PECO ENERGY COMPANY
STATEMENT NO. 3

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PETITION OF PECO ENERGY COMPANY
FOR APPROVAL OF ITS DEFAULT
SERVICE PROGRAM

_____

DOCKET NO. P-2012 _____

DIRECT TESTIMONY

WITNESS: SCOTT G. FISHER

SUBJECT: DEFAULT SERVICE PROCUREMENT

DATED: JANUARY 13, 2012

TABLE OF CONTENTS

DIRECT TESTIMONY
OF
SCOTT G. FISHER

I. INTRODUCTION AND PURPOSE OF TESTIMONY

1. Q. Please state your full name and business address.

A. My name is Scott G. Fisher. My business address is 30 Monument Square, Suite 105, Concord, Massachusetts 01742.

2. Q. What is your current position?

A. I am a Principal with The NorthBridge Group ("NorthBridge"), an economic and strategic consulting firm serving the electric and natural gas industries.

3. Q. On whose behalf are you submitting testimony?

A. I am submitting testimony on behalf of PECO Energy Company ("PECO").

4. Q. Please summarize your professional and academic background.

A. Since joining NorthBridge in 1998, I have advised companies in the electric industry on decisions related to risk management, asset valuation and portfolio management, product pricing, contract negotiations, regulatory affairs, supply procurement, rate design, and overall corporate strategy. I also have served as an expert witness on several of these topics in state public utility commission proceedings. Before joining NorthBridge, I was a consultant at Strategic Decisions Group, a management consulting firm serving a variety of industries. I received an A.B. from Dartmouth College, and a B.E. from the Thayer School of Engineering at Dartmouth College,

with high honors. In addition, I received an M.S. in Engineering-Economic Systems from Stanford University and an M.B.A. from the Tuck School of Business at Dartmouth College, with high honors.

5. Q. What is the purpose of your testimony?

A. The purpose of my testimony is to evaluate PECO's proposed default service plan (the "Default Service Plan" or "Plan" or "DSP II") to procure supply for default service customers for the period beginning June 1, 2013, and ending May 31, 2015. My testimony is divided into two parts. First, I review PECO's first default service plan ("DSP I")[1] and identify several lessons learned. This discussion includes an analysis of the "residual compensation" incorporated in the prices of the residential full requirements contracts procured by PECO. Second, I evaluate PECO's DSP II with respect to Act 129's requirement that the plan include a "prudent mix" of contracts designed to ensure the least cost to customers over time, taking into account any benefits of price stability.[2]

6. Q. Please summarize your conclusions.

A. First, with regard to the lessons learned from PECO's DSP I, I conclude the following:

- The basic default service model used by PECO in DSP I has facilitated and supported substantial growth in the competitive retail market. In fact,

[1] *See Petition of PECO Energy Company for Approval of Its Default Service Program and Rate Mitigation Plan* Docket No. P-2008-2062739 (Order entered June 2, 2009) ("*DSP I Order*").

[2] 66 Pa. C.S. § 2807(e)(3.4), *and* Act 129 of 2008 (Preamble).

the percent of customer load that has elected service from an alternative electric generation supplier ("EGS" or "competitive retail supplier") has increased significantly, from 1.7%[3] to 56%.[4]

- There have been high levels of participation in PECO's open solicitations for full requirements supply products, indicating that many suppliers understand the products being solicited and are willing to compete to sell the supply products.

- The high levels of participation, combined with my quantitative analysis of the results of PECO's DSP I solicitations for fixed-price full requirements residential default service supply products, indicate that the resulting contract prices are reasonable, considering the costs and risks that the suppliers under these contracts assume to the benefit of customers.

Second, with regard to PECO's proposed DSP II, I conclude the following:

- DSP II incorporates a prudent mix of contracts designed to ensure least cost to customers over time, taking into account the benefits of price stability, and includes prudent steps necessary to obtain least cost generation supply contracts on a long-term, short-term and spot market basis, as required by Section 2807(e)(3.4) and Section 2807(e)(3.7) of the Act. Furthermore, PECO's decision to replace expiring DSP I block

[3] Figure is "Percentage of Customers Load (MW) Served By An Alternative Supplier As Of 10/1/2010" as found in "Pennsylvania Electric Shopping Statistics – October 1, 2010" published by the PA Office of Consumer Advocate.

