BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. P-2016-__________

PPL Electric Utilities Corporation

Statement No. 1

Direct Testimony of James M. Rouland

Topics Addressed:	Default Service Program and Procurement Plan Alternative Energy Credits Request for Proposals Process and Rules Default Service Supply Master Agreement Third-Party Administrator Regional Transmission Organization Compliance Standard Offer Program Time of Use Program CAP Shopping Affiliated Interest Agreements

January 29, 2016

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is James M. Rouland. My business address is Two North Ninth Street, Allentown, Pennsylvania 18101.

Q. What is your current position?

A. I am currently the Supervisor of Energy Procurement, Settlement & Scheduling for PPL Electric Utilities Corporation ("PPL Electric" or the "Company").

Q. Please describe your primary responsibilities in that position.

A: My primary responsibilities include managing the PPL Electric Default Service Plan auctions and related activities, managing energy contracts and credit provisions associated with those contracts, supervising the settlement and scheduling activities, supervising the PPL Electric Price-to-Compare, and managing the alternative energy credit ("AEC") contracts and state reporting obligations associated with such contracts. I also manage the Time-of-Use Program and manage the Company's Net Metering Program.

Q. Please describe your educational experience.

A: I graduated from Albright College in 2005 with a Bachelor of Arts in Environmental Policy and a Bachelor of Science in Environmental Science. I graduated from the University of Phoenix in 2008 with a Masters of Business Administration, concentration in Finance.

Q. Please describe your professional experience.

A: I began my career in 2005 with PPL Corporation, in the PPL Environmental Management Department, as an Environmental Auditor and was later promoted to Lead Environmental Auditor in 2007. In 2008, I joined PPL Development Company and was promoted to the position of Senior Energy and Climate Change Professional. In 2009, I joined the Energy Acquisition Department within PPL Electric as a Senior Analyst of Business Operations Analysis. In 2012, I was promoted to Supervisor of Energy Procurement within the Distribution Regulatory and Business Affairs Department of PPL Electric, which is my current position.

Q. Have you testified previously before the Commission?

Yes. I previously testified before the Commission in support of the PPL Electric's Petition for the Approval of a Pilot Time-of-Use Program at Docket No. P-2013-2389572; PPL Electric's Default Service Program and Procurement Plan for the Period June 1, 2015 through May 31, 2017, at Docket No. P-2014-2417907; PPL Electric's 2015 base rate case, at Docket No. R-2015-2469275; and a net metering complaint at Docket No. C-2013-2375440.

Q. What is the purpose of your testimony?

A. My testimony is being submitted in support of the Petition of PPL Electric Utilities Corporation for Approval of a Default Service Program and Procurement Plan for the Period June 1, 2017 through May 31, 2021, filed with the Commission on January 29, 2016. Therein, PPL Electric requests approval of its fourth Default Service Program and

Procurement Plan ("DSP IV Program") to establish the terms and conditions under which PPL Electric will acquire and supply Default Service or provider of last resort service ("Default Service"), from June 1, 2017 through May 31, 2021 (the "DSP IV Program Period"). The subjects of my testimony include the following:

- A description of the background of, and essential elements of, the DSP IV Program;
- A description of the *pro forma* Request for Proposals Process and Rules ("RFP Rules") and the *pro forma* Default Service Supply Master Agreement ("Default Service SMA") which are included as Attachments A and B to the Petition, respectively;
- A description of the Time of Use ("TOU") Program;
- Compliance with the Alternative Energy Portfolio Standards Act ("AEPS Act") and Procurement of Alternative Energy Credits ("AEPS Credits");
- A description of changes proposed for the PPL Electric's Standard Offer Program ("SOP");
- A description of the Request for Proposals ("RFP") process, including bidder qualifications under the RFP Rules and the Default Service SMA;
- The selection of the independent third-party manager to administer procurement under the Default Service Program;
- Compliance with Regional Transmission Organization ("RTO") requirements; and
- A description of the Customer Assistance Program ("CAP") shopping proposal.

Q. Please describe the direct testimony submitted by the Company in this proceeding.

A. In addition to my direct testimony, the Company also has submitted the direct testimony of the following witnesses that will explain the subject matter indicated:

- PPL Electric Statement No. 2 - the Direct Testimony of A. Joseph Cavicchi, explaining the lessons learned from PPL Electric's existing Default Service Procurement Program, describing the products to be procured in the DSP IV Program, explaining the procurement process, and describing how the DSP IV Program meets the "Prudent Mix" and "Least Cost Over Time" requirements.
- PPL Electric Statement No. 3 - the Direct Testimony of Michael S. Wukitsch, sponsoring and describing the statistics and data related to CAP shopping within PPL Electric's service territory, as well as describing the impact that CAP shopping has on CAP credits and the CAP program costs borne by other customers.

Q. Mr. Rouland, are you sponsoring any exhibits in this proceeding?

A. Yes. I am sponsoring the Company's Petition, including the following attachments: Attachment A, the DSP IV RFP; Attachment B, the DSP IV SMA; and Attachment C, the *pro forma* tariff provisions for the Generation Supply Charge-1, the Generation Supply Charge-2 and the Transmission Service Charge. The Company requests that the Petition, together with the accompanying Attachments, be identified as PPL Electric Exhibit Number 1. I also am sponsoring the following exhibits that are attached to my testimony: PPL Electric Exhibit JMR-1, which is the original Third-Party SOP Services Contract between PPL Electric and PPL Solutions, LLC ("PPL Solutions"); PPL Electric Exhibit

JMR-2, which is Amendment 1 to the Third-Party SOP Services Contract approved in DSP III; PPL Electric Exhibit JMR-3, which is a proposed amendment to the Third-Party SOP Services Contract that extends the termination date through May 31, 2021; and PPL Electric Exhibit JMR-4, which is the proposed SOP Binding Agreement.

II. BACKGROUND

Q. Please explain why PPL Electric is filing the DSP IV Program.

A. Act 129 of 2008 ("Act 129") became effective on October 15, 2008. Among other provisions, Act 129 amended the Customer Choice Act to require EDCs, in their role as Default Service providers, to procure supply through competitive processes utilizing a "prudent mix" of contracts, and to offer a TOU rate option to customers with smart meters.

Pursuant to 52 Pa. Code § 54.185, a Default Service provider must file a Default Service program with the Commission no later than 12 months prior to the conclusion of the currently effective Default Service program. 52 Pa. Code § 54.185(a). PPL Electric's current Commission-approved Default Service Program and Procurement Plan ("DSP III Program") expires on May 31, 2017. To meet its statutory and regulatory Default Service obligation after the expiration of the DSP III Program, PPL Electric is filing the DSP IV Program to establish the terms and conditions under which PPL Electric will acquire and supply Default Service during the DSP IV Program Period.

This filing represents PPL Electric's fifth program for procurement of Default Service Supply. The first procurement plan was known as the Competitive Bridge Plan, or CBP, and operated for calendar year 2010. The next two plans, DSP I and DSP II, operated for the periods of January 1, 2011 through May 31, 2013 and June 1, 2013 through May 31, 2015, respectively. The current plan, DSP III, operates from June 1, 2015 through May 31, 2017. PPL Electric is proposing the DSP IV Program to establish the terms and conditions under which PPL Electric would continue to provide Default Service and obtain generation supply for the period beginning June 1, 2017 through May 31, 2021.

Q. What are some of the important aspects of the DSP III Program that are relevant to the DSP IV Program?

A. By Final Order entered January 15, 2015, the Commission approved the Company's DSP III Program. Importantly, PPL Electric plans to acquire the generation supply and related services needed to meet its Default Service obligation for the DSP IV Program Period through procedures similar to those previously approved by the Commission and successfully used by PPL Electric for its Default Service supply under the DSP III Program. The DSP IV Program incorporates the best practices and lessons learned from the DSP III Program, and includes several modifications designed to better address customer needs for the DSP IV Program Period.

Q. Please provide a summary of the Commission-approved DSP III Program.

A. PPL Electric's current DSP III Program relies on a portfolio of fixed-price full-requirements supplies for both the Residential and Small Commercial and Industrial ("Small C&I") customers. The Residential customer portfolio also includes a pre-existing block contract for 50 MW of supply committed from January 1, 2016 through May 31, 2021. The Residential and Small C&I product mixtures are designed around the purchase of fixed-price, full-requirements, load-following products with 6 and 12 month contract terms using a laddered procurement approach. Under the laddered procurement approach, the procurements are staggered rather than procuring all of the products at the same time. Under the DSP III Program, a 12 month product, reflecting 25% of load requirements, net of the 50 MW long-term block product, continues in effect through November 30, 2017. The Company conducts competitive solicitations to purchase these Default Service products.

For its Large Commercial and Industrial ("Large C&I") customers, PPL Electric's DSP III Program provides full-requirements, load-following power supply contracts. This product includes an energy component priced at wholesale electricity spot market prices on a real-time hourly basis to meet the Default Service demand of those customers electing to receive such service.

With respect to its obligation under the AEPS Act, PPL Electric procures certain Alternative Energy Credits ("AECs") as a component of its fixed-price and spot-market Default Service supply contracts. The seller must provide its proportional share of AECs to fulfill PPL Electric's AEPS obligation, in accordance with the terms of the SMA. Additionally, the SMA requires the seller to complete its transfer of AECs into PPL Electric's Generation Attribute Tracking System ("GATS") account(s) in the amount necessary to fulfill the seller's AEPS obligation, pursuant to the schedule set forth in the SMA. PPL Electric also previously acquired long-term solar Tier I AECs associated with its 10-year, 50 MW block product in its Commission-approved DSP I Program. PPL Electric also has acquired additional Tier I non-solar AECs to cover the period from June

1, 2015 through May 31, 2021, associated with its 10-year long-term product obligation in its Commission-approved DSP III Program.

The DSP III Program's procurement process is administered by an independent third-party, NERA Economic Consulting ("NERA"). NERA monitors the results of each solicitation to ensure that they are consistent with prevailing market prices. NERA also submits confidential reports to the Commission evaluating the solicitation process and the results of each solicitation.

Q. Have the products in the Company's DSP III Program been successful?

A. Yes. PPL Electric has successfully procured fixed-priced, full-requirement supply and spot market supply as part of its product portfolio going back to at least July 2007, when PPL Electric first began procuring supplies for its 2010 Competitive Bridge Plan, through its most recent DSP III solicitation. The results from PPL Electric's solicitations confirm that these Default Service products draw numerous competitors and that multiple bidders are successful suppliers. There currently is substantial competition to supply the fixed-price, full-requirements and spot market supply products.

With the exception of Tier II AECs, the Company's DSP III Program has successfully procured AECs needed to meets its obligations under the AEPS Act. The DSP III Program also included a process to obtain TIER II AECs for the period June 1, 2015 through May 31, 2021 associated with its 10-year long-term 50 MW product. However, the results of two procurements of Tier II AECs were rejected by the Commission as not competitive. PPL Electric filed a Petition to amend its DSP III Program related to procurement of long-term Tier II AECs for the period June 1, 2015 through May 31, 2021. On January 28, 2016, the Commission approved the amendment, which the Company will implement in its April 2016 auction.

Q. Does PPL Electric offer a TOU rate option under the DSP III Program?

A. Yes. Pursuant to 66 Pa.C.S. § 2807(f)(5), PPL Electric, as the Default Service provider, is required to offer a TOU rate option to its Default Service customers. The Company currently provides a TOU rate option to Residential and Small C&I customers through its tariff, which relies on the retail market and electric generation suppliers ("EGSs") to provide TOU service to customers. Retail EGSs that choose to participate in the TOU program offer TOU rate options to eligible customers in PPL Electric's service territory, subject to certain restrictions set forth under the program. This mechanism was first approved by the Commission on a pilot basis and became effective December 10, 2014.[1] The pilot mechanism became permanent in the Commission-approved DSP III Plan.

Q. Is the Company proposing major changes from its DSP III Program?

A. No. PPL Electric's DSP III Program, as approved by the Commission, implemented several major changes from prior Default Service Program and Procurement Plans, including, but not limited to:

- Major substantive and format issues to the SMA and RFP;

[1] *See Petition of PPL Electric Utilities Corporation for Approval of a New Pilot Time-of-Use Program A case stemming from: Petition of PPL Electric Utilities Corporation for Approval of a Default Service Program for the Period June 1, 2013 through May 31, 2015*, Docket No. P-2013-2389572, 2014 Pa. PUC LEXIS 690, 316 P.U.R.4th 167 (Pa. PUC Sept. 11, 2014) ("*Pilot TOU* Order").

- Use of 6 month and 12 month fixed-price, load-following, full-requirements contracts for the Residential and Small C&I Default Service load;
- Semi-annual Residential and Small C&I procurements;
- Continued use of a spot market, load-following, full-requirements contract for the Large C&I Default Service load;
- Annual Large C&I procurements;
- A 100 kW Commercial and Industrial customer demand split for GS-3 and LP-4 rate groups;
- Quarterly reconciliation and Price-to-Compare ("PTC") calculations;
- Elimination of Preliminary PTC Calculations;
- A Default Service TOU rate option that relies on the retail market and EGSs to offer TOU service;
- Procurement of Tier I Non-solar and Tier II Alternative Energy Credits associated with the Company's legacy block contracts through 6 year contracts;
- Continuation of the Company's long-standing treatment of Non-Market Based ("NMB") Transmission Service charges;
- An online sign-up option for customers seeking to participate in the Company's SOP; and
- Modifications to the Company's SOP scripts.

As summarized above, PPL Electric has acquired, and continues to successfully acquire, the generation supply and related services needed to meet its Default Service obligation under the DSP III Program. Importantly, the Company is not proposing any major modifications to any of the procedures or products successfully used in the DSP III

Program. Rather, PPL Electric's DSP IV Program will continue the procedures and products successfully used in the DSP III Program with a few modifications.

Q. Can you please summarize the differences between the Commission-approved DSP III Program and the proposed DSP IV Program?

A. The primary changes from the DSP III Program include:

- Expanding the term of the Default Service Plan to four (4) years;
- Using an electronic platform for the RFP and utilizing the hard-copy method as a contingency only;
- Updating the SMA to accommodate the transfer and acceptance of documents through electronic means;
- Certain limited amendments to the Standard Offer Program, including changes to the EGS Binding Agreement and enacting monthly supplier invoicing of costs related to customers referred to EGSs through the SOP process; and
- A CAP customer shopping proposal.

Each of these modifications are further explained below.

III. <u>DESCRIPTION OF THE DSP IV PROGRAM</u>

A. OVERVIEW OF DSP IV PROGRAM

Q. Please summarize the essential elements of PPL Electric's DSP IV Program.

A. The DSP IV Program consists of: a proposal for competitive procurement of Default Service supply and related AECs during the DSP IV Program Period; an implementation plan; a proposed rate design, including a TOU rate option for Default Service during the

DSP IV Program Period; a proposal to continue the Company's current SOP; a proposal to allow CAP customers to continue to shop for competitive electric generation supply; and a contingency plan for the DSP IV Program.

PPL Electric will procure Default Service supply separately for the following three Customer Classes: Residential; Small C&I; and Large C&I. The Company will purchase energy, capacity, transmission (other than Non-market-based Transmission Services),[2] ancillary services, transmission and distribution losses, congestion management costs, and such other services or products that are required to supply Default Service to PPL Electric's retail customers, including AEPS Credits, through a series of load-following, full-requirements contracts. The Company proposes to recover the cost of obtaining all services necessary to provide Default Service from the customers in each respective Customer Class.

Q. Please explain the proposed term of the DSP IV Program Period.

A. PPL Electric proposes that the DSP IV Program be in effect for a period of four years, from June 1, 2017 through May 31, 2021. The Company proposes a four-year plan because the proposed DSP IV Program is largely unchanged from its predecessor, the DSP III Program. The Company believes that the relatively short terms of the prior DSP Programs have allowed for refinements to the procurement process and procedure as shopping has developed in PPL Electric's service territory. Throughout each of the PPL

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[2] The Non-market-based Transmission Services that will not be purchased by the Company through the Default Service procurement process include: Network Integration Transmission Services; Transmission Enhancement Costs; Expansion Cost Recovery Costs; Non-Firm Point-to-Point Transmission Service Credits; Regional Transmission Expansion Plan; and Generation Deactivation Charges.

Electric's DSP plans, the Company has sought to create a simpler procurement plan that is both market reflective and less volatile for customers. The Company believes it has achieved a "steady state" mix of products that should not need modification for a four-year period. The Company believes that it has achieved its goals and as such, seeks to maintain the results going forward.

PPL Electric's past three DSP programs have each been for a term of two years. This means that PPL Electric and other parties have been required to litigate the DSP programs every other year. Extending the term from two years to four years will save litigation time and cost for PPL Electric, other parties that participate in DSP proceedings and the Commission. For these reasons, PPL Electric believes that it is reasonable and appropriate to extend the term of the DSP IV program from two years to four years.

Q. Is there any concern that approval of a four-year DSP Program could become an issue if the Company ceased to be the Default Service Provider prior to the end of the Program?

A. No. If PPL Electric's role as a Default Service Provider is eliminated prior to May 31, 2021 (the end of the proposed DSP IV Program Period), the Company can respond quickly in several ways. First, if the Company is made aware of a change prior to the final DSP IV procurements in October, 2020, the Company can request to modify the term of the final contracts procured under DSP IV to reduce or eliminate any overlap beyond May 2021. Second, the SMA enables the Company to transfer its obligations to procure or provide Default Service supply to a third party in the event PPL Electric ceases to serve as the Default Service Supplier. Specifically, Section 16.3(b) of the SMA would allow the Company to transfer its Default Service contracts if required by a change in law or regulation. This provision is unchanged from the SMA currently in effect for DSP III.

I also note that if PPL Electric were to transfer its Default Service contracts under Section 16.3(b) of the SMA, the only contract remaining would be the previously-approved, ten-year block, long-term solar contracts, solar set-aside contracts for Solar AECs, and long-term Tier I contract which conclude at various points during DSP IV's term. I note, however, that in the Commission's January 23, 2013 Order concerning DSP II, the Commission specifically acknowledged that provision would be made for recovery of the costs of these contracts if the Company ceased to be the Default Service Provider prior to the conclusion of these contracts.

B. PROCUREMENT AND RATE DESIGN

Q. Is the Company proposing to modify the procurement approach under DSP IV?

A. No. The DSP IV Program will continue the same basic procurement approach taken in DSP III.

Q. Please describe the rate schedules that compromise the Residential Customer Class.

A. The Residential Customer Class is comprised of customers served under current PPL Electric Rate Schedules RS and RTS. This remains unchanged from the DSP III Program.

Q. Please describe the proposed procurement for the Residential Customer Class.

A. Under the proposed DSP IV Program, PPL Electric will acquire 100% of the fixed-price Residential Customer Class Default Service supply, exclusive of supply previously committed under a block contract for Residential customers, through a series of load-following, full-requirements contracts. The fixed-price, load-following, full-requirements supply will be obtained through semiannual solicitations beginning in April 2017 and continuing through October 2020. As further explained in the Direct Testimony of Mr. Cavicchi (PPL Electric Statement No. 2), the DSP IV Program's procurement schedule will procure a fixed percentage of its Default Service load on a semiannual basis through 12- and 6-month contracts using a laddered or staggered approach so that all of the products are not procured at the same time. The proposed procurement of Residential Customer Class Default Service supply remains unchanged from the DSP III Program.

Q. Please describe the rate schedules that make up the Small C&I Customer Class.

A. The Small C&I Customer Class is comprised of customers served under current PPL Electric Rate Schedules GS-1, GS-3 (under 100 kW), LP-4 (under 100 kW), GH-2, BL, SA, SM, SHS, SLE, SE, TS, and standby service for qualifying facilities. This is essentially unchanged from the Small C&I Customer Class definition currently in effect for DSP III. The classification of individual commercial and industrial customers on Rate Schedules GS-3 and LP-4 as either Small C&I or Large C&I will be updated effective June 1, 2017, based upon demand data for each customer's peak load contribution assigned for the 2017-2018 PJM Interconnection, LLC ("PJM") Planning Year.

Q. Please describe the proposed procurement for the Small C&I Customer Class.

A. Similar to the Residential Customer Class, PPL Electric will acquire 100% of the fixed-price Small C&I Customer Class Default Service supply through a series of load-following, full-requirements contracts. The fixed-price, load-following, full-requirements supply will be obtained through semiannual solicitations beginning in April 2017 and continuing through October 2020. As further explained in the Direct Testimony of Mr. Cavicchi (PPL Electric Statement No. 2), the DSP IV Program's procurement schedule will procure a fixed percentage of its Default Service load on a semiannual basis through 12- and 6-month contracts using a laddered or staggered approach so that all of the products are not procured at the same time. The proposed procurement of Small C&I Customer Class Default Service supply remains unchanged from the DSP III Program.

Q. Please explain how the costs to provide Default Service to the Residential and Small C&I Customer Classes will be recovered.

A. The costs incurred by PPL Electric to provide Default Service to the Residential and Small C&I Customer Classes will be recovered through the Generation Supply Charge-1 ("GSC-1"). The GSC-1 will be separately calculated for the Residential Customer Class and Small C&I Customer Class.

The costs recovered in the GSC-1 will include, among other costs, both costs incurred under the various supplier contracts and costs incurred to acquire the supply and administer the DSP IV Program. The costs incurred prior to June 1, 2017, related to procurement of supply and other costs related to development and implementation of the DSP IV Program will be included in the GSC-1, as applicable, and will be amortized ratably over the 48-month term of the DSP IV Program.

The GSC-1 will be adjusted every six months to reflect the cost of the Default Service supply contracts in place for the upcoming six-month period. It will be reconciled every six months for over and under recoveries by the respective Customer Class. Also, any remaining under/over collections from the DSP III Program will be included in this reconciliation, as well as the consolidation of the time-of-use under/over collection within the respective customer classes.

The proposed cost recovery and GSC-1 remain unchanged from the DSP III Program. *Pro forma* tariff pages for the GSC-1 rate are provided in Attachment C to the Company's Petition.

Q. Please describe the rate schedules that make up the Large C&I Customer Class.

A. The Large C&I Customer Class includes customers served under current PPL Electric Rate Schedules GS-3 (over 100 kW), LP-4 (over 100 kW), LP-5, LP-6, LPEP, and standby service for qualifying facilities. This is the same customer classification currently in effect for DSP III.

Q. Please describe the proposed procurement for the Large C&I Customer Class.

A. For the Large C&I Customer Class, the Company proposes to continue to obtain Default Service supply on a real-time hourly basis through the PJM spot market. Specifically, PPL Electric proposes to issue a single annual solicitation to obtain competitive offers from suppliers to provide the Default Service spot market supply to the Large C&I Customer Class. These annual procurements will be held in April 2017, April 2018, April 2019, and April 2020 for the subsequent PJM planning periods. As explained in the direct testimony of Mr. Cavicchi (PPL Electric Statement No. 2), this form of contract has been used for the Large C&I Class under previous procurement plans, and has been successful in providing service to this Class, which is overwhelmingly (roughly 98% of customer load) comprised of customers who are shopping. The proposed procurement of Large C&I Customer Class Default Service supply remains unchanged from the DSP III Program.

Q. Please explain how the costs to provide Default Service to the Large C&I Customer Class will be recovered.

A. The costs incurred by PPL Electric to provide Default Service to the Large C&I Customer Class will be recovered through the Generation Supply Charge-2 ("GSC-2"). The costs recovered in the GSC-2 will include PJM spot market energy, PJM capacity charges, the suppliers' charge for all other services (including AECs) based upon winning bids in the annual solicitation and PPL Electric's costs to acquire the supply and administer the DSP IV Program.

Customers in the Large C&I Customer Class will continue to pay the following three charges for Default Service under the GSC-2:

- An energy charge per kWh based on the real-time hourly spot-market price and the customer's actual hourly energy use;
- A capacity charge per kW based on the PJM Reliability Pricing Model ("RPM") price for capacity and the customer's peak load contribution; and
- An energy charge per kWh to recover all supplier charges and PPL Electric's cost of administration, both prospective costs and an amortization of previously incurred costs over the term of the DSP IV Program.

The GSC-2 will be revised annually, effective June 1 on thirty days advance notice, to reflect changes in costs. The GSC-2 will continue to be reconciled on an annual basis. Also, any remaining under/over collections from the DSP III Program will be included in this reconciliation.

The proposed cost recovery and GSC-2 remain unchanged from the DSP III Program. *Pro forma* tariff pages for the GSC-2 rate are provided in Attachment C to the Company's Petition.

C. AEPS PROCUREMENT

Q. Does the Company propose to procure AECs under the DSP IV Program?

A. Yes. The AEPS Act and the Commission's implementing regulations require EDCs to obtain AECs in an amount equal to certain percentages of electric energy sold to retail customers in this Commonwealth.[3] The DSP IV Program will procure the AECs necessary to meet its obligations under the AEPS Act.

Q. Please explain how AECs will be procured under the DSP IV Program.

A. Under the DSP IV Program, the Company will procure certain AECs to meet its obligation under the AEPS Act as a component of its load-following fixed-price and spot market Default Service supply contracts. The Default Service Supplier ("DS Supplier") is required to provide its proportional share of AEPS Credits to fulfill PPL Electric's AEPS obligation, in accordance with the terms of the Default Service SMA. The SMA also requires the seller to complete its transfer of AECs into PPL Electric's Generation Attribute Tracking System ("GATS") account(s) in the amount necessary to fulfill the seller's AEPS obligation, pursuant to the schedule set forth in the SMA. The proposed procurement of AECs remains unchanged from the DSP III Program.

In addition, PPL Electric previously acquired long-term solar Tier I AECs associated with its 10-year, 50 MW block product in its Commission-approved DSP I Program. PPL Electric also has acquired additional Tier I non-solar AECs to cover the period from June 1, 2015 through May 31, 2021, associated with its 10-year long-term product obligation in its Commission-approved DSP III Program.

The DSP III Program also included a process to obtain Tier II AECs for the period June 1, 2015 through May 31, 2021 associated with its 10-year long-term 50 MW product. However, the results of two procurements of Tier II AECs were rejected by the Commission as not competitive. PPL Electric has pending before the Commission a

[3] *See* 52 Pa. § Code 54.182.

Petition to amend its DSP III Program related to procurement of long-term Tier II AECs for the period June 1, 2015 through May 31, 2021. Assuming that the Commission approves the amended procurement of long-term Tier II AECs, and the resulting auction for these AECs is successful, no additional AECs are required to be procured in addition to those procured through fixed price full requirements contracts.

Q. Will excess AECs be banked under the DSP IV Program?

A. No. The quantities of AECs procured will be sized such that no significant banking will take place, and that cost recovery takes place on a current basis for those AECs purchased by compliance period. To minimize banking of AECs, the Company proposes to allocate available AECs that were separately procured in AEC solicitations to reduce the amount of AECs that Residential Default Service Suppliers must provide. Prior to each solicitation, PPL Electric will inform RFP Bidders of the quantity of AECs allocated on a per tranche basis to winning residential Default Service Suppliers for the term of their contract.

Q. Please explain how the costs to procure AECs will be recovered.

A. The costs incurred to procure the AECs will be recovered through the GSC-1, which is the same cost recovery method used in the DSP III Program. Although the Company proposes to minimize banking of excess AECs as described above, PPL Electric is requesting approval to sell any excess AECs obtained through long-term contracts with revenues received from such sales credited to customers through the GSC-1.

D. PRUDENT MIX OF SUPPLIES

Q. Does the DSP IV Program comply with Act 129 by providing for the procurement of Default Service supply through a prudent mix of spot, short-term, and long-term power supplies?

A. Yes. The proposed DSP IV Program will acquire a fixed percentage of the Company's Default Service load on a semiannual basis through short and medium-term 12- and 6-month contracts. The DSP IV Program procurement schedule will continue to procure supply over a short-term, 6-month, contract term which enables more market-reflective rates while continuing to moderate price volatility through the procurement of 12-month contracts. Similar to DSP III, the percentage of load split between 6-month and 12-month contracts is 45% and 55%, respectively. The Company also proposes to obtain Default Service supply with energy priced to the PJM real-time spot market for the Large C&I Customer Class. Additionally, the Company has 50 MW of energy and capacity associated with a long-term product for the period June 1, 2015 through May 31, 2021. The Company also has a series of long-term Solar and Tier I AEC contracts in effect, concluding on May 31, 2020 and May 31, 2021, respectively. As further explained in the Direct Testimony of Mr. Cavicchi (PPL Electric Statement No. 2), the proposed product mixture will continue to promote the development of retail competition while protecting against various risks that must be addressed by any Default Service plan.

Finally, it should be noted that in its January 15, 2015 Opinion and Order approving the DSP III Program, the Commission found that the "proposed generation supply procurement plan as set forth in its DSP III program and modified by the terms of the Partial Settlement encompasses a prudent mix of supply methods, which is anticipated to result in adequate, reasonable and reliable service to customers, as well as service that is provided at the least cost over time."[4] As explained above, the DSP IV Program will continue the same procurement approach taken in Commission-approved DSP III Program.

IV. DSP IV PROGRAM RFP AND SMA

A. THE RFP PROCESS

Q. How will PPL Electric implement the DSP IV Program?

A. PPL Electric will implement the DSP IV Program by holding a series of solicitations pursuant to a series of RFPs to obtain the Default Service products from competitive wholesale generation suppliers. Separate bids will be solicited for the Residential, Small C&I and Large C&I Customer Classes.

Q. Is the implementation process for solicitations under the DSP IV Program similar to the DSP III Program?

A. Yes. PPL Electric based the *pro forma* RFP on the documents approved by the Commission in the DSP III Program proceeding. The implementation process for DSP IV is nearly identical to that of the DSP III Program with the following limited exceptions: (1) the primary change has been to modify the bidder qualification and proposal process to adopt an electronic signature and submission process for most documents; (2) PPL Electric is seeking to align the credit and financial requirements under the RFP with the requirements in the Default Service SMA; and (3) PPL Electric proposes to slightly shift the auction window from 12:00 p.m. to 2:00 p.m., to 10:00 a.m.

[4] *See DSP III Order*, p. 28.

to 12:00 p.m.. The *pro forma* RFP is provided as Attachment A to the Company's Petition.

Q. Are the DSP IV Program RFP Rules similar to the DSP III Program?

A. Yes. The DSP IV Program's RFP Rules are similar to the rules approved by the Commission in the DSP III Program. The Company has made the following updates to the RFP Rules: modifying the terms to match those in the SMA; updating auction dates; updating the number of tranches to be procured; updating the tranche size; and updating to accommodate the electronic platform mentioned above.

Q. Please summarize the solicitation and approval process.

A. Separate bids will be solicited for the Residential, Small C&I, and Large C&I Customer Classes. The proposed solicitation schedule is attached to the direct testimony of Mr. Cavicchi (PPL Electric Statement No. 2) as PPL Electric Exhibits JC-3 and JC-4. The results for each solicitation will be presented to the Commission within one business day of the bid proposal due date for that solicitation. At that time, the Commission will have one business day to review those results and render a final decision. The Commission may either accept or reject all of the winning bids presented for a customer group in their entirety. After receiving Commission approval of the solicitation results, PPL Electric will then execute transaction confirmations with the winning suppliers. This is the same solicitation and approval procedure used in the DSP III Program.

