	\$ 1,420,360
Monthly Rate Base		\$ 9,874	\$ 11,394	\$ 14,958	\$ 20,913	\$ 23,862	\$ 25,748	\$ 31,744	\$ 35,912	\$ 39,374	\$ 40,938	\$ 42,438	\$ 47,352
Return On Investment (2010 - actual, 2011-13 mo. Ave.)	5.27%	\$ 68,646	\$ 68,646	\$ 68,646	\$ 68,646	\$ 68,646	\$ 68,646	\$ 68,646	\$ 68,646	\$ 68,646	\$ 68,646	\$ 68,646	\$ 68,646
Income Taxes	40.22%	\$ 31,730	\$ 31,730	\$ 31,730	\$ 31,730	\$ 31,730	\$ 31,730	\$ 31,730	\$ 31,730	\$ 31,730	\$ 31,730	\$ 31,730	\$ 31,730
OGM		\$ 20,337	\$ 18,673	\$ 32,761	\$ 36,711	\$ 23,685	\$ 36,868	\$ 80,363	\$ 102,191	\$ 114,273	\$ 54,267	\$ 128,483	\$ 46,373
Deferred Income Tax Expense		\$ 7,283	\$ 8,634	\$ 42,588	\$ 72,787	\$ 13,021	\$ 8,837	\$ 68,182	\$ 53,151	\$ 51,525	\$ 24,550	\$ 27,589	\$ 70,918
Deconversion Expense		\$ 1,989	\$ 2,295	\$ 2,904	\$ 4,009	\$ 4,981	\$ 5,494	\$ 6,540	\$ 7,877	\$ 8,830	\$ 9,998	\$ 10,152	\$ 10,905
Residential Revenue Requirement		\$ 136,980	\$ 129,079	\$ 178,640	\$ 215,884	\$ 142,064	\$ 140,574	\$ 295,441	\$ 295,596	\$ 285,105	\$ 188,869	\$ 296,558	\$ 228,571

PPL Electric Utilities Corporation

Residential Revenue Requirement Calculation												
	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
01 - Load Control Pilot	Capital	\$ 232,265	\$ 232,265	\$ 232,265	\$ 232,265	\$ 232,265	\$ 232,265	\$ 232,265	\$ 232,265	\$ 232,265	\$ 232,265	\$ 232,265
01 - Load Control Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-
02 - Customer Owned Generation Pilot	Capital	-	-	-	-	-	-	-	-	-	-	-
02 - Customer Owned Generation Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-
03 - IHDHAN Evaluation and Pilot	Capital	14,563	14,563	14,563	162,731	162,731	162,731	162,731	162,731	162,731	162,731	162,731
03 - IHDHAN Evaluation and Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-
04 - Price and Usage Information Evaluation	Capital	7,208	7,208	7,208	7,208	7,208	7,208	17,862	7,208	7,208	7,208	7,208
04 - Price and Usage Information Evaluation	Expense	-	-	-	-	-	-	-	-	-	-	-
05 - Telecommunication Substation Modern Pilot and Implementation	Capital	-	-	-	-	-	-	-	-	-	-	-
05 - Telecommunication Substation Modern Pilot and Implementation	Expense	-	-	-	-	-	-	-	-	-	-	-
06 - Enhance Site Scan Implementation	Capital	-	-	-	-	-	-	-	-	-	-	-
06 - Enhance Site Scan Implementation	Expense	-	-	-	-	-	-	-	-	-	-	-
07 - Voltage Monitoring Pilot	Capital	13,368	13,368	13,368	13,368	13,368	13,368	13,368	3,817	3,063	1,904	1,604
07 - Voltage Monitoring Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-
08 - Next Generation Technology	Capital	109,265	109,265	109,265	109,265	109,265	109,265	109,265	109,265	109,265	109,265	109,265
08 - Next Generation Technology	Expense	1,821	1,821	1,821	1,821	1,821	1,821	1,821	1,821	1,821	1,821	1,821
09 - Proactive Outage Detection Evaluation	Capital	4,340	4,340	4,340	2,250	1,780	1,250	1,248	1,248	1,248	1,248	1,248
09 - Proactive Outage Detection Evaluation	Expense	-	-	-	-	-	-	-	-	-	-	-
10 - 15 minute Interval Data Pilot	Capital	-	-	-	-	-	-	-	-	-	-	-
10 - 15 minute Interval Data Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-
11 - Remote Disconnect/Reconnection Pilot	Capital	30,394	30,394	30,394	135,258	30,394	30,394	30,394	30,394	30,394	30,394	30,394
11 - Remote Disconnect/Reconnection Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-
12 - On-board Meter Data Storage Pilot	Capital	14,204	14,204	14,204	14,204	14,204	14,204	14,204	14,204	14,204	79,764	14,204
12 - On-board Meter Data Storage Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-
13 - Real Time Pathmapping Evaluation	Capital	14,569	14,569	14,569	14,569	14,569	14,569	14,569	14,569	14,569	14,569	14,569
13 - Real Time Pathmapping Evaluation	Expense	1,821	1,821	1,821	1,821	1,821	1,821	1,821	1,821	1,821	1,821	1,821
14 - PLC-Based System Enhancement Evaluation	Capital	50,296	50,296	50,296	50,296	50,296	50,296	50,296	50,296	50,296	50,296	50,296
14 - PLC-Based System Enhancement Evaluation	Expense	-	-	-	-	-	-	-	-	-	-	-
15 - Momentary Outage Monitoring Pilot	Capital	7,390	7,390	7,390	7,390	7,390	7,390	7,390	7,390	7,390	7,390	7,390
15 - Momentary Outage Monitoring Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-
16 - Service Extender Pilot	Capital	-	-	-	-	-	-	-	-	3,334	3,334	3,332
16 - Service Extender Pilot	Expense	-	-	-	-	-	-	-	-	3,334	3,334	3,332
18 - Pre-Pay Metering Pilot	Capital	-	-	-	-	-	-	-	-	-	-	-
18 - Pre-Pay Metering Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-
Program Management - Smart Meter Team	Capital	30,433	30,433	32,877	31,742	30,520	30,607	30,520	30,520	30,520	37,852	30,520
Program Management - Smart Meter Team	Expense	-	-	-	-	-	-	-	-	-	-	-
Total		\$ 631,847	\$ 631,847	\$ 634,381	\$ 784,299	\$ 677,622	\$ 677,179	\$ 677,990	\$ 687,564	\$ 687,520	\$ 748,353	\$ 671,970
Capital		\$ 497,872	\$ 497,872	\$ 497,872	\$ 748,824	\$ 643,490	\$ 642,930	\$ 642,928	\$ 653,401	\$ 633,357	\$ 704,660	\$ 637,812
Expense		\$ 34,075	\$ 34,075	\$ 36,519	\$ 35,364	\$ 34,162	\$ 34,250	\$ 34,162	\$ 34,162	\$ 34,162	\$ 41,494	\$ 34,162
Rate Base		\$ 2,458,956	\$ 2,941,250	\$ 3,426,779	\$ 4,147,798	\$ 4,785,583	\$ 5,379,265	\$ 5,869,374	\$ 6,806,355	\$ 7,199,718	\$ 7,880,886	\$ 8,451,236
Net Plant		\$ 2,458,956	\$ 2,941,250	\$ 3,426,779	\$ 4,147,798	\$ 4,785,583	\$ 5,379,265	\$ 5,869,374	\$ 6,806,355	\$ 7,199,718	\$ 7,880,886	\$ 8,451,236
ADIT		(537,990)	(568,883)	(587,045)	(616,380)	(657,765)	(713,289)	(785,431)	(878,189)	(996,140)	(1,148,849)	(1,353,092)
Monthly Rate Base		\$ 1,900,965	\$ 2,372,367	\$ 2,839,734	\$ 3,531,418	\$ 4,107,818	\$ 4,665,976	\$ 5,083,943	\$ 5,928,166	\$ 6,203,578	\$ 6,732,037	\$ 7,098,144
Return On Investment (2010 - actual, 2011-13 mo. Avg.)	8.27%	\$ 376,324	\$ 376,324	\$ 376,324	\$ 376,324	\$ 376,324	\$ 376,324	\$ 376,324	\$ 376,324	\$ 376,324	\$ 376,324	\$ 376,324
Income Taxes	46.22%	\$ 173,949	\$ 173,949	\$ 173,949	\$ 173,949	\$ 173,949	\$ 173,949	\$ 173,949	\$ 173,949	\$ 173,949	\$ 173,949	\$ 173,949
Q&M		\$ 34,075	\$ 34,075	\$ 36,519	\$ 35,364	\$ 34,162	\$ 34,250	\$ 34,162	\$ 34,162	\$ 34,162	\$ 41,494	\$ 34,162
Deferred Income Tax Expense		\$ 4,431	\$ 10,923	\$ 18,161	\$ 29,315	\$ 41,405	\$ 55,504	\$ 72,182	\$ 92,758	\$ 117,951	\$ 152,708	\$ 204,213
Depreciation Expense		\$ 12,812	\$ 15,578	\$ 18,343	\$ 21,807	\$ 26,614	\$ 29,247	\$ 32,819	\$ 36,420	\$ 39,994	\$ 43,712	\$ 47,441
Residential Revenue Requirement		\$ 901,560	\$ 810,640	\$ 823,296	\$ 856,779	\$ 851,514	\$ 869,274	\$ 869,416	\$ 713,613	\$ 742,380	\$ 788,187	\$ 842,662