[4] Source: PECO. Data is for the week ending January 3, 2012, and includes customers who will be switched to EGSs within 45 days. Percentage of load is based on peak load contribution ("PLC") values.

energy contracts with new fixed-price full requirements products during DSP II is appropriate, especially in light of the significant expansion of retail shopping in PECO's service area and various new retail market initiatives being considered in Pennsylvania.

- DSP II builds on retail market enhancements in DSP I with additional enhancements to facilitate further development of the competitive retail market in PECO's service territory.

Each of these findings is described further below.

II. REVIEW OF DSP I AND THE LESSONS LEARNED

7. Q. Please provide an overview of the mix of products procured under DSP I.

A. Under PECO's DSP I, the plan currently in effect, a unique and tailored portfolio of supply products is procured for each of four different customer classes at different points in time. The following chart summarizes the default service supply product portfolio for each customer class:[5]

[5] With the exception of Option B for Large Commercial and Industrial customers, the initial delivery periods of the full requirements supply products procured in DSP I included an extra five months (from January 1, 2011 to May 31, 2011) to align the delivery periods of subsequent products with the commencement of the annual PJM planning period.

Residential	Small Commercial	Medium Commercial	Large Commercial and Industrial
• 30% 1-year fixed-price full requirements ("FPFR") products • 45% 2-year FPFR products • Block energy products of 1-year, 2-year, 5-year, and seasonal delivery periods that are targeted to serve 20% of default service load[6] • Spot market purchases that are targeted to serve 5% of default service load[7]	• 70% 1-year FPFR products • 20% 2-year FPFR products • 10% spot-priced full requirements ("FR") products[8]	• 85% 1-year FPFR products • 15% spot-price FR products	Option A for customers: • 100% spot-priced FR products Option B for customers: • 100% FPFR products for 2011 only

8. Q. Has the default service model used by PECO in DSP I been compatible with substantial growth in the competitive retail market?

A. Yes. Since DSP I delivery began, the competitive retail market in PECO's service area has grown considerably. PECO's transition from long-term rate caps to default service rates based on competitive market pricing has facilitated and supported the

[6] Unlike full requirements products, deliveries under block products do not scale with changes in load, so the percentages of default service load served by the block products often deviate from the targeted percentage.

[7] Since these spot market purchases make up the differences between the block product quantities and the actual default service load, the percentages of default service load served by the spot market purchases often deviate from the targeted percentage.

[8] All spot-priced full requirements products for Small and Medium Commercial customers and Large Commercial and Industrial customers are indexed to the PJM day-ahead energy markets.

growth of the competitive retail market in PECO's service area. As of October 1, 2010, only a few months before supply deliveries under DSP I began, only 1.7% of PECO's total customer load was being served by an alternative electric generation supplier ("EGS" or "competitive retail supplier").[9] In contrast, 56% of PECO's total customer load is currently being served by an EGS, with switching percentages equal to 25% for the Residential class, 52% for the Small Commercial class, 78% for the Medium Commercial class, and 96% for the Large Commercial and Industrial class.[10]

The numbers of active EGSs are also indicators of the robustness of the competitive retail market in PECO's service area. There are currently 66 EGSs licensed and certified to serve customers in PECO's service area, with 59 suppliers serving customers in general and 51 suppliers serving residential customers.[11] These statistics provide further evidence of the substantial growth in the competitive retail market in PECO's service area under DSP I.

9. Q. Mr. Fisher, in DSP I, the majority of default service supply for the Residential, Small Commercial, and Medium Commercial customer classes is procured in the form of fixed-price full requirements products. What is a fixed-price full requirements default service supply product?