Q. Please explain how the submission of certain documents electronically will improve the RFP process.

A. Currently, with the exception of an online registration form to record a bidder's expression of interest in an RFP, all materials and forms related to bidder qualifications are submitted in hard copy. Using an online platform for particular aspects of the RFP process reduces the amount of time for a bidder to submit its proposal. Information submitted in a prior solicitation may be saved and available for the bidder as a starting point. Furthermore, an online form can be easier to complete as certain fields in the form would only appear if appropriate for the particular circumstances of a bidder. Although the entire RFP process cannot be moved online (*e.g.*, the bid assurance letter of credit must be submitted as a hardcopy document), allowing the submission of certain forms online should reduce the burden to bidders and facilitate participation. Similarly, requiring only the electronic submission of contract related documents would facilitate the contract execution process. Several EDCs in Pennsylvania and in other States have already transitioned to an online process for bidder qualifications as part of the RFP or auction process for default service. For the receipt of materials related to bidder qualifications, PPL Electric will work with NERA to develop and implement the online proposal submission website prior to the first scheduled procurement under the DSP IV Program (April 2017). NERA has experience with developing and implementing an online process for bidder qualifications in general and is familiar with PPL Electric's RFP requirements in particular given it has been the independent evaluator for PPL Electric's prior Default Service Programs. After the proposal submission website has been developed, and before the first procurement under the DSP IV Program, PPL

Electric will provide additional instructions related to the use of the proposal submission website to RFP Bidders in an addendum to the RFP Rules.

Q. What are the changes PPL Electric is proposing to make related to the credit and financial requirements under the RFP?

A. There are two changes that the Company is seeking to make to the credit and financial requirements. First, the RFP under DSP III currently requires that the RFP Bidder or its guarantor be rated by one of the three major rating agencies (Standard & Poor's, Fitch Ratings, or Moody's Investor Services). The RFP also requires two years of financial information be submitted. The Company is seeking to keep these items as mandatory only for RFP Bidders seeking to be granted an unsecured credit line under the Default Service SMA. This would allow the qualification requirements to be aligned with the requirements of the Default Service SMA. Newer entities that may not yet have two years of financial information or that are not be rated may participate in the RFP. Such entities would not be granted an unsecured credit line under the terms of the Default Service SMA and would be required to post liquid collateral under the Default Service SMA if they win tranches.

Second, the Default Service SMA under DSP III as well as the proposed Default Service SMA for DSP IV require additional documents to be submitted by the default service supplier if it is relying on the financial standing of a foreign entity as guarantor such as a legal opinion that the guaranty pursuant to the Default Service SMA will be binding on the Guarantor in the jurisdiction in which it has been incorporated or otherwise formed. The Company is proposing to allow RFP Bidders to submit these documents in draft form during the Bidder Qualifications process and to receive information regarding the acceptability of the form of the documents when they are notified of their status as a Qualified Bidder. This would allow the RFP Bidder to know whether it could rely on the foreign guarantor under the Default Service SMA in advance of their bid submission. If the form of the documents is not acceptable, the RFP Bidder is provided with information regarding the deficiencies related to the documents and is put on notice during the RFP process that unless the deficiencies are addressed it would not be able to rely on the foreign guarantor and that it would be required to post liquid collateral under the Default Service SMA if the RFP Bidder win tranches.

Q. Are there any other changes the Company is proposing to the RFP Process?

A. Yes. The Company is proposing to move the window to submit bids from between 12:00 PM and 2:00 PM to between 10:00 AM and 12:00 PM on the Bid Proposal Due Date. As is the case today, the independent evaluator is expected to inform RFP Bidders that have tranches in the winning combination on the same day, and to provide the Commission with a confidential report regarding the RFP by the morning of the next business day. The proposed change would allow the independent evaluator to evaluate the bids earlier, and provide for additional time for the independent evaluator to make the necessary notifications to the RFP Bidders and to prepare its report to the Commission.

Q. Please summarize the bidder qualifications in the RFP.

A. The bidder qualifications are straightforward and primarily require that the supplier be a member of PJM in good standing and that they meet certain fundamental credit-worthiness criteria. More specifically, the qualifications consist of:

- Submitting an Expression of Interest Form;
- Executing a Confidentiality Agreement;
- Certifying the supplier meets the PJM membership and Federal Energy Regulatory Commission authorization requirements;
- Submitting a Credit Application and associated financials; and,
- Submitting an executed copy of the Binding Bid Agreement.

These bidder qualifications are the same in the DSP IV Program as they were in the DSP II and III Programs.

Also, an individual bidder for Residential and Small C&I contracts is subject to two load cap limitations. First, a bidder cannot be awarded more than 85% of the contracts offered in a single solicitation, by customer class ("Solicitation Cap"). Second, a wholesale supplier cannot supply more than 50% of the Default Service load for either the Residential or Small C&I Customer Classes at any time ("Aggregate Load Cap").[5] This limitation was approved in DSP III and PPL Electric is proposing to continue it in DSP IV. PPL Electric believes that continuing this limitation in DSP IV will continue to maintain the competitive wholesale market by ensuring supplier diversity, opportunities for multiple suppliers, and provide protection against the default of a single supplier.

[5] The 50% Load Cap was not applied to the Large C&I Customers Class in DSP III and is not proposed for DSP IV. The small number of tranches solicited for this Customer Class (10, once per year) would indicate that a further Load Cap restriction may result in higher rates, as the Company could be required to reject lower bids.

Q. What amount of Default Service supply will be procured in each solicitation?

A. For the Residential and Small C&I Customer Classes, semi-annually the percentage of load will vary given the existing laddering of supply contracts from the DSP III Program and based upon the contract terms to be procured under DSP IV. PPL Electric Exhibits JC-3 and JC-4 attached to the direct testimony of Mr. Cavicchi (PPL Electric Statement No. 2) illustrate the products procured, the terms of the products, and the percent of the load to be procured throughout DSP IV for the Residential and Small C&I customer groups. Overall, PPL Electric plans to procure between 70 and 75% of the load in each solicitation, comprised of 6 and 12-month contracts. For the Large C&I customer group, PPL Electric plans to procure 100% of load through spot market full requirements contracts, once per year, in the April solicitation.

Q. How are the Residential and Small C&I fixed-price tranche sizes determined?

A. For both the Residential and Small C&I Customer Classes, each fixed-price tranche will be a fixed percentage of the Customer Class' Default Service load, with that percentage estimated to produce approximately 100 MW of peak load per tranche based on current PPL Electric forecasts and the Customer Class' 2015-2016 projected peak load contributions with PJM. As detailed in the RFP as well as the accompanying SMA, Residential tranche size is 2.5%, and Small C&I tranche size is 5%.

Q. How is the Large C&I spot market tranche size determined?

A. The Large C&I customer tranche size is 10% or approximately 190 MW per tranche. This is roughly the same tranche size successfully used in DSP III (170 MW), which was an increase from DSP II. The Large C&I Customer Classes tranche sizing was not solely based upon the maximum demand for this customer group, as the Residential and Small C&I Customer Classes were, but also on the very high shopping levels in Large C&I Customer Class. While the Large C&I Customer Class has always been fully subscribed by Default Service Suppliers, approximately 85% of customers are shopping (98% of the load), which has contributed to lower supplier participation in this product relative to the Residential and Small C&I Customer Classes. The Company believes that maintaining the tranche size successfully used in DSP III will continue to encourage suppliers to bid on the product and create a more competitive price.

Q. What services will the winning bidder provide to PPL Electric?

A. As explained in the RFP Rules and the Default Service SMA, each winning supplier must provide all products and services required by the Company to fulfill its obligations as Default Service provider. These products and services include energy, capacity, transmission (other than Non-market-based Transmission Services), ancillary services, transmission and distribution losses, congestion management costs, and such other services or products that are required to supply Default Service to PPL Electric's retail customers, including AEC Credits. As a result, each supplier will become the load-serving entity in PJM for its share of PPL Electric's Default Service load. PPL Electric, however, will remain the Default Service provider for its retail customers.

Q. Will the selected suppliers be required to post performance assurance?

A. PPL Electric proposes that wholesale suppliers selected to serve any portion of PPL Electric's Default Service load be required to post performance assurance collateral to cover any credit exposure above the amount of any unsecured credit provided to the supplier. For the Residential and Small C&I Customer Classes, the credit exposure is based upon the results of the mark-to-market calculations. For the Large C&I Customer Class, the credit exposure is $75,000 per tranche awarded. Such assurance is required to enable PPL Electric to recover costs arising in the event of a supplier default. These credit requirements have not been changed as compared to DSP III.

B. THE SMA

Q. Is the DSP IV Program's Default Service SMA similar to that used in the DSP III Program?

A. Yes. I note that the Commission-approved DSP III SMA was substantively changed following the Commission's Final Order in Investigation of Pennsylvania's Retail Electricity Market: End State of Default Service, Docket No. I-2011-2237952, 2013 Pa. PUC LEXIS 306; 303 P.U.R.4th 28 (February 15, 2013). The DSP IV SMA is nearly identical to the DSP III SMA. The only substantive change is to adopt an electronic signature and submission process. The proposed *pro forma* SMA is provided as Attachment B to the Company's Petition.

V. THIRD-PARTY MANAGER

Q. Will an independent party be used to administer the DSP IV Program procurements?

A. The Default Service Policy Statement provides that the competitive bid solicitation process should be monitored by an independent evaluator to achieve a fair and transparent process for each solicitation. The Default Service Policy Statement also states that the independent evaluator should have expertise in the analysis of wholesale energy markets, including methods of energy procurement. Consistent with these requirements, PPL Electric has retained NERA as the independent third-party manager to administer each procurement, analyze the results of the solicitations for each customer class, select the supplier(s) that will provide services at the lowest cost and submit all necessary reports to the Commission.

Q. Why was NERA retained as the third-party manager?

A. NERA has successfully administered the CBP, the DSP I, DSP II, and DSP III Program procurements and other Default Service supply procurement programs throughout the region. Based on this track record, the Company proposes to retain NERA to administer the DSP IV Program. NERA is the main point of contact with bidders, ensures the RFP Rules approved by the Commission are followed, ensures bidder qualifications are evaluated equitably and fairly, ensures bids are conforming, evaluates and determines the lowest-cost combination of bids based solely on price, and lastly presents the results to the Commission.

VI. RTO COMPLIANCE

Q. Will the DSP IV Program comply with RTO requirements?

A. Yes. Section 54.185(d)(4) of the Commission's regulations requires Default Service plans to include documentation that the program is consistent with the requirements regarding the generation, sale and transmission of electricity of the RTO in the control area where the Default Service provider is providing service. 52 Pa. Code § 54.185(d)(4). The Company will provide Default Service within the control area of PJM, which is an RTO approved by the Federal Energy Regulatory Commission ("FERC"). PPL Electric's DSP IV Program fully meets this requirement.

Q. Please explain how the DSP IV Program is consistent with RTO requirements.

A. First, the Company is proposing a plan that is aligned with PJM's planning period, *i.e.*, begins June 1. Second, the Default Service RFP Rules and accompanying SMA require that both PPL Electric and any bidder in the procurement process must be in compliance with PJM requirements. For example, Article 2.4 of the SMA states that the DS Supplier must be a PJM member in good standing, be qualified as a market buyer and seller, and be qualified as a PJM Load Serving Entity. Additionally, Article 4 of the RFP Rules requires that an applicant must certify that it is a member of PJM and qualified as a market buyer and market seller in good standing that is able to secure generation or otherwise obtain and deliver electricity in PJM through compliance with all applicable requirements of PJM to fulfill a full requirements obligation. Finally, a potential bidder must certify that it has been authorized by FERC to make sales of energy, capacity and ancillary services at market-based rates.

VII. CONTINGENCY PLANNING

Q. Does the DSP IV Program contain a contingency plan to ensure reliable provision of Default Service?

A. Yes. The Commission's Default Service Regulations require that a Default Service plan include contingency plans to ensure the reliable provision of Default Service if a wholesale generation supplier fails to meet its contractual obligations. The DSP IV Program meets these requirements.

Q. Is the contingency plan in the DSP IV Program similar to the contingency plan in the DSP III Program?

A. Yes. With the exception of the TOU rate option described below, the DSP IV contingency plan is the same as that approved for DSP III.

Q. Please summarize the contingency plan for the DSP IV Program.

A. If the Commission rejects all bids for a given product, in any solicitation, or if some tranches of a given product in a particular solicitation do not receive bids, the Company will expeditiously seek guidance and approval from the Commission to address this shortfall in procurement of Default Service supply.

To the extent that unfilled tranches remain at the commencement of delivery for a given product, the Company will obtain Default Service supply through the spot market administered by PJM. Specifically, PPL Electric will supply the unserved load by purchasing energy and all other necessary services through the PJM-administered markets, including, but not limited to, the PJM energy, capacity, and ancillary services markets, any other service required by PJM to serve such unserved load, and any AEPS requirements. PPL Electric proposes to recover all the costs of such purchases from Default Service customers in the retail rates charged for the service for which the purchases are made.

In the event a supplier defaults, PPL Electric will offer full-requirements supply assignment to other winning bidders for the same product consistent with the step-up process described in the Default Service SMA. If this assignment is not successful, PPL Electric will offer full-requirements supply assignment to all Default Service suppliers consistent with the Default Service SMA, even if a Default Service supplier does not serve tranches for that product. These assignments will be offered at the original bid price in the event of default(s), or at the average price from the last successful bid for that product in the event of insufficient bids.

VIII. STANDARD OFFER PROGRAM

Q. Please explain the current Standard Offer Program.

A. In December, 2012, the Commission issued a Final Order in *Investigation of Pennsylvania's Retail Electricity Market: Intermediate Work Plan*, Docket No. I-2011-2237952, which identified a number of design elements that EDCs were directed to consider, and later implement, in their Default Service plans. As such, the Company proposed to implement the Standard Offer Program ("SOP") as part of its DSP II plan. The SOP began on August 1, 2013, and is currently still in place.

The SOP has a series of core elements: the program is marketed to Residential and Small C&I Default Service customers who call the PPL Electric Customer Contact Center, but is available to all Residential and Small C&I customers (shopping and non-shopping); it sets a standard 7% discount off the then-current PTC and is held at that initial rate for 12 months; customers may leave the program at any time without penalty; and, EGSs opt in to participate in the program on a quarterly basis during which time they are equally allocated customers who choose to participate in the program. EGSs are charged a fee of $28 per referred customer. Also, at the start of the SOP, if an EGS was not rate ready certified, it could have opted into a special certification process to be rate ready certified, but had to pay a one-time fee of $500 for market certification testing costs. If an EGS chooses to participate in a later quarter and is not rate ready certified, it would be able to participate in certification testing based upon a previously issued schedule at no additional charge.

Finally, as part of the Commission-approved DSP III Program, the Company implemented a new SOP web access. Through the SOP web access feature, customers may review information on the SOP terms and conditions, and elect to enroll in the SOP should they so choose. If a customer is referred to an EGS through the web access, there is no referral fee.

Q. How is the SOP currently administered?

A. Default service customers who contact the PPL Electric Customer Contact Center and meet the SOP referral criteria (New/Moving customers, high bill complaints, directly asking for details on the SOP), are referred to the SOP by a Customer Service Representative ("CSR"). If the customer is interested in learning more about the SOP, the CSR transfers them to a third-party administrator, currently PPL Solutions, who gives the customer greater details and information about the SOP and, if interested, enrolls the customer for the service. A list of referred customers is sent by PPL Solutions to participating EGSs, including customer specific details (Name, Account Number, etc.), and the EGS is instructed to process the customer enrollments according to the new 3-day switching rules. As a result, customers begin service with the EGS more rapidly, no longer having to wait for their next meter reading date to switch.

Additionally, PPL Electric customers may access the SOP via the web. If a customer is new/moving and accesses the change in service through PPL Electric's online platform, at the end of the online process they are offered additional information on the Standard Offer Program. If the customer chooses to enroll in the program they are automatically assigned an EGS through the same selection process as those customers that call in to the Company's Call Center. PPL Electric compiles a list of referred customers and sends it to participating EGSs, including the same customer specific details as the phone-enrollment method.

Q. Has the SOP been successful?

A. Yes, I believe it has. As of December 31, 2015, approximately 210,150 eligible customers were transferred to the third-party service provider and approximately 186,295, or 88.6%, of those customers enrolled in the SOP. In addition, since the SOP Web Self Service option became available June 1, 2015, approximately 1,657 other customers have elected SOP.

Q. Who will be the third-party administrator of the SOP in DSP III?

A. Given the current success of the SOP, the Company is recommending continued use of PPL Solutions as its third-party administrator for this program. In addition to the success of the program as administered by PPL Solutions, using PPL Solutions to describe the program and enroll interested customers will continue to free up PPL Electric CSRs to handle other calls, thereby avoiding increased call wait times or the need to hire additional CSRs that otherwise would have resulted if CSRs were required to also fully describe and enroll customers into the SOP. Given the success of the program and the approach used, the Company believes maintaining PPL Solutions as the third-party administrator is appropriate.

The Company is seeking to accomplish this by maintaining the Third-Party SOP Services Contract currently in place, including the cost to provide the service of $28 per referral, and simply extend the termination date to May 31, 2021. Attached as PPL Electric Exhibit JMR-1 is the original Third-Party SOP Services Contract between PPL Electric and PPL Solutions. PPL Electric Exhibit JMR-2 is Amendment 1 to the Third-Party SOP Services Contract approved in DSP III, which extended the term of the contract through May 31, 2017. Attached as PPL Electric Exhibit JMR-3 is a proposed amendment to the Third-Party SOP Services Contract, extending the termination date through May 31, 2021.

Q. Who is responsible for paying the $28 per referral fee?

A. PPL Electric charges EGSs who participate in the SOP the $28 per customer referral to the EGS. The Company proposes to continue this approach for the DSP IV. As noted above, there is no referral fee if a customer is referred via the SOP Web Self Service option because PPL Solutions is not involved in the transaction and PPL Electric has already fully recovered the costs to implement the SOP Web Self Service option.

Q. Is the Company proposing any changes to the SOP?

A. The Company is proposing only limited modifications to the SOP approved under the DSP III Program. Commencing June 1, 2017, PPL Electric proposes to invoice EGSs monthly for the fee associated with referred customers, rather than on a quarterly basis. This change is in response to recommendations raised by various EGSs during a collaborative.

Another issue raised by EGSs during the collaborative process was their inability to enroll customers referred to them for the SOP, but that were in a pending active status. Customers are placed in this status for a number of reasons – such as they have a pending and unresolved PUC Complaint, they have an unpaid bill, or they are moving but their new account has not yet been activated. Customers in this status are unable to shop and, thus, are unable to participate in the SOP. The EGSs concern relates to the lapse in time between when these customers are referred and when they are actually enrolled -- for instance some PUC Complaints are not able to be resolved for weeks or even months. During this time, EGSs with pending active customers must maintain the SOP rate and continually seek to enroll them.

In response to this concern, PPL Electric agreed to investigate the issue to reduce the number of customers in this status and relieve impacted EGSs. After review, however, the Company does not feel the current process requires a complete rework, nor should EGSs be relieved of their requirement to supply these customers. Indeed, only a very small percentage (approximately 0.8%) of all customers that seek to participate in the SOP program are at some point during the process in a pending active status. Thus, the historical data does not seem to support the concern raised by the EGSs. Further, PPL

Electric has already implemented, or plans to implement in the near future, a number of process improvements that will increase the speed at which customers are processed out of this status, or that will reduce the number of customers that reach this status to begin with. Specifically, the Company has completed two improvements: (1) it has processed the backlog of accounts that occurred as a result of Accelerated Switching, and (2) it has implemented an internal business improvement process to monitor suspended accounts due to a pending PUC complaint – ensuring suspended accounts are worked in a timelier manner. Additionally, with the implementation of Seamless move in September 2016, there will be a decreased delay when transferring old accounts to new accounts, which will further expedite the time customers are pending active altogether.

Finally, the Company is proposing a minor modification to the SOP Binding Agreement, mandating that EGSs accept SOP customers who wish to re-enroll in the SOP with a new rate code. The EGS must send an EDI 814 rate code change transaction no later than 3 business days after notification of the assignment. The proposed SOP Binding Agreement is attached as PPL Electric Exhibit JMR-4.

Q. Please describe the reasoning behind the proposed changes.

A. PPL Electric is proposing the changes to improve the process currently in place for all parties. Currently PPL Electric pays PPL Solutions on a monthly basis, but invoices EGSs on a quarterly basis. Moving to a parallel, monthly, invoicing process with EGSs reduces lag between processes, and makes costs for all parties current. Additionally, in working with EGSs, it appears there is a gap in the current agreement as to whether an EGS is obligated to supply a customer that seeks to re-enroll during the 12-month SOP period due to a decrease in the PTC. Specifically, some customers that enroll in SOP later seek to re-enroll in SOP if PPL Electric's PTC decreases within their 12-month SOP agreement. In most instances, the customer wishes to maintain the EGS they are with while on the SOP, but receive the new lower SOP rate. When this occurs, some EGSs do not re-enroll the customer with a new rate code. As a result, PPL Electric is unable to confirm that the EGS has affirmatively re-enrolled the customers. To address this issue, the Company has added new language to the Binding Agreement that affirms that the EGS must accept such a customer and process an EDI 814 rate change code transaction.

IX. <u>TIME-OF-USE</u>

Q. Does the Company currently offer a TOU rate option under its DSP III Program?

A. Yes. The Company currently provides a TOU rate option to Residential and Small C&I customers through its tariff, which relies on the retail market and EGSs to provide TOU service to customers. This mechanism was first approved by the Commission on a pilot basis and became effective December 10, 2014. The pilot mechanism became permanent as a result of the *DSP III Order.*

Q. Please summarize the current TOU rate option.

A. Under the current TOU rate option, retail EGSs that choose to participate in the TOU Program offer TOU rate options and provide TOU service to customers in PPL Electric's service territory. A participating EGS defines the term of the contract between the EGS and the TOU customer, but the contract terms cannot change more often than quarterly. A participating EGS also defines the on- and off-peak rates that it will offer to customers. However, an EGS's off-peak/discounted pricing hours cannot include 2 p.m. to 6 p.m., Monday through Friday, excluding PJM holidays during the summer (June, July, and August). Participating EGSs are not required to offer a net metering option to customers in the TOU program.

Q. Has the current TOU rate option been successful in obtaining EGSs that will offer a TOU rate option?

A. Yes. Since the beginning of the current TOU rate option in December 10, 2014, PPL Electric has been able to successfully procure EGSs to provide the TOU service to Residential and Small C&I customers. Tables 1 and 2 below show the number of Residential and Small C&I customers and EGSs that have participated in the current TOU rate option.

Table 1. Residential Customer – TOU Program Statistics

Term	# of EGSs offering TOU Rate	# of New Customer Sign-ups
December 2014 – February 2015	1	13
March 2015 – May 2015	3	15
June 2015 – August 2015	3	96
September 2015 – November 2015	3	52
December 2015 – February 2016	3	NA

Table 2. Small C&I Customer – TOU Program Statistics

Term	# of EGSs offering TOU Rate	# of New Customer Sign-ups
December 2014 – February 2015	1	0

March 2015 – May 2015	1	14
June 2015 – August 2015	1	7
September 2015 – November 2015	1	0
December 2015 – February 2016	1	NA

Q. The current TOU rate option is pending before the appellate courts. Please explain.

A. The Pilot TOU Order was appealed by the Dauphin County Industrial Development Authority ("DCIDA"). By Opinion and Order entered September 9, 2015, the Commonwealth Court concluded that 66 Pa.C.S. § 2807(f)(5) provides that there can be only one default service provider, that PPL Electric, as the default service provider, is required to offer TOU rates to its customer-generators, and that PPL Electric cannot satisfy this obligation through EGSs. *See The Dauphin County Industrial Development Authority v. Pennsylvania Public Utility Commission*, No. 1814 C.D. 2014, 123 A.3d 1124, 2015 Pa. Commw. LEXIS 381 (Pa. Cmwlth. 2015).

PPL Electric and the Commission have sought Pennsylvania Supreme Court review of the Commonwealth Court's decision. *See The Dauphin County Industrial Development Authority v. Pennsylvania Public Utility Commission*, Nos. 904 MAL 2015 and 905 MAL 2015 (Petitions for Allowance of Appeal Filed November 25, 2015). At this time it is not known whether the Supreme Court will grant further review.

Q. Please explain what will happen if the appellate courts conclude that the current TOU rate option is unlawful.

A. This situation is already addressed in the TOU contingency plan. Under the TOU contingency plan, if the TOU rate option fails, including if the current TOU rate option is held to be unlawful, PPL Electric is required to expeditiously file and seek approval of a new subsequent TOU proposal and request the replacement plan be made effective within 60 days.

Q. Is PPL Electric proposing any changes to its TOU rate option under the DSP IV Program?

A. No. At this time, PPL Electric proposes to continue the current TOU option.

X. CAP SHOPPING PROPOSAL

Q. Does the Company currently have any limits on CAP customers' ability to shop and received supply from EGSs?

A. No. PPL Electric's low-income residential CAP is called the OnTrack Program. OnTrack customers have been eligible to shop since the beginning of shopping in 2010.

Q. What has been the impact of CAP shopping on PPL Electric's system?

A. The direct testimony of Mr. Wukitsch (PPL Electric Statement No. 3) explains the statistics and data related to CAP shopping within PPL Electric's service territory, as well as describes the impact that CAP shopping has on CAP credits and the CAP program costs borne by other customers. Shopping does not directly affect an OnTrack customer's payment amount, which is based upon ability to pay. However, the OnTrack data and statistics summarized by Mr. Wukitsch suggest that CAP shopping can result, and has resulted, in OnTrack customers, as a whole, exceeding their CAP credits at a faster pace than they would have if they did not shop and, instead, received default service at PPL Electric's PTC. This accelerated use of CAP credits puts these low-income customers at risk of early removal from the OnTrack program. The OnTrack data and statistics summarized by Mr. Wukitsch also suggest that CAP shopping can result, and has resulted, in increased CAP costs that are paid for by other Residential customers through the USR.

Q. Is the impact of CAP shopping limited to PPL Electric?

A. No. CAP shopping is an issue that impacts all EDCs and natural gas distribution companies ("NGDCs") in the Commonwealth. All EDCs and NGDCs must and do offer CAP to low-income and payment-troubled customers. Further, there are both retail electric and natural gas competitive markets in the Commonwealth. Finally, all EDCs and NGDCs are the provider or supplier of last resort, meaning that they are required to provide the energy supply (electricity or natural gas) when a competitive retail supplier is not selected by the customer. Thus, the issue of CAP customers potentially selecting a supplier with a price higher than the utility price is an issue that is applicable to all EDCs and NGDCs through the Commonwealth.

Given the CAP shopping data provided by Mr. Wukitsch, the Company believes that some limits on CAP shopping should be developed. However, the impact of CAP shopping is not an issue that is limited to PPL Electric alone but, rather, is an issue of statewide importance.

Q. Has the Company considered any proposals related to CAP shopping?

A. Yes. As explained by Mr. Wukitsch, the Company held several collaborative meetings with interested stakeholders prior to filing the DSP IV Petition. PPL Electric provided OnTrack shopping data and solicited input from participating stakeholders during the collaborative meetings. During the collaborative, interested stakeholders offered certain proposals to address the impacts of CAP shopping, including, but not limited to, a proposal to limit the CAP shopping rate to be no higher than the effective PTC and/or waive all EGS contract cancellation/termination fees for CAP shopping customers.

PPL Electric considered CAP shopping proposals offered during the collaborative and agrees that certain proposals, if designed appropriately, could potentially address some of the concerns and issues with CAP shopping. However, the Company has serious concerns that if any such proposals are adopted for PPL Electric only, this could effectively erode retail competition for CAP customers in PPL Electric's service territory. Indeed, if CAP shopping limits were adopted for only PPL Electric (*i.e.*, limit the CAP shopping rate to be no higher than the effective PTC and/or waive all EGS contract cancellation/termination fees for CAP shopping customers), EGSs likely would stop offering competitive supply to OnTrack customers and, instead, seek only to offer competitive supply to CAP customers of other utilities that do not have any restrictions on CAP shopping.

PPL Electric is also concerned that adopting such proposals could potentially put PPL Electric in the position of actively monitoring, policing, and ultimately enforcing the terms and conditions between EGSs and CAP customers. For example, PPL Electric could be put in the place of monitoring EGS contracts to ensure that EGSs are not charging OnTrack customers a rate that is higher than the PTC or that EGSs are not applying termination/cancellation fees to OnTrack customers. This is particularly problematic as PPL Electric does not have access to the EGS contract, nor do the EDI enrollement transactions disclose the rate and/or if there are termination/cancellation fees. Not only would PPL Electric be required to monitor new EGS contracts, the Company also would be required to track and monitor all current shopping customers that are enrolled in CAP to ensure that the existing EGS contract complies with the CAP limitations on an ongoing basis. Clearly, requiring PPL Electric to monitor and enforce these EGS contracts will require changes to the current process, as well as significant time and resources.

Further, it is entirely unclear what, if any, authority PPL Electric has over the EGS contracts with CAP customers. PPL Electric is not a party to any contracts between EGSs and shopping customers. Thus, even if CAP shopping limitations were adopted and the Company invested the resources necessary to monitor and track the EGS contracts with CAP customers, PPL Electric would not be able to enforce the CAP shopping limitations without a change in the law or regulatory scheme.

To avoid these concerns, and given that CAP shopping is an issue of statewide importance, the Company recommends that the Commission promptly initiate a statewide collaborative open to all interested stakeholders and/or initiate a new rulemaking proceeding to address these CAP shopping issues on a uniform, statewide basis.

Q. Is PPL Electric proposing any interim measures until a uniform, statewide solution to CAP shopping can be developed?

A. As previously stated, the Company strongly believes that CAP shopping is a statewide issue that needs to be addressed on a statewide basis. In the interim, however, the Company proposes to try to mitigate the impacts of CAP shopping by encouraging all OnTrack customers to participate in the SOP.

The SOP provides customers with the ability to receive competitive electric generation supply at 7% discount from the then effective PTC for one year and does not permit EGS termination/cancellation fees. As a temporary measure until a uniform, statewide solution to CAP shopping can be developed, PPL Electric proposes that any customer that either (i) inquires about OnTrack or other low-income programs or (ii) is enrolled in OnTrack will be advised about the availability of the SOP (consistent with the SOP requirements), including its terms and conditions. Any OnTrack customers interested in the SOP will be transferred to the SOP third-party administrator, who will further review the program with the customer and, if interested, assign the customer to a participating EGS.

This interim CAP shopping proposal will encourage OnTrack customers to (i) obtain competitive retail supply, (ii) obtain a rate lower than the PTC, and (iii) avoid EGS contract cancellation/termination fees if they elect to withdraw from the SOP program. Although this may not be a long-term, statewide solution to CAP shopping, PPL Electric believes this interim CAP shopping proposal will help mitigate the impacts that CAP shopping has on CAP credits, risk of early removal from the OnTrack program, and the CAP costs that are paid for by other Residential customers through the USR.

XI. MISCELLANEOUS

Q. Is PPL Electric requesting that the Commission issue any specific rulings to support implementation of the DSP IV Program?

A. Yes. In addition to approving all aspects of the DSP IV Program and the requested waivers described in the Petition, PPL Electric requests that the Commission approve the DSP IV SMA and the amendment to the Third-Party SOP Services Contract between PPL Electric and PPL Solutions as affiliated interest agreements under 66 Pa.C.S. § 2102 and include such approval in its final order.

Q. Please explain why the Company is requesting affiliate approval of the addendum to the agreement between PPL Electric and PPL Solutions.