PPL Electric Utilities Corporation

Small C&I Revenue Requirement Calculation		Actual 2010 YTD through Dec	Actual 2011 YTD through Jun	2011 Projection Jul-Dec	2011 Budget	2012 Budget	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10
01- Load Control Pilot	Capital	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01- Load Control Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02 - Customer Owned Generation Pilot	Capital	8,966	11,400	1,005	12,404	-	24	24	24	24	535	146	416	699	1,153	1,334	2,762	1,826
02 - Customer Owned Generation Pilot	Expense	796	-	-	-	-	-	-	59	229	238	154	13	-	49	-	55	-
03 - IHD/HAN Evaluation and Pilot	Capital	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03 - IHD/HAN Evaluation and Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04 - Price and Usage Information Evaluation	Capital	17	4,708	20,181	24,889	13,966	-	-	-	-	-	-	-	-	-	-	-	17
04 - Price and Usage Information Evaluation	Expense	2,337	189	-	189	-	-	-	14	95	100	136	378	210	117	375	345	568
05 - Telecommunication Substation Modem Pilot and Implemen	Capital	37,428	16,928	10,743	27,671	-	73	73	3,043	186	500	213	5,200	12,541	316	965	6,501	7,816
05 - Telecommunication Substation Modem Pilot and Implemen	Expense	4,610	-	-	-	-	204	165	500	386	91	155	155	164	245	220	-	2,324
06 - Enhance Site Scan Implementation	Capital	64,690	26,349	37,063	63,412	-	-	-	-	1,078	7,078	13,276	19,045	6,105	5,361	1,441	7,631	3,686
06 - Enhance Site Scan Implementation	Expense	5,510	197	-	197	-	-	-	1,611	1,372	921	963	286	214	143	-	-	-
07 - Voltage Monitoring Pilot	Capital	347	4,091	12,562	16,653	16,880	-	-	-	-	44	25	74	94	36	48	2	24
07 - Voltage Monitoring Pilot	Expense	197	(11)	-	(11)	-	-	-	-	9	-	-	21	26	9	39	-	94
08 - Next Generation Technology	Capital	-	52	-	52	188,819	-	-	-	-	-	-	-	-	-	-	-	-
08 - Next Generation Technology	Expense	1,634	912	32,394	33,306	3,147	-	-	-	82	74	55	86	136	220	414	419	149
09 - Proactive Outage Detection Evaluation	Capital	-	2,633	18,692	21,325	3,713	-	-	-	-	-	-	-	-	-	-	-	-
09 - Proactive Outage Detection Evaluation	Expense	331	406	-	406	-	-	-	-	-	51	54	44	39	34	90	20	-
10 - 15-minute Interval Data Pilot	Capital	9,129	27,197	2,742	29,939	-	2,083	2,083	2,083	2,083	2,576	2,279	3,664	2,566	3,215	3,414	(18,293)	1,376
10 - 15-minute Interval Data Pilot	Expense	1,379	-	-	-	-	-	-	256	328	-	289	289	72	145	-	-	-
11 - Remote Disconnection/Reconnection Pilot	Capital	-	11	-	11	67,628	-	-	-	-	-	-	-	-	-	-	-	-
11 - Remote Disconnection/Reconnection Pilot	Expense	-	3,571	2,341	5,912	-	-	-	-	-	-	-	-	-	-	-	-	-
12 - On-board Meter Data Storage Pilot	Capital	-	-	1,967	1,967	33,987	-	-	-	-	-	-	-	-	-	-	-	-
12 - On-board Meter Data Storage Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 - Real Time Pathmapping Evaluation	Capital	-	-	-	-	25,176	-	-	-	-	-	-	-	-	-	-	-	-
13 - Real Time Pathmapping Evaluation	Expense	-	-	-	-	3,147	-	-	-	-	-	-	-	-	-	-	-	-
14 - PLC-Based System Enhancement Evaluation	Capital	-	-	-	-	86,863	-	-	-	-	-	-	-	-	-	-	-	-
14 - PLC-Based System Enhancement Evaluation	Expense	-	1,153	3,259	4,412	-	-	-	-	-	-	-	-	-	-	-	-	-
15 - Momentary Outage Monitoring Pilot	Capital	-	-	1,706	1,706	12,770	-	-	-	-	-	-	-	-	-	-	-	-
15 - Momentary Outage Monitoring Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 - Service Extender Pilot	Capital	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18 - Pre-Pay Metering Pilot	Capital	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18 - Pre-Pay Metering Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Program Management - Smart Meter Team	Expense	49,758	19,614	34,866	54,481	54,480	-	-	6,543	3,923	2,265	3,622	2,420	2,398	2,598	17,385	467	8,137
Total		\$ 187,131	\$ 119,411	\$ 179,522	\$ 298,933	\$ 510,578	\$ 2,384	\$ 2,345	\$ 13,876	\$ 9,272	\$ 15,252	\$ 21,366	\$ 32,089	\$ 25,266	\$ 13,631	\$ 25,725	\$ (92)	\$ 26,018
Capital							\$ 2,180	\$ 2,180	\$ 5,150	\$ 3,371	\$ 10,733	\$ 15,939	\$ 28,398	\$ 22,006	\$ 10,071	\$ 7,202	\$ (1,397)	\$ 14,746
Expense							\$ 204	\$ 165	\$ 8,726	\$ 5,900	\$ 4,519	\$ 5,427	\$ 3,691	\$ 3,260	\$ 3,560	\$ 18,523	\$ 1,305	\$ 11,272
Rate Base																		
Net Plant							\$ 2,174	\$ 4,336	\$ 9,447	\$ 12,756	\$ 23,388	\$ 39,151	\$ 67,251	\$ 88,818	\$ 98,361	\$ 104,987	\$ 102,988	\$ 117,115
ADIT							(5)	(15)	(78)	(166)	(453)	(1,064)	(2,426)	(4,455)	(6,798)	(9,449)	(13,778)	(20,679)
Monthly Rate Base							\$ 2,169	\$ 4,321	\$ 9,369	\$ 12,590	\$ 22,935	\$ 38,088	\$ 64,825	\$ 84,364	\$ 91,563	\$ 95,538	\$ 89,220	\$ 96,436
Return On Investment (2010 - actual, 2011-13 mo. Avg.)							8.27%											
Income Taxes							46.22%											
O&M							83	165	358	481	877	1,456	2,478	3,225	3,500	3,652	3,411	3,686
Deferred Income Tax Expense							204	165	8,726	5,900	4,519	5,427	3,691	3,260	3,560	18,523	1,305	11,272
Depreciation Expense							5	9	63	88	287	611	1,362	2,029	2,343	2,651	4,329	6,900
Small C&I Revenue Requirement							6	18	39	62	101	175	299	439	528	576	592	629
							\$ 478	\$ 715	\$ 9,961	\$ 7,573	\$ 7,681	\$ 10,819	\$ 13,191	\$ 15,929	\$ 17,503	\$ 33,302	\$ 17,016	\$ 30,463