A. A fixed-price full requirements or "FPFR" default service supply product obligates the seller of the product to satisfy a specified percentage of all of the default service

[9] Figure is "Percentage of Customers Load (MW) Served By An Alternative Supplier As Of 10/1/2010" as found in "Pennsylvania Electric Shopping Statistics – October 1, 2010" published by the PA Office of Consumer Advocate.

[10] Source: PECO. Data is for the week ending January 3, 2012, and includes customers who will be switched to EGSs within 45 days. Percentages of load are based on PLC values.

[11] Source: PECO. Data is for the week ending January 3, 2012.

customers' supply requirements in every hour of the delivery period, regardless of the default service customers' instantaneous changes in energy consumption, regardless of how frequently customers switch to or from default service, and regardless of how the seller's cost to satisfy its supply obligation may change. The seller is paid a predetermined price per megawatt-hour for this service. As a result, FPFR products can provide significant price stability benefits for customers. The full requirements products that PECO has procured under DSP I include the generation components required to supply PECO's default service customers, including energy, capacity, and ancillary services, as well as alternative energy credits required for compliance with Pennsylvania's Alternative Energy Portfolio Standards ("AEPS") Act. In PECO's solicitations for FPFR products, qualified bidders compete with one another by submitting the prices at which they are willing to provide the full requirements default service supply, and the suppliers with the lowest prices are selected upon approval of the procurement by the Commission.

10. Q. Have there been high levels of participation in PECO's solicitations for full requirements supply products?

A. Yes. The levels of participation in these open solicitations have been high, indicating that many suppliers understand the products being solicited and want to compete to sell those products. Evidence of the high levels of participation includes the following:

- Between 11 and 13 suppliers participated in each of the first four full requirements solicitations, and there were nine winning bidders.[12]

- All tranches of the FPFR supply products that were solicited were fully subscribed.

- The Commission has approved the bid results for each FPFR solicitation held to date.

11. Q. What does this indicate about the prices resulting from these solicitations?

A. The high levels of participation in these open solicitations indicate that the resulting prices have been competitive. Multiple bidders competed to sell the products solely on the basis of price. In order to be selected, bidders needed to offer a price that did not include unreasonable or excessive compensation for assuming and managing the costs and risks associated with the products. Otherwise, the bidder would be underpriced by another bidder. High levels of supplier participation are beneficial for customers and are a sign that prices are the lowest possible for the product being offered.

12. Q. Do the bidders in FPFR product solicitations require compensation in the prices that they offer for the product to help them cover the associated costs and risks of their obligation, to the benefit of customers?

[12] October 14, 2010 PECO Procurement: Fall 2010 Solicitation Results (http://www.pecoprocurement.com/assets/files/NERA%20PECO%20Fall%202010%20Results%2010-14-2010.pdf), p. 3. Participation, in this context, involves at least completing the steps required to be qualified to submit bids. Data about the number of qualified bidders, or the number of winning bidders, in later solicitations is not yet publicly available.

A. Yes. As in any market, participants require compensation for the costs and risks which they bear by providing a product.

13. Q. Have you performed a quantitative analysis of the results of PECO's DSP I solicitations for FPFR default service supply products, in order to better understand the compensation that is required by suppliers?

A. Yes. I have performed an analysis of the residential supply product pricing.

14. Q. What was the basic approach that you adopted in your analysis?

A. For each of the FPFR product solicitations that PECO completed under DSP I, I calculated the values of the individual cost components that can be quantified in a fairly simple way, and deducted them from the winning bid prices. Then, by examining whether the difference (i.e., the "residual compensation" required by suppliers to cover the other costs and risks that I did not individually quantify) represents a relatively small or large portion of the winning bid prices, I determine whether this "residual compensation" is reasonable, considering the costs and risks assumed by FPFR product suppliers to the benefit of customers.

15. Q. Please identify the cost components of full requirements service that you individually quantified.

A. For each solicitation, I used market price information and load data available at the time of the solicitation to quantify cost components related to energy (including the effect of load shape), capacity, ancillary services, and various credits.