A. PPL Electric Utilities Corporation, and PPL Solutions are affiliated entities, as they both report to the same parent, PPL Corporation. Because PPL Electric and PPL Solutions are affiliates as defined in 66 Pa.C.S. § 2101, the Company is required to seek Commission approval of the proposed amendment of the Third-Party SOP Services Contract between PPL Electric and PPL Solutions as an affiliated interest agreement pursuant to 66 Pa.C.S. § 2102. As explained above, given the success of the program and the approach used, the Company believes maintaining PPL Solutions as the third-party administrator is appropriate.

Q. Please explain why the Company is requesting affiliate approval of the DSP IV SMA.

A. Under 52 Pa. Code § 54.186(b)(5), an affiliated supplier may participate in a Default Service provider's competitive bid solicitations for generation service. PPL Electric currently does not have any affiliated suppliers.[6] However, in the event any suppliers were to become affiliated with PPL Electric during the DSP IV Program Period, any such unregulated affiliates will be permitted to participate in the Company's Default Service supply solicitations. If one of those affiliates is the successful bidder for one or more tranches of Default Service supply, PPL Electric would enter into a SMA with that affiliate.

It would not be practical or efficient, in light of the procurement schedule set forth in PPL Electric Exhibits JC-3 and JC-4, for the Commission to review the SMA contract under 66 Pa.C.S. § 2102 following the solicitation processes. Rejection or significant modification to the SMA after a solicitation has concluded, and winning bidders have been selected, could significantly disrupt the Company's Default Service procurement process.

Q. Is the Company requesting any waivers in this proceeding?

A. Yes. Pursuant to 52 Pa. Code § 54.185(f), a Default Service provider "shall include requests for waivers from the provisions of this subchapter in their Default Service

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[6] *See Joint Application of PPL Interstate Energy Company and PPL Electric Utilities Corporation for All of the Necessary Authority, Approvals, and Certificates of Public Convenience (1) for the Transfer of PPL Corporation's Ownership Interest in PPL Interstate Energy Company to Talen Energy Corporation, and Certain Post Closing Transactions Associated therewith; (2) for the Transfer of Certain Property Interests Between PPL Electric Utilities Corporation and PPL Energy Supply, LLC, and its Subsidiaries in Conjunction with the Transfer of All of the Interests of PPL Energy Supply, LLC and its Subsidiaries to Talen Energy Corporation; (3) for any Modification or Amendment of Associated Affiliated Interest Agreements; and (4) for any Other Approvals Necessary to Complete the Contemplated Transactions,* Docket Nos. A-2014-2435752, A-2014-2435833, 2015 Pa. PUC LEXIS 157 (Order entered April 15, 2015).

program filings." In this proceeding, PPL Electric is requesting the following waivers for the DSP IV Program:

- PPL Electric seeks a waiver of the quarterly PTC requirement and, instead, proposes to continue to offer semi-annual PTC changes. The semi-annual PTC was approved in DSP III, to be consistent with the 6- and 12-month procurements used in the DSP III Program. The six-month PTC changes, and associated six-month reconciliations, reduce volatility in the PTC. Moreover, the six-month PTC changes support retail competition by providing customers greater certainty when evaluating shopping opportunities and by providing EGSs greater certainty when developing offers.
- PPL Electric also seeks a waiver from the requirement to issue a final PTC 45 days prior to the effective date of the PTC, and to continue the issuance of the PTC 30 days in advance of the effective date that was approved for DSP III.
- To the extent required, PPL Electric also seeks a waiver from Section 69.1804 of the Commission's DSP Policy Statement, which provides that default service plans should be for two years, unless otherwise directed by the Commission. As explained previously, PPL Electric proposes that the term of DSP IV Program be for four years.

Q. Is the Company requesting that the Commission act on its petition by a specific date?

A. Yes. PPL Electric requests that the Commission approve the DSP IV Program on or before October 28, 2016. The Company requests Commission approval of the DSP IV

Program no later than October 28, 2016, to provide sufficient time to implement procurements under the Program.

Q. Does this conclude your direct testimony?

A. Yes.

CALL CENTER SERVICES AGREEMENT

This Call Center Services Agreement ("Agreement") is made and entered into on April 10th, 2013 by and between PPL Electric Utilities Corporation ("PPL Electric" or "the Company"), a corporation organized and existing under the laws of the Commonwealth of Pennsylvania and PPLSolutions, LLC ("Contractor"), a limited liability company organized and existing under the laws of the State of Delaware. PPL and Contractor are individually referred to as a "Party" and collectively as "Parties" in this Agreement. PPL Electric and its directors, officers, agents and employees are referred to as the "PPL Parties," and Contractor, and its respective directors, officers, subcontractors, agents and employees are referred to as the "Contractor Parties".

1. BACKGROUND.

A. PPL Electric is an electric distribution company ("EDC") headquartered in Allentown, PA. PPL Electric delivers electricity to approximately 1.4 million customer accounts in east/central Pennsylvania. PPL Electric's customers may purchase their electricity from an electric generation supplier ("EGS"). If they do not, their electric service is provided by PPL Electric pursuant to Pennsylvania Public Utility Commission ("Commission") approved Default Service Supply contracts.

B. The Standard Offer Program ("SOP") is designed to present a discounted EGS rate offer to customers who contact PPL Electric to start service or who are existing PPL Electric customers who contact PPL Electric to inquire about their bills (other than those who are responding to a collections notice) or to inquire about the SOP.

C. The SOP is a customer referral program, to be established in accordance with PPL Electric's Default Service Program and Procurement Plan Final Order issued on January 24, 2013 and subsequent orders (collectively "Commission Orders"), by the Commission.

D. Certain matters related to the operation of the SOP, in particular the use of a third party to provide call center services, are currently pending review by the Commission. The description herein of the SOP is based upon the compliance proposal submitted by PPL Electric to the Commission on March 11, 2013.

E. This Agreement is based upon that proposal and the project scope that is contained therein.

IN THE EVENT THAT THE COMMISSION MODIFIES OR REJECTS PPL ELECTRIC'S SOP COMPLIANCE PROPOSAL, IT MAY BECOME NECESSARY TO REVISE THIS AGREEMENT OR TO NULLIFY IT ALTOGETHER. IN THE EVENT THAT THE COMMISSION MODIFIES PPL ELECTRIC'S COMPLIANCE PROPOSAL THE PARTIES SHALL ENTER INTO GOOD FAITH NEGOTIATIONS TO MODIFY THIS CONTRACT INTO COMPLIANCE WITH THE SOP COMPLIANCE PROPOSAL AS MODIFIED BY THE COMMISSION. IN THE EVENT THAT THE COMMISSION REJECTS PPL ELECTRIC'S COMPLIANCE SOP PROPOSAL WHOLLY OR IN PART, THIS AGREEMENT SHALL BE NULL AND VOID, AND THE PARTIES SHALL HAVE NO FURTHER OBLIGATIONS TO ONE ANOTHER.

F. The Parties agree that, as a contract between affiliated entities, this Agreement must be approved by, and is contingent upon approval by, the Commission. In the event that this Agreement is not approved, the Agreement shall be null and void, and the Parties shall have no further obligations to one another.

2. **DESCRIPTION OF THE STANDARD OFFER PROGRAM.**

A. The SOP provides eligible PPL Electric customers who are starting service, inquiring about their bill or inquiring about service from an EGS with the opportunity to receive supply service from a participating EGS at a discounted rate, pursuant to the terms of the Commission Orders. PPL Electric Customer Service Representatives ("CSRs") will ask eligible customers inquiring about their bill or service from an EGS if they are interested in learning about the SOP; any interested customer will be transferred to the Contractor who will provide more detail to the customer regarding the SOP and who will be responsible for determining if the

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customer wants to participate in the SOP. PPL Electric CSRs will transfer all start service customers to the Contractor to provide details regarding the SOP.

B. The Contractor will record the customer's selection, which the Contractor will submit to PPL Electric at the end of each business day in an electronic format to be agreed upon between the Contractor and the Company.

C. Customers participating in the SOP will receive a fixed rate from a participating EGS for a twelve-month period that is equal to a 7% discount from the PPL Electric Price-to-Compare ("PTC") in effect at the time the customer enrolls in the SOP. The SOP has no contract termination or penalty fees if a customer decides to switch to another EGS or return to Default Service. PPL Electric's PTC is subject to change effective March 1, June 1, September 1 and December 1 of each year. EGSs may elect each quarter whether they desire to participate in the SOP.

D. Residential and Small Commercial & Industrial ("C&I") customers with billing demands less than 25kW) who currently do not receive service from an EGS in the PPL Service territory calling the Company will be actively offered the SOP, subject to certain restrictions set forth in Commission Orders. If an eligible residential or small C&I customer currently receiving service from an EGS ("shopping customer") actively inquires about the SOP, the Company will allow the customer's potential participation and inclusion.

3. **TERM OF CONTRACT.**

A. The SOP will be offered to customers beginning August 1, 2013. The program will continue until May 31, 2015. This Agreement will remain in force between August 1, 2013 and May 31, 2015, unless terminated earlier by the Commission.

4. **PRICE.**

A. The Contractor will provide the services under this Agreement at a rate of $28.00 per referred customer. For purposes of this Agreement, a referred customer is a customer who affirmatively elected the SOP, and whose election was submitted by Contractor to PPL Electric as provided herein. The Parties agree that Contractor will submit monthly invoices to PPL Electric (via an inter-unit accounting transfer or otherwise) which shall show the number of customers referred and charges therefore. PPL Electric shall pay such invoices within 30 days of the date of the invoice.

5. **PROCESS FOR CALLS.**

A. PPL Electric will complete all applicable steps associated with the original customer call. It is not expected that any calls will be transferred back to PPL Electric once transferred to the Contractor for the SOP. At the end of the original call to PPL Electric, eligible callers and selected customer data will be transferred to the Contractor so the Contractor can explain in more detail the terms and conditions of the SOP. PPL Electric's CSRs will not stay on the call after transfer to the Contractor. The Contractor will use scripting and talking points provided by the Company in the discussion with the customer. At the end of the discussion, the Contractor will record the customer's selection - either an enrollment with no EGS preference; an enrollment with a specific EGS selected; or the customer's decline of the offer.

B. At the end of each business day, the Contractor will submit the customer account number and the customer's selection to PPL Electric. PPL Electric will select an EGS for each customer who had no EGS preference, and will submit the referrals to the respective EGSs to enroll the customer on the rate. For each EGS referral submitted to the Company, the Contractor will be credited.

C. The Contractor's agents must read from scripts provided by the Company to all customers. The scripts will address different types of calls; it is imperative and material that the agent receiving the call executes the correct script and actions associated with the call type.

D. The Contractor will transmit and receive electronic files in a format agreed upon by the Contractor and the Company. Reports related to customers referred and enrolled and other process control reports need to be in place for the successful execution of the SOP. The development and responsibility for these reports will be agreed upon during the development of the processes by PPL Electric and Contractor at a later date.

E. Approximately 5 days prior to the start of each calendar quarter (March 1, June 1, September 1, and December 1), the Company will provide to the Contractor a list of participating EGSs for that quarter. If no EGS offers are made available, the SOP will not be offered to customers. In the event there are no participating EGSs for a quarter, the Company will not transfer calls to the Contractor, and the Contractor will not provide call center services; however, the Contractor will be expected to be prepared to begin offering call center services again the following quarter.

F. The Contractor is required to set-up phone lines that allow the call transfer types (start service and billing inquiry) to be distinguishable to its agents receiving the call. The Contractor shall provide its agents with all relevant telephony, computer, and other office equipment and materials to provide successfully the services described in this Agreement.

G. The Contractor will be required to provide supervision to resolve agent and customer issues. PPL Electric will provide escalated support for Contractor's supervision; however, Contractor's supervision is required to troubleshoot and attempt to resolve issues before escalating the issue to PPL Electric.

H. The Contractor is obligated to provide translation services as needed by customers.

I. PPL Electric's call center is open Monday through Friday from 8:00 AM to 5:00 PM Eastern Time. The Contractor shall handle referred calls during those times. The Company shall provide notice to Contactor of holidays when the call center will not be open. The Company will transfer customer calls to Contractor only during the hours of operation during those quarters when the SOP is in effect.

J. Contractor shall provide a grade of service level of 80/30, meaning that 80 percent of calls are answered within 30 seconds. Contractor shall provide a service level which meets or exceeds this level.

K. The Contractor is responsible for ensuring that scripts are followed by its agents and that quality monitoring is performed. The Company will require the immediate removal of any agent from performing duties associated with the SOP whose behaviors are threatening or disrespectful to customers.

L. The Contractor must conduct agent training. The Company will support the Contractor with the development of the training, including train-the-trainer sessions with the Contractor.

6. **INTELLECTUAL PROPERTY.**

A. Except as otherwise provided herein, each Party shall retain all its rights in its intellectual property. PPL Electric shall have the right to use the reports, prepared by Contractor using Contractor's proprietary reporting system, and delivered to PPL Electric as part of the services in connection with this Agreement. Contractor represents and warrants that it has the right to provide such reports to PPL Electric and that such reports are delivered free and clear of any liens, claims, encumbrances, and rights in favor of any third-party. PPL Electric grants to Contractor a fully paid, nonexclusive license during the Term to use PPL Electric's proprietary software ("PPL Software") solely to the extent necessary for performing the services hereunder. The Contractor shall not be permitted to use PPL Software for the benefit of any entities other than PPL Electric. Contractor shall cease all use of PPL Software upon expiration or termination of this Agreement.

7. **CONFIDENTIALITY.**

A. "Confidential Information" of PPL Electric or Contractor means all information and documentation of PPL Electric and Contractor, respectively, whether disclosed to or accessed by PPL Electric or Contractor in connection with this Agreement, including (A) with respect to PPL Electric, all information, including information relating to customers, PPL Electric payments, technology, operations, facilities, consumer markets, products, capacities, systems, procedures, security practices, research, development, business affairs, ideas, concepts, innovations, inventions, designs, business methodologies and processes, improvements, trade secrets, copyrightable subject matter and other proprietary information, of PPL Electric, PPL Electric affiliates or its or their customers, suppliers, contractors and other third parties doing business with PPL Electric or PPL Electric affiliates, (B) with respect to PPL Electric and Contractor, the terms of this Agreement and (C) with respect to Contractor, the Contractor operations, facilities, products, capacities, systems, procedures, security practices, research, development, business affairs, ideas, concepts, innovations, inventions, designs, business methodologies and processes, improvements, trade secrets, copyrightable subject matter and other proprietary information, of Contractor; provided, however, that except to the extent otherwise provided by applicable law, the term "Confidential Information" will not include information that (1) is independently developed by the recipient, as demonstrated by the recipient's written records, without violating the disclosing Party's proprietary rights, (2) is or becomes publicly known (other than through unauthorized disclosure), (3) is disclosed by the owner of such information to a third party free of any obligation of confidentiality, (4) is already known by the recipient at the time of disclosure, as demonstrated by the recipient's written records, and the recipient has no obligation of confidentiality other than pursuant to this Agreement or any confidentiality agreements between PPL Electric and Contractor entered into before the date of this Agreement or (5) is rightfully received by a Party free of any obligation of confidentiality, provided that (a) such recipient has no knowledge that such information is subject to a confidentiality agreement and (b) such information is not of a type or character that a reasonable person would have regarded it as confidential.

B. All Confidential Information relating to a Party will be held in confidence by the other Party to the same extent and with at least the same degree of care as such Party protects its own confidential or proprietary information of like kind and import, but in no event using less than a reasonable degree of care. Neither Party will disclose, duplicate, publish, release, transfer or otherwise make available Confidential Information of the other Party in any form to, or for the use or benefit of, any person or entity without the other Party's consent. Each Party shall use Confidential Information solely to provide or receive services under this Agreement. Each Party will, however, be permitted to disclose relevant aspects of the other Party's Confidential Information to its officers, agents, subcontractors and employees to the extent that such disclosure is reasonably necessary for the performance of its duties and obligations under this Agreement and such disclosure is not prohibited by the Gramm-Leach-Bliley Act of 1999 (15 U.S.C. § 6801 et seq.), as it may be amended from time to time (the "GLB Act"), the regulations promulgated thereunder or other applicable law. Each Party will establish commercially reasonable controls to ensure the confidentiality of the Confidential Information and to ensure that the Confidential Information is not disclosed contrary to the provisions of this Agreement, the GLB Act or any other applicable privacy laws. Without limiting the foregoing, each Party will implement such physical and other security measures as are necessary to (A) ensure the security and confidentiality of the Confidential Information (B) protect against any threats or hazards to the security and integrity of the Confidential Information and (C) protect against any unauthorized access to or use of the Confidential Information. To the extent that any duties and responsibilities under this Agreement are delegated to an agent or other subcontractor) the Party ensures that such agents and subcontractor adhere to the same requirements.

C. In the event that either Party or an agent of either Party is requested or required by any governmental authority, whether by oral question, interrogatories, requests for information or documents, subpoenas, civil investigation or similar process, to disclose any of the Confidential Information of the other Party, such Party will provide the other Party with prompt notice of such requests so that the other Party may seek an appropriate protective order or similar relief, or if appropriate, waive compliance with the provisions of this Section. Such Party will use all commercially reasonable efforts to obtain, or assist the other Party in obtaining, such a protective order or relief.

D. Contractor and PPL Electric acknowledge the sensitivity and confidentiality of personal consumer financial information which may be contained in PPL Electric's Confidential Information including all personally identifiable information relating to an individual consumer in connection with PPL Electric's accounts, any application for a PPL Electric account or the marketing or promotion of PPL Electric's accounts ("Personal Information"). In addition to the confidentiality obligations of the Parties under this Section, Contractor and PPL Electric acknowledge the protections afforded by law to such Personal Information and each agrees to comply with all such legal requirements applicable to it in the performance of its obligations under this Agreement. Contractor agrees that it will not disclose or use Personal Information other than to carry out the purposes for which PPL Electric provides such information to Contractor. PPL Electric acknowledges that such purposes include the creation, maintenance and implementation of data bases intended to prevent actual or potential fraud, unauthorized transactions, claims or other liability, including data bases that may be used for the same purposes for other customers of Contractor. Specifically, PPL Electric represents and warrants to Contractor that PPL Electric has provided all required notices, opt-outs, opt-ins or other similar rights to consumers with respect to any Personal Information delivered, transmitted or disclosed in any other fashion by Contractor to any third party at the direction of PPL Electric. The parties acknowledge that certain federal, state and local laws may require in the event of unauthorized acquisition of personal information about PPL Electric customers or their transactions from the Contractor System that either Contractor or PPL Electric (i) notify law enforcement entities or consumers or (ii) undertake other actions. In such event, Contractor shall fully cooperate with PPL Electric regarding the nature, timing and content of such notice or relevant aspects of such other required action. The parties agree that the costs of performing any such compliance requirements, whether incurred by Contractor or PPL Electric, shall be allocated to the party responsible for causing the required action to be taken.

E. Without limiting either Party's rights in respect of a breach of this Section, each Party will:

1. promptly notify the other Party of any unauthorized possession, use or knowledge, or attempt thereof, of the other Party's Confidential Information by any person or entity that may become known to such Party;

2. promptly furnish to the other Party full details of the unauthorized access, possession, use or knowledge, or attempt thereof, and assist the other Party in investigating or preventing the recurrence of any unauthorized possession, use or knowledge, or attempt thereof, of Confidential Information;

3. cooperate with the other Party in any litigation and investigation against third parties deemed necessary by the other Party to protect its proprietary rights to the extent such litigation or investigation relates to the services hereunder; and

4. promptly use its best efforts to prevent a recurrence of any such unauthorized possession, use or knowledge, or attempt thereof, of Confidential Information.

F. Contractor will not, during and after the term of this Agreement, issue a press release, or advertise, disclose or use PPL Electric's name in marketing materials or in any media (written, printed, recorded, electronic or otherwise), without the prior written consent of PPL Electric for each instance, except in order to comply with any applicable law, order, regulation or exchange rule.

8. **INDEMNITY.**

A. Contractor shall defend, indemnify and hold harmless PPL Electric and PPL Parties from and against any liability, loss, claim, settlement payment, cost and expense, interest, awards, judgments, damages, fines, fees and penalties (including reasonable attorney's fees) ("Losses") incurred by PPL Parties to the extent any claims, demands, suits or causes of action are made by unrelated third parties against PPL Parties based on allegations arising from or relating to (i) a breach of the Agreement by Contractor or (ii) damage to property or injuries to or death of any person due to the negligent acts or omissions by Contractor Parties. Contractor also shall indemnify PPL Parties from any costs and expenses incurred in connection with the enforcement of this Section.

B. PPL Electric shall defend, indemnify and hold harmless Contractor and Contractor Parties from and against any Losses incurred by Contractor Parties to the extent any claims, demands, suits or causes of action are made by unrelated third parties against Contractor Parties based on allegations arising from or relating to (i) a breach of the Agreement by PPL Electric or (ii) damage to property or injuries to or death of any person due to the negligent acts or omissions of PPL Parties. PPL Electric also shall indemnify Contractor Parties from any costs and expenses incurred in connection with the enforcement of this Section.

9. **INSURANCE.**

A. If requested by PPL Electric, Contractor shall furnish to PPL Electric within ten (10) days of the date of this Agreement, evidence of minimum insurance coverage in an amount to be determined by PPL Electric in its sole discretion. Contractor's obligations under this Section shall not be limited to Contractor's insurance coverages. Contractor shall secure and maintain in force worker's compensation or the equivalent insurance for Contractor's employees in amount and form to comply with any applicable law.

10. **INSPECTIONS/AUDITS.**

A. During the course of performance under this Agreement, PPL Electric or its designee shall have the right of reasonable access to Contractor Parties' facilities during normal business hours for the purposes of inspection of the progress on the services. Contractor shall cooperate with PPL Electric's representatives in furnishing such access, records and assistance as may be reasonably requested. Contractor and its subcontractors shall maintain books, records, documents and other information and accounting procedures and practices ("Records") sufficient to determine Contractor's and its subcontractors' performance and compliance with the requirements of this Agreement. Records shall be retained for a minimum of three (3) years after final payment. PPL Electric shall have the right of access to all Contractor's and its subcontractors Records, wherever maintained, during normal business hours, to review, audit and verify Contractor's and its subcontractors' performance and compliance with the requirements of this Agreement. Contractor and its subcontractors shall cooperate with PPL Electric in furnishing such access, Records and assistance as may be reasonably requested by PPL Electric. In addition, PPL Electric may review and audit Records to verify that Contractor and its subcontractors did not make payments to or for the personal benefit of employees of PPL Electric, its agents and its other contractors.

B. Contractor shall keep and maintain complete and accurate books, records and accounts relating to this Agreement and shall conduct such internal audits as are reasonably required to verify continuing full compliance with this Agreement. PPL Electric shall have the right, from time to time, to audit such books, records and accounts of Contractor to verify Contractor's compliance with the terms and conditions of this Agreement. Any such audit shall be at PPL Electric's expense; provided that if such audit reveals an error in Contractor's invoice calculation resulting in an overcharge to PPL Electric of three percent (3.0%) or more, or any other material breach of this Agreement, Contractor shall promptly pay to PPL Electric all costs and expenses of such audit, and PPL Electric may perform additional audits at Contractor's expense, until an audit shows no underpayment or noncompliance. Contractor shall promptly pay PPL Electric the amount of any underpayment (and correct any other noncompliance) revealed by any such audit. At PPL Electric's request from time to time, Contractor shall provide to PPL Electric a signed officer's certificate certifying Contractor's compliance with this Agreement.

11. **ASSIGNMENT AND DELEGATION.**

A. Contractor will not assign any of its rights or delegate its performance arising under or relating to this Agreement, voluntarily or involuntarily, whether by merger, consolidation, dissolution, operation of law or any other manner, to any third party without the prior written consent of PPL Electric. For the purposes of this section, change of control is deemed an assignment of rights. Any such assignment or delegation, absent written consent, will be null and void.

12. **APPLICABLE LAW; FORUM; JURY WAIVER.**

A. All matters arising under or relating to this Agreement will be governed by the laws of the Commonwealth of Pennsylvania, notwithstanding conflicts of law rules. Contractor consents to the exclusive jurisdiction of the state courts in Allentown, Pennsylvania and the federal district court in Allentown, Pennsylvania for the purpose of all legal actions and proceedings arising out of or relating to this Agreement. Each party waives, to the fullest extent permitted by law, any objection that it may now or later have to the laying of venue as provided in this Section and any claim that any action or proceeding brought in any such court has been brought in an inconvenient forum.

EACH PARTY, TO THE EXTENT PERMITTED BY LAW, KNOWINGLY, VOLUNTARILY AND INTENTIONALLY WAIVES ITS RIGHT TO A TRIAL BY JURY IN ANY ACTION OR OTHER LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS CONTRACT. THIS WAIVER APPLIES TO ANY ACTION OR LEGAL PROCEEDING, WHETHER IN CONTRACT, TORT OR OTHERWISE.

13. **BREACH, REMEDIES AND LIABILITY.**

A. Contractor represents and warrants that its services shall be performed by technically competent, qualified and trained personnel in accordance with generally accepted call center standards.

B. PPL Electric may terminate this Agreement for Contractor's material breach, if such breach remains uncured for ten days after receipt of written notice thereof by PPL Electric. Upon termination of this Agreement, Contractor shall immediately cease performing the services and deliver to PPL Electric all property belonging to PPL Electric and hereinafter all material in Contractor's possession containing Confidential Information as defined and copies thereof whether prepared by Contractor or others. Following termination, Contractor shall not retain any written or other tangible, including "machine readable" material containing any PPL Electric Confidential Information. The Parties agree that Sections 6, 7 and 8 will survive any termination of this Agreement.

In the event that the Commission should make changes to the SOP which materially affect either Parties' obligations under this Agreement, either party may elect in writing, within 20 days after a final Commission Order changing the SOP, to terminate the Agreement upon 30 days written notice. Upon termination, the Parties hereunder shall have no further obligations to one another except those specifically denoted for survival herein.

C. Each Party's liability to the other (as distinct from and excluding a Party's obligation to pay for the services hereunder) or for any loss, claim, injury, liability, cost or expense, including reasonable attorneys' fees, relating to or arising out of or relating to this Agreement, shall be limited to the amount of direct damages actually incurred. In no event shall either Party be liable to the other in connection with this Agreement for special, incidental or consequential damages, including without limitation, lost profits or lost revenue, whether based in contract, tort, warranty, misrepresentation, patent infringement, or otherwise.

14. **FORCE MAJEURE.**

A. Neither Party will be liable for any default or delay in the performance of its obligations under the Agreement if and to the extent such default or delay is caused, directly or indirectly, by (i) fire, flood, earthquake, elements of nature or acts of God; or (ii) wars, riots, civil disorders, rebellions, strikes or revolutions; provided, that the nonperforming Party is without fault in failing to prevent or causing such default or delay, and such default or delay cannot reasonably be circumvented by the non-performing Party through the use of alternate sources, workaround plans or other means. Upon the occurrence of a force majeure event at Contractor's site providing the Services hereunder, Contractor will implement promptly, as appropriate, the disaster recovery/business continuity plan and provide disaster recovery/business continuity services in accordance therewith, subject to the availability of T1 data connectivity circuits from third party circuit providers or, as an alternative to the T1 circuit connectivity environment, using VPN data connectivity and pointing telephone calls to Contractor's 1-800 line, which alternative would require that PPL Electric maintain its VPN access to its data system as a backup system. In the event of a force majeure event, PPL Electric shall have the right to terminate this Agreement upon 30 days' notice.

15. **MISCELLANEOUS.**

A. Contractor is an independent contractor, and nothing in this Agreement will be construed as creating the relationship of principal and agent, or employer and employee, between PPL Electric and any Contractor Parties. Contractor will have no authority to hire any persons on behalf of PPL Electric or incur any debt, liability or obligation of any nature for or on behalf of PPL Electric. All persons whom Contractor employs will be deemed solely the employees of Contractor and will not be considered employees of PPL Electric for any purposes. Each party giving a notice under this Agreement will give the notice in writing and address the notice as follows:

If to PPL Electric:

Customer Contact Center
PPL Electric Utilities
827 Hausman Road (CCC)
Allentown PA 18104-9392
Attention: Bernard J. Molchany

If to Contractor:

PPLSolutions, LLC
Two North Ninth Street
Allentown, PA 18101
Attention: James M. Minneman

With a copy to:

PPL Services Corporation
Two North Ninth Street
Allentown, PA 18101-1179
Attention: Office of General Counsel (GENTW3)
Facsimile No: (610) 774-6726

or to such other address designated by the parties from time to time. Notice is effective only upon delivery to such address. Any amounts for which Contractor is liable under this Agreement may be offset by PPL Electric against any payments required of any PPL Electric or its affiliates under any contract with Contractor or its affiliates. The term "including" in this Agreement will be deemed to mean "including but not limited to". No change, amendment or modification of any of the provisions of this Agreement will be binding unless in writing that identifies itself as an amendment to this Agreement and that is issued by PPL Electric. Any grant of rights to PPL Electric under this Agreement will be deemed to be a grant of rights to PPL Parties. This Agreement constitutes the final agreement between the parties and is the complete and exclusive expression of the parties' agreement on the matters contained in this Agreement. All prior and contemporaneous negotiations and agreements between the parties on the matters contained in this Agreement are expressly merged into and superseded by this Agreement. The parties desire that the rights and obligations set forth herein be enforced to the maximum extent permitted by applicable law. If any provision of this Agreement or its application to any party or circumstance is held invalid, illegal or unenforceable to any extent, the remainder of this Agreement and the application of that provision to the other parties or to other circumstances is not affected and is to be enforced to the fullest extent permitted by applicable law provided that such enforcement does not materially change the underlying business arrangement. This Agreement is binding upon, and inures to the benefit of, the parties' respective permitted successors and assigns. No provision of this Agreement may be waived by PPL Electric except pursuant to a writing that identifies itself as a waiver of this Agreement issued by PPL Electric. Any remedies expressly conferred upon a party by this Agreement are cumulative with and not exclusive of any other remedy conferred by this Agreement or by law on that party. This Agreement may be executed in one or more counterparts, with the same effect as if the parties had signed the same document. Each counterpart so executed will be deemed to be an original, and all such counterparts will be construed together and will constitute one Agreement.

By affixing their signatures below, the parties hereby agree to be bound by the terms of this Agreement.

ATTEST: ______________________

PPL ELECTRIC UTILITIES CORPORATION

By: Robert M Geneczko
Name: Robert M. Geneczko
Title: VP - Customer Services

ATTEST: ______________________

PPLSOLUTIONS, LLC

By: ______________________
Name: Michael R. Toner
Title: President

OFFICE OF GENERAL COUNSEL
BY:
DATE: 4-10-13

10578284v1

Amendment Number 1
to the
Call Center Services Agreement

This Amendment Number 1 to the Call Center Services Agreement ("Amendment 1") is made by and between PPL Electric Utilities Company ("Company") and PPLSolutions, LLC ("Contractor") this 22nd day of April, 2014 ("Effective Date"). Company and Contractor are sometimes referred to in this Amendment 1 individually as a "Party" and collectively as the "Parties."

WHEREAS, Company and Contractor are Parties to that certain Call Center Services Agreement dated April 10, 2013 (the "Agreement") pursuant to which Contractor provides call center services related to the operation of the Standard Offer Program ("SOP") presented by Company;

WHEREAS, Company's Default Service Program and Procurement Plan II approved by the Pennsylvania Public Utility Commission ("Commission") on January 24, 2013, under which the SOP was established, expires on May 31, 2015;

WHEREAS, Company has filed a Default Service Program and Procurement Plan III with the Commission for the period June 1, 2015 to May 31, 2017 pursuant to which Company proposes to extend the SOP through May 31, 2017; and

WHEREAS, Company and Contractor have agreed to amend the Agreement to provide for an extension of the term based upon the proposal and project scope of the extended SOP submitted to the Commission.