PPL Electric Utilities Corporation

Small C&I Revenue Requirement Calculation		Capital /	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11
		Expense												
01- Load Control Pilot	Capital		-	-	-	-	-	-	-	-	-	-	-	-
01- Load Control Pilot	Expense		-	-	-	-	-	-	-	-	-	-	-	-
02 - Customer Owned Generation Pilot	Capital		1,362	1,120	1,010	552	576	6,780	167	167	167	167	167	167
02 - Customer Owned Generation Pilot	Expense		-	-	-	-	-	-	-	-	-	-	-	-
03 - IHD/HAN Evaluation and Pilot	Capital		-	-	-	-	-	-	-	-	-	-	-	-
03 - IHD/HAN Evaluation and Pilot	Expense		-	-	-	-	-	-	-	-	-	-	-	-
04 - Price and Usage Information Evaluation	Capital		185	816	949	562	1,498	698	3,267	4,891	3,006	3,006	3,006	3,006
04 - Price and Usage Information Evaluation	Expense		167	14	9	-	-	-	-	-	-	-	-	-
05 - Telecommunication Substation Modern Pilot and Implement	Capital		816	2,815	1,019	4,288	6,731	1,260	1,045	1,940	1,940	1,940	1,940	1,939
05 - Telecommunication Substation Modern Pilot and Implement	Expense		-	-	-	-	-	-	-	-	-	-	-	-
06 - Enhance Site Scan Implementation	Capital		2,390	16,576	7,354	29	-	-	-	7,413	7,413	7,413	7,413	7,413
06 - Enhance Site Scan Implementation	Expense		197	-	-	-	-	-	-	-	-	-	-	-
07 - Voltage Monitoring Pilot	Capital		403	434	1,276	(287)	1,161	1,104	5,052	1,738	1,738	1,345	1,345	1,345
07 - Voltage Monitoring Pilot	Expense		(1)	-	-	-	-	-	-	-	-	-	-	-
08 - Next Generation Technology	Capital		52	-	-	-	-	-	-	-	-	-	-	-
08 - Next Generation Technology	Expense		-	20	10	155	652	75	1,413	6,192	8,582	1,413	13,382	1,413
09 - Proactive Outage Detection Evaluation	Capital		22	6	46	18	1,786	746	9,046	1,929	1,929	1,929	1,929	1,929
09 - Proactive Outage Detection Evaluation	Expense		59	68	206	143	98	(168)	-	-	-	-	-	-
10 - 15-minute Interval Data Pilot	Capital		2,122	3,943	5,474	3,948	7,388	4,323	457	457	457	457	457	457
10 - 15-minute Interval Data Pilot	Expense		-	-	-	-	-	-	-	-	-	-	-	-
11 - Remote Disconnection/Reconnection Pilot	Capital		205	493	764	(1,209)	472	(714)	-	-	-	-	-	-
11 - Remote Disconnection/Reconnection Pilot	Expense		-	-	-	1,232	298	2,040	390	390	390	390	390	390
12 - On-board Meter Data Storage Pilot	Capital		-	-	-	-	-	-	-	393	393	393	393	393
12 - On-board Meter Data Storage Pilot	Expense		-	-	-	-	-	-	-	-	-	-	-	-
13 - Real Time Pathmapping Evaluation	Capital		-	-	-	-	-	-	-	-	-	-	-	-
13 - Real Time Pathmapping Evaluation	Expense		-	-	-	-	-	-	-	-	-	-	-	-
14 - PLC-Based System Enhancement Evaluation	Capital		-	-	-	-	-	-	-	-	-	-	-	-
14 - PLC-Based System Enhancement Evaluation	Expense		-	91	35	109	426	492	543	543	543	543	543	543
15 - Momentary Outage Monitoring Pilot	Capital		-	-	-	-	-	-	-	341	341	341	341	341
15 - Momentary Outage Monitoring Pilot	Expense		-	-	-	-	-	-	-	-	-	-	-	-
17 - Service Extender Pilot	Capital		-	-	-	-	-	-	-	-	-	-	-	-
17 - Service Extender Pilot	Expense		-	-	-	-	-	-	-	-	-	-	-	-
18 - Pre-Pay Metering Pilot	Capital		-	-	-	-	-	-	-	-	-	-	-	-
18 - Pre-Pay Metering Pilot	Expense		-	-	-	-	-	-	-	-	-	-	-	-
Program Management - Smart Meter Team	Expense		3,917	2,498	4,459	3,936	1,936	2,869	6,347	7,592	6,941	5,469	4,185	4,332
Total			\$ 11,897	\$ 28,891	\$ 22,609	\$ 13,475	\$ 23,033	\$ 19,507	\$ 27,728	\$ 33,986	\$ 33,841	\$ 24,806	\$ 35,491	\$ 23,669
Capital			\$ 7,558	\$ 26,202	\$ 17,891	\$ 7,900	\$ 19,622	\$ 14,197	\$ 19,035	\$ 19,269	\$ 17,384	\$ 16,991	\$ 16,991	\$ 16,991
Expense			\$ 4,339	\$ 2,689	\$ 4,718	\$ 5,575	\$ 3,411	\$ 5,309	\$ 8,693	\$ 14,717	\$ 16,457	\$ 7,815	\$ 18,500	\$ 6,678
Rate Base														
Net Plant			\$ 123,982	\$ 149,399	\$ 166,383	\$ 173,304	\$ 191,871	\$ 204,919	\$ 222,712	\$ 240,634	\$ 256,568	\$ 272,014	\$ 287,366	\$ 302,623
ADIT			(21,131)	(22,659)	(23,625)	(24,660)	(27,222)	(29,275)	(35,966)	(39,482)	(43,520)	(48,132)	(53,828)	(61,724)
Monthly Rate Base			\$ 102,851	\$ 127,340	\$ 142,758	\$ 148,644	\$ 164,649	\$ 175,644	\$ 186,746	\$ 201,152	\$ 213,048	\$ 223,882	\$ 233,538	\$ 240,898
Return On Investment (2010 - actual, 2011-13 mo. Avg.)	8.27%		\$ 14,362	\$ 14,362	\$ 14,362	\$ 14,362	\$ 14,362	\$ 14,362	\$ 14,362	\$ 14,362	\$ 14,362	\$ 14,362	\$ 14,362	\$ 14,362
Income Taxes	46.22%		6,638	6,638	6,638	6,638	6,638	6,638	6,638	6,638	6,638	6,638	6,638	6,638
O&M			4,339	2,689	4,718	5,575	3,411	5,309	8,693	14,717	16,457	7,815	18,500	6,678
Deferred Income Tax Expense			452	928	1,566	1,035	2,562	2,053	6,691	3,516	4,038	4,612	5,696	7,896
Depreciation Expense			691	785	907	979	1,055	1,149	1,241	1,348	1,450	1,545	1,640	1,734
Small C&I Revenue Requirement			\$ 26,482	\$ 25,402	\$ 28,191	\$ 28,588	\$ 28,029	\$ 29,512	\$ 37,626	\$ 40,581	\$ 42,945	\$ 34,973	\$ 46,835	\$ 37,308