16. Q. How did you quantify each of these cost components?

A. For energy, I relied on forward block energy prices for the PECO Zone as reported by the New York Mercantile Exchange ("NYMEX").[13,14] I then added a load shaping adjustment to account for the fact that market prices are generally higher during hours in which customer loads are higher.[15] The load shaping was performed using actual PECO hourly loads and prices.

For capacity, I applied PJM-published capacity prices to megawatt quantities of required capacity, and divided the products by the commensurate megawatt-hour loads in order to express capacity costs in terms of dollars per megawatt-hour. The capacity quantities were calculated based on the reported peak load contribution ("PLC") values for the appropriate classes of customers, and the corresponding megawatt-hour load values were calculated from publicly available load values as of the times of the solicitations.

The other cost components that I individually quantified include ancillary services costs,[16] alternative energy credits ("AECs"),[17] Auction Revenue Rights ("ARR")

[13] While PECO Zone forward prices were available as of the later solicitations, they were not available as of the earlier solicitations. For these earlier solicitations, PECO Zone forward prices were developed using forward prices at nearby delivery points and using regressions of historical locational marginal energy prices at the PECO Zone versus at these nearby delivery points.

[14] NYMEX prices were provided by Ventyx / Energy Velocity.

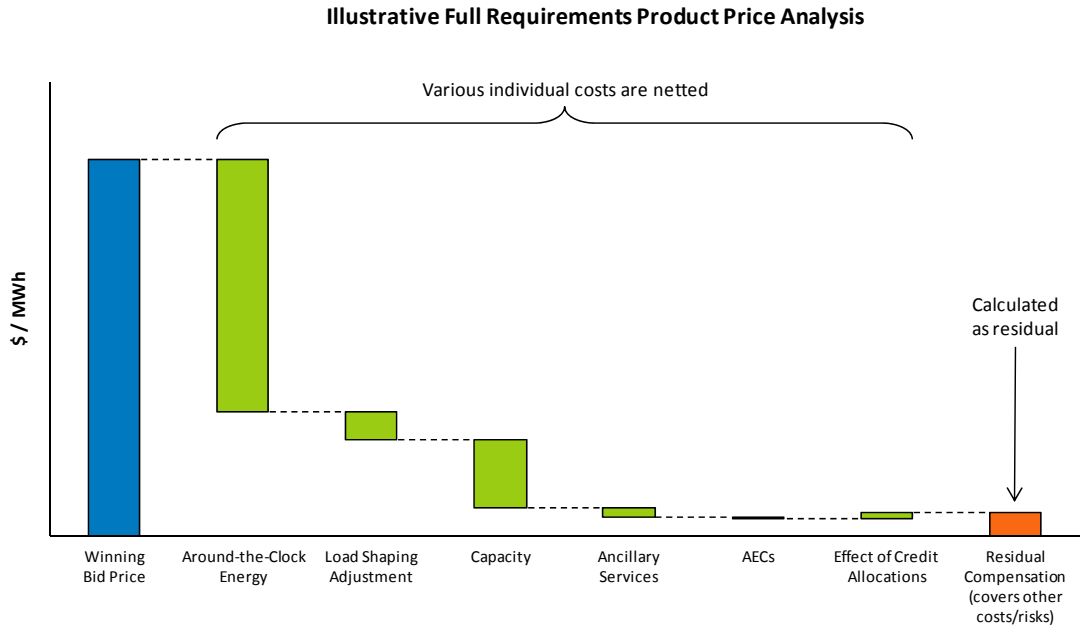
[15] The calculation of this load shaping adjustment involved applying actual historical percentage differences between load-weighted hourly energy prices and straight-average hourly energy prices.

[16] The ancillary services costs that I used were based on PECO's historical ancillary services costs.

[17] The costs of AECs were calculated using AEC prices as of the time of the solicitation, and the volume requirements of the winning suppliers.

credits,[18] and marginal loss credits.[19] These values tend to be much smaller than the cost of energy and capacity, and therefore they have a much smaller effect on the results of my analysis.[20]

For each solicitation, I quantified these cost components and then deducted the resulting values from the winning bid price to determine how much was left over – the "residual compensation" for all other cost and risk items that were not individually quantified. The following illustrative chart graphically portrays this approach:



[18] Auction Revenue Rights ("ARR") credits were calculated by dividing zonal ARR credit allocations published by PJM by zonal loads calculated from PJM zonal load forecasts.