NOW THEREFORE, in consideration of the premises and other valuable considerations, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound, the Parties agree as follows:

1. The Recitals set forth above are hereby incorporated in and made a part of this Agreement by this reference.

2. The Parties agree that, as a contract between affiliated entities, this Amendment 1 must be approved by, and is contingent upon approval by, the Commission. In the event that this Amendment 1 is not approved, this Amendment 1 shall be null and void, and the Parties shall have no further obligations to one another as contemplated under this Amendment 1.

3. Section 3, Term of Contract, of the Agreement is hereby amended by extending the term of the Agreement to May 31, 2017. Accordingly, the last two sentences of Section 3 are hereby deleted and the following inserted in the place thereof:

"The program will continue until May 31, 2017. This Agreement will remain in force between August 1, 2013 and May 31, 2017, unless terminated earlier by the Commission."

Confidential

4. Any capitalized terms that are used but not defined in this Amendment 1 shall have the meanings ascribed to them in the Agreement. All other provisions of the Agreement shall remain in effect.

IN WITNESS WHEREOF, the Parties have caused this Amendment 1 to be duly executed by their respective duly authorized representatives.

PPL Electric Utilities Company

By: Robert M Geneczko

Name: Robert M. Geneczko

Title: VP- Customer Services

PPLSolutions, LLC

By:

Name: Michael R. Toner

Title: President

OFFICE OF GENERAL COUNSEL
BY:
DATE: 4/22/14

Confidential

Amendment Number 2
to the
Call Center Services Agreement

This Amendment Number 2 to the Call Center Services Agreement ("Amendment 2") is made by and between PPL Electric Utilities Company ("Company") and PPLSolutions, LLC ("Contractor") this ____ day of January, 2016 ("Effective Date"). Company and Contractor are sometimes referred to in this Amendment 2 individually as a "Party" and collectively as the "Parties."

WHEREAS, Company and Contractor are Parties to that certain Call Center Services Agreement dated April 10, 2013 (the "Agreement") pursuant to which Contractor provides call center services related to the operation of the Standard Offer Program ("SOP") presented by Company;

WHEREAS, Company's Default Service Program and Procurement Plan III approved by the Pennsylvania Public Utility Commission ("Commission") on January 18, 2015, under which the SOP was established, expires on May 31, 2017;

WHEREAS, Company has filed a Default Service Program and Procurement Plan IV with the Commission for the period June 1, 2017 to May 31, 2021 pursuant to which Company proposes to extend the SOP through May 31, 2021; and

WHEREAS, Company and Contractor have agreed to amend the Agreement to provide for an extension of the term based upon the proposal and project scope of the extended SOP submitted to the Commission.

NOW THEREFORE, in consideration of the premises and other valuable considerations, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound, the Parties agree as follows:

1. The Recitals set forth above are hereby incorporated in and made a part of this Agreement by this reference.

2. The Parties agree that, as a contract between affiliated entities, this Amendment 2 must be approved by, and is contingent upon approval by, the Commission. In the event that this Amendment 2 is not approved, this Amendment 2 shall be null and void, and the Parties shall have no further obligations to one another as contemplated under this Amendment 2.

3. Section 3, Term of Contract, of the Agreement is hereby amended by extending the term of the Agreement to May 31, 2021. Accordingly, the last two sentences of Section 3 are hereby deleted and the following inserted in the place thereof:

"The program will continue until May 31, 2021. This Agreement will remain in force between August 1, 2013 and May 31, 2021, unless terminated earlier by the Commission."

Confidential

4. Any capitalized terms that are used but not defined in this Amendment 2 shall have the meanings ascribed to them in the Agreement. All other provisions of the Agreement shall remain in effect.

IN WITNESS WHEREOF, the Parties have caused this Amendment 2 to be duly executed by their respective duly authorized representatives.

PPL Electric Utilities Corporation	PPLSolutions, LLC
By: ____________________________	By: ____________________________
Name: Christopher Cardenas	Name:
Title: VP – Customer Service	Title:

Confidential

Standard Offer Program Binding Participation Form

To be included in PPL Electric Utilities Corporation's ("PPL Electric") Standard Offer Program, ____ ("Standard Offer EGS Participant") agrees to be bound by the terms set forth below.

The Standard Offer EGS Participant hereby agrees that:

(1) It acknowledges, understands and will abide by the rules set forth in the Standard Offer Program (SOP) Process and Rules document;

(2) it is obligated to pay the fee of $28 per customer referred, as incurred by PPL Electric Utilities from the third party provider, within 20 business days of being invoiced;

(3) it will issue an EDI 814 enrollment upon notification from PPL Electric of customer being assigned to it. The EDI enrollment will be processed by the Standard Offer EGS Participant no later than 3 business days after notification of the assignment;

(4) it must accept all Standard Offer Customers who elect to participate and are assigned to it under the Standard Offer Program;

(5) it must accept customers enrolled in the Standard Offer Program and implement a new SOP rate code. If the Customer was previously enrolled with the Standard Offer EGS Participant under a different quarterly rate code assignment, the Standard Offer EGS Participant must send an EDI 814 rate code change transaction no later than 3 business days after notification of the assignment;

(6) once notification is received that a Standard Offer Customer is enrolled, the Standard Offer EGS Participant will send notification to such Standard Offer Customer and include the following terms as part of its disclaimer:

    a. the terms and conditions of the program;
    b. the Standard Offer price, herein described below, to all its designated Standard Offer Customers for a term of twelve (12) billing cycles;
    c. notification that there is no early termination penalty to any Standard Offer Customer who leaves the Program at any time during the twelve (12) billing cycles;
    d. any additional terms or conditions as set forth in Chapter 54 of the Pennsylvania State Code;

(7) The Standard Offer Customer's price must reflect a 7% discount to PPL Electric's Price to Compare (PTC) in effect at the time the Standard Offer Customer elects service under the Program. This price will be maintained for all 12 billing cycles for which the Standard Offer Customer participates in the program; and,

(8) In accordance with the provisions of 52 Pennsylvania Code Chapter 54, prior to the termination of the contract with a customer under this program, the EGS will notify the customer regarding the conclusion of the contract, and its offer concerning the terms and conditions for continuation of service.

The Standard Offer EGS Participant warrants and agrees that it hereby undertakes all responsibilities and service delineated herein as to Standard Offer Customers, and expressly absolves PPL Electric from any and all liability for Standard Offer EGS Participant's failure to perform and/ or its default with respect to such responsibilities and service.

PPL Electric warrants and agrees that it hereby undertakes all responsibilities and service delineated herein as to Standard Offer Customers, and expressly absolves Standard Offer EGS Participant from any and all liability for PPL Electric's failure to perform and/ or its default with respect to such responsibilities and service.

Participation in this Program shall constitute an Agreement by Standard Offer EGS Participant to abide by the terms and conditions of the Program as set forth herein. In the event of a material default by Standard Offer EGS Participant in any of its obligations under this Program, PPL Electric shall have the right to provide written notice of the default to Standard Offer EGS Participant, directed to the Contact listed in Exhibit 2. If Standard Offer EGS Participant does not cure the default within 10 business days from the date of the written notice, PPL Electric shall have the right to terminate Standard Offer EGS Participant from further participation in the Program. PPL Electric also may seek whatever remedies to which it may be entitled before the Commission, in a court of law or otherwise, including reasonable attorneys' fees. Any court action shall be litigated in the Court of Common Pleas for Lehigh County or in the District Court for the Eastern District of Pennsylvania in Allentown.

The Standard Offer EGS Participant acknowledges that if PPL Electric Utilities is not able to confirm that the Standard Offer EGS Participant is a licensed by the PUC, approved to participate in PPL Electric's service territory, is registered as an EGS at PJM, and has passed EDI "Rate Ready Billing" certification for the PPL Electric service territory as of the Submission Due Date, the Standard Offer EGS Participant will not be qualified to participate in the Standard Offer Program and will be excluded from the Program until such time as all deficiencies have been rectified. Furthermore, it is the responsibility of the Standard Offer EGS Participant to cure such deficiencies.

The Standard Offer EGS Participant need only execute and submit this Form to PPL Electric once. However, in order to be a participant during each PTC Quarter, it must utilize distinct Rate Codes for each PTC Quarter through the PPL Electric System and notify the Company via e-mail of its intent to participate per Article 4 of the SOP Rules. Any EGS failing to notify the Company of its intent to participate in the Program will be excluded from that quarter's SOP offering.

The submission of this Form to PPL Electric shall constitute the Standard Offer EGS Participant's acknowledgment and acceptance of all the terms, conditions and requirements of this Standard Offer Program.

The undersigned represents and warrants that he/she has the authority to act on behalf of, and to bind, the Standard Offer EGS Participant to perform the terms and conditions and otherwise comply with all obligations stated herein.

Customer Group Participation:

Residential _______ Small C&I < 25kW______ Both ______

Signature of Authorized Individual: ________________________________

Name of Authorized Individual *(print)*:______________________________

Title of Authorized Individual *(print)*: ______________________________

Date Signed: ______________________

As part of your submission to participate in the Standard Offer Program, please send one (1) original of this Form to:

PPL Electric Utilities Corporation
Standard Offer Program
Two North Ninth Street, GENN5
Allentown, PA 18101
Attn: Supplier Coordination

EXHIBIT 2
Standard Offer Program Contact Form

Please provide contact information for purposes of the SOP (*items with an * are required*):

Company:*______________________________

Contact Name:*______________________________

Contact Title:*______________________________

Address:

Street 1*

Street 2

City*

State*

Zip Code*

Phone Number:*______________________________

E-mail Address:*______________________________

Fax (Optional):

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. P-2016-__________

PPL Electric Utilities Corporation

Statement No. 2

Direct Testimony of A. Joseph Cavicchi

Topics Addressed:	Lessons Learned from DSP III Product Description Procurement Plan Prudent Mix and Least Cost Over Time

January 29, 2016

I. QUALIFICATIONS, INTRODUCTION, AND SUMMARY

Q: Please state your full name and business address.

A: My name is A. Joseph Cavicchi. My business address is 200 State Street, Boston, MA 02109.

Q: Who is your employer and what is your position?

A: I am employed by Compass Lexecon as an Executive Vice President.

Q: Please briefly describe the services provided by Compass Lexecon.

A: Compass Lexecon is an economics and financial consulting firm that provides corporations, law firms, and government agencies with analysis of complex economic and financial issues for use in legal and regulatory proceedings, and in strategic decision-making. Compass Lexecon is actively involved in a wide variety of matters that can arise in the areas of economics and finance. Our practice areas include energy and environmental economics, antitrust, securities, damages, intellectual property, as well as business consulting and public policy analysis.

Q: What are your duties as Executive Vice President?

A: I provide economic analysis and expert testimony in various state and federal regulatory proceedings related to electricity markets. In particular, I work with clients on a variety of state regulatory and Federal Energy Regulatory Commission proceedings, and often file testimony and affidavits supported by economic analyses. Throughout my career I have been directly involved with corporations, private and public institutions, and state and federal regulatory authorities in connection with the economics of the electricity industry. For the past 19 years I have been working almost exclusively on the regulatory economics of the electricity industry, and, in particular, performing economic analyses of wholesale electricity markets.

Q: What is your educational background?

A: I hold Masters degrees in Technology and Policy and in Environmental Engineering from the Massachusetts Institute of Technology and Tufts University, respectively.

Q: Please describe your professional experience.

A: Prior to joining Compass Lexecon, I was a staff mechanical engineer and a project manager at the Massachusetts Institute of Technology, overseeing the development, permitting, engineering, construction, and start-up of a $40 million, 20 megawatt gas turbine-based cogeneration facility on the Cambridge campus. In addition, I was responsible for the implementation of various energy consumption monitoring programs, and optimization of the operation of a centrally distributed electricity, steam, and chilled water production facility.

Q: Have you previously testified as a witness on regulation and competition in the electricity industry?

A: Yes. I have previously testified on power supply procurement plans in Pennsylvania and Ohio. In addition, I have testified on several occasions regarding wholesale electricity market competitiveness and design issues at the Federal Energy Regulatory Commission. I have also testified on qualifying facility pricing policy and wholesale market design policy in the state of California. Finally, I have written articles on electricity industry structure and issues associated with procuring wholesale electricity supplies for delivery to retail customers. Additional detail regarding my credentials and experience can be found in my *curriculum vitae*, which is attached as Appendix A to this testimony.

Q: What is the subject matter of your testimony in this proceeding?

A: My testimony describes and evaluates the competitive procurement program proposed by PPL Electric Utilities Corporation ("PPL Electric" or "Company") in its Petition for Approval of a Default Service Program and Procurement Plan ("DSP IV"), filed with the Pennsylvania Public Utility Commission ("PUC" or "Commission") on January 29, 2016, to procure default service supply for non-shopping customers from June 1, 2017, through May 31, 2021.[1] Consistent with the Commission's policy on the provision of default service, PPL Electric is proposing a default service program that: (1) establishes a procurement plan for acquiring generation supply; (2) provides an implementation plan that identifies the schedules and technical requirements of these generation supply procurements; (3) provides a rate design plan; and (4) is designed to meet the requirements set forth in Pennsylvania's Act 129 of 2008, P.L. 1592, as codified in 66 Pa.C.S. Chapter 28.[2]

Q: Please describe PPL Electric's proposed DSP IV.

A: The central objective of PPL Electric's proposed DSP IV is to obtain a portfolio of default service supply contracts that provide power for non-shopping customers from June 1, 2017, through May 31, 2021. To meet this objective, PPL Electric proposes to

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1 *Petition of PPL Electric Utilities Corporation for Approval of a Default Service Program and Procurement Plan for the Period June 1, 2017, through May 31, 2021*, Filed on January 29, 2016 (hereinafter "Petition").

2 See 66 Pa. C.S. § 2807(e).

use a portfolio of laddered fixed-price, full-requirements, load-following electricity supply contracts to meet the demand of its residential and small commercial and industrial customers,[3] and a full-requirements, load-following, spot market service to meet the demand of its large commercial and industrial customers. Notably, the proposed DSP IV's portfolio of products continues the Company's current, successful default service plan ("DSP III"). As I explain herein, PPL Electric's proposal provides for continuation of a clear, logical procurement plan that recognizes the experience PPL Electric has had with DSP III and the ongoing high numbers of customers obtaining competitive retail service within the PPL Electric service territory.

Q: What are full-requirements, load-following products and why is PPL Electric proposing to continue using these products for the provision of default service?

A: A full-requirements, load-following product obligates a wholesale electricity seller to supply a fixed-percentage (referred to as a "tranche") of PPL Electric's default service hourly load during every hour of a product's term. By assuming this obligation, sellers are responsible for managing the acquisition of energy, capacity, transmission (other than non-market-based transmission services), ancillary services, alternative energy credits ("AECs"), and any other related products (net of transmission and distribution losses) to meet default service customers' hourly loads. The pricing for a full-requirements, load-

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[3] Note that as the Petition explains, under DSP IV, the Company proposes to continue its default service Time-of-Use ("TOU") supply option currently in place. See Petition, Section V. Under this TOU rate option, PPL Electric relies on Electric Generation Suppliers ("EGSs") to offer TOU rate options and provide the TOU service to customers in the Company's service territory. TOU load is not included in the default service load procured for residential and small commercial and industrial customers because the TOU load will be separately supplied by retail EGSs.

following product is specified based on the type of default service load being supplied. For PPL Electric's residential and smaller commercial and industrial customers, the price is fixed for the term of the product and does not vary regardless of the number of default service customers being served. Thus, a fixed-price, full-requirements, load-following product provides PPL Electric's smaller default service customers with reasonably stable rates that change in response to power market changes as contracts expire and are replaced.

To reduce abrupt pricing changes, PPL Electric staggers, or ladders, procurements to avoid situations where all contracts expire at the same time. For PPL Electric's large commercial and industrial customers, the full-requirements, load-following product pricing includes an energy component that varies hourly based on changes in hourly wholesale electricity prices (commonly referred to as "spot" market pricing). Because the majority of PPL Electric's larger customers obtain electric supply service tailored to their needs from retail power providers, the full-requirements, load-following, spot market product has proven to be the best approach to providing large customers default service. Several power suppliers compete to provide full-requirements, load-following products, and PPL Electric has used these products successfully in all of its default service supply procurement plans.

Q: What guided the development of PPL Electric's proposed DSP IV?

A: Pennsylvania's Act 129, the Commission's Final Policy Statement in Proposed Policy Statement Regarding Default Service and Retail Electric Markets,[4] its Final Order in Investigation of Pennsylvania's Retail Electricity Market: End State of Default Service,[5] and the Company's experience with the Competitive Bridge Plan, DSP I, DSP II, and DSP III guided the development of PPL Electric's DSP IV. Consistent with Act 129 and PUC policy, the proposed DSP IV ensures that default service customers will receive adequate and reliable electricity supply at least cost over time while maintaining support for the competitive retail market.

Two important objectives were carefully considered when developing the proposed DSP IV. First, to be consistent with the Commission's policy outlined in its DS Policy Statement[6] and additional guidance provided in its Final ES Order,[7] PPL Electric's DSP IV continues semiannual competitive procurement of a laddered portfolio of supply products with differing terms that emphasizes shorter contract terms while maintaining price stability (identical to the Company's successful DSP III). Thus, consistent with the Commission's DS Policy Statement, DSP IV continues to strike a balance by providing

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4 Final Policy Statement, Proposed Policy Statement Regarding Default Service and Retail Electric Markets, Docket No. M-2009-2140580, September 23, 2011. In particular, the details of the policy are stated in Annex A, Title 52 Pa. Code §§ 69.1802-69.1817, Public Utilities, Part I. Public Utility Commission, Subpart C. Fixed Service Utilities, Chapter 69, General Orders, Policy Statements and Guidelines on Fixed Utilities, Default Service and Retail Electric Markets (hereinafter "DS Policy Statement").

5 Final Order, Investigation of Pennsylvania's Retail Electricity Market: End State of Default Service, Docket No. I-2011-2237952, February 15, 2013 (hereinafter "Final ES Order").

6 52 Pa. Code §§ 69.1802 and 69.1805.

7 Final ES Order at pp 30-31 and 41-43.

reasonably frequent price adjustment without exposing customers to unacceptable price volatility, while encouraging retail customers to seek service from EGSs. Second, should the Company no longer serve as the default service provider, PPL Electric's DSP IV is designed to allow the Company to modify the contract terms of its proposed final DSP IV default service procurement to provide a smooth transition if necessary. This establishes a procurement platform for PPL Electric that can continue in the future as appropriate, or if the PUC properly so determines, easily accommodate transferring the responsibility of providing default service to an entity other than PPL Electric.

Q: Please summarize your conclusions.

A: In my expert opinion as an economist, I believe the proposed DSP IV represents a prudent default service product mixture, procured at least cost over time, which will ensure that customers receive the benefits of competition in regional wholesale electricity markets while supporting continued growth of retail competition in Pennsylvania. The heart of PPL Electric's DSP IV is its portfolio of power supply products that will provide default service customers with competitively priced power supplies. PPL Electric's DSP IV product portfolio provides for customer rates to change on a semiannual basis (and more frequently for larger customers), ensuring that customers have continued opportunities to assess competitive retail opportunities, while guarding against excessive price volatility. Finally, PPL Electric's DSP IV relies on fixed-price, full-requirements, load-following products that have a proven record for supplying default service, and proposes to obtain these products through transparent competitive solicitations that have been widely successful in all the Company's default service procurement plans to date, and elsewhere throughout Pennsylvania and the Mid-Atlantic U.S.

Q: Please summarize the following sections of your testimony.

A: In my testimony, I first review additional lessons learned from PPL Electric's experience with DSP III. Next, I describe the Company's proposed DSP IV's product portfolio for each customer group. I then evaluate the proposed DSP IV and explain why the plan is a reasonable approach to procuring default service supply in a manner that is consistent with Act 129's requirements and the Commission's Orders. In particular, I address why the product portfolio constitutes a "prudent mix" that will ensure "least cost over time" to non-shopping customers while continuing to support the development of a competitive retail market.

II. LESSONS LEARNED FROM PPL ELECTRIC'S DSP III

Q: Please provide a brief overview of PPL Electric's existing DSP III.

A: For residential customers, PPL Electric's current DSP III obtains a portfolio of laddered fixed-price, full-requirements, load-following supplies plus long-term block power supply.[8] For small commercial and industrial customers, PPL Electric's current DSP III also obtains a portfolio of laddered fixed-price, full-requirements, load-following supplies. Under DSP III, the Company purchases laddered full-requirements power supply products with 6- and 12-month contract terms for its non-shopping residential and small commercial and industrial customers. For its large commercial and industrial customers, PPL Electric's current DSP III provides a full-requirements, load-following,

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[8] Under DSP III, PPL Electric relies upon block power supply that was purchased under DSP I for its residential customers. A long-term block power supply purchase of 50 MW now remains as of January 2016, and this long-term block purchase will continue through May 31, 2021.

spot market power supply to meet the default service demand of those customers electing to receive such service.

Q: In your opinion, have the results of the procurements under DSP III continued to support the competitive retail market?

A: Yes. Retail electricity shopping statistics recently reported by the Pennsylvania Office of Consumer Advocate ("OCA") show that PPL Electric's service territory has maintained a high rate of shopping by residential, commercial, and industrial customers.[9] For example, reported customer shopping percentages by load show residential shopping at 49%, commercial shopping at 85% and industrial shopping at 98.5% within PPL Electric's service territory. In addition, there continues to be a large number of licensed EGSs serving residential customers in PPL Electric's service territory as of January 2016.[10] Retail competition is strong in the PPL Electric service territory.

Q: Is there evidence that the auction process used to solicit the fixed-price, load-following product types within DSP III provides least-cost supplies?

A: Yes. With respect to the product types within DSP III's product portfolio, PPL Electric has successfully procured these products numerous times (going back to July 2007, when PPL Electric first began procuring supplies for its Competitive Bridge Plan, through its most recent DSP III solicitation). The results from PPL Electric's auctions, as well as

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[9] *Pennsylvania Electric Shopping Statistics*, Pennsylvania Office of Consumer Advocate, October, 2015.

[10] As of December 2015, 35 EGSs were reported as offering service to PPL Electric Utility residential customers (see PA Office of Consumer Advocate's Electric Shopping Guides, December 2015, available at http://www.oca.state.pa.us/Industry/Electric/elecomp/Archive/pricecharts_archive.htm). In addition, 64 EGSs were reported as willing to serve business consumers as of January 7, 2016 (see http://www.papowerswitch.com/shop-for-electricity/).

those of numerous similar auctions conducted by Pennsylvania, Maryland, and New Jersey utilities during the past several years for these products, confirm that these default service products draw numerous competitors and that multiple bidders are successful suppliers.[11] Competition disciplines the prices offered by suppliers and drives competitors to innovate and find methods to deliver services at lower costs to buyers than their rivals. The evidence shows that there is substantial competition to supply the fixed-price, full-requirements, load-following products.

Q: Are there other lessons that can be learned from PPL Electric's experience with the existing DSP III?

A: Yes. The product mixture within DSP III's product portfolio (relative to PPL Electric's DSP II) for non-shopping residential (and small commercial and industrial) customers has further simplified the default service procurement process for PPL Electric, and default service pricing has continued to be responsive to market changes, while avoiding price volatility.[12] For example, PPL Electric Exhibit JC-1 plots the evolution of the Company's reported fixed-price, full-requirements power supply prices for residential and small commercial and industrial customers over the past several years. PPL Electric Exhibit JC-1 shows that over the past several years the evolution of the Company's fixed-price power supply pricing for its non-shopping customers has tracked market changes

[11] See, e.g., http://www.pepcoholdings.com/about-us/do-business-with-phi/energy-suppliers/wholesale-suppliers/sos-public-disclosure-of-information/, https://www.firstenergycorp.com/upp/md/power_procurements/mdsosrfp/archive.html, http://www.bge.com/myaccount/billsrates/ratestariffs/electricservice/Pages/Electric-Supply-Auction-Results.aspx

[12] PPL Electric's default service procurements under DSP III have been successful and approved by the Commission, with the exception of the recent long-term procurement of Tier II Alternative Energy Credits.

and most recently stabilized following the introduction of bi-annual reconciliation and default service pricing updates. In addition, PPL Electric Exhibit JC-2 shows the evolution of PPL Electric's Price-to-Compare ("PTC") (which includes additional costs incurred by the Company to provide default service and reconciliation adjustments) over the past several years. PPL Electric Exhibit JC-2 shows how the average fixed-price power supply and PTC are tracking together following the implementation of DSP-III which has eliminated pricing swings that could result from more frequent reconciliation. Collectively, PPL Electric Exhibits JC-1 and JC-2 show that the Company's power procurement programs have resulted in default service prices that are responsive to underlying wholesale power market price variations while changing without excessive volatility.

Thus, under DSP III PPL Electric's procurement of default power supply semiannually using a straightforward product mixture effectively balances responsiveness to market changes and default service price stability. At the same time, default service pricing updates associated with a large quantity of PPL Electric's default service load being re-priced in each Company procurement ensures that EGSs continue to have an opportunity to compete for customers in the PPL Electric service territory.

III. PPL ELECTRIC'S PROPOSED DSP IV

A. OVERVIEW, PRODUCT DESCRIPTIONS, AND PROCUREMENT PLAN

Q: Please provide an overview of PPL Electric's proposed DSP IV.

A: For its residential and small commercial and industrial default service customers, PPL Electric's DSP IV envisions obtaining a portfolio of laddered fixed-price, full-requirements, load-following supplies.[13] In particular, for its non-shopping residential and small commercial and industrial customers, DSP IV provides for the purchase of fixed-price, full-requirements, load-following products with 6- and 12-month contract terms using a laddering approach. DSP IV's reliance on 6- and 12-month products reflects a continuation of the default service procurement program used to provide default supply during DSP III.

For large commercial and industrial customers, DSP IV will continue the approach taken in DSP III and provide for the purchase of power supply pursuant to full-requirements, load-following contracts with an energy component that reflects wholesale electricity spot market prices on a real-time hourly basis to meet the default service demand of those customers electing to receive such service. To be clear, products to supply each customer group (i.e., residential, small commercial and industrial, and large commercial and industrial) will be procured separately.

[13] Under DSP IV PPL Electric will continue to rely upon a long-term block purchase of 50 MW that will remain in effect until the end of DSP IV (May 31, 2021).

1. Residential and Small Commercial and Industrial Customers

Q: How is the proposed DSP IV structured for residential customers?

A: PPL Electric Exhibit JC-3 shows DSP IV's product portfolio and procurement schedule. For residential customers, DSP IV obtains a portfolio of 12- and 6-month fixed-price, full-requirements, load-following products procured semiannually. Each semiannual solicitation will procure 45% of the power supply under a 6-month contract and either 25% or 30% under a 12-month contract. Thus, default service power supply is repriced with sufficient regularity to capture changes in market conditions without exposing customers to excessive price volatility. DSP IV is structured so that, following its completion, PPL Electric will have only one 12-month default service supply (25% of the default service load) under contract at the end of the DSP IV period.

Q: How is the proposed DSP IV structured for small commercial and industrial customers?

A: For small commercial and industrial customers, DSP IV obtains a portfolio of 12- and 6-month fixed-price, full-requirements, load-following products procured semiannually that mirrors the structure for residential customer procurements with the exception that there is no reliance on block products. PPL Electric Exhibit JC-4 shows DSP IV's product portfolio and procurement schedule for the small commercial and industrial customer group.

Q: Why is the proposed DSP IV's structure for small commercial and industrial customers similar to residential customers?

A: The proposed DSP IV approach for the small commercial and industrial customers mirrors the approach for residential customers (ignoring block purchases) because these non-shopping small commercial and industrial customers collectively represent PPL Electric's lowest-load customers in this rate class. The incidence of shopping for these lower-load customers is notably less than for larger-load small commercial and industrial customers. In particular, OCA shopping statistics show that almost 97,000 commercial customers, out of a total of approximately 181,000 customers, are shopping and represent approximately 85% of the load.[14] Based upon this information, we can conclude that the remaining non-shopping customers, representing 15% of the load, are customers with much lower loads.[15] Thus, the reasoning supporting the small commercial and industrial product mixture is the same as that for the residential plan. That is, DSP IV provides a continued reliance on shorter-term fixed-price, full-requirement, load-following products. Moreover, the PUC's DS Policy Statement allows for a similar mixture of products for these two customer groups, and using an approach that mirrors the residential plan simplifies the procurement process.[16]

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[14] *Pennsylvania Electric Shopping Statistics*, Pennsylvania Office of Consumer Advocate, October, 2015. I understand that the OCA's definition of commercial customers for the purposes of tracking shopping statistics closely matches the Company's definition of small commercial and industrial customers.

[15] For example, these remaining customers total approximately 85,000 customers and represent only 15% of the load. Thus, the per customer load of the non-shopping commercial customers is much smaller when compared to the approximately 97,000 customers that represent 85% of the load.

[16] 52 Pa. Code § 69.1805.

Q: When will the DSP IV products for residential and small commercial and industrial customers be solicited?

A: The semiannual solicitations envisioned under DSP IV will procure the 12- and 6-month products approximately two months prior to delivery. This is the same approach used in DSP III.

2. Large Commercial and Industrial Customers

Q: How is the proposed DSP IV structured for large commercial and industrial customers?

A: As I describe above, for large commercial and industrial customers, DSP IV obtains the default service supply for these customers at prices based on the wholesale electricity spot markets. PPL Electric will annually solicit contracts to administer the provision of this spot market supply. This is identical to the approach taken in all the Company's prior default service plans and, thus, non-shopping large commercial and industrial customers will experience no change in the structure of their default service.

Specifically, PPL Electric proposes to issue single solicitations in the second quarter of each year 2017 through 2021 in which PPL Electric will request competitive offers from suppliers to manage the provision of its default service spot market supply for a period of 12 months. Customer rates will include the real-time hourly spot market electric energy prices in the PPL Electric transmission zone, PJM's pre-determined electric capacity charge in the PPL Electric transmission zone, and a competitive supplier charge that encompasses all other components of the spot market default service supply necessary for PPL Electric to satisfy its customer obligations (including AECs) plus PPL Electric's costs of administering DSP III. Experience has shown that competitive suppliers will make offers in response to the solicitation, and the successful bidders' charges will form the basis of the competitive supplier charge described above.[17]

B. DSP IV SATISFIES THE "PRUDENT MIX" AND "LEAST COST OVER TIME" REQUIREMENTS PUT FORTH BY ACT 129 AND PUC POLICY

Q: Can you please summarize how you have interpreted Act 129 and PUC policy for the purposes of supporting the proposed DSP IV?

A: A primary aspect of Act 129 and PUC policy is the requirement that default service providers rely on a "prudent mix" of supplies that is "least cost over time" while providing default service to customers that is adequate and reliable.[18] At the same time, consistent with Act 129, the PUC's policy regarding default service encourages retail competition.[19] Thus, in my analysis I consider that the structure of a default service program should be consistent with supporting continued retail competition. I also believe a balance should be struck between market-reflective pricing and avoidance of excessive price volatility.

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[17] As discussed above, PPL Electric has successfully used this approach to obtaining default service supplies for large commercial and industrial customers in the Competitive Bridge Plan, DSP I, DSP II and DSP III. In addition, I note that this service is similar to the commercial and industrial energy product solicited each year as part of New Jersey's basic generation service auctions.