Small C&I Revenue Requirement Calculation		Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
01 - Load Control Pilot	Capital	-	-	-	-	-	-	-	-	-	-	-	-
01 - Load Control Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-
02 - Customer Owned Generation Pilot	Capital	-	-	-	-	-	-	-	-	-	-	-	-
02 - Customer Owned Generation Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-
03 - IHD/HAN Evaluation and Pilot	Capital	-	-	-	-	-	-	-	-	-	-	-	-
03 - IHD/HAN Evaluation and Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-
04 - Price and Usage Information Evaluation	Capital	1,038	1,038	1,038	1,038	1,038	1,038	1,038	2,547	1,038	1,038	1,038	1,038
04 - Price and Usage Information Evaluation	Expense	-	-	-	-	-	-	-	-	-	-	-	-
05 - Telecommunication Substation Modern Pilot and implemen	Capital	-	-	-	-	-	-	-	-	-	-	-	-
05 - Telecommunication Substation Modern Pilot and implemen	Expense	-	-	-	-	-	-	-	-	-	-	-	-
06 - Enhance Site Scan Implementation	Capital	-	-	-	-	-	-	-	-	-	-	-	-
06 - Enhance Site Scan Implementation	Expense	-	-	-	-	-	-	-	-	-	-	-	-
07 - Voltage Monitoring Pilot	Capital	1,928	1,928	1,928	1,928	1,928	1,928	1,928	1,928	550	445	231	231
07 - Voltage Monitoring Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-
08 - Next Generation Technology	Capital	15,735	15,735	15,735	15,735	15,735	15,735	15,735	15,735	15,735	15,735	15,735	15,735
08 - Next Generation Technology	Expense	262	262	262	262	262	262	262	262	262	262	262	262
09 - Proactive Outage Detection Evaluation	Capital	625	625	625	324	256	180	180	180	180	180	180	180
09 - Proactive Outage Detection Evaluation	Expense	-	-	-	-	-	-	-	-	-	-	-	-
10 - 15-minute Interval Data Pilot	Capital	-	-	-	-	-	-	-	-	-	-	-	-
10 - 15-minute Interval Data Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-
11 - Remote Disconnection/Reconnection Pilot	Capital	4,377	4,377	4,377	19,482	4,377	4,377	4,377	4,377	4,377	4,377	4,377	4,377
11 - Remote Disconnection/Reconnection Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-
12 - On-board Meter Data Storage Pilot	Capital	2,046	2,046	2,046	2,046	2,046	2,046	2,046	2,046	2,046	11,486	2,046	2,046
12 - On-board Meter Data Storage Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-
13 - Real Time Pathmapping Evaluation	Capital	2,098	2,098	2,098	2,098	2,098	2,098	2,098	2,098	2,098	2,098	2,098	2,098
13 - Real Time Pathmapping Evaluation	Expense	262	262	262	262	262	262	262	262	262	262	262	262
14 - PLC-Based System Enhancement Evaluation	Capital	7,239	7,239	7,239	7,239	7,239	7,239	7,239	7,239	7,239	7,239	7,239	7,239
14 - PLC-Based System Enhancement Evaluation	Expense	-	-	-	-	-	-	-	-	-	-	-	-
15 - Momentary Outage Monitoring Pilot	Capital	1,064	1,064	1,064	1,064	1,064	1,064	1,064	1,064	1,064	1,064	1,064	1,064
15 - Momentary Outage Monitoring Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-
17 - Service Extender Pilot	Capital	-	-	-	-	-	-	-	-	-	-	-	-
17 - Service Extender Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-
18 - Pre-Pay Metering Pilot	Capital	-	-	-	-	-	-	-	-	-	-	-	-
18 - Pre-Pay Metering Pilot	Expense	-	-	-	-	-	-	-	-	-	-	-	-
Program Management - Smart Meter Team	Expense	4,383	4,383	4,735	4,571	4,395	4,408	4,395	4,395	4,395	5,451	4,571	4,395
Total		\$ 41,057	\$ 41,057	\$ 41,409	\$ 56,050	\$ 40,701	\$ 40,637	\$ 40,624	\$ 42,132	\$ 39,246	\$ 49,638	\$ 39,103	\$ 38,927
Capital		\$ 36,149	\$ 36,149	\$ 36,149	\$ 50,954	\$ 35,781	\$ 35,704	\$ 35,704	\$ 37,212	\$ 34,326	\$ 43,662	\$ 34,007	\$ 34,007
Expense		\$ 4,907	\$ 4,907	\$ 5,259	\$ 5,096	\$ 4,920	\$ 4,933	\$ 4,920	\$ 4,920	\$ 4,920	\$ 5,976	\$ 5,096	\$ 4,920
Rate Base													
Net Plant		\$ 336,890	\$ 370,957	\$ 404,823	\$ 453,251	\$ 486,266	\$ 519,005	\$ 551,546	\$ 585,393	\$ 616,154	\$ 656,035	\$ 686,048	\$ 715,961
ADIT		(62,244)	(63,203)	(64,651)	(66,689)	(69,334)	(72,698)	(76,913)	(82,213)	(88,764)	(97,102)	(107,975)	(124,038)
Monthly Rate Base		\$ 274,646	\$ 307,754	\$ 340,172	\$ 386,563	\$ 416,932	\$ 446,307	\$ 474,633	\$ 503,179	\$ 527,390	\$ 558,934	\$ 578,070	\$ 591,923
Return On Investment (2010 - actual, 2011-13 mo. Avg.)	8.27%	\$ 35,926	\$ 35,926	\$ 35,926	\$ 35,926	\$ 35,926	\$ 35,926	\$ 35,926	\$ 35,926	\$ 35,926	\$ 35,926	\$ 35,926	\$ 35,926
Income Taxes	46.22%	16,606	16,606	16,606	16,606	16,606	16,606	16,606	16,606	16,606	16,606	16,606	16,606
O&M		4,907	4,907	5,259	5,096	4,920	4,933	4,920	4,920	4,920	5,976	5,096	4,920
Deferred Income Tax Expense		520	959	1,448	2,038	2,645	3,364	4,215	5,300	6,550	8,338	10,874	16,063
Depreciation Expense		1,882	2,082	2,283	2,525	2,766	2,965	3,163	3,366	3,564	3,781	3,997	4,091
Small C&I Revenue Requirement		\$ 59,841	\$ 60,481	\$ 61,523	\$ 62,192	\$ 62,864	\$ 63,794	\$ 64,830	\$ 66,118	\$ 67,567	\$ 70,627	\$ 72,499	\$ 77,606