[19] Marginal loss credits were calculated using actual credit data provided by PJM.

[20] The values of both the ARR credits and the marginal loss credits were netted from the values of the other cost components that I calculated (i.e., these credit values effectively act as cost components with negative values), because a positive value for these credits equates to a positive dollar value allocated to the winning bidders in the solicitations.

17. Q. Do the residual compensation values that you calculated represent the expected "profit margins" or "premiums" for the winning bidders?

A. No, these residual compensation values do not represent the expected profit margins for winning bidders. While it is reasonable for winning bidders to expect some level of profit in order to assume the full requirements obligations, there are clearly costs and risks that were not quantified and deducted from the winning bid prices; suppliers require the residual compensation to cover these costs and risks. Therefore, the residual compensation that I calculated simply represents what is left over after deducting the values of cost components that I individually quantified, and does not represent the expected supplier profit or premium.

18. Q. What are some of the other costs and risks that this "residual compensation" is intended to cover?

A. The residual compensation must cover a wide range of other costs and risks, including:

- Customer migration – the financial costs and risks associated with the uncertainty regarding customer switching and its effect on the default service volumes to be supplied.[21]

[21] Customers have an incentive to elect service from competitive retail suppliers when the default service rate is higher than retail supplier prices, and they have an incentive to elect default service when the rate is lower than those prices. This customer switching option can be very valuable for customers, but can be costly to the seller of the FPFR default service supply product given the need to provide additional supply when market prices are high and/or manage excess supply when market prices are low.

- Usage and price uncertainty – various costs and risks due to unexpected events that affect usage and price levels.[22]

- Unexpected congestion – various costs and risks associated with the possibility that differences in prices between a given trading hub and the delivery location will be higher than expected values.

- Adverse selection – the costs and risks associated with the likelihood that high cost-to-serve customers (e.g., with less attractive load shapes) will disproportionately remain on default service due to competitive retail suppliers' lack of interest in marketing to such customers.

- Adverse developments in energy markets during the time a bid is held open – even for a few days, while the bids are evaluated and considered for approval by the applicable regulatory body.

- Potential changes in laws and regulations.

- Administrative and legal costs.

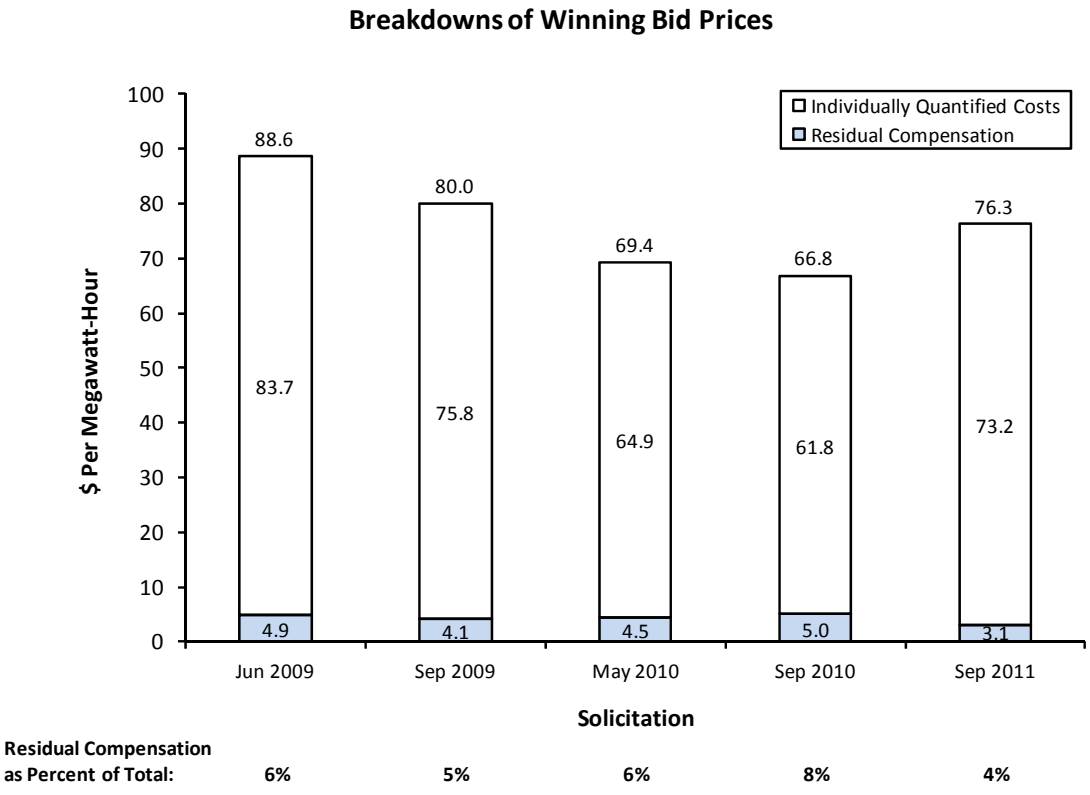
- Credit-related costs (e.g., costs associated with posting collateral).