[18] Act 129, 66 Pa. C.S. § 2807(e) 3.4 and 52 Pa. Code §§69.1802 and 69.1805. See also, *Implementation of Act 129 of October 15, 2008; Default Service and Retail Electric Markets*, Docket No. L-2009-2095604 (Final Rulemaking Order entered October 4, 2011), at p 40.

[19] 66 Pa. C.S. § 2802 (12) and 52 Pa. Code § 69.1802.

Q: How have you interpreted PUC policy with respect to the default service customers in each of PPL Electric's customer classes?

A: I have considered customer groupings as defined by PPL Electric in accordance with Commission policy.[20] I have evaluated residential and small commercial and industrial customers collectively, recognizing that most non-shopping customers within these various rate schedules are primarily PPL Electric's smallest (i.e., lowest load per customer) customers. I considered the prudent mix for large commercial and industrial customers separately. In this way, I am able to appropriately evaluate a suitable prudent mix for the different customer classes, recognizing the different risks that the customer classes' loads present to the service PPL Electric obtains as the default service provider and observations (from both the Company's experience and other jurisdictions) that a substantial majority of large commercial and industrial customers elect service from competitive retail suppliers.

Q: Can you please summarize why DSP IV's proposal for residential and small commercial and industrial customers is appropriate to comply with Act 129 and the PUC's related orders regarding default service?

A: Consistent with Act 129, and Commission policy, defining a prudent mix requires consideration of supporting retail competition while providing for the provision of reliable supply without excessive price volatility over time.[21] PPL Electric's proposed DSP IV for its residential and small commercial and industrial customers continues to

[20] 52 Pa. Code § 69.1805.

[21] Act 129, Legislative Objectives and 52 Pa. Code § 69.1802.

rely on DSP-III's approved mixture of short-term, fixed-price, full-requirements, load-following products which have a proven track record as prudent default service products.[22] As I explain in greater detail below, market uncertainty impacts any particular mixture of power supply products, and it is not possible to know ahead of time that one mixture will be less expensive than another mixture. Thus, there can be many mixtures that will provide customer rates that are consistent with Commission policy.

Moreover, Commission policy does not provide an explicit definition regarding the power supply mix that a default service provider should procure or precisely prescribe how the supplies must be procured, but instead Commission policy offers options to the default service provider as to what types of products and procurement processes are acceptable.[23] Commission policy recognizes that it is desirable for default service programs to be structured so as to accommodate incremental changes as more experience is gained with particular product mixtures, and with the impact of Pennsylvania's other policy objectives, including continued support for the competitive retail market.[24] DSP IV for PPL Electric's residential and small commercial and industrial customers provides a logical continuation of DSP III default service product terms and in my opinion is a reasonable approach for provision of default service supply by the Company.

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[22] Including as part of residential customers' default service supply a long-term block power supply product.

[23] 52 Pa. Code § 69.1805.

[24] *Id.*

Q: Can you please summarize why DSP IV's proposal for large commercial and industrial customers is appropriate to comply with Act 129 and the PUC's related orders regarding default service?

A: As I discuss above, the vast majority of PPL Electric's large commercial and industrial customers and load continue to be served by competitive suppliers.[25] By continuing to offer default service with spot market pricing to non-shopping large commercial and industrial customers, these non-shopping customers will continue to have a strong incentive to consider the competitive offerings from retail suppliers, whose short- and long-term products will be best suited to their particular individual needs. Finally, PPL Electric's largest customers have demonstrated that they are able to consistently obtain power supply from retail suppliers.

1. The Proposed DSP IV Provides a "Prudent Mix"

Q: Does PPL Electric's proposed DSP IV represent a "prudent mix" under Act 129?

A: Yes. The Company's proposed DSP IV includes each of the default service product types specified in Act 129. Thus, the Company's proposed DSP IV is consistent with Act 129's prudent mix requirement.[26]

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[25] Although the reported shopping statistics do not break down commercial and industrial customers by billing peak demands, the data show that practically all these customers' load is served by EGSs (see above).

[26] I understand that it is not necessarily the case that a prudent mix must contain all three types of power supply products, but note here that the Company's proposed plan does.

Q: What factors did you take into consideration when evaluating what products constitute a prudent mix for the Company's two default service customer groupings?

A: As I explained above, the definition of a prudent mixture takes into account balancing the objective that default service rates support retail competition against ensuring that default service rates are not unacceptably volatile. In addition, it is important to ensure that any product mixture can be successfully procured from the wholesale electricity market.

Q: How do the product types within PPL Electric's proposed DSP III constitute a "prudent mix" for residential and small commercial and industrial customers?

A: For residential and small commercial and industrial customers, DSP III's reliance on fixed-price, full-requirements, load-following products with terms of 6 and 12 months will track ongoing changes in wholesale electricity market prices while guarding against price volatility. The proposed product mixture will continue to promote the development of retail competition while protecting against various risks that must be addressed by any default service plan. Simply stated, the costs of otherwise protecting against uncertain future load and prices (e.g., having the Company engage in managing default service procurement risk) will not be known until after the fact and, thus, are best minimized by using short-term (i.e., 12 months or less) fixed-price, full-requirements, load-following products. These products are well known throughout the industry and can be competitively procured by PPL Electric to obtain reasonably priced reliable power supplies for default service.

Q: Can you please explain why the use of fixed-price, full-requirements, load-following products continues to remain appropriate for obtaining default service supply for non-shopping residential and small commercial and industrial customers?

A: The proposed DSP IV continues to use a laddering approach whereby fixed-price, full-requirements, load-following products are purchased periodically to establish default service pricing for 6-month periods, and in doing so, reduces the risk of unreasonable price volatility (See PPL Electric Exhibits JC-1 and JC-2). Moreover, competition between wholesale suppliers in the provision of fixed-price, full-requirements, load-following products has been robust for several years and ensures that PPL Electric will be able to obtain supply for default service through these products at reasonable prices for its customers while minimizing the risks associated with the provision of default service supply.

Q: What types of risk do wholesale suppliers manage when providing default service?

A: Wholesale suppliers primarily manage the risks associated with offering a fixed-price default service while underlying supply input costs and customer loads can change throughout a product term. For example, wholesale suppliers agree to meet a fixed percentage of default service load regardless of the number and type of default service customers and the variance in load that occurs due to seasonal weather changes. Wholesale suppliers also must manage the costs of default service supply and hedge against possible shifts in fuel and power markets during the product delivery term. Wholesale suppliers specialize in managing these risks and compete to provide the lowest-price default service to PPL Electric's customers.

Q: Is there any evidence to support your claim that PPL Electric's use of fixed-price, full-requirements, load-following products has resulted in reasonable prices for customers?

A: Yes. The pricing of the fixed-price, full-requirements, load-following products is consistent with the actual prices of underlying wholesale electricity market products at the time the purchases are made. To show this I have prepared PPL Electric Exhibits JC-5 and JC-6, which compare the prices obtained for the various fixed-price, full-requirements, load-following products serving the residential and small commercial and industrial customer groups in the more recent DSP II and DSP III solicitations to the estimated costs of each major component of the full-requirements product obtained separately (not including the costs of overhead and risk management services, and a competitive profit margin). These components are the cost of energy based on contemporaneous forward prices of the same term plus a load-shaping adjustment, the cost of capacity (based on the applicable price of capacity established by PJM), the cost of ancillary services (based on the price of ancillary services reported in PJM's *2014 State of the Market Report*[27]), and the costs of AECs (based on the prices reported on the PennAEPS website[28]).

As PPL Electric Exhibits JC-5 and JC-6 show, the cost build-up (not including the expected costs of overhead and risk management services, and a competitive profit

[27] *2014 State of the Market Report for PJM*, Monitoring Analytics, LLC, Independent Market Monitor for PJM, March 12, 2015.

[28] http://www.pennaeps.com/reports/.

margin) is somewhat less than the full-requirements product (which includes all the costs a supplier expects to incur). On average, across the solicitations, the fixed-price, full-requirements, load-following product prices are slightly higher than the cost build-up (by roughly $4 per MWh for the residential customer group and $3 per MWh for the small commercial and industrial group).

Next, because estimating the costs a supplier incurs associated with overhead and risk management services is difficult and subject to each supplier's particular business structure, I have not tried to estimate these costs for the individual procurements, or tried to estimate a competitive profit margin. However, empirical analysis suggests that these excluded costs are at least in the range of $3-7.50/MWh.[29] Thus, these excluded costs fall squarely into the range of the difference between default service auction prices and the estimated prices using the cost build-ups. Including an estimate of the costs associated with overhead and risk management services and a competitive profit margin causes the results of my cost build-up analysis to be closely comparable to the actual default service auction prices. This indicates that default service pricing based on fixed-price, full-requirements, load-following products has been competitive and consistent with power market conditions at the time the supply is procured.

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[29] Statistical modeling has shown that the modal premium associated with hedging is around 5%, the median premium is 8%, and the mean premium is 11% (see Faruqui, Ahmad, "The Ethics of Dynamic Pricing," The Brattle Group, March 30, 2010). As with any statistical study, the result depends on assumptions regarding underlining stochastic variables. However, applying these results to the fixed-price, full-requirements, load-following products in PPL Electric Exhibits JC-5 and JC-6 suggests that roughly an additional $3-7.50/MWh of costs associated with risk management are not included in the cost build-ups. This is consistent with the estimates reported elsewhere.

Q: Why have the contract terms been maintained for residential and small commercial and industrial customers?

A: Under DSP III, PPL Electric transitioned to shorter-term (6- and 12-month) fixed-price, full-requirements default service products. As I explained above, PPL Electric's lessons learned under DSP III show continued high numbers of shopping customers and competitively priced default service supply contracts. Under DSP IV, the Company's default service load (less block purchases where relevant) is continually re-priced through semiannual solicitations for non-shopping residential and small commercial and industrial customers. This structure encourages these non-shopping customers to consider offers from competitive retail suppliers (for example, prices each year will rise and fall with market conditions during summer/fall and winter/spring, which helps signal to customers the value of competitive supplier products), continuing to support the further development of Pennsylvania's competitive retail electricity markets. Moreover, resetting prices for 6-month time periods facilitates non-shopping customers' evaluation of EGS offers by providing a long enough time horizon to make a reliable estimate of the savings available from shopping.[30] In my opinion, this approach is fully consistent with Act 129 and the PUC's default service policies, and an appropriate evolution for the prudent mixture of default service products for the Company's residential and small commercial and industrial customers.

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[30] For smaller customers, more frequent default service price changes that accompany even shorter-term products (e.g., quarterly, monthly, and spot market) make the determination of savings less certain, and all else equal, will increase price volatility.

Q: How does the product type within PPL Electric's proposed DSP IV constitute a "prudent mix" for large commercial and industrial customers?

A: In my opinion, the full-requirements, load-following, spot market product provides non-shopping large commercial and industrial customers a cost-effective default service that has been consistently available from competitive wholesale suppliers. By using a spot market product, PPL Electric protects large commercial and industrial customers from the risks of high costs that could result if longer-term products were purchased, which would require bidders to incorporate into their prices the uncertainty associated with shopping customers possibly returning to default service. For example, almost all of the Company's large commercial and industrial customers are shopping (see above). Moreover, a spot market-priced service provides default service customers the opportunity to shop without restrictions. Company experience has shown that the full-requirements, load-following, spot market product facilitates retail competition and has been a consistently successful default service product.

2. The Proposed DSP IV Ensures "Least Cost Over Time"

Q: In your opinion, will the products procured under the proposed DSP IV ensure "least cost over time" to customers?

A: Yes. First, it is important to note that there are numerous assumptions regarding inherently uncertain future market conditions that affect a given product portfolio's costs to customers. On a going-forward basis, there are many possible contract mixtures that can constitute a prudent mix, and the cost of these various mixtures is not necessarily known ahead of time. Thus, when assessing a product portfolio prospectively, it is important to analyze the products recognizing the uncertainty surrounding energy markets at the time the products are purchased. It is impossible to say with certainty whether one particular prudent mixture of products will always be less costly than another prudent mixture of products when evaluated post procurement. What can be said with certainty is that exposing PPL Electric's smaller default service customers to price and quantity volatility can result in unexpected cost increases. DSP IV explicitly recognizes such possibilities and insures against uncertain outcomes by relying primarily on fixed-price, full-requirements, load-following products.

Consistent with the realities of the inherent uncertainty in energy markets, I have interpreted "least cost over time" along two dimensions. First, in a broader context, it is my understanding that the phrase "least cost over time" requires the selection of contracts that compose a prudent mix, and that the types of products in the prudent mix are selected by considering all relevant and appropriate risks and costs. Second, in a narrow context, it is my understanding that this phrase requires default service products to be procured through a process that produces the lowest cost for the particular product being purchased.

Q: How does PPL Electric's proposed DSP IV satisfy the broad interpretation of "least cost over time" with respect to residential and small commercial and industrial default service customers?

A: I have analyzed the proposed DSP IV from the perspective of satisfying the policy objectives of the Commonwealth. In particular, I have assumed that it is important to support retail competition while protecting default service customers, over time, from costly risks. Retail competition is supported by default service rates that track changes in wholesale electricity markets and provide customers an opportunity to assess the benefits of shopping. As I show in PPL Electric Exhibits JC-1 and JC-2, under the Company's approved DSP-III, which is essentially identical to the Company's proposed DSP-IV, default service prices are tracking changes in wholesale power markets while not being excessively volatile. Under DSP-IV fixed-price default service supply products for residential and small commercial and industrial customers will continue to incorporate market variations and provide cost-effective protection against price volatility.

Thus, in my opinion, DSP IV's product portfolio supports retail competition (one of the Commonwealth's primary public policy objectives) while balancing market-reflective price changes with reasonable price stability (which is another one of the Commonwealth's public policy objectives, and is especially important for smaller customers). The DSP-IV plan also takes into account the various risks that must be addressed by any default service plan.

Q: How does PPL Electric's proposed DSP IV satisfy the narrow interpretation of "least cost over time" with respect to residential and small commercial and industrial default service customers?

A: The proposed DSP IV satisfies this provision by regularly holding transparent solicitations in which wholesale suppliers can compete with one another to be the source of default service supply. Over time this approach will produce default service prices that are the least cost over time given the underlying energy market conditions. PPL Electric relies on widely advertised, well-defined solicitations to procure these products where the overarching objective is to seek out the lowest-cost suppliers. By obtaining default service supplies through competitive solicitations in the form of an auction, PPL

Electric always obtains default supplies at the lowest possible cost for the product being procured.

Q: How does PPL Electric's proposed DSP IV satisfy the broad interpretation of "least cost over time" with respect to large commercial and industrial default service customers?

A: As I have discussed above, by using the spot market to price default service for non-shopping large commercial and industrial customers, the proposed DSP IV ensures that these customers are provided a default service product that has been demonstrably successful and competitively priced.

Q: How does PPL Electric's proposed DSP IV satisfy the narrow interpretation of "least cost over time" with respect to large commercial and industrial default service customers?

A: The proposed DSP IV satisfies this provision for the same reasons I have explained above with respect to the fixed-price, full-requirements, load-following products used to obtain supply for residential and small commercial and industrial customers. Namely, wholesale competition among suppliers of the spot market-priced product will ensure that PPL Electric provides this default service at the lowest possible cost. Providing default service supplies based on the spot market allows the large commercial and industrial customers complete flexibility to shop and recognizes that retail suppliers have clearly offered large commercial and industrial customers products that will take into account the particular needs of the individual customers. It is my opinion that default service with prices based on the spot market will be least cost over time for these customers.

Q: Does this conclude your direct testimony?

A: Yes.

Appendix A

COMPASS LEXECON

CURRICULUM VITAE

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PROFESSIONAL EXPERIENCE

Compass Lexecon, Boston, MA
Executive Vice President, April 2013 – present
Senior Vice President, January 2007 – March 2013
Managing Director, 2003 – 2006
Vice President, 2001 – 2003
Senior Consultant, 1999 – 2001
Consultant, 1997 – 1999

Provides wholesale and retail electricity market regulatory economic analyses in connection with the restructuring of the US electricity industry. In particular, he advises clients in Federal Energy Regulatory Commission matters, state regulatory proceedings, and arbitration and court proceedings. He files testimony, affidavits and expert reports supported by economic analyses.

Extensive knowledge of wholesale market operations with general economic theory of contracting and electricity generation plant dispatch that provides companies with detailed analyses that impact both regulatory and business decisions. Actively involved in the electricity industry both before and after restructuring for a total of more than 20 years.

Tufts University, Medford, MA
Adjunct Instructor, Summer 2000

Taught graduate-level environmental economics.

Massachusetts Institute of Technology, Cambridge, MA
Research Engineer, 1997
Research Assistant, 1995 – 1997

> Performed an analysis of water and electricity resources in Mendoza, Argentina. Developed a computer simulation model to support analysis and permit the display of results to a diverse group of stakeholders. Traveled frequently to Mendoza to interact with government officials and relevant institutions in an effort to establish electricity and water policy.

Massachusetts Institute of Technology, Cambridge, MA
Project Manager/Staff Mechanical Engineer, 1989 – 1995

> Managed the development, engineering, and construction of a $40 million, 20 MW gas turbine-based cogeneration facility at the Cambridge campus. Directed all attributes of the project for its three-year duration. Involved extensively in energy conservation programs with emphasis on building and utility plant optimization through innovative engineering applications.

Carrier Building Systems and Services, Waltham, MA
Project Engineer, 1987 – 1988

> Engineered and managed the installation of Energy Management Systems used exclusively for demand-side management. Interfaced direct digital control systems to mechanical equipment associated with thermal systems of industrial, commercial, and educational buildings.

EDUCATION

Massachusetts Institute of Technology, Cambridge, MA
S.M. in Technology Policy, 1997

Tufts University, Medford, MA
S.M. in Environmental Engineering, 1992

University of Connecticut, Storrs, CT
B.S. in Mechanical Engineering, 1987

TESTIMONY

PJM Power Providers Group

Before the Public Utilities Comission of Ohio, In the Matter of the Application Seeking Approval of Ohio Power Company's Proposal to Enter into an Affiliate Power Purchase Agreement for Inclusion in the Power Purchase Agreement Rider, Case No. 14-1693-EL-RHR et al. Supplement Testimony of A. Joseph Cavicchi on behalf of the PJM Power Providers Group and The Electric Power Supply Association, December 28, 2015, Written, public and Confidential. Deposition of A. Joseph Cavicchi on behalf of the PJM Power Providers Group and The Electric Power Supply Association, January 5, 2016. Testimony of A. Joseph Cavicchi, January 7, 2016.

Exelon Generation Company, LLC

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PJM Power Providers Group

Before the Public Utilities Comission of Ohio, In the Matter of the Application Seeking Approval of Ohio Power Company's Proposal to Enter into an Affiliate Power Purchase Agreement for Inclusion in the Power Purchase Agreement Rider, Case No. 14-1693-EL-RHR et al. Direct Testimony of A. Joseph Cavicchi on behalf of the PJM Power Providers Group and The Electric Power Supply Association, September 11, 2015, Written, Public and Confidential. Testimony of A. Joseph Cavicchi on behalf of the PJM Power Providers Group and The Electric Power Supply Association, October 20, 2015, Oral, Public.

Iberdrola Renewables, LLC

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San Diego Gas and Electric Company

Naturener USA, LLC, et al. v. San Diego Gas & Electric Company, in the Montana Ninth Judicial District Court, Toole County. Declaration, Non-Public (January 22, 2014).

PPL EnergyPlus

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Before the Federal Energy Regulatory Commission. RE : Triennial Market-Based Rate Update for the Northwest Region, PPL EnergyPlus LLC et al, Dockets ER 10-2011 et al. Affidavit of A. Joseph Cavicchi, December 31, 2013, Written, Public.

Transalta Energy Marketing

Before the Federal Energy Regulatory Commission, Puget Sound Energy, Inc., Complainant v. All Jurisdictional Sellers of Energy and/or Capacity at Wholesale into Electric Energy and/or Capacity Markets in the Pacific Northwest, Including Parties to the Western System Power Pool Agreement Participants, Docket. No. EL01-085. Prepared Answering Testimony of A. Joseph Cavicchi on behalf of Transalta Energy Marketing (U.S.) Inc. and Transalta Energy Marketing (California) Inc., December 17, 2012. Deposition of A. Joseph Cavicchi on behalf of Transalta Energy Marketing (California) Inc., February 8, 2013. Testimony of A. Joseph Cavicchi, October 21 and 22, 2013, Oral, Public.

Avista Corporation et al

Before the Federal Energy Regulatory Commission. In the Matter of Puget Sound Energy, Inc. v. All Jurisdictional Sellers of Energy and/or Capacity at Wholesale into Electric Energy and/or Capacity Markets in the Pacific Northwest, including Parties to the Western Systems Power Pool Agreement. Docket EL01-10-085. Testimony of A. Joseph Cavicchi, September 26, 2013. Oral, public. Answering Testimony of A. Joseph Cavicchi on behalf of Avista Corporation et al. ("Joint Defense Group"), June 24, 2013. Deposition of A. Joseph Cavicchi on behalf of Avista Corporation et al, July 9, 2013.

Department of Justice

Before the United States Court of Federal Claims, Pacific Gas and Electric Company and Southern California Edison Company, Plaintiffs et al v. The United States, Defendant, No. 07-157C, No. 07-167C (Consolidated), No. 07-184C. Deposition of A. Joseph Cavicchi, March 27, 2013. Confidential, Subject to Protective Order.

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PPL Montana and PPL EnergyPlus

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BUSINESS STRATEGY ANALYSES

Electricity Generation Facility Developers

Oversees the development and implementation of transmission-constrained dispatch modeling for proposed electricity generation units locating in the Northeastern, Mid-Atlantic, and Midwestern United States. Analyses typically focus on determining likely facility capacity factors and impacts on local and regional air pollutant emissions as well as on wholesale electricity prices. In addition, these analyses provide detailed knowledge of new facilities' impacts on the operation of the electricity transmission system that is critical to assessing the ability of a generating unit to deliver its power in a wide geographical area.

Electricity Distribution Companies

Provide extensive strategic advice and analytical support to electricity distribution companies that are required to assess new wholesale marketplaces in order to fulfill their regulatory commitments as providers of last resort or default electricity service. In most instances these companies require assistance with the development and issuance of requests for proposals as well as rapid evaluation of commodity bids. The assignments combine extensive knowledge of wholesale market operations with general economic theory of contracting and electricity generation plant dispatch in order to provide companies with an approach to commodity procurement that agrees with their risk profile. In most cases there are numerous business and regulatory concerns that are incorporated into the procurement strategies. Additionally, each assignment typically requires extensive analysis of customer demand patterns and wholesale market prices in order to develop market-based customer service cost forecasts.

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“Key Issues in Ancillary Service Markets,” IBC’s conference on Pricing and Selling Ancillary Services in a Competitive Market Conference, San Francisco, CA, March 11, 1999.

“Successfully Forecasting the Price of Energy and Other Products,” workshop presented at IBC’s conference on Successful Load Profiling, San Francisco, CA, December 2, 1998.

“International Perspective: Lessons from the US Deregulation Experience,” Nordic Power ’98, Stockholm, Sweden, October 7, 1998.

“Successfully Forecasting the Price of Energy and Other Products in a Restructured Electric Power Industry,” workshop presented at IBC’s 3rd Strategic Forum on Market Price Forecasting, Baltimore, MD, August 24, 1998.

“Managing Market Share Loss with the Opening of Retail Markets to Competition,” Electric Utility Business Environment Conference, Denver, CO, June 24, 1998.

“Multi-Attribute Trade-Off Analysis for Water and Electricity Policy Development,” presented in Mendoza, Argentina, July 1996 and April 1997.

“The Basics of Cogeneration,” presented at the Tufts University Forum on Energy Conservation, December 1993.

“Implications and History of the MIT Cogeneration Project,” presented to the Massachusetts Society of Professional Engineers, November 1993.

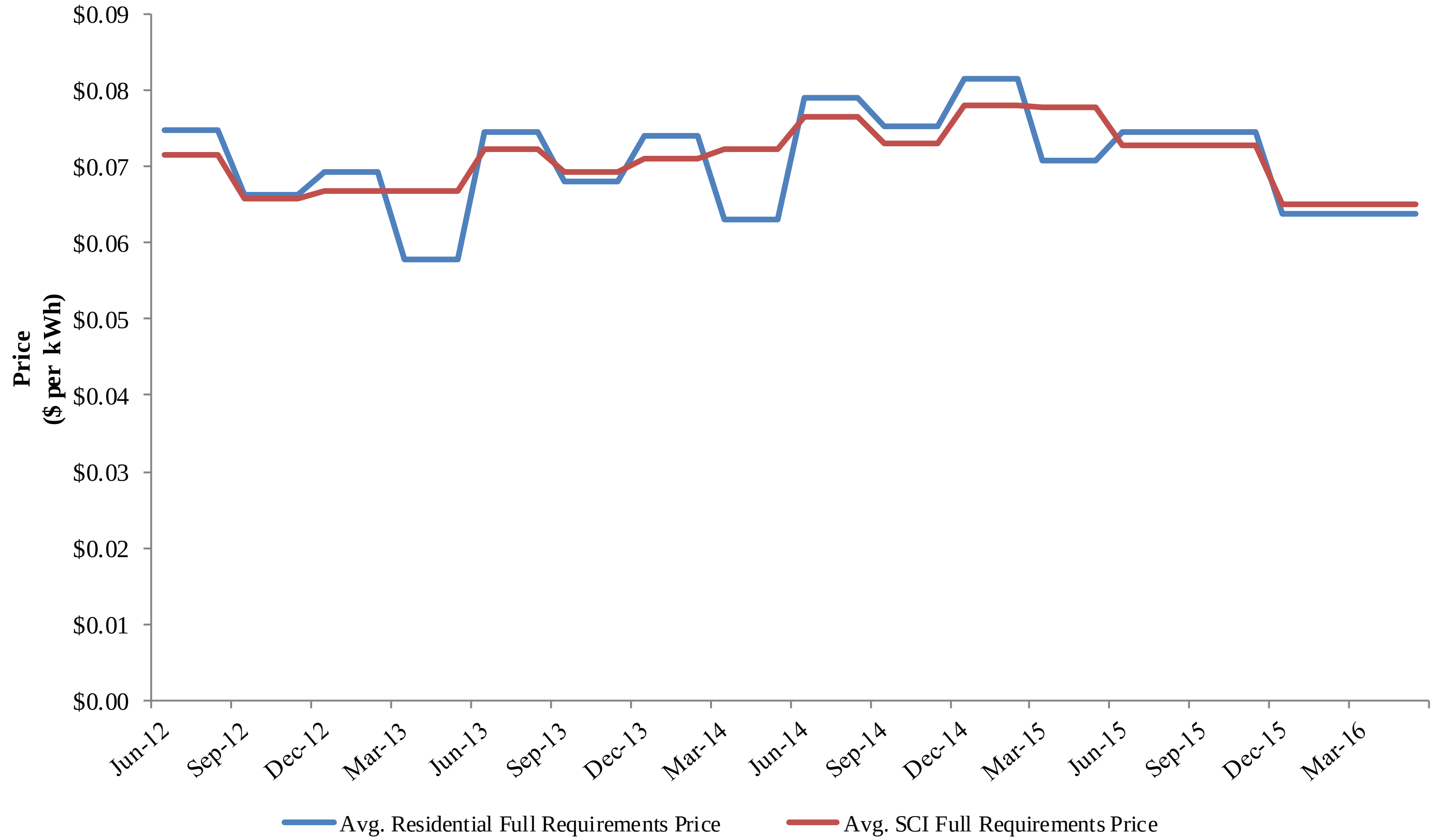
CERTIFICATIONS

Registered Professional Engineer, Commonwealth of Massachusetts, 1992 - .

PROFESSIONAL AFFILIATIONS

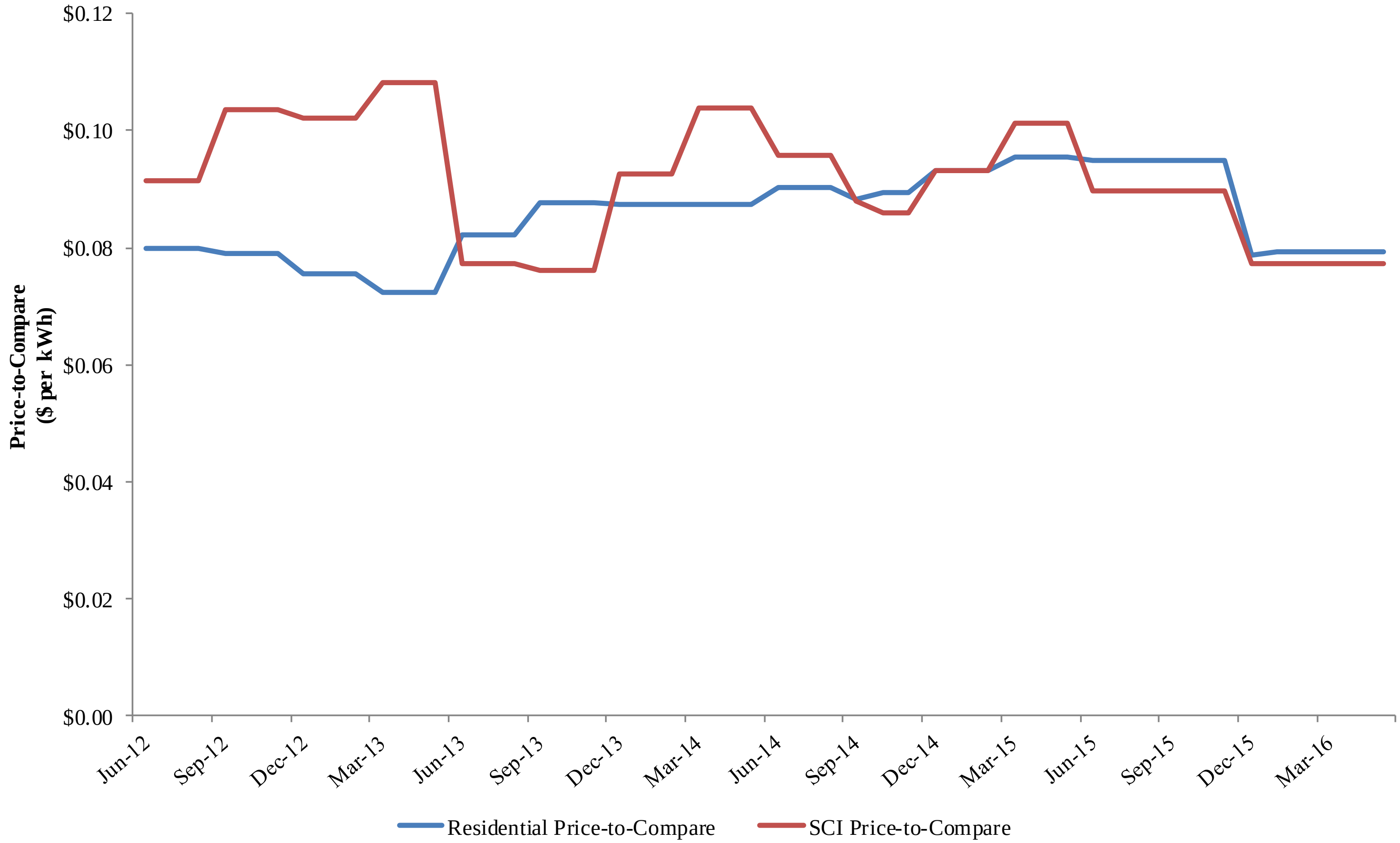
Member, Board of Directors, Northeast Energy and Commerce Association, 2002-2012.