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Large C&I Revenue Requirement Calculation		Actual 2010 YTD through Dec	Actual 2011 YTD through Jun	2011 Projection Jul-Dec	2011 Budget	2012 Budget	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10
01 - Load Control Pilot	Capital	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
01 - Load Control Pilot	Expense	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
02 - Customer Owned Generation Pilot	Capital	107	136	12	146	-	0	0	0	0	6	2	5	8	14	18	33	22
02 - Customer Owned Generation Pilot	Expense	10	-	-	-	-	0	0	1	3	3	2	0	0	1	18	1	0
03 - IRIDIUM Evaluation and Pilot	Capital	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
03 - IRIDIUM Evaluation and Pilot	Expense	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
04 - Price and Usage Information Evaluation	Capital	0	58	241	297	187	0	0	0	0	0	0	0	0	0	0	0	0
04 - Price and Usage Information Evaluation	Expense	28	2	-	2	-	0	0	0	1	1	2	5	3	1	4	4	7
05 - Telecommunication Substation Modem Pilot and Implementation	Capital	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
05 - Telecommunication Substation Modem Pilot and Implementation	Expense	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
06 - Enhance Site Scan Implementation	Capital	762	310	437	747	-	0	0	0	13	83	156	224	72	83	17	90	43
06 - Enhance Site Scan Implementation	Expense	85	2	-	2	-	0	0	19	11	16	11	3	3	2	0	0	0
07 - Voltage Monitoring Pilot	Capital	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
07 - Voltage Monitoring Pilot	Expense	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
08 - Next Generation Technology	Capital	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
08 - Next Generation Technology	Expense	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
09 - Proactive Outage Detection Evaluation	Capital	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
09 - Proactive Outage Detection Evaluation	Expense	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
10 - 15-minute Interval Data Pilot	Capital	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
10 - 15-minute Interval Data Pilot	Expense	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
11 - Remote Disconnection/Reconnection Pilot	Capital	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
11 - Remote Disconnection/Reconnection Pilot	Expense	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
12 - On-board Meter Data Storage Pilot	Capital	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
12 - On-board Meter Data Storage Pilot	Expense	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
13 - Real Time Pathmapping Evaluation	Capital	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
13 - Real Time Pathmapping Evaluation	Expense	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
14 - PLC-Based System Enhancement Evaluation	Capital	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
14 - PLC-Based System Enhancement Evaluation	Expense	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
15 - Momentary Outage Monitoring Pilot	Capital	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
15 - Momentary Outage Monitoring Pilot	Expense	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
16 - Service Extender Pilot	Capital	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
16 - Service Extender Pilot	Expense	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
18 - Pre-Pay Metering Pilot	Capital	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
18 - Pre-Pay Metering Pilot	Expense	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
Program Management - Smart Meter Team	Expense	594	234	418	850	850	0	0	78	47	27	43	29	29	31	207	6	97
Total		\$ 1,585	\$ 741	\$ 1,105	\$ 1,847	\$ 817	\$ 0	\$ 0	\$ 98	\$ 75	\$ 137	\$ 216	\$ 286	\$ 114	\$ 111	\$ 245	\$ 133	\$ 189
Capital							\$ 0	\$ 0	\$ 0	\$ 13	\$ 90	\$ 158	\$ 229	\$ 80	\$ 77	\$ 33	\$ 123	\$ 65
Expense							\$ -	\$ -	\$ -	\$ 62	\$ 47	\$ 58	\$ 37	\$ 34	\$ 35	\$ 212	\$ 10	\$ 104
Rate Base																		
Net Plant							\$ 0	\$ 1	\$ 1	\$ 14	\$ 103	\$ 260	\$ 487	\$ 565	\$ 638	\$ 867	\$ 788	\$ 847
ADIT							0	0	0	(0)	(2)	(8)	(20)	(35)	(53)	(72)	(103)	(144)
Monthly Rate Base							\$ 0	\$ 1	\$ 1	\$ 14	\$ 101	\$ 252	\$ 467	\$ 530	\$ 585	\$ 595	\$ 683	\$ 703
Return On Investment (2010 - actual, 2011-13 mo. Avg.)	8.27%						\$ 0	\$ 0	\$ 0	\$ 1	\$ 8	\$ 21	\$ 39	\$ 44	\$ 48	\$ 49	\$ 57	\$ 58
Income Taxes	46.22%						0	0	0	1	4	10	18	20	22	23	28	27
O&M							-	-	98	62	47	58	37	34	35	212	10	104
Deferred Income Tax Expense							(0)	(0)	(0)	0	2	6	12	15	18	20	30	41
Depreciation Expense							0	0	0	0	0	1	2	3	3	4	4	5
Large C&I Revenue Requirement							\$ 0	\$ 0	\$ 98	\$ 63	\$ 62	\$ 95	\$ 108	\$ 115	\$ 127	\$ 307	\$ 127	\$ 235