Again, my analysis does not include a quantification and deduction of these costs and risks from the winning bid prices. Therefore, winning bidders in the FPFR solicitations would need to cover these costs and risks in the residual compensation values that I calculated.

[22] These include extreme weather patterns, changes in customer usage patterns, plant outages or transmission line outages (which also affect the congestion cost), fuel price shocks, and unexpected economic growth levels.

19. Q. What residual compensation values did you calculate when you deducted the values of the individually quantified cost components from the winning bid prices?

A. As the following exhibit shows, the residual compensation values range from about $3 per megawatt-hour to about $5 per megawatt-hour (4% to 8% of the winning supply bid price):



20. Q. Do you believe that the residual compensation values that you calculated are reasonable, considering the costs and risks assumed by the winning bidders in these solicitations to the benefit of customers?

A. Yes. As I explained earlier, the high levels of participation in these open solicitations indicate that the resulting prices were competitive. Furthermore, these residual compensation values represent only a small portion of the winning bid prices, especially considering the other costs and risks that I described above, which FPFR suppliers intend to cover through the residual compensation to the benefit of customers.

21. Q. Are there reasons why the residual compensation values that you calculated may differ from the results of solicitations that PECO conducts in the future?

A. Yes. If there are changes in the costs and risks assumed by FPFR product suppliers to the benefit of customers, then there are likely to be commensurate changes in the residual compensation values implicit in the bid prices for these products. For example, the potential impact of environmental regulations or legislation, or a general tightening of the electricity supply versus demand balance, could affect wholesale electricity costs and therefore suppliers' bid prices in the future. The residual compensation would also be affected by different competitive retail market conditions, as this would affect the customer migration costs and risks assumed by the default service suppliers to the benefit of customers. Differences in the levels of regulatory risk directly or indirectly associated with the supply contracts would also contribute to differences between the residual compensation values in one solicitation versus another. For example, increased regulatory uncertainty regarding future

default service policy could result in higher residual compensation values implicit in supply product bid prices, all else equal.[23]

III. EVALUATION OF PECO'S PROPOSED DSP II

22. Q. Please summarize PECO's proposed plan for DSP II and highlight some of the significant changes from DSP I.

A. PECO's proposed DSP II builds upon the successes of DSP I, while including important improvements that are based on the lessons learned during DSP I. DSP II is designed to further promote retail competition while continuing to provide customers with a reliable default service using a prudent mix of contracts that is designed to be least cost over time, taking into account the benefits of price stability for each customer class.