Average Fixed-Price, Full-Requirements Power Supply Price for Residential and Small Commercial and Industrial Customers (June 2012 - May 2016)



Sources: PPL Electric Price to Compare Calculators - https://www.pplelectric.com/at-your-service/for-generation-suppliers/general-supplier-reference-information/price-to-compare-and-shopping.aspx

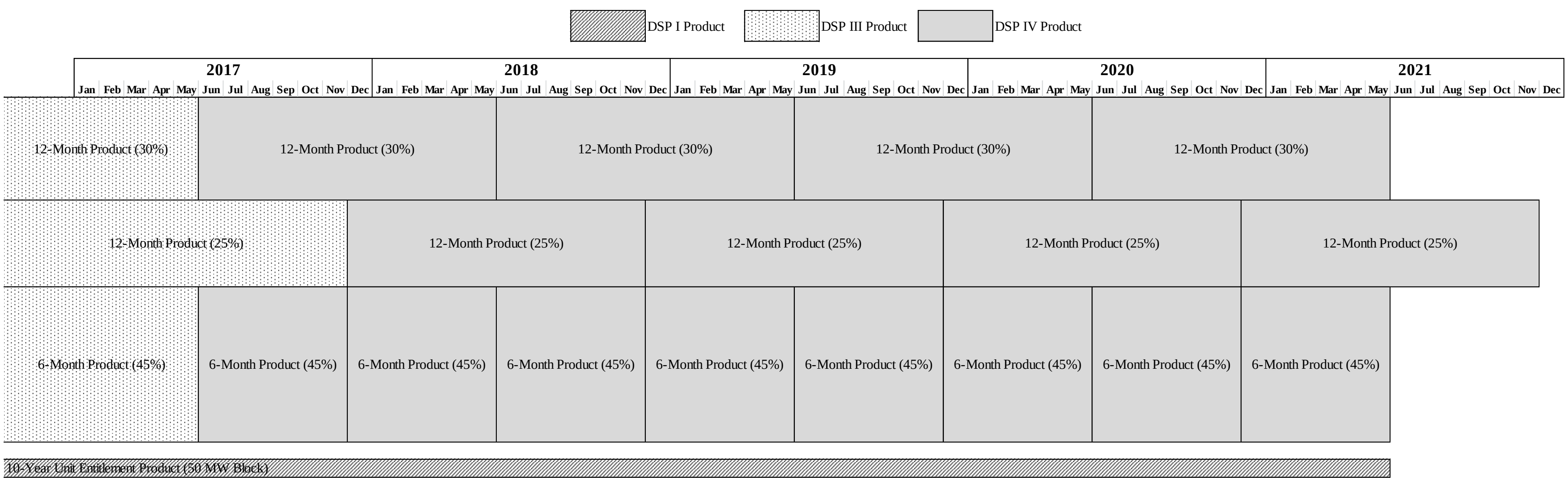
PPL Electric's Price-to-Compare for Residential and Small Commercial and Industrial Customers (June 2012 - May 2016)



Sources: PPL Electric's Historical Price to Compare - https://www.pplelectric.com/at-your-service/for-generation-suppliers/general-supplier-reference-information/price-to-compare-and-shopping.aspx

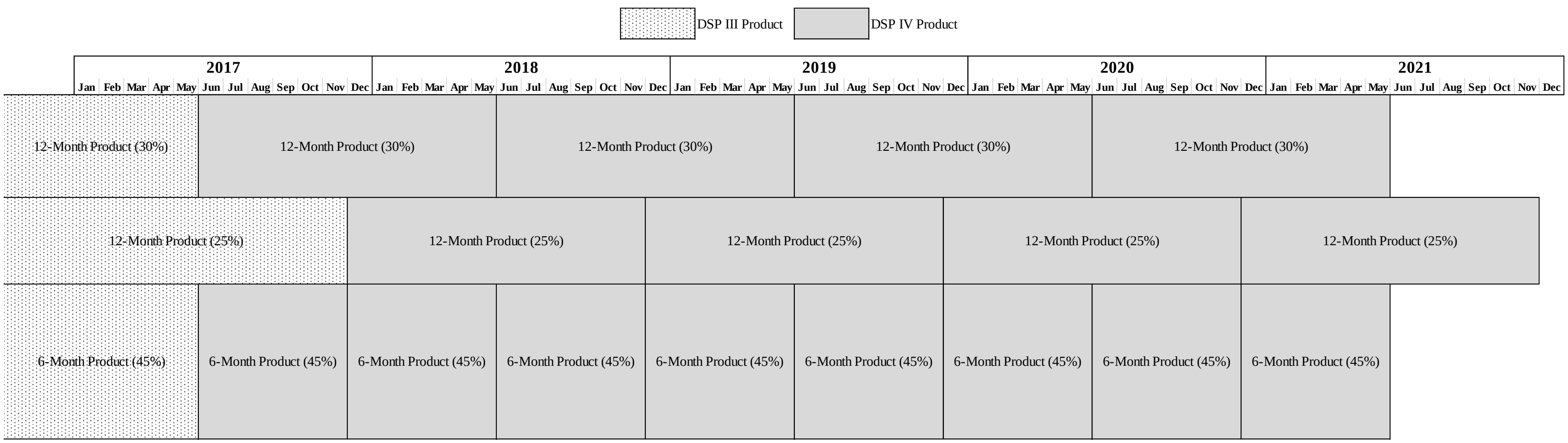
Note: PPL Electric's Price-to-Compare includes the company's average fixed-price, full-requirements power supply price plus additional costs primarily composed of the transmission services charge, reconciliation adjustment, state tax adjustment surcharge, and block supply for residential customers.

PPL Electric Utilities DSP IV Product Structure and Procurement Schedule (Residential Customer Class)



Notes: (1) All products are fixed price full requirements service except where noted.
(2) Auctions will be held every six months approximately two months prior to the start of delivery.
(3) The first auction will be held during the spring of 2017.

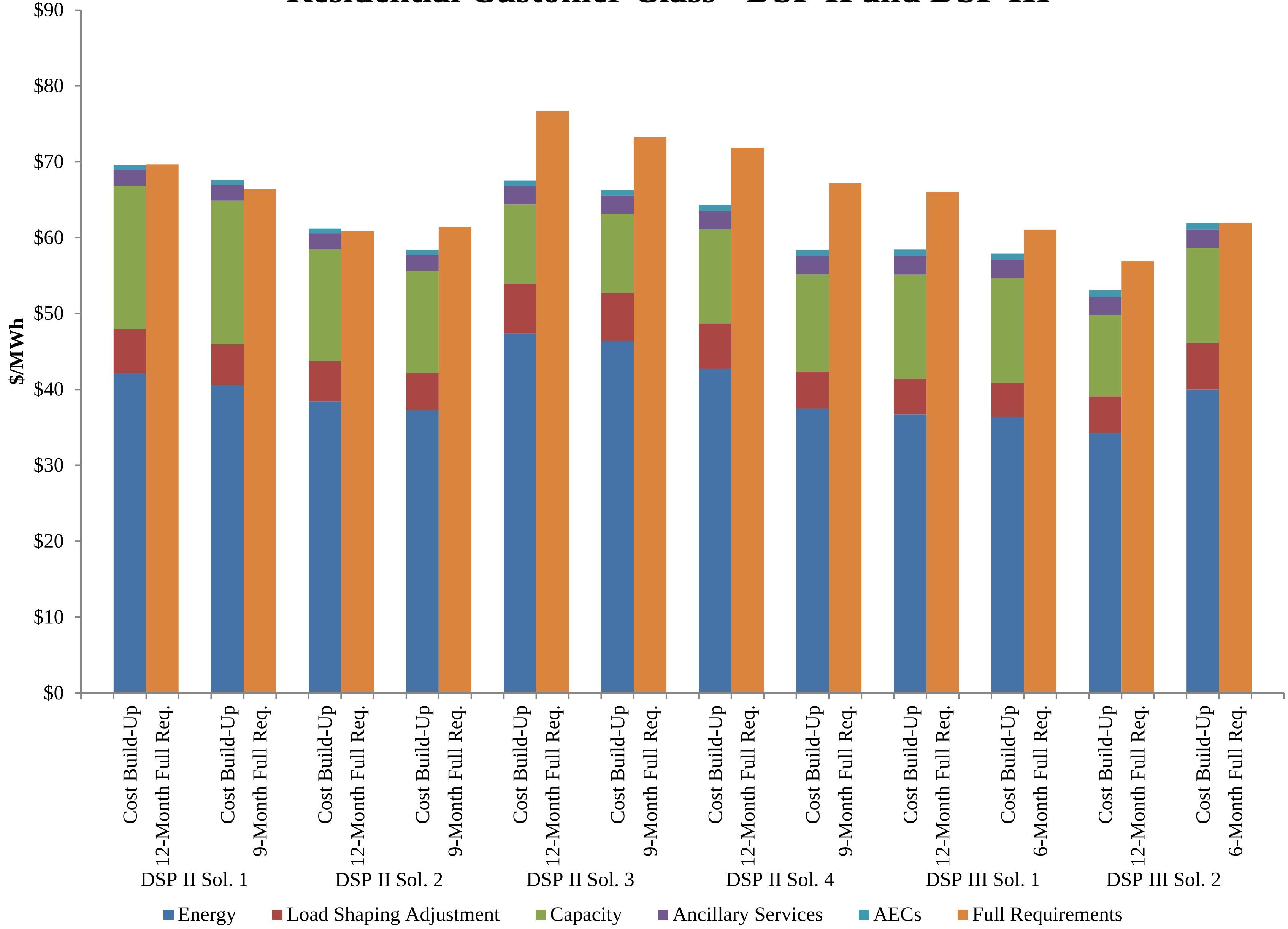
PPL Electric Utilities DSP IV Product Structure and Procurement Schedule
(Small Commercial and Industrial Customer Class)



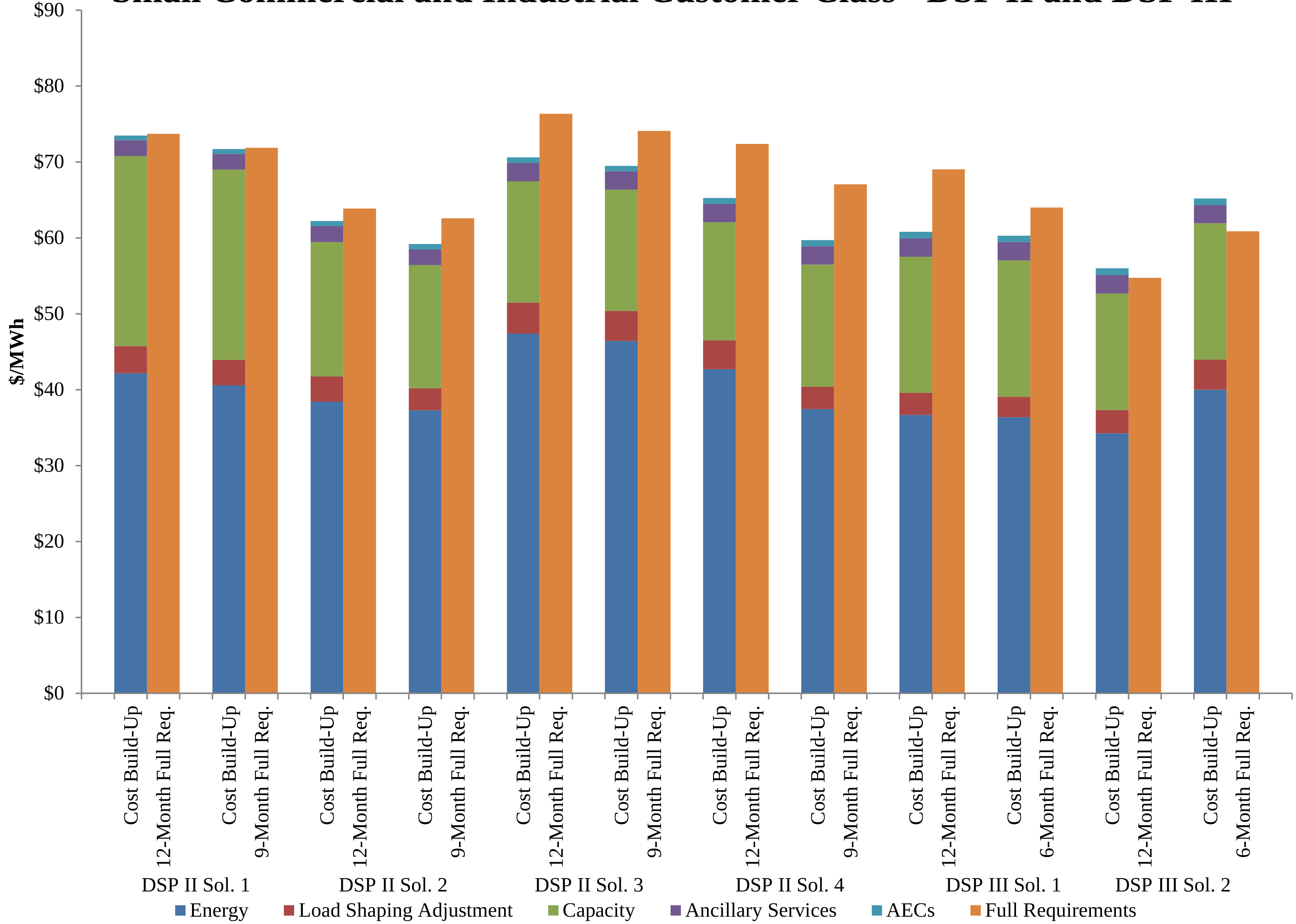
Notes: (1) All products are fixed price full requirements service.
(2) Auctions will be held every six months approximately two months prior to the start of delivery.
(3) The first auction will be held during the spring of 2017.

PPL Electric Exhibit JC-5

Cost Build-Up v. Full Requirements Price
Residential Customer Class - DSP II and DSP III



Cost Build-Up v. Full Requirements Price
Small Commercial and Industrial Customer Class - DSP II and DSP III



BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. P-2016-__________

PPL Electric Utilities Corporation

Statement No. 3

Direct Testimony of Michael S. Wukitsch

Topics Addressed: Customer Assistance Program Shopping Data

January 29, 2016

I. INTRODUCTION

Q. What is your name and business address?

A. My name is Michael S. Wukitsch. My business address is PPL Electric Utilities Corporation ("PPL Electric" or the "Company"), 827 Hausman Rd., Allentown, PA 18104.

Q. What is your current position?

A. I am a Customer Relations Specialist in PPL Electric's Customer Services Department. I report to the Manager-Regulator Programs and Business Services.

Q. What are your primary job responsibilities?

A. I oversee the system wide implementation of the following PPL Electric universal service programs: OnTrack, PPL Electric's Customer Assistance Program ("CAP"); Operation HELP, PPL Electric's hardship fund; Customer Assistance and Referral Services ("CARES"); and Low-Income Home Energy Assistance Program ("LIHEAP"). I provide guidance and direction on policies, procedures, and other program management activities necessary to support the Company's Regulatory Programs Specialists that work with local social service agencies to implement the above-referenced universal service programs.

I have the responsibility of providing program information to internal and external resources (*i.e.*, administering agencies, PPL Electric employees, etc.) regarding policy updates, new procedures, and regulatory changes. I play a lead role in providing annual Pennsylvania Public Utility Commission ("Commission" or "PUC") required reporting information (*e.g.*, Universal Service Reporting Requirements) and prepare internal metrics related to PPL Electric's low-income programs. I work closely with staff from the Pennsylvania Department of Human Services regarding the implementation of LIHEAP. I am responsible for developing outreach plans and initiatives to increase customer enrollment in PPL Electric's OnTrack payment program. I also identify and execute initiatives to improve the effective implementation of OnTrack. I oversee and execute plans to raise funds for the Company's hardship fund (Operation HELP). I support efforts to prepare the work group's annual budget for operation and maintenance expenses and universal service program expenditures.

Q. Have you been involved in other Commission proceedings?

A. Yes. I have helped prepare interrogatory responses in PPL Electric's 2012 and 2015 base rate cases at Docket Nos. R-2012-2290597 and R-2015-2469275. I also have assisted in the preparation of PPL Electric's Universal Service and Energy Conservation Plan for 2014-2016 at Docket No. M-2013-2367021.

Q. What is your educational background?

A. I have a Bachelors of Art in Economics from Moravian College and an MBA from Moravian College, with a focus on Business Management. I also have a certification in Project Management from Lehigh University.

Q. What is the purpose of your direct testimony?

A. The purpose of my direct testimony is to sponsor and describe the statistics and data related to CAP shopping within PPL Electric's service territory, as well as describe the impact that CAP shopping has on CAP credits and the CAP program costs borne by other customers. I also will describe the CAP shopping collaborative that PPL Electric held with interested stakeholders. This data, as well as input from stakeholders, forms the basis for the Company's CAP shopping proposal as further explained in the direct testimony of Mr. Rouland (PPL Electric Statement No. 1).

Q. Are you sponsoring any exhibits for your direct testimony?

A. Yes. I am sponsoring the following exhibits: PPL Electric Exhibit MSW-1, which is the OnTrack shopping data and information prepared for and provided to stakeholders during the December 11, 2015 CAP shopping collaborative; PPL Electric Exhibit MSW-2, which is the OnTrack shopping data and information prepared for and provided to stakeholders during the January 15, 2016 CAP shopping collaborative; and PPL Electric Exhibit MSW-3, which shows the number of OnTrack shoppers with supply charges above and at/below the Company's price-to-compare ("PTC").

II. OVERVIEW OF ONTRACK

Q. Please summarize the key features of the Company's OnTrack program.

A. OnTrack is the Company's Commission-approved CAP. Through OnTrack, PPL Electric provides reduced payment amounts based on household income, offers arrearage forgiveness, and refers customers to other assistance programs (*e.g.*, weatherization). PPL Electric's OnTrack customers pay a fixed amount each month based on household income and ability to pay. Local community-based organizations administer the program.

Q. Are there limits to participation in the OnTrack program?

A. Yes. The OnTrack program is available to Residential customers. To participate in OnTrack, the customer must be payment-troubled and have a household income at or below 150% of the federal poverty level. Customers are removed from the OnTrack program if they miss two consecutive payments or when they exceed their allocation of CAP credits.

Q. Please explain CAP credits.

A. The CAP credits are the difference between the fixed OnTrack payment and the total OnTrack customer electric bill. Consequently, the higher the total bill, the faster the OnTrack customer will reach the maximum CAP credit and be removed from the OnTrack program. The maximum CAP credits are set in the Company's base rate cases and universal service proceedings. The Company's current maximum 18-month CAP credit is $185 per month for electric heat customers ($3,328 over 18 months) and $73 per month for non-electric heat customers ($1,310 over 18 months), as established by the Commission-approved settlement in the 2015 base rate case at Docket No. R-2015-2469275.

Q. How does PPL Electric fund the OnTrack program?

A. In PPL Electric's 2007 distribution base rate case at Docket No. R-00072155, the Commission approved a reconcilable Universal Service Rider ("USR") for the recovery of costs (excluding employee wages or internal administrative costs) associated with its universal service programs, including OnTrack. The USR is applied to and recovered from all Residential customers.

III. ONTRACK SHOPPING STATISTICS

Q. Have OnTrack customers always had the ability to shop?

A. Yes. Within PPL Electric's service territory, OnTrack customers have always had the ability to shop for and receive electric supply from electric generation suppliers ("EGSs"). The percentage of OnTrack customers that have selected an EGS has risen from 44 percent in September 2013 to 52 percent in October 2015 – an increase of 18 percent.

Q. Please explain why PPL Electric is addressing CAP shopping in this Default Service Program and Procurement Plan proceeding.

A. In the Company's 2014-2016 Universal Service and Energy Conservation Plan ("USP Plan") at Docket No. M-2013-2367021, the Commission directed PPL Electric to address CAP shopping in its next Default Service Program and Procurement Plan proceeding. Specifically, on page 18 of its Final Order in the USP Plan, the Commission stated as follows:

> 3. Resolution: Addressing CAP shopping issues is beyond the scope of a utility's three year USECP. The Commission is not persuaded to address any changes to electric shopping for OnTrack customers through this Final Order. PPL should propose any changes to its CAP shopping plan within its Default Service Program and Procurement Plan Petition at Docket No. P-2012-2302074. Accordingly, approval herein relative to PPL's USECP is not an approval of matters relating to shopping by PPL's OnTrack customers.

Q. Has the Commission provided any other guidance to PPL Electric regarding shopping by CAP customers?

A. Yes. In paragraph 49 of its Final Order in PPL Electric's 2015 base rate case at Docket No. R-2015-2474714, the Commission adopted the following commitment regarding CAP shopping:

> 49. PPL Electric commits to hold a collaborative by May 31, 2016, with all interested stakeholders to discuss and evaluate CAP customer participation in the competitive shopping market as set forth in OCA Statement 4 and CAUSE-PA Statement No. 1-R. In advance of the collaborative, PPL Electric shall obtain and provide data to interested stakeholders regarding the number of CAP customers that are shopping, whether the rates paid by shopping CAP customers is above or below the Price to Compare, and the impact that shopping CAP customers have on CAP credits and CAP customers' bills. The Joint Petitioners reserve the right to evaluate further revisions to the CAP customer participation in the competitive shopping market and to recommend changes to CAP customer shopping in the Company's next default service procurement plan proceeding. The Joint Petitioners retain the right to review and file testimony concerning any such proposals as permitted by the normal Commission process for review of the default service plan proceeding.

Q. Has PPL Electric fulfilled these CAP shopping collaborative requirements as directed by the Commission?

A. Yes. PPL Electric conducted its first stakeholder collaborative on December 11, 2015 at the Commission's offices in Harrisburg. The Company conducted a second collaborative via conference call on January 15, 2016.

In advance of the December 11 and January 15 collaborative meetings, the Company provided stakeholders with information, statistics, and data regarding CAP shopping on PPL Electric's system, which are attached to my testimony as PPL Electric Exhibits MSW-1 and MSW-2.

Q. What percentage of OnTrack customers have elected to receive competitive electric generation supply from electric generation suppliers ("EGS")?

A. Table 1 below shows the average monthly percentage of total OnTrack customers that shopped for competitive electric generation supply during 2013, 2014, and 2015.[1]

TABLE 1

2013	2014	2015
46%	51%	52%

PPL Electric Exhibit MSW-3 shows the number of OnTrack shoppers with supply charges above and at/or below the Company's PTC.

Q. How is this percentage computed?

A. For purposes of this calculation, and the other calculations presented in my testimony, the Company looked at monthly data concerning OnTrack customers and shopping. The Company then averaged those monthly data.

Q. What percentage of OnTrack shopping customers selected an EGS that offered a price above PPL Electric's PTC?

A. The table below shows the average monthly percentage of OnTrack shopping customers that selected an EGS with a price above PPL Electric's PTC during 2013, 2014, and 2015.[2]

[1] For 2013 and 2014, the results are through December 31; the results for 2015 are through October 31.

TABLE 2

2013	2014	2015
67%	50%	46%

Q. **What percentage of OnTrack shopping customers selected an EGS that offered a price at or below PPL Electric's PTC?**

A. Table 3 below shows the average monthly percentage of OnTrack shopping customers that selected an EGS with a price at or below PPL Electric's PTC during 2013, 2014, and 2015.[3]

TABLE 3

2013	2014	2015
33%	50%	54%

Q. Please summarize the OnTrack shopping statistics during 2013 through 2015.

A. Over a thirty-four month-period (January 2013 through October 2015), an average of 49% of OnTrack members were shopping, 55% of OnTrack shoppers were paying above the PTC, and 45% of OnTrack shoppers were paying at or below the PTC. For comparison purposes, Table 4 below shows the percentage of customers within the Residential customer class (both CAP and non-CAP customers) that shopped during 2013 through 2015.[4]

TABLE 4

2013	2014	2015

[2] See Footnote 1.
[3] See Footnote 1.
[4] For 2013 and 2014, the results are through December 31; the results for 2015 are through November.

44.6%	44.5%	45.7%

Q. Has PPL Electric conducted an analysis of OnTrack shopping customers that paid a price above the Company's PTC?

A. Yes. PPL Electric conducted an analysis, by month, of OnTrack shoppers that paid above the PTC from January 1, 2012 through October 30, 2015 – a period of 46 months. The results are shown in PPL Electric Exhibit MSW-2, p. 3.

During this period, an average of 9,626 OnTrack shopping customers paid an average price of $0.11048 and used an average of 1,197 kWh monthly. Over this 46-month period, the average PTC was $0.08475.

If these OnTrack customers had <u>not</u> shopped, they would have had an average monthly energy charge of $101 (1,197 kWh usage x $0.08475 PTC). However, their actual average monthly energy charge was $132 (1,197 kWh usage x $0.11048 average shopping price). In other words, these OnTrack shopping customers' average monthly energy charges were $31 higher (each month) than they would have been had they not shopped.

The total average monthly difference for all OnTrack shopping customers above the PTC was $298,406 (9,626 x $31). Extrapolated over 12 months, the estimated impact for all OnTrack shopping customers above the PTC would be $3,580,872 ($298,406 x 12).

Q. Can you describe the financial impact of OnTrack customers that selected EGS with prices higher than PPL Electric's PTC?

A. Yes. As previously explained, OnTrack customers are removed from the program if they reach the maximum allocation of CAP credits. Consequently, the higher the total bill, the faster the OnTrack customer will reach the maximum CAP credit.

As shown in PPL Electric Exhibit MSW-2, p. 3, OnTrack customers that selected suppliers with prices higher than PPL Electric's PTC had average monthly energy charges that were $31 higher (each month) than they would have been had they not shopped. Although these shopping customers' OnTrack payment amounts did not change, they would have used up their CAP credits at a faster pace, which increases the risk of early removal from the OnTrack program. In addition, to the extent that these customers did not use up their CAP credits, the higher average monthly energy charges increased the resulting CAP shortfall costs recovered through the USR.

Q. Does this data include any savings OnTrack customers may have received in the form of gift cards or other incentives offered by EGSs?

A. No. The Company has no way of knowing of or tracking such incentives. Furthermore, such incentives would not be reflected as an offset to any CAP shortfall recovered through the USR.

Q. Has PPL Electric conducted an analysis of OnTrack shopping customers that paid a price at or below the Company's PTC?

A. Yes. PPL Electric conducted an analysis of OnTrack shoppers that paid at or below the PTC from January 1, 2012 through October 30, 2015 – a period of 46 months. The results are shown PPL Electric Exhibit MSW-2, p. 4.

During this period, an average of 7,750 OnTrack customers paid an average price of $0.07772 and used an average of 1,294 kWh monthly. Over this 46-month period the average PTC was $0.08475.

If these OnTrack customers had <u>not</u> shopped, they would have had an average monthly energy charge of $110 (1,294 kWh usage x $0.08475 PTC). Their actual average monthly energy charge was $101 (1,294 kWh usage x $0.07772 average shopping price). In other words, these customers' average monthly energy charges were $9 lower (each month) than they would have been had they not shopped.

The total average monthly difference for all customers at or below the PTC was $69,750 (7,750 x $9). Extrapolated over 12 months, the estimated impact for all customers at or below the PTC would be $837,000 ($69,750 x 12).

Q. Can you describe the financial impact of OnTrack customers that selected EGSs with prices at or below PPL Electric's PTC?

A. Yes. As shown in PPL Electric Exhibit MSW-2, p. 4, OnTrack customers that selected suppliers with prices at or below PPL Electric's PTC had average monthly energy charges that were $9 lower (each month) than they would have been had they not shopped. Although these shopping customers' OnTrack payment amounts did not change, they would have used up their CAP credits at a slower pace, which decreases the possibility of early removal from the OnTrack program. In addition, the lower average monthly energy charges decreased the resulting CAP shortfall cost recovered through the USR.

Q. What has been the net financial impact of OnTrack shopping customers?

A. The estimated net impact of all OnTrack shopping customers (net of both OnTrack customers above the PTC and OnTrack customers at/below the PTC) over the same 46-month period (January 2012 through October 2015) is shown in PPL Electric Exhibit MSW-2, p. 5.

The results of this analysis show that the estimated net monthly energy charges for all OnTrack shopping customers was $228,656 ($298,406 - $69,750) more than the PTC. Extrapolated over 12 months, the net effect for all OnTrack shopping customers would be a cost of $2,743,872 ($3,580,872 - $837,000). Stated differently, the net financial impact of OnTrack shopping is an increase of approximately $2.7 million annually in the energy charges paid for supply provided to OnTrack customers.

Q. What percentage of total OnTrack customers (both shopping and non-shopping) have been removed from the program for exceeding their allocation of CAP credits?

A. Over the same 46-month period discussed above (January 2012 through October 2015), an average of 2.0% of customers (both shopping and non-shopping) were removed from the OnTrack program for exceeding CAP credits. As of October 31, 2015, approximately 1.4% of customers (both shopping and non-shopping) were removed from the OnTrack program for exceeding CAP credits.

Q. Based on this data and information, what are your conclusions regarding OnTrack shopping?

A. About half of the Company's OnTrack customers have participated in shopping and obtained supply from EGSs. Overall, OnTrack customers have been able to manage their allocation of CAP credits relatively well. However, the OnTrack data and statistics summarized above suggest that CAP shopping can result, and has resulted, in OnTrack customers exceeding their CAP credits at a faster pace, which puts these low-income customers at risk of early removal from the OnTrack program. The OnTrack data and statistics summarized above also suggest that CAP shopping can result, and has resulted, in increased CAP costs that are paid for by all Residential customers through the USR. This data, as well as the input received during the CAP shopping collaborative, forms the basis for the Company's CAP shopping proposal as further explained in the direct testimony of Mr. Rouland (PPL Electric Statement No. 1).