PPL Electric Utilities Corporation

Large C&I Revenue Requirement Calculation		Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11
01 - Load Control Pilot	Capital	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
01 - Load Control Pilot	Expense	0	0	0	0	0	0	0	0	0	0	0	0
02 - Customer Owned Generation Pilot	Capital	10	13	12	7	7	81	2	2	2	2	2	2
02 - Customer Owned Generation Pilot	Expense	0	0	0	0	0	0	0	0	0	0	0	0
03 - IHDHAN Evaluation and Pilot	Capital	0	0	0	0	0	0	0	0	0	0	0	0
03 - IHDHAN Evaluation and Pilot	Expense	0	0	0	0	0	0	0	0	0	0	0	0
04 - Price and Usage Information Evaluation	Capital	2	10	11	7	18	8	39	58	36	36	36	36
04 - Price and Usage Information Evaluation	Expense	2	0	0	0	0	0	0	0	0	0	0	0
05 - Telecommunication Substation Modern Pilot and Implementation	Capital	0	0	0	0	0	0	0	0	0	0	0	0
05 - Telecommunication Substation Modern Pilot and Implementation	Expense	0	0	0	0	0	0	0	0	0	0	0	0
06 - Enhance Site Scan Implementation	Capital	28	195	87	0	0	0	0	87	87	87	87	87
06 - Enhance Site Scan Implementation	Expense	2	0	0	0	0	0	0	0	0	0	0	0
07 - Voltage Monitoring Pilot	Capital	0	0	0	0	0	0	0	0	0	0	0	0
07 - Voltage Monitoring Pilot	Expense	0	0	0	0	0	0	0	0	0	0	0	0
08 - Next Generation Technology	Capital	0	0	0	0	0	0	0	0	0	0	0	0
08 - Next Generation Technology	Expense	0	0	0	0	0	0	0	0	0	0	0	0
09 - Proactive Outage Detection Evaluation	Capital	0	0	0	0	0	0	0	0	0	0	0	0
09 - Proactive Outage Detection Evaluation	Expense	0	0	0	0	0	0	0	0	0	0	0	0
10 - 15-minute Interval Data Pilot	Capital	0	0	0	0	0	0	0	0	0	0	0	0
10 - 15-minute Interval Data Pilot	Expense	0	0	0	0	0	0	0	0	0	0	0	0
11 - Remote Disconnection/Reconnection Pilot	Capital	0	0	0	0	0	0	0	0	0	0	0	0
11 - Remote Disconnection/Reconnection Pilot	Expense	0	0	0	0	0	0	0	0	0	0	0	0
12 - On-board Meter Data Storage Pilot	Capital	0	0	0	0	0	0	0	0	0	0	0	0
12 - On-board Meter Data Storage Pilot	Expense	0	0	0	0	0	0	0	0	0	0	0	0
13 - Real Time Pathmapping Evaluation	Capital	0	0	0	0	0	0	0	0	0	0	0	0
13 - Real Time Pathmapping Evaluation	Expense	0	0	0	0	0	0	0	0	0	0	0	0
14 - PLC-Based System Enhancement Evaluation	Capital	0	0	0	0	0	0	0	0	0	0	0	0
14 - PLC-Based System Enhancement Evaluation	Expense	0	0	0	0	0	0	0	0	0	0	0	0
15 - Momentary Outage Monitoring Pilot	Capital	0	0	0	0	0	0	0	0	0	0	0	0
15 - Momentary Outage Monitoring Pilot	Expense	0	0	0	0	0	0	0	0	0	0	0	0
17 - Service Extender Pilot	Capital	0	0	0	0	0	0	0	0	0	0	0	0
17 - Service Extender Pilot	Expense	0	0	0	0	0	0	0	0	0	0	0	0
18 - Pre-Pay Metering Pilot	Capital	0	0	0	0	0	0	0	0	0	0	0	0
18 - Pre-Pay Metering Pilot	Expense	0	0	0	0	0	0	0	0	0	0	0	0
Program Management - Smart Meter Team	Expense	47	30	53	47	23	34	76	91	83	65	50	52
Total		\$ 98	\$ 248	\$ 163	\$ 81	\$ 48	\$ 123	\$ 117	\$ 238	\$ 208	\$ 190	\$ 175	\$ 177
Capital		\$ 47	\$ 218	\$ 110	\$ 14	\$ 25	\$ 89	\$ 41	\$ 148	\$ 125	\$ 125	\$ 125	\$ 125
Expense		\$ 51	\$ 30	\$ 53	\$ 47	\$ 23	\$ 34	\$ 76	\$ 91	\$ 83	\$ 65	\$ 50	\$ 52
Rate Base													
Net Plant		\$ 889	\$ 1,101	\$ 1,205	\$ 1,211	\$ 1,229	\$ 1,311	\$ 1,344	\$ 1,483	\$ 1,600	\$ 1,715	\$ 1,830	\$ 1,944
ADIT		(145)	(150)	(158)	(162)	(169)	(178)	(187)	(202)	(222)	(250)	(282)	(347)
Monthly Rate Base		\$ 743	\$ 951	\$ 1,049	\$ 1,049	\$ 1,060	\$ 1,133	\$ 1,157	\$ 1,281	\$ 1,377	\$ 1,466	\$ 1,542	\$ 1,597
Return On Investment (2010 - actual, 2011-13 mo. Avg.)	8.27%	\$ 96	\$ 96	\$ 96	\$ 96	\$ 96	\$ 96	\$ 96	\$ 96	\$ 96	\$ 96	\$ 96	\$ 96
Income Taxes	46.22%	44	44	44	44	44	44	44	44	44	44	44	44
O&M		51	30	53	47	23	34	76	91	83	65	50	52
Deferred Income Tax Expense		1	4	6	6	7	9	10	15	20	27	38	50
Depreciation Expense		5	6	7	7	7	7	8	8	9	10	10	11
Large C&I Revenue Requirement		\$ 198	\$ 181	\$ 207	\$ 201	\$ 177	\$ 191	\$ 234	\$ 254	\$ 252	\$ 243	\$ 239	\$ 263

PPL Electric Utilities Corporation

Large C&I Revenue Requirement Calculation		Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
01 - Load Control Pilot	Capital	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
01 - Load Control Pilot	Expense	0	0	0	0	0	0	0	0	0	0	0	0
02 - Customer Owned Generation Pilot	Capital	0	0	0	0	0	0	0	0	0	0	0	0
02 - Customer Owned Generation Pilot	Expense	0	0	0	0	0	0	0	0	0	0	0	0
03 - IHD/HAN Evaluation and Pilot	Capital	0	0	0	0	0	0	0	0	0	0	0	0
03 - IHD/HAN Evaluation and Pilot	Expense	0	0	0	0	0	0	0	0	0	0	0	0
04 - Price and Usage Information Evaluation	Capital	12	12	12	12	12	12	12	30	12	12	12	12
04 - Price and Usage Information Evaluation	Expense	0	0	0	0	0	0	0	0	0	0	0	0
05 - Telecommunication Substation Modern Pilot and Implementation	Capital	0	0	0	0	0	0	0	0	0	0	0	0
05 - Telecommunication Substation Modern Pilot and Implementation	Expense	0	0	0	0	0	0	0	0	0	0	0	0
06 - Enhance Site Scan Implementation	Capital	0	0	0	0	0	0	0	0	0	0	0	0
06 - Enhance Site Scan Implementation	Expense	0	0	0	0	0	0	0	0	0	0	0	0
07 - Voltage Monitoring Pilot	Capital	0	0	0	0	0	0	0	0	0	0	0	0
07 - Voltage Monitoring Pilot	Expense	0	0	0	0	0	0	0	0	0	0	0	0
08 - Next Generation Technology	Capital	0	0	0	0	0	0	0	0	0	0	0	0
08 - Next Generation Technology	Expense	0	0	0	0	0	0	0	0	0	0	0	0
09 - Proactive Outage Detection Evaluation	Capital	0	0	0	0	0	0	0	0	0	0	0	0
09 - Proactive Outage Detection Evaluation	Expense	0	0	0	0	0	0	0	0	0	0	0	0
10 - 15-minute Interval Data Pilot	Capital	0	0	0	0	0	0	0	0	0	0	0	0
10 - 15-minute Interval Data Pilot	Expense	0	0	0	0	0	0	0	0	0	0	0	0
11 - Remote Disconnection/Reconnection Pilot	Capital	0	0	0	0	0	0	0	0	0	0	0	0
11 - Remote Disconnection/Reconnection Pilot	Expense	0	0	0	0	0	0	0	0	0	0	0	0
12 - On-board Meter Data Storage Pilot	Capital	0	0	0	0	0	0	0	0	0	0	0	0
12 - On-board Meter Data Storage Pilot	Expense	0	0	0	0	0	0	0	0	0	0	0	0
13 - Real Time Pathmapping Evaluation	Capital	0	0	0	0	0	0	0	0	0	0	0	0
13 - Real Time Pathmapping Evaluation	Expense	0	0	0	0	0	0	0	0	0	0	0	0
14 - PLC-Based System Enhancement Evaluation	Capital	0	0	0	0	0	0	0	0	0	0	0	0
14 - PLC-Based System Enhancement Evaluation	Expense	0	0	0	0	0	0	0	0	0	0	0	0
15 - Momentary Outage Monitoring Pilot	Capital	0	0	0	0	0	0	0	0	0	0	0	0
15 - Momentary Outage Monitoring Pilot	Expense	0	0	0	0	0	0	0	0	0	0	0	0
17 - Service Extender Pilot	Capital	0	0	0	0	0	0	0	0	0	0	0	0
17 - Service Extender Pilot	Expense	0	0	0	0	0	0	0	0	0	0	0	0
18 - Pre-Pay Metering Pilot	Capital	0	0	0	0	0	0	0	0	0	0	0	0
18 - Pre-Pay Metering Pilot	Expense	52	52	57	55	52	53	52	52	52	65	55	52
Program Management - Smart Meter Team	Expense												
Total		\$ 85	\$ 85	\$ 89	\$ 87	\$ 85	\$ 86	\$ 85	\$ 83	\$ 85	\$ 77	\$ 87	\$ 85
Capital		\$ 12	\$ 12	\$ 12	\$ 12	\$ 12	\$ 12	\$ 12	\$ 30	\$ 12	\$ 12	\$ 12	\$ 12
Expense		\$ 52	\$ 52	\$ 57	\$ 55	\$ 52	\$ 53	\$ 52	\$ 52	\$ 52	\$ 65	\$ 55	\$ 52
Rate Base													
Net Plant		\$ 1,945	\$ 1,946	\$ 1,948	\$ 1,947	\$ 1,948	\$ 1,948	\$ 1,949	\$ 1,967	\$ 1,967	\$ 1,968	\$ 1,968	\$ 1,968
ADIT		(348)	(349)	(350)	(351)	(353)	(354)	(357)	(360)	(364)	(368)	(373)	(381)
Monthly Rate Base		\$ 1,597	\$ 1,597	\$ 1,597	\$ 1,596	\$ 1,595	\$ 1,594	\$ 1,592	\$ 1,607	\$ 1,604	\$ 1,600	\$ 1,594	\$ 1,587
Return On Investment (2010 - actual, 2011-13 mo. Avg.)	8.27%	\$ 132	\$ 132	\$ 132	\$ 132	\$ 132	\$ 132	\$ 132	\$ 132	\$ 132	\$ 132	\$ 132	\$ 132
Income Taxes	46.22%	61	61	61	61	61	61	61	61	61	61	61	61
O&M		52	52	57	55	52	53	52	52	52	65	55	52
Deferred Income Tax Expense		1	1	1	1	2	2	2	3	4	4	5	7
Depreciation Expense		11	12	12	12	12	12	12	12	12	12	12	12
Large C&I Revenue Requirement		\$ 258	\$ 258	\$ 262	\$ 261	\$ 259	\$ 259	\$ 260	\$ 261	\$ 261	\$ 275	\$ 265	\$ 265