The DSP II proposal retains tailored and separate default service supply portfolios for each of the various customer classes, and retains the procurement of supply products through competitive solicitations. The Plan also continues the reliance on FPFR supply products for smaller customers, which provides greater price stability. At the same time, the Plan phases out the block-and-spot aspect of the supply portfolio for the Residential customer class, and replaces these products with FPFR products. As I will explain later, renewal of the block-and-spot approach would expose customers to magnified risks given the growth in the competitive retail market and the increased

[23] It is worth noting, however, that the solicitations for some of the products that I analyzed were held while the Commission's "Retail Market Investigation" (*Investigation of Pennsylvania's Retail Electricity Market*, Docket No. I-2011-2237952) was already open, so the residual compensation values implicit in the prices for these products would incorporate bidders' assessments (at that time) of the potential for changes that could arise from that investigation as it relates to the costs and risks that these bidders would bear if they were selected as a winning bidder.

uncertainty regarding customer migration stemming from the pending Retail Market Investigation. For smaller customers, the Plan also involves more frequent replacements of the supply products, but with generally less supply volume replaced at each replacement, in order to reduce the chance of "rate shock" for these customers. Finally, the Plan involves generally shorter product delivery periods and shorter times between product procurement and the start of delivery, in order to provide shorter-term price signals to customers (while maintaining appropriate levels of rate stability) and to help ensure that default service rates are more reflective of contemporaneous market prices.

The direct testimony of PECO witness John J. McCawley describes the DSP II supply product portfolio in detail, and the following chart provides a summary of the portfolio for each customer class:[24]

[24] Transitional supply products will be procured to reach the procurement cycles described in the chart for the Residential class (40% 1-year FPFR products and 60% 2-year FPFR products with semi-annual overlapping) and for the Small Commercial class (100% 1-year FPFR products with semi-annual overlapping). For example, six-month FPFR products with a delivery period spanning June 1, 2013 through November 30, 2013, covering 50% of the Small Commercial class' default service load, will be procured to allow for the procurement cycle for this class to be reached.

Residential	Small Commercial	Medium Commercial	Large Commercial and Industrial

• The roughly 25% portion of the portfolio that currently consists of block energy and spot market purchases transitions to supply through FPFR products
  • As the existing block products expire, they are replaced by FPFR products that terminate at the end of the DSP II period (May 31, 2015)[25]
  • The pre-existing five-year block energy product, and the associated spot purchases, remain throughout the DSP II period because this product does not expire until December 31, 2015, after the DSP II period has concluded
• The roughly 75% remainder of the portfolio retains the same basic mix of products, but the procurement timing is changed:
  • The mix of products still consists of 40% 1-year FPFR products and 60% 2-year FPFR products[26,27]
  • The delivery periods of these products overlap on a semi-annual basis
  • After the first procurement (Fall 2012), each product is procured 2-4 months before the start of delivery of that product
	• 100% 1-year FPFR products (following an initial transitional procurement of six-month FPFR contracts to facilitate laddering)
	• Delivery periods overlap on a semi-annual basis
	• All products (after the initial transitional procurement) are procured 2-4 months prior to delivery
		• 100% 6-month FPFR products
		• No overlapping delivery periods
		• All products are procured 2-4 months prior to delivery
			• 100% spot-market purchases

1

[25] As the block energy products expire, the number of tranches that replace these block energy products is based on the volume of the block energy products and the volume of the targeted spot purchases that accompany the block energy products to serve the load.

[26] In DSP I, 75% of the Residential supply is procured through FPFR products, with 30% of the Residential supply procured through one-year FPFR products and 45% of the Residential supply procured through two-year FPFR products. In other words, of the Residential supply that is procured through FPFR products, 40% is comprised of one-year products and 60% is comprised of two-year products.

[27] One exception to this is that the two-year product that would be procured in Fall 2013 has been shortened to an 18-month product in order to reduce the amount of supply contract volume with deliveries beyond the DSP II period.

23. Q. Mr. Fisher, the Act requires a default service plan to produce a prudent mix of contracts, and include prudent steps necessary to obtain least cost generation supply contracts on a long-term, short-term and spot market basis.[28] What guidance has the Commission provided in interpreting that standard?