Q. Does this conclude your Direct Testimony?

A. Yes, it does.

PPL Electric Utilities

CAP Shopping Collaborative

December 11, 2015 - Harrisburg

OnTrack Background

- Begun in 1994
- Administered by 10 agencies
- Eligibility is 150% poverty level and a payment plan
- Universal Service Rider

OnTrack Enrollment/$

Year	Customers	Dollars
2015*	49,104	$76.4M
2014	41,288	$72.0
2013	37,204	$55.2
2012	31,657	$47.1
2011	34,308	$53.1
2010	32,446	$46.6
*11/30/15		

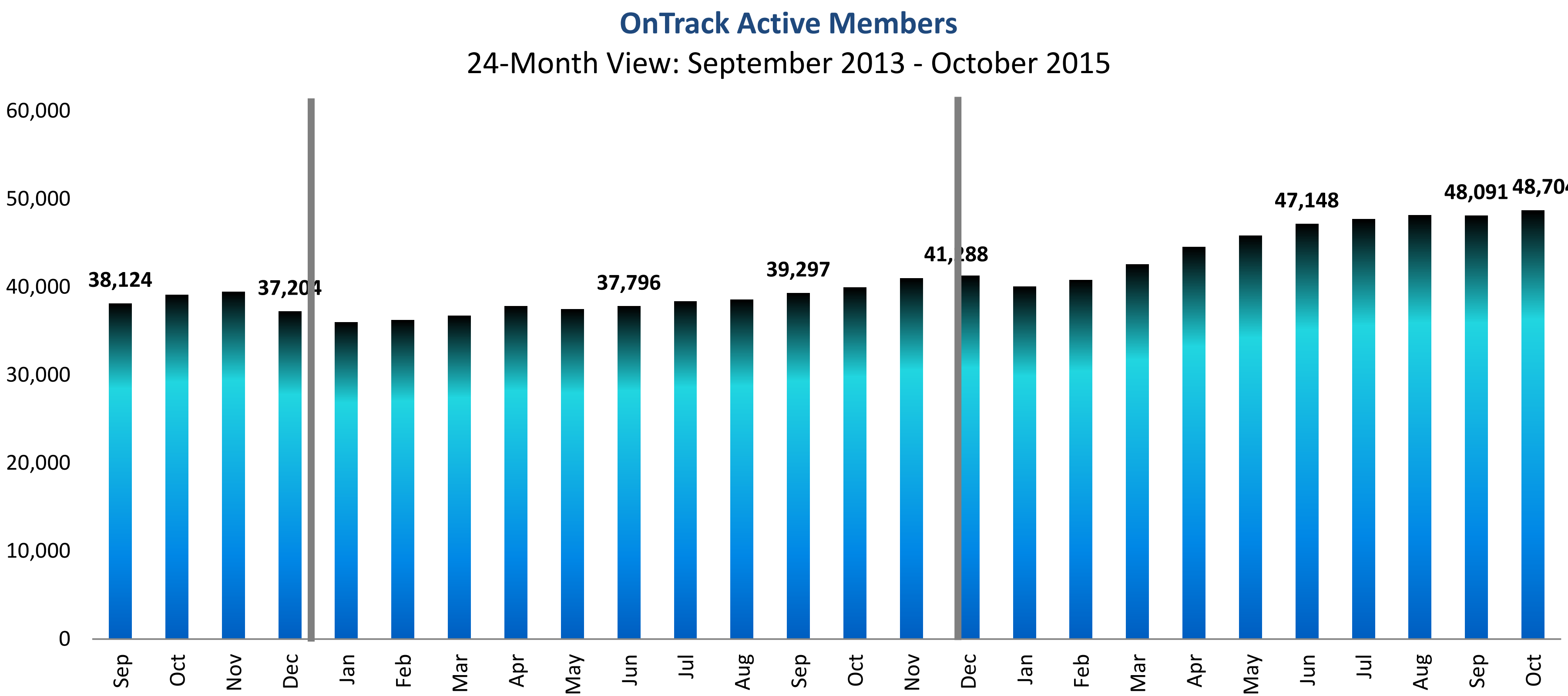
PPL's 2014-2016 USECP

- Final Order (Docket No. M-2013-2367021) entered 9/11/14
- PUC concluded that CAP shopping was beyond the scope of PPL's USECP
- PPL should address CAP shopping in it's next Default Service Plan

PPL's 2015 Rate Case

- Final Order (Docket No. R-2015-2469275) approved a settlement agreement under which PPL agrees to hold a collaborative on CAP Shopping
- Provide certain information (e.g., CAP shoppers) to stakeholders in advance
- Address CAP shopping in PPL's next default service plan

Active OnTrack Members



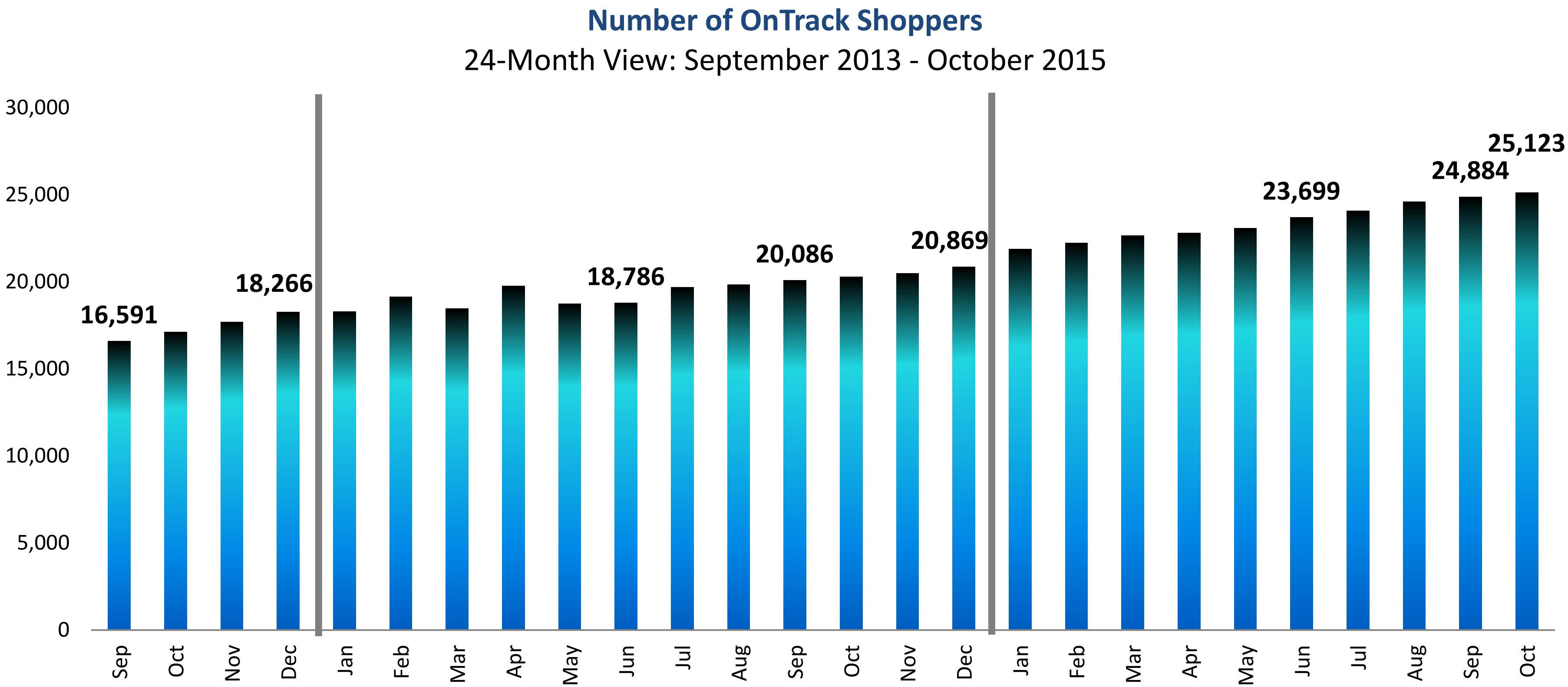
Averages for this 24-month period:

Percentage of Members Shopping: 50%

Number of Active Members (Monthly Average): 41,074

Number of OnTrack Shoppers

PPL Electric Utilities



Averages for this 24-month period:

Number of Members Shopping: 20,738

* The number of members shopping is derived by counting the number of OnTrack shopper **bills** rendered for the time period.

Percent Change:

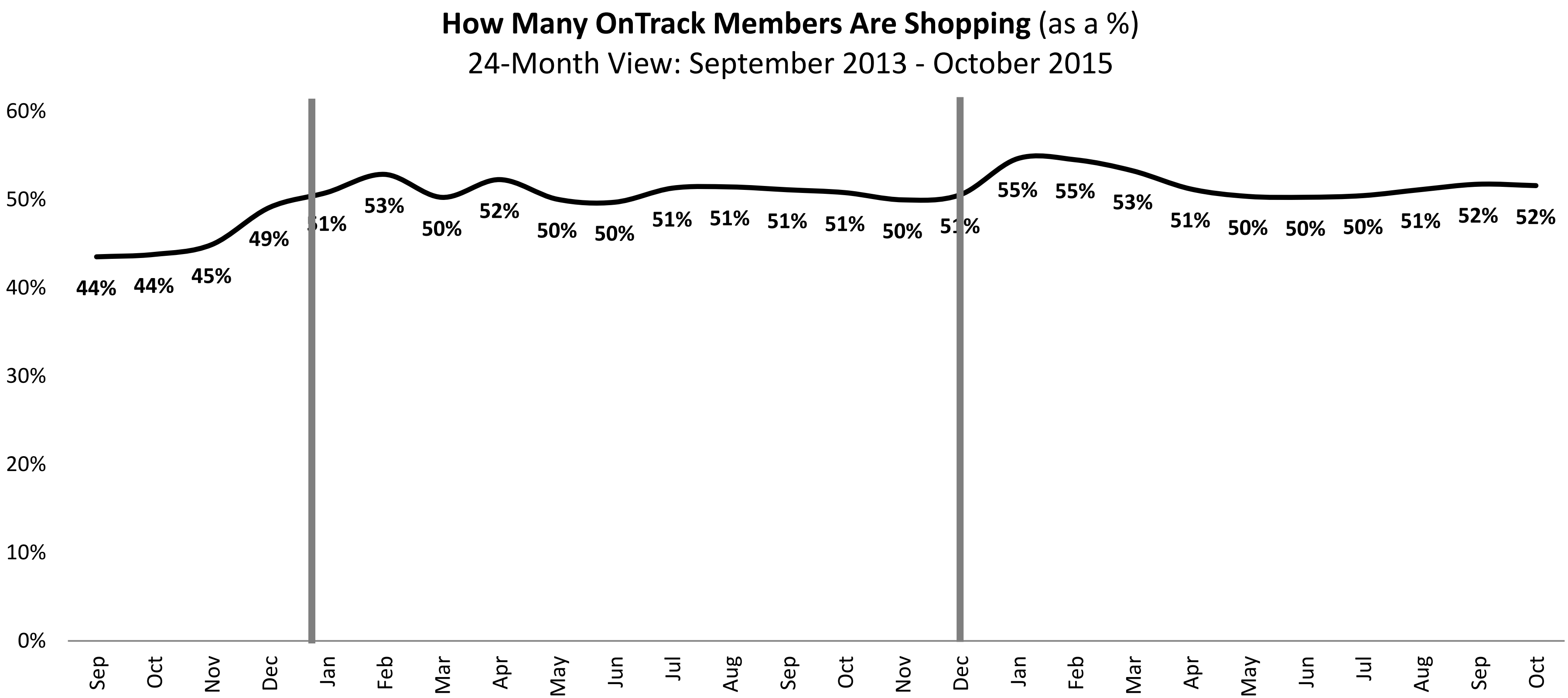
From September 2013 to August 2014: **20%**

From September 2014 to August 2015: **23%**

OnTrack Members Shopping (as a %)

PPL Electric Exhibit MSW-1

PPL Electric Utilities



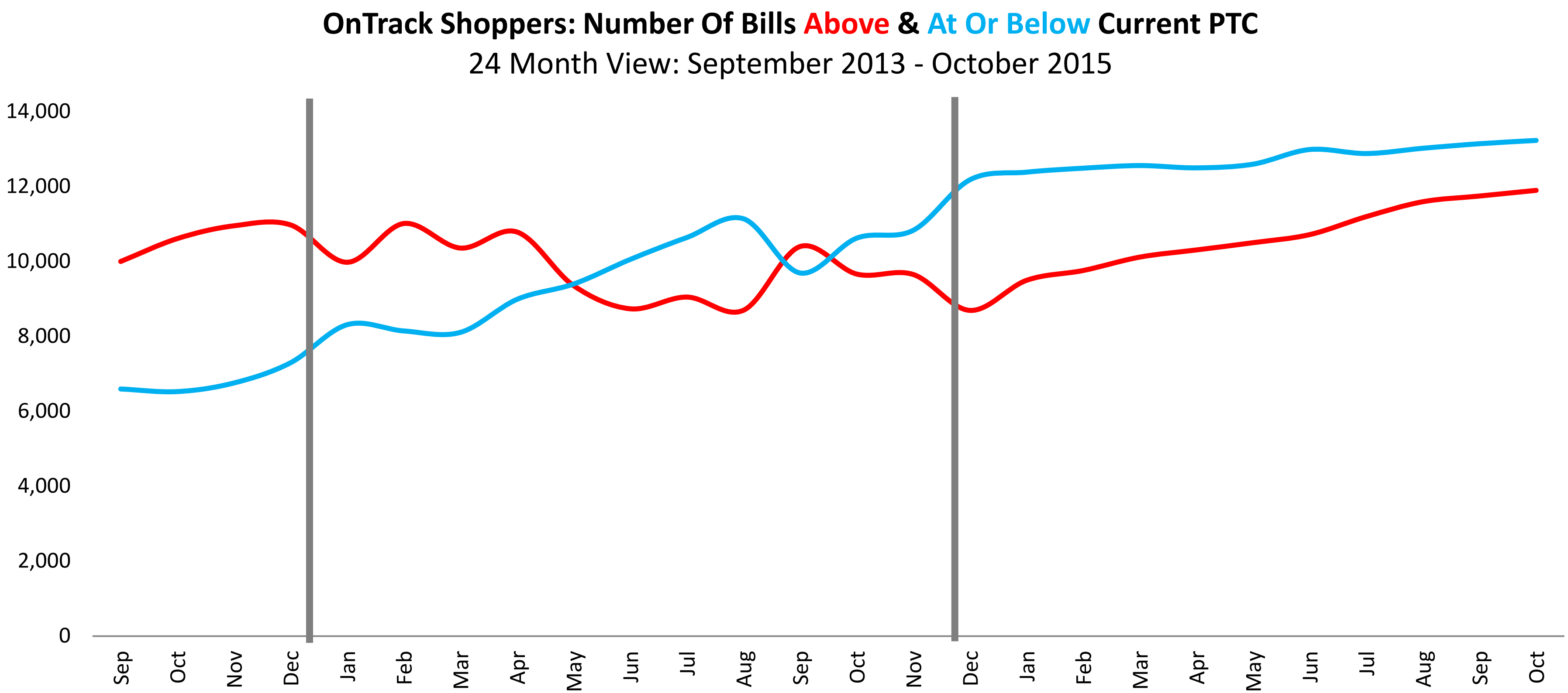
Averages for this 24-month period:

Percentage of Members Shopping: 50%

Number of Active Members (Monthly Average): 41,074

Number of OnTrack Shoppers

PPL Electric Utilities



Averages for this 24-month period:

Number of bills above PTC: 10,238

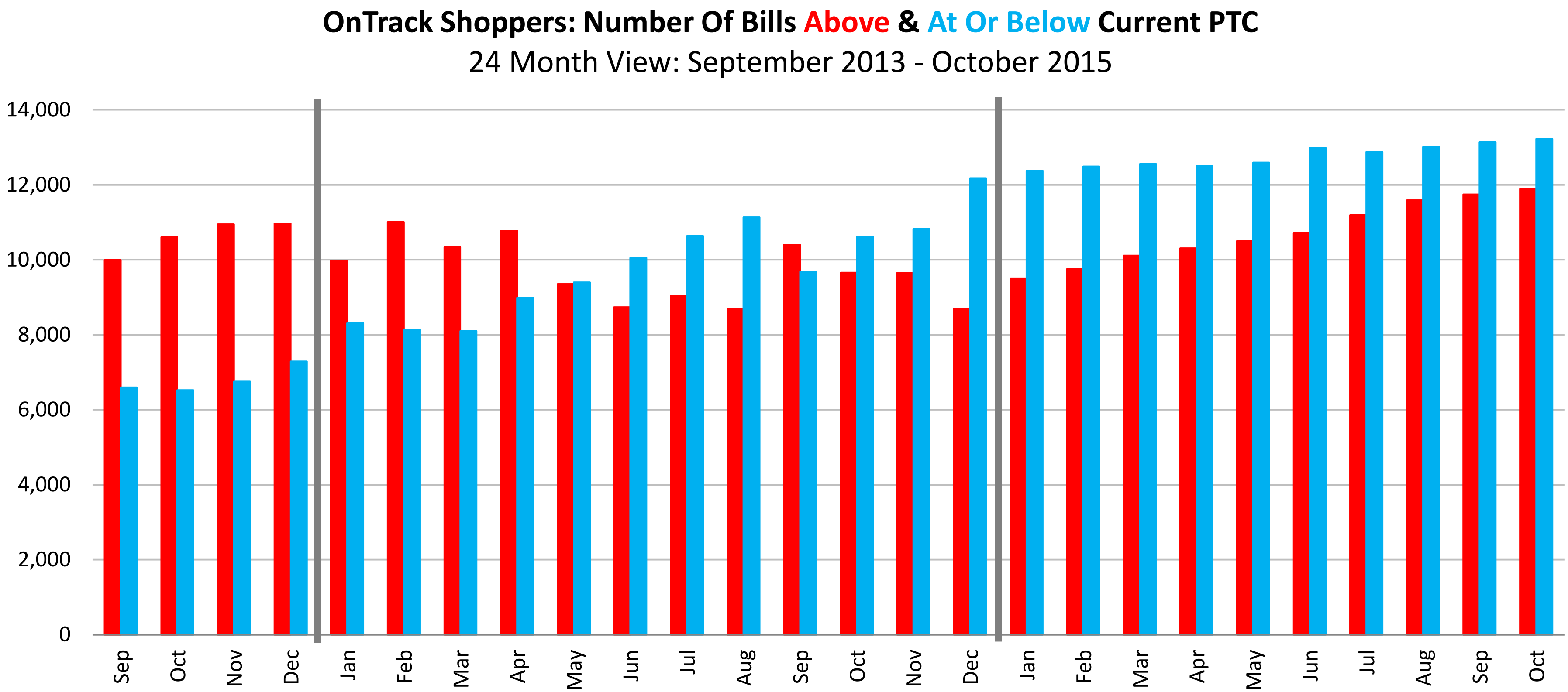
Number of bills below PTC: 10,501

* The number of members shopping is derived by counting the number of OnTrack shopper **bills** rendered for the time period.

Number of OnTrack Shoppers*

PPL Electric Exhibit MSW-1

PPL Electric Utilities



Averages for this 24-month period:

Number of bills above PTC: 10,238

Number of bills below PTC: 10,501

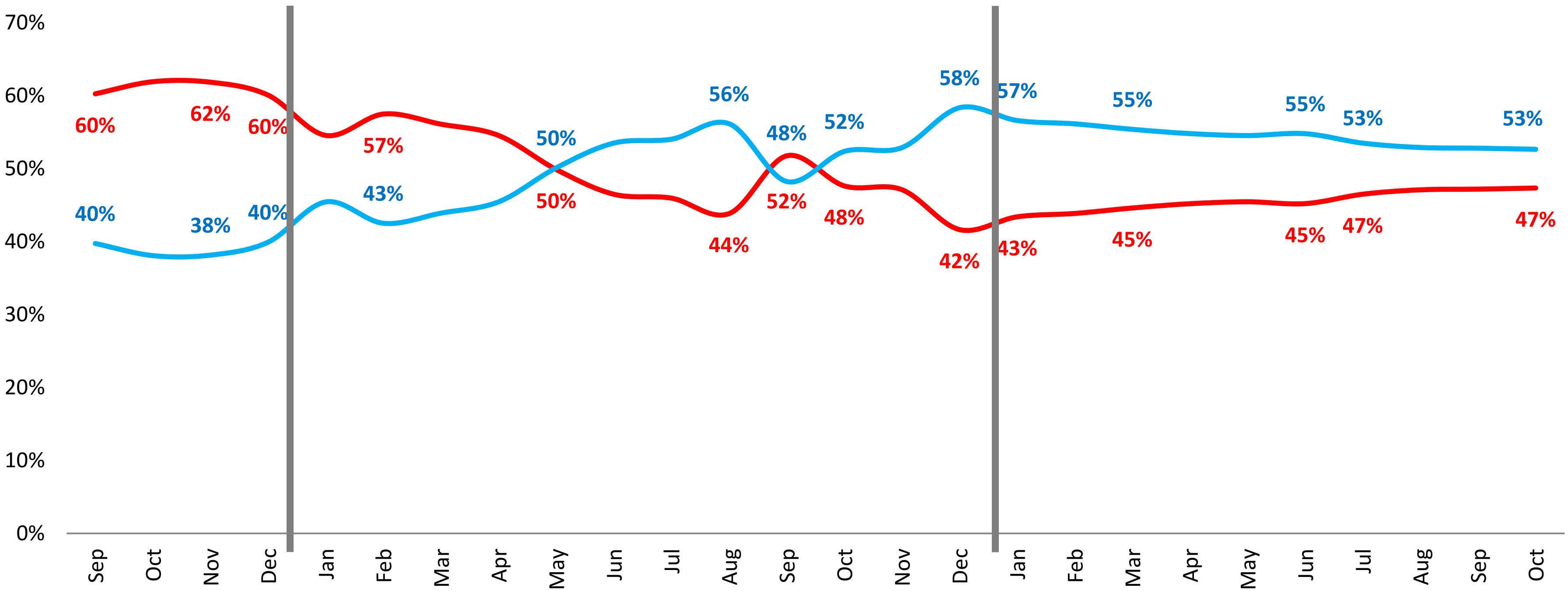
* The number of members shopping is derived by counting the number of OnTrack shopper **bills** rendered for the time period.

Shopping Decisions & PTC Trend

PPL Electric Utilities

OnTrack Shoppers: Percentage Of Bills Above & At Or Below Current PTC

24-Month View: September 2013 - October 2015



Averages for this 24-month period:

Above the PTC: 50% **Below the PTC: 50%**

PTC: **$0.09107**

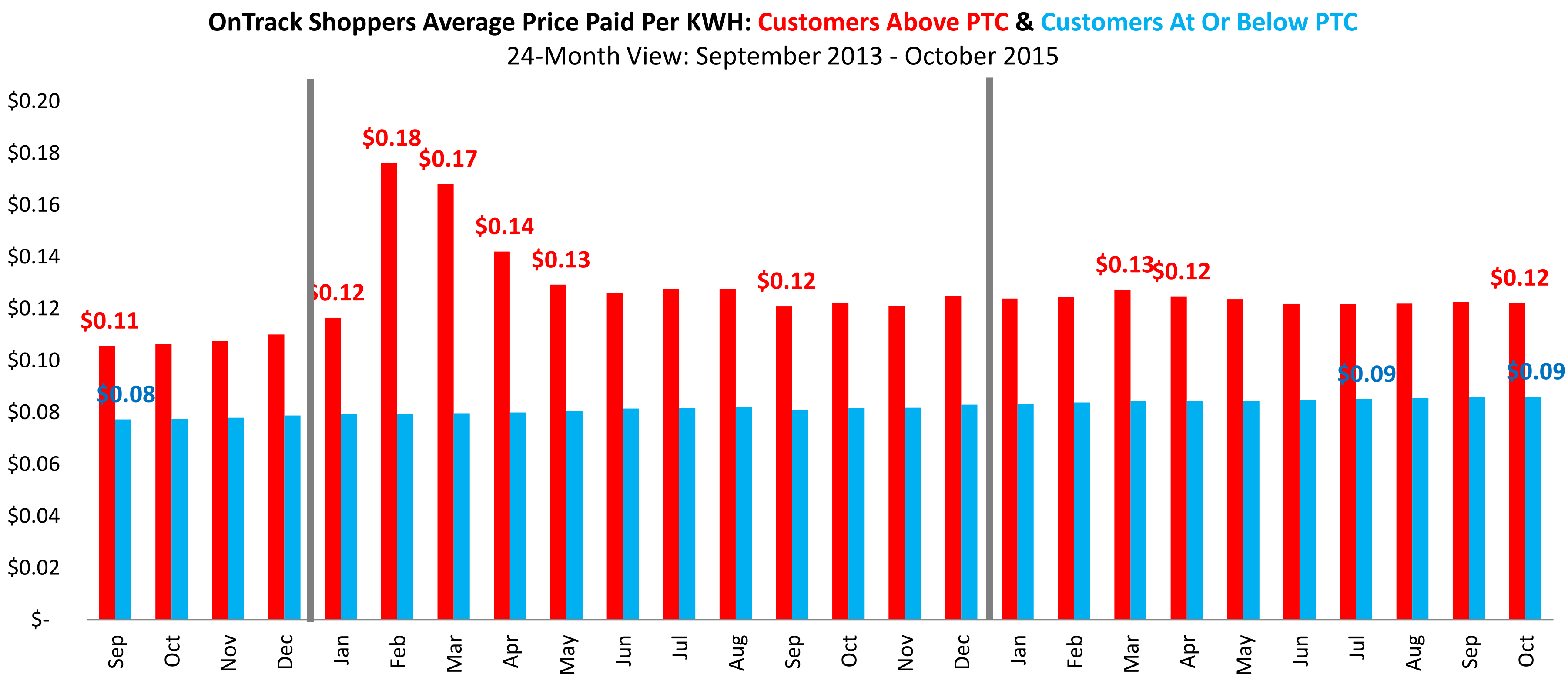
OnTrack Shopping: **50%**

OnTrack Members: **41,074**

What Did Our Shoppers Pay?

PPL Electric Exhibit MSW-1

PPL Electric Utilities



Averages for this 24-month period:

Shoppers Above PTC paid (on average) $0.12562

Shoppers Below PTC paid (on average) $0.08196

Average PTC for 24-month period was $0.09107

Shopping Impact on CAP Credits?

PPL Electric Utilities

Notes on Methodology:

1. We looked at **two snapshots** for OnTrack active members – October **2014** and October **2013**.

2. Then we backed up one month, to September, and **built cases** based on customers with an **OnTrack start date in September**.

3. We **“followed” these customers** (cases) for twelve months and looked for the indicators that says the customer was **removed early** for exceeding the maximum OnTrack credit amount.

Shopping Impact on CAP Credits?

PPL Electric Utilities

Notes on Case Studies:

1. Group **A**. Timeline Track: October ‘14 – September ‘15.
   - Broke Group A into **3 sub-groups**.

   A. OT**A1**. **All** shoppers. N=**1,604**.

   B. OT**A2**. Shoppers paying **above** the PTC. N=**772**.

   C. OT**A3**. Shoppers paying **below** the PTC. N=**832**.

2. Group **B**. Timeline Track: October ‘13 – September ‘14.
   - Broke Group B into **3 sub-groups**.

   A. OT**B1**. **All** shoppers. N=**1,564**.

   B. OT**B2**. Shoppers paying **above** the PTC. N=**934**.

   C. OT**B3**. Shoppers paying **below** the PTC. N=**630**.

Shopping Impact on CAP Credits?

PPL Electric Utilities

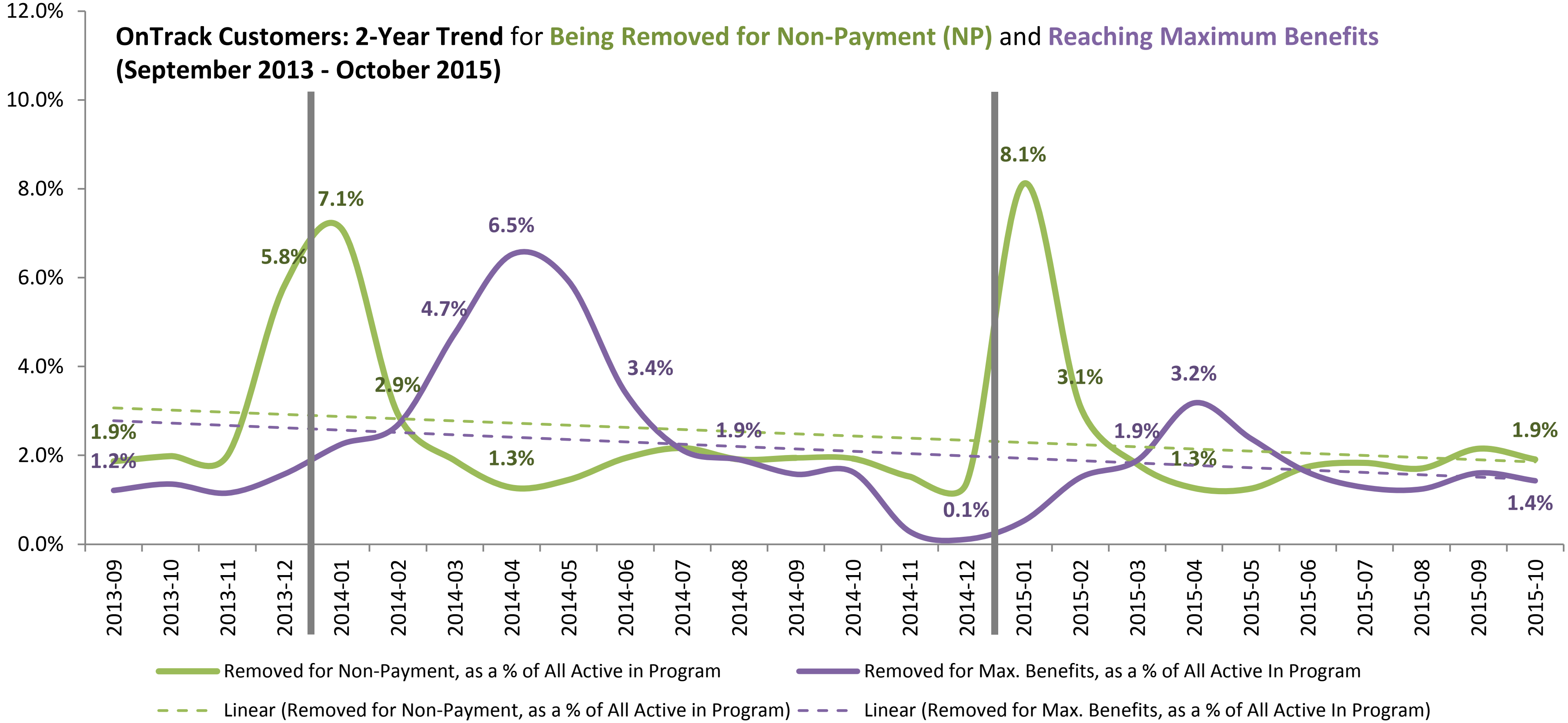
Results Summary Table:

2	3	4	5	6	7	8	9	10
Case	Timeline Track	HHs	HHs	EH	NEH	%	EH	NEH
		Total	Removed	Removed	Removed	Removed	Split	Split
OTA1	Oct 14-Sep 15	1,604	156	25	131	10%	16%	84%
OTA2	Oct 14-Sep 15	772	86	10	76	11%	12%	88%
OTA3	Oct 14-Sep 15	832	70	15	55	8%	21%	79%
OTB1	Oct 13-Sep 14	1,564	595	153	442	38%	26%	74%
OTB2	Oct 13-Sep 14	934	390	104	286	42%	27%	73%
OTB3	Oct 13-Sep 14	630	205	49	156	33%	24%	76%

HHs = Households
EH = Electric Heat (as the primary heating source in the home)
NEH = Non-Electric Heat (something other than electric heat, as the primary heating source in the home)

PPL Electric Utilities

OnTrack Removal (2 main ways to get removed)