Appendix 1

PPL ELECTRIC UTILITIES CORPORATION

**2011 SMART METER RIDER
RECONCILIATION REPORT**
For the Quarter Ended June 30, 2011

Docket No. M-2009-2123945

July 29, 2011

PPL ELECTRIC UTILITIES CORPORATION
SMART METER RIDER COLLECTION RECONCILIATION
Report For The Period January 1, 2011 to December 31, 2011

Line No.		(Schedule B, page 1 of 3, Column M) Residential	(Schedule B, Page 2 of 3, Column M) Small C&I	(Schedule B, page 3 of 3, Column M) Large C&I	Total
ACTUAL REVENUES					
1	Smart Meter Revenue Collected	\$ 667,640	\$ 94,289	\$ 747	\$ 762,676
2	Less: GRT (1)	\$ 39,391	\$ 5,563	\$ 44	\$ 44,998
3	Revenue Applicable to Smart Meter Plan	\$ 628,249	\$ 88,726	\$ 703	\$ 717,678
ACTUAL EXPENSES					
4	Smart Meter Plan Expenses (2)	\$ 650,267	\$ 94,207	\$ 803	\$ 745,277
5	Expense Applicable to Smart Meter	\$ 650,267	\$ 94,207	\$ 803	\$ 745,277
6	Over/(Under) Collection (Excluding GRT)	\$ (22,018)	\$ (5,481)	\$ (100)	\$ (27,599)
7	Interest on Over/(Under) Collection (Per Schedule D, Line 13)	\$ (1,118)	\$ (456)	\$ (8)	\$ (1,582)
8	Net Over/(Under) Collection, Including Interest (Excluding GRT)	\$ (23,136)	\$ (5,937)	\$ (108)	\$ (29,181)
9	Net Over/(Under) Collection, Including Interest (Including GRT)	\$ (24,587)	\$ (6,309)	\$ (115)	\$ (31,011)

(1) Gross Receipts Tax Factor (1-.059)

(2) This category, which is designated as Smart Meter Plan Expenses, reflects the revenue requirement associated with the Smart Meter Plan's capital and operating costs.

PPL ELECTRIC UTILITIES CORPORATION
SMART METER RIDER COLLECTION RECONCILIATION
Residential
Report For The Period January 1, 2011 to December 31, 2011

Line No.	(A) January	(B) February	(C) March	(D) April	(E) May	(F) June	(G) July	(H) August	(I) September	(J) October	(K) November	(L) December	(M) Total
ACTUAL REVENUES													
1 Smart Meter Revenue Collected	\$ 69,185	\$ 159,275	\$ 136,079	\$ 113,018	\$ 89,928	\$ 100,155							\$ 667,640
2 Less: GRT (1)	\$ 4,082	\$ 9,397	\$ 8,029	\$ 6,668	\$ 5,306	\$ 5,909	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 39,391
3 Revenue Applicable to Smart Meter Plan	\$ 65,103	\$ 149,878	\$ 128,050	\$ 106,350	\$ 84,622	\$ 94,246	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 628,249
ACTUAL EXPENSES													
4 Smart Meter Plan Expenses (2)	\$ 85,740	\$ 77,302	\$ 127,027	\$ 165,973	\$ 93,013	\$ 101,212							\$ 650,267
5 Expense Applicable to Smart Meter	\$ 85,740	\$ 77,302	\$ 127,027	\$ 165,973	\$ 93,013	\$ 101,212	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 650,267
6 Residential Over/(Under) Collection	\$ (20,637)	\$ 72,576	\$ 1,023	\$ (59,623)	\$ (8,391)	\$ (6,966)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (22,018)

(1) Gross Receipts Tax Factor (1-.059)

(2) This category, which is designated as Smart Meter Plan Expenses, reflects the revenue requirement associated with the Smart Meter Plan's capital and operating costs.

PPL ELECTRIC UTILITIES CORPORATION
SMART METER RIDER COLLECTION RECONCILIATION
Small Commercial and Industrial
Report For The Period January 1, 2011 to December 31, 2011

Line No.	(A) January	(B) February	(C) March	(D) April	(E) May	(F) June	(G) July	(H) August	(I) September	(J) October	(K) November	(L) December	(M) Total
ACTUAL REVENUES													
1 Smart Meter Revenue Collected	\$ 7,559	\$ 18,281	\$ 17,957	\$ 16,464	\$ 16,283	\$ 17,745							\$ 94,289
2 Less: GRT (1)	\$ 446	\$ 1,079	\$ 1,059	\$ 971	\$ 961	\$ 1,047	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,563
3 Revenue Applicable to Smart Meter Plan	\$ 7,113	\$ 17,202	\$ 16,898	\$ 15,493	\$ 15,322	\$ 16,698	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 88,726
ACTUAL EXPENSES													
4 Smart Meter Plan Expenses (2)	\$ 14,073	\$ 13,239	\$ 16,183	\$ 16,639	\$ 16,240	\$ 17,833							\$ 94,207
5 Expense Applicable to Smart Meter	\$ 14,073	\$ 13,239	\$ 16,183	\$ 16,639	\$ 16,240	\$ 17,833	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 94,207
6 Small Commercial and Industrial Over/(Under) Collection	\$ (6,960)	\$ 3,963	\$ 715	\$ (1,146)	\$ (918)	\$ (1,135)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (5,481)

(1) Gross Receipts Tax Factor (1-.059)

(2) This category, which is designated as Smart Meter Plan Expenses, reflects the revenue requirement associated with the Smart Meter Plan's capital and operating costs.