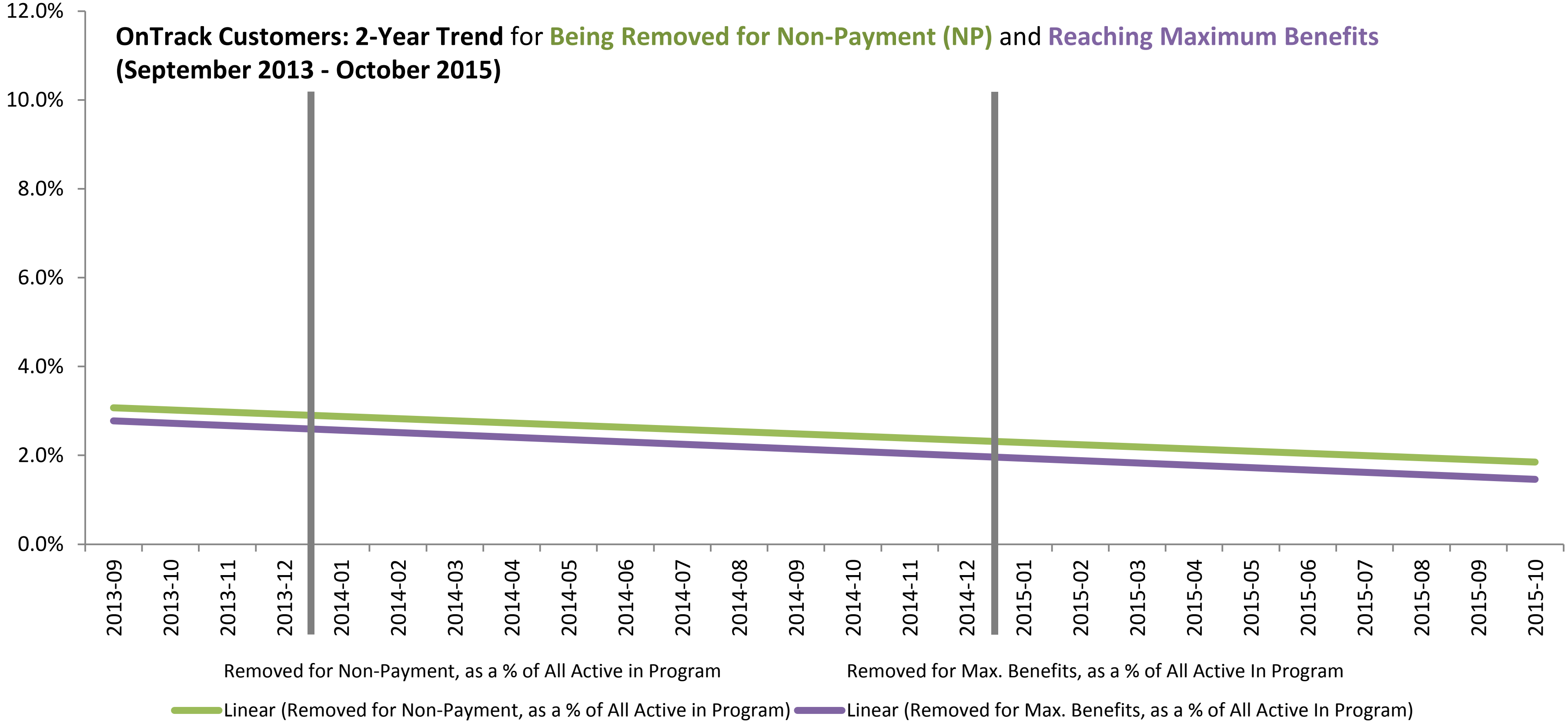
Averages for this 24-month period:

Removed for Non-Payment: 2.5%

Removed for Maximum Benefits: 2.1%

OnTrack Removal (2 main ways to get removed)

PPL Electric Utilities

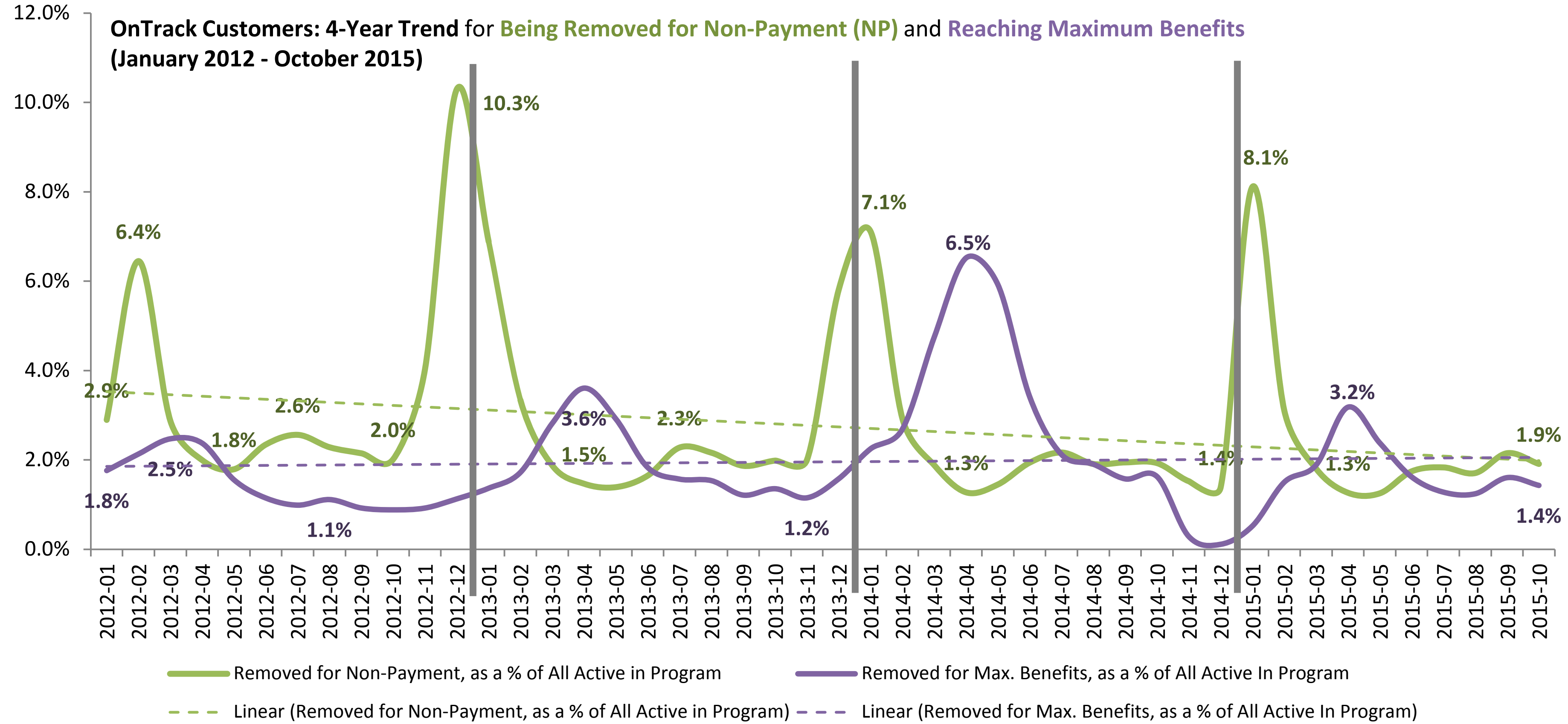


Averages for this 24-month period:

Removed for Non-Payment: 2.5%

Removed for Maximum Benefits: 2.1%

OnTrack Removal (2 main ways to get removed)

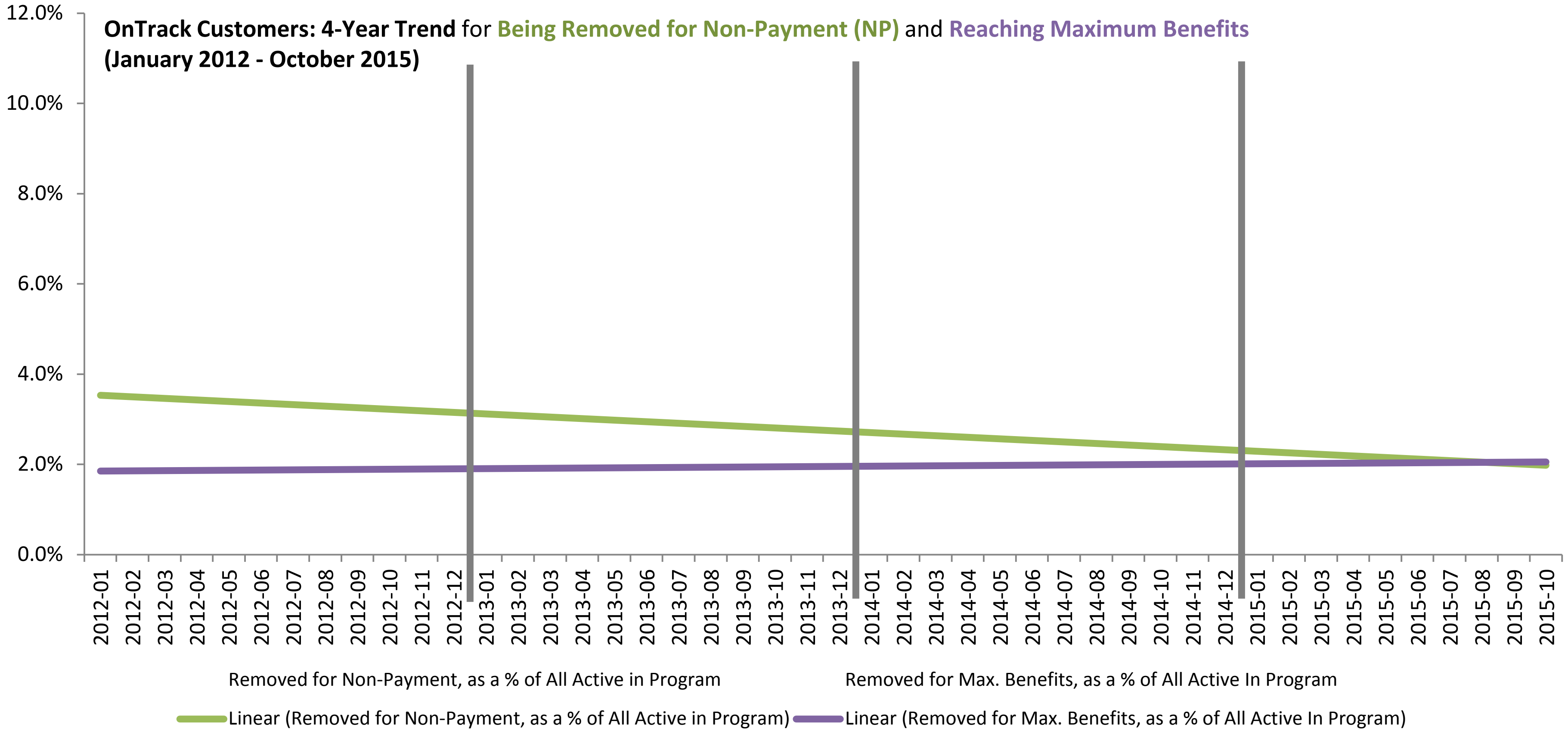


Averages for this (almost) 4-year period:

Removed for Non-Payment: 2.8%

Removed for Maximum Benefits: 2.0%

OnTrack Removal (2 main ways to get removed)



Averages for this (almost) 4-year period:

Removed for Non-Payment: 2.8%

Removed for Maximum Benefits: 2.0%

Can We Estimate The Impact?

PPL Electric Utilities

What is the estimated impact on the **full (actual)** bill of OnTrack members?
Time Period Used: January 2012 – October 2015 (46 months or 3.8 years)

1. Average number of customers each month where the price paid was **above the PTC = 9,626.**
2. For those customers above the PTC, **average price paid = $0.11048.**
3. Average **usage per month** for customers above PTC was **1,197 KWH.**
4. The **average PTC** across this timeline was **$0.08475.** If I did not shop I would have paid this.

5. Average monthly energy charge, if on PTC (**actual** bill) = **$101** (1,197 x $0.08475)
6. Average monthly energy charge at the price above (**actual**) = **$132** (1,197 x $0.11048)
7. Difference (each month) = **$31**

8. The (monthly) difference for all customers above the PTC = **$298,406** (9,626 x $31)
9. The impact over 12 months = **$3,580,872**
10. The impact over 18 months = **$5,371,308**

OnTrack Bill Sample

Shopping Information Added in 2014…

OnTrack Billing Details

Current Charges - Apr 28 - May 28

Your OnTrack Monthly Payment	$25.50	
Catch-up Amount		$0.00
Total PPL Electric Utilities Charges		$25.50
Amount Due By Jun 19, 2014		**$25.50**

Added in 2014

PPL Electric Utilities' price to compare for your rate is $0.09036 per kWh. This changes the 1st of Mar, Jun, Sept, and Dec. Visit **papowerswitch.com** or **www.oca.state.pa.us** for supplier offers.

General Information

Added in 2014

- Price message from your current supplier, [redacted]
  Electric Chg: 291 KWH @ $0.07890
  For questions regarding this price, please contact your supplier at the number provided on the back of this bill.
- Actual Charges for 291 kWh $46.97
- OnTrack makes your bill more affordable. Compare the difference between your actual bill and your OnTrack bill. **Actual Bill $46.97 Ontrack Bill $25.50**
- You're right OnTrack with your payments. Thank you!

PPL Electric Utilities

Comments
Questions

PPL Electric Utilities

PPL Electric Contacts

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as of 1/1/16

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OnTrack (CAP) Program

Shopping Collaborative
Session #2

Friday January 15, 2016

Connection Between Percent Shopping & PTC?

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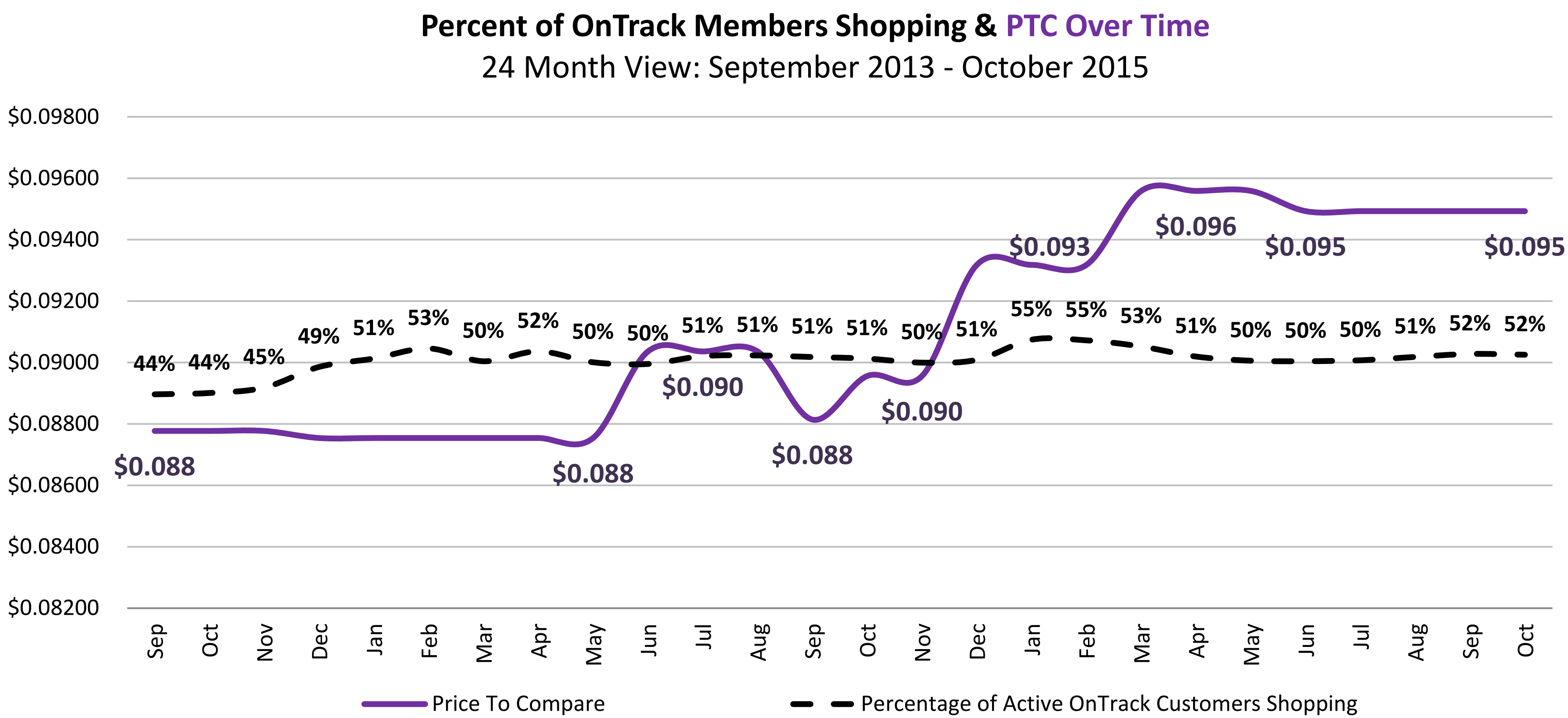

Estimate the impact for customers above PTC

PPL Electric Utilities

What is the estimated impact on the **full (actual)** bill of OnTrack members?
Time Period Used: January 2012 – October 2015 (46 months or 3.8 years)

1. Average number of customers each month where the price paid was **above the PTC = 9,626.**
2. For those customers above the PTC, **average price paid = $0.11048.**
3. Average **usage per month** for customers above PTC was **1,197 KWH.**
4. The **average PTC** across this timeline was **$0.08475.** If I did not shop I would have paid this.

5. Average monthly energy charge, if on PTC (**actual** bill) = **$101** (1,197 x $0.08475)
6. Average monthly energy charge at the price above (**actual**) = **$132** (1,197 x $0.11048)
7. Difference (each month) = **$31**

8. The (monthly) difference for all customers above the PTC = **$298,406** (9,626 x $31)
9. The impact over 12 months = **$3,580,872** ($298,406 x 12)
10. The impact over 18 months = **$5,371,308** ($298,406 x 18)

Estimate the impact for customers at/below the PTC

PPL Electric Utilities

What is the estimated impact on the **full (actual)** bill of OnTrack members?
Time Period Used: January 2012 – October 2015 (46 months or 3.8 years)

1. Average number of customers each month where the price paid was **at/below the PTC = 7,750.**
2. For those customers at/below the PTC, **average price paid = $0.07772.**
3. Average **usage per month** for customers at/below PTC was **1,294 KWH.**
4. The **average PTC** across this timeline was **$0.08475.** If I did not shop I would have paid this.
5. Average monthly energy charge, if on PTC (**actual** bill) = **$110** (1,294 x $0.08475)
6. Average monthly energy charge at the price at/below (**actual**) = **$101** (1,294 x $0.07772)
7. Difference (each month) = **$9**
8. The (monthly) difference for all customers at/below the PTC = **$69,750** (7,750 x $9)
9. The impact over 12 months = **$837,000** ($69,750 x 12)
10. The impact over 18 months = **$1,255,500** ($69,750 x 18)

Estimate the net impact

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Look at shopper non-savers versus savers, as compared to the PTC
Time Period Used: January 2012 – October 2015 (46 months or 3.8 years)

Those Paying Above PTC	Those Paying At/Below PTC
7. Difference (each month) = **$31**	7. Difference (each month) = **$9**
8. The difference, above = **$298,406**	8. The difference, below = **$69,750**
9. The impact, 12 mos. = **$3,580,872**	9. The impact, 12 mos. = **$837,000**
10. The impact, 18 mos. = **$5,371,308**	10. The impact, 18 mos. = **$1,255,500**

1. **Net (each month) = $22**
2. **Net effect, monthly = $228,656**
3. **The impact, over 12 months = $2,743,872**
4. **The impact, over 18 months = $4,115,808**

Estimate the net impact (exclude polar vortex)

Look at shopper non-savers versus savers, as compared to the PTC
Time Period Used: January 2012 – October 2015 (excluding Feb, Mar, Apr 2014)

Those Paying Above PTC	Those Paying At/Below PTC
7. Difference (each month) = **$26**	7. Difference (each month) = **$8**
8. The difference, above = **$248,300**	8. The difference, below = **$ 61,624**
9. The impact, 12 mos. = **$2,979,600**	9. The impact, 12 mos. = **$739,488**
10. The impact, 18 mos. = **$4,469,400**	10. The impact, 18 mos. = **$1,109,232**

1. **Net (each month) = $18**
2. **Net effect, monthly = $ 186,676**
3. **The impact, over 12 months = $2,240,112**
4. **The impact, over 18 months = $3,360,168**

Connection Between Standard Offer Program & OnTrack Shoppers?

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- How many OnTrack shoppers participated in the **Standard Offer Program?** (SOP)
- We looked at customers who were connected with a supplier via the SOP.
- The sample/snapshot used was August 2015. The sample size was **6,159**.
- The **results** showed **4%** of the customers who connected with a supplier via SOP ended up **enrolled in OnTrack** at some point after August 2015.

OnTrack Customers Removed (prior to 2009)

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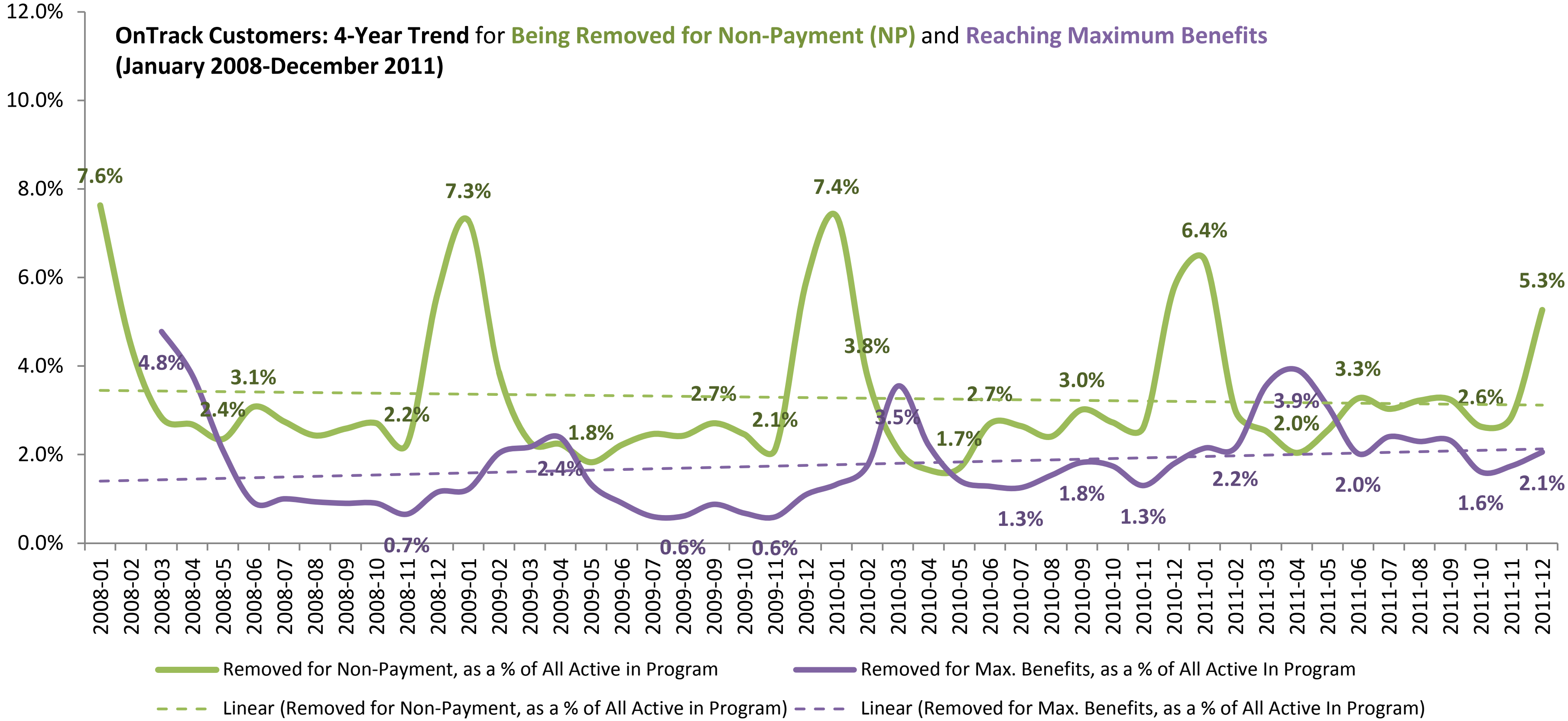

Averages

Removed for Non-Payment: 3.3%

Removed for Maximum Benefits: 1.8%

OnTrack Customers: Duration In Program

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- We looked at **new enrollees** during the month of June 2014 and tracked their duration in the program. The OnTrack "end date" signifies the end of the program.
- The **end date** could be driven by **multiple reasons**, such as: non-payment (defaulted), exceeding benefits, moving outside of the service territory, moving within the service territory and not responding to the application, graduating, or requesting to be removed from the program.

Results

1. Average: 362 days
2. Median: 385 days
3. Minimum: 20 days
4. Maximum: 583 days

Average KWH Usage For OnTrack Shoppers At/Below The PTC…

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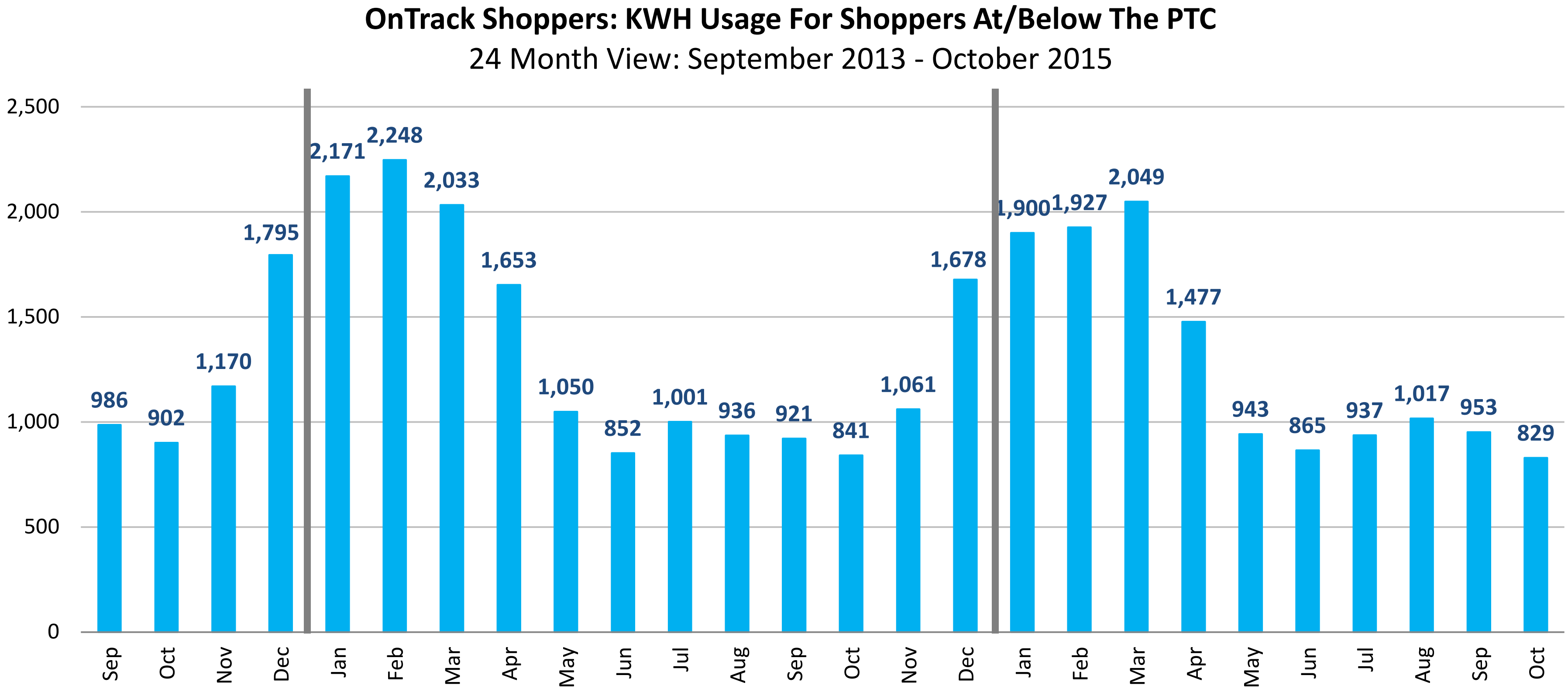
- The average monthly KWH usage for OnTrack shoppers at/below the PTC for the 24-month period of September 2013 through October 2015 was **1,315 KWH**.



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How Many Suppliers?

Across Residential & OnTrack Shoppers

- There are currently **108** suppliers across the PPL **residential** shopping population. *
- There are currently **68** suppliers across the PPL residential **OnTrack** shopping population. **

* November 2015 list review
** October 2015 list review

PPL Electric Utilities

Policy Discussion: Input, Ideas, Suggestions

Closing Comments

PPL Electric Utilities

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mswukitsch@pplweb.com

Number of OnTrack Shoppers

*PPL Electric Exhibit MSW-3

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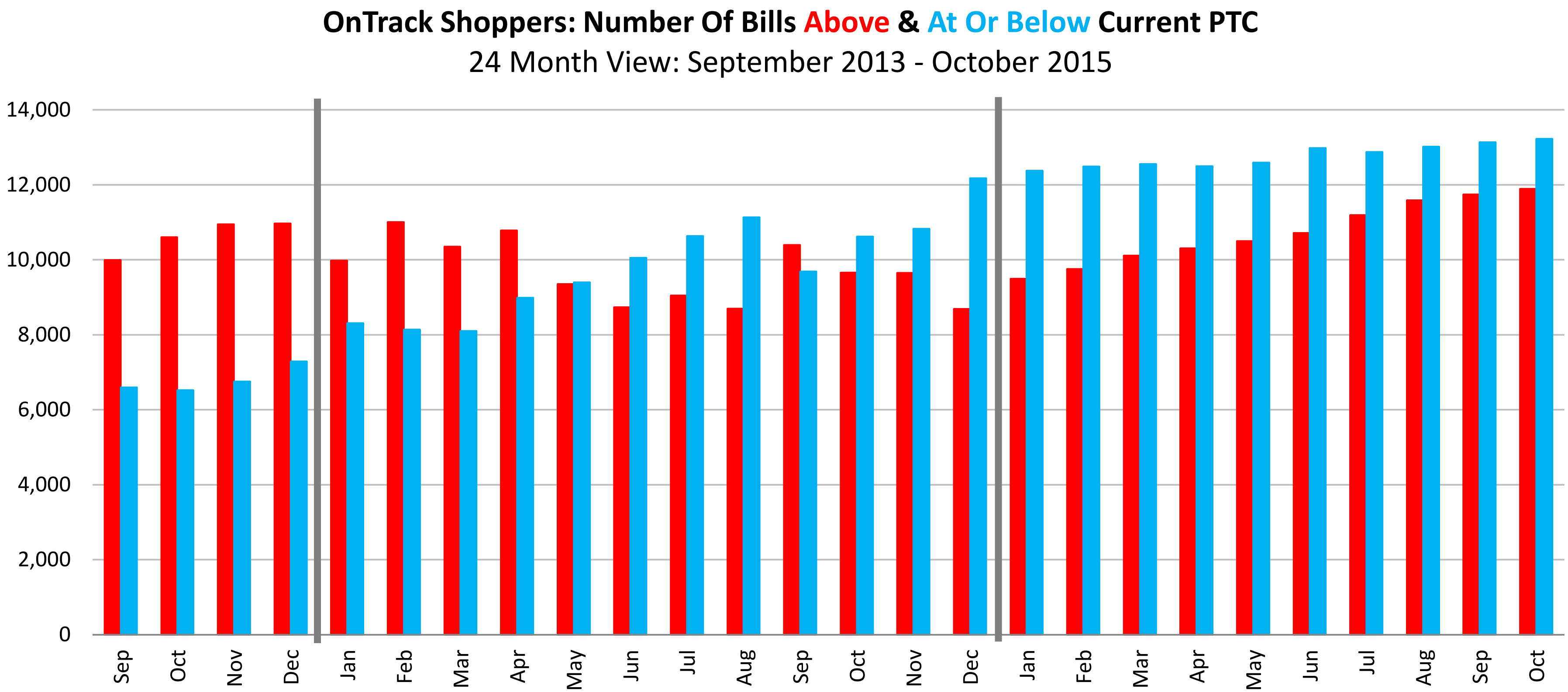

Averages for this 24-month period:

Number of bills above PTC: 10,238

Number of bills below PTC: 10,501

* The number of members shopping is derived by counting the number of OnTrack shopper **bills** rendered for the time period.