PPL ELECTRIC UTILITIES CORPORATION
SMART METER RIDER COLLECTION RECONCILIATION
Large Commercial and Industrial
Report For The Period January 1, 2011 to December 31, 2011

Line No.	(A) January	(B) February	(C) March	(D) April	(E) May	(F) June	(G) July	(H) August	(I) September	(J) October	(K) November	(L) December	(M) Total
ACTUAL REVENUES													
1 Smart Meter Revenue Collected	\$ 50	\$ 136	\$ 139	\$ 137	\$ 145	\$ 140							\$ 747
2 Less: GRT (1)	\$ 3	\$ 8	\$ 8	\$ 8	\$ 9	\$ 8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 44
3 Revenue Applicable to Smart Meter Plan	\$ 47	\$ 128	\$ 131	\$ 129	\$ 136	\$ 132	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 703
ACTUAL EXPENSES													
4 Smart Meter Plan Expenses (2)	\$ 137	\$ 122	\$ 148	\$ 143	\$ 119	\$ 134							\$ 803
5 Expense Applicable to Smart Meter	\$ 137	\$ 122	\$ 148	\$ 143	\$ 119	\$ 134	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 803
6 Large Commercial and Industrial Over/(Under) Collection	\$ (90)	\$ 6	\$ (17)	\$ (14)	\$ 17	\$ (2)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (100)

(1) Gross Receipts Tax Factor (1- 059)

(2) This category, which is designated as Smart Meter Plan Expenses, reflects the revenue requirement associated with the Smart Meter Plan's capital and operating costs.

Smart Meter Program
Schedule C - Monthly Revenue Requirement

		<u>1/31/2011</u>	<u>2/28/2011</u>	<u>3/31/2011</u>	<u>4/30/2011</u>	<u>5/31/2011</u>	<u>6/30/2011</u>
Residential							
Rate Base							
Net Plant		\$ 369,971	\$ 435,238	\$ 583,763	\$ 826,110	\$ 924,716	\$ 1,000,172
ADIT		(73,803)	(82,437)	(125,035)	(197,822)	(210,843)	(217,680)
Rate Base		296,168	352,802	458,728	628,288	713,873	782,492
Return On Investment ¹	0.6892%	2,041	2,432	3,162	4,330	4,920	5,393
Income Taxes	45.7086%	933	1,111	1,445	1,979	2,249	2,465
O&M		67,327	56,663	70,751	76,701	61,675	74,856
Deferred Income Tax Expense		12,826	14,177	48,141	78,330	18,565	12,381
Depreciation Expense		2,612	2,919	3,527	4,632	5,604	6,117
Residential Revenue Requirement		\$ 85,740	\$ 77,302	\$ 127,027	\$ 165,973	\$ 93,013	\$ 101,212
Small C&I							
Rate Base							
Net Plant		\$ 123,982	\$ 149,399	\$ 166,383	\$ 173,304	\$ 191,871	\$ 204,919
ADIT		(21,131)	(22,059)	(23,625)	(24,660)	(27,222)	(29,275)
Rate Base		102,851	127,340	142,758	148,644	164,649	175,644
Return On Investment ¹	0.6892%	709	878	984	1,024	1,135	1,211
Income Taxes	45.7086%	324	401	450	468	519	553
O&M		9,885	8,235	10,264	11,121	8,957	10,855
Deferred Income Tax Expense		2,176	2,651	3,289	2,758	4,285	3,777
Depreciation Expense		979	1,073	1,196	1,267	1,344	1,438
Small C&I Revenue Requirement		\$ 14,073	\$ 13,239	\$ 16,183	\$ 16,639	\$ 16,240	\$ 17,833
Large C&I							
Rate Base							
Net Plant		\$ 889	\$ 1,101	\$ 1,205	\$ 1,211	\$ 1,229	\$ 1,311
ADIT		(145)	(150)	(156)	(162)	(169)	(178)
Rate Base		743	951	1,049	1,049	1,060	1,133
Return On Investment ¹	0.6892%	5	7	7	7	7	8
Income Taxes	45.7086%	2	3	3	3	3	4
O&M		109	88	111	105	81	92
Deferred Income Tax Expense		13	16	18	18	19	21
Depreciation Expense		7	8	8	9	9	9
Large C&I Revenue Requirement		\$ 137	\$ 122	\$ 146	\$ 143	\$ 119	\$ 134
Total							
Rate Base							
Net Plant		\$ 494,841	\$ 585,738	\$ 751,350	\$ 1,000,625	\$ 1,117,816	\$ 1,206,402
ADIT		(95,079)	(104,646)	(148,816)	(222,643)	(238,234)	(247,133)
Rate Base		399,762	481,093	602,534	777,982	879,582	959,269
Return On Investment		2,755	3,316	4,153	5,362	6,062	6,611
Income Taxes		1,259	1,516	1,898	2,451	2,771	3,022
O&M		77,322	64,986	81,127	87,927	70,714	85,804
Deferred Income Tax Expense		15,015	16,845	51,448	81,106	22,869	16,178
Depreciation Expense		3,599	4,000	4,731	5,908	6,957	7,564
Total Revenue Requirement		\$ 99,950	\$ 90,662	\$ 143,358	\$ 182,754	\$ 109,372	\$ 119,179

1. The Annual Return on Investment is 8.27%.

PPL ELECTRIC UTILITIES CORPORATION
INTEREST EXPENSE ON 2011 SMART METER RIDER
OVER/(UNDER) COLLECTIONS BY MONTH

Line No.	Month	(A) Interest Rate	(B) Weighting Factor	(C) (D)		(C) (D)		(C) (D)		(C) (D)	
				Total		Residential		Small Commercial and Industrial		Large Commercial and Industrial	
				Over/(Under) Collection Total (1)	Interest on Over/(Under) Collection	Over/(Under) Collection Total (1)	Interest on Over/(Under) Collection	Over/(Under) Collection Total (1)	Interest on Over/(Under) Collection	Over/(Under) Collection Total (1)	Interest on Over/(Under) Collection
1	January	6.00%	18/12	\$ (27,687)	\$ (2,491)	\$ (20,637)	\$ (1,857)	\$ (6,960)	\$ (626)	\$ (90)	\$ (8)
2	February	6.00%	17/12	\$ 76,545	\$ 6,507	\$ 72,576	\$ 6,169	\$ 3,963	\$ 337	\$ 6	\$ 1
3	March	6.00%	16/12	\$ 1,721	\$ 138	\$ 1,023	\$ 82	\$ 715	\$ 57	\$ (17)	\$ (1)
4	April	6.00%	15/12	\$ (60,783)	\$ (4,559)	\$ (59,623)	\$ (4,472)	\$ (1,146)	\$ (86)	\$ (14)	\$ (1)
5	May	6.00%	14/12	\$ (9,292)	\$ (650)	\$ (8,391)	\$ (587)	\$ (918)	\$ (64)	\$ 17	\$ 1
6	June	6.00%	13/12	\$ (8,103)	\$ (527)	\$ (6,966)	\$ (453)	\$ (1,135)	\$ (74)	\$ (2)	\$ -
7	July	6.00%	12/12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	August	6.00%	11/12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9	September	6.00%	10/12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	October	6.00%	9/12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11	November	6.00%	8/12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	December	6.00%	7/12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Total			\$ (27,599)	\$ (1,582)	\$ (22,018)	\$ (1,118)	\$ (5,481)	\$ (456)	\$ (100)	\$ (8)

(1) From Schedule B, Line 6 for the respective month.