A. On October 4, 2011, the Commission entered its Second Default Service Rulemaking Order, and in this Order it provided guidance based on input received from stakeholders. Some of the Commission's guidance regarding the interpretation of "least cost" and "prudent mix" is as follows:

> [T]he ["least cost"] standard must give the DSP sufficient latitude to select contracts that constitute a "prudent mix" which includes a sufficient variety of products that adequately take into consideration price volatility, changes in generation supply, customer usage characteristics and the need to assure safe and reliable service.[29]

> In implementing default service standards, the Commission must be concerned about rate stability as well as other considerations such as ensuring a "prudent mix" of supply and ensuring safe and reliable service. In our view, a default service plan that meets the "least cost over time" standard should not have, as its singular focus, the achievement of the absolute lowest cost over the default service plan time frame but rather a cost for power that is both relatively stable and also economical relative to other options.[30]

> Price stability benefits are very important to some customer groups, so an interpretation of "least cost" that mandates subjecting all default service customers to significant price volatility through general reliance on short term pricing is inconsistent with Act 129's objectives.[31]

---

[28] 66 Pa. C.S. § 2807(e)(3.4), and 66 Pa. C.S. § 2807(e)(3.7).

[29] *Default Service and Retail Electric Markets*, Docket No. L-2009-2095604 (Order entered October 4, 2011) ("*Second Default Service Rulemaking Order*"), p. 38.

[30] *Second Default Service Rulemaking Order*, p. 40.

[31] *Second Default Service Rulemaking Order*, p. 41.

> We agree with the majority of parties that the "prudent mix" of contracts be interpreted in a flexible fashion which allows the DSPs to design their own combination of products that meets the various obligations to achieve "least cost to customers over time," ensure price stability, and maintain adequate and reliable service.[32]

> We do reject the positions of those parties that "prudent mix" be defined to always require a specific mix or percentage of types of contract components in each default service plan or a minimum of two types of products.[33]

Furthermore, on December 16, 2011, the Commission entered its Default Service Recommendations Order in the Retail Market Investigation, which included guidance on the format and structure of upcoming default service plans. Some of the Commission's guidance in this Order is as follows:

> [T]he Commission continues to recommend that the next phase of default service plans run for two years. The Commission asserts that a two-year plan complies with the requirements of Act 129 in that default service providers still have the flexibility to design a plan that produces the "least cost to customers over time."[34]

> [T]he Commission continues to recommend the following: (1) that EDCs file plans limiting or eliminating the existence of short-term energy contracts extending past the end date of the upcoming default service plan time period; and (2) that EDCs limit the proportion of long-term contracts that make up their default service plan energy portfolios, and consider using already existing long-term contracts from previous or presently effective default service plans.[35]

24. Q. Do you believe that PECO's proposed DSP II involves a prudent mix of contracts, and includes prudent steps necessary to obtain least cost generation

---

[32] *Second Default Service Rulemaking Order*, p. 60.

[33] *Second Default Service Rulemaking Order*, p. 60.

[34] *Investigation of Pennsylvania's Retail Electricity Market: Recommended Directives on Upcoming Default Service Plans*, Docket No. I-2011-2237952 (Order entered December 16, 2011) ("*Default Service Recommendations Order*"), p. 11.

[35] *Default Service Recommendations Order*, p. 19.

supply contracts on a long-term, short-term and spot market basis, as required by Section 2807(e)(3.4) and Section 2807(e)(3.7) of the Act?

A. Yes, I do. There are several reasons for this conclusion:

1. The procurement process is designed to ensure the least cost to customers by requiring qualified bidders in the supply product solicitations to compete and be selected based on the lowest price. Furthermore, when FPFR products are solicited, default service customers are provided the benefits of competition on all aspects of the full requirements supply obligation, including the portfolio management function.[36] It is reasonable to assume that bidders in the FPFR solicitations will consider the costs and risks associated with all forms of supply available to them to satisfy their fixed-price full requirements obligation, and will reflect in their bid prices the benefits of any opportunity that they believe is the least cost supply opportunity. Thus all customers – including those who remain with the utility, not just those who switch to competitive retail suppliers – will get the benefits of two levels of competition: the competition among generating resources in the underlying wholesale market, and the competition among suppliers for how best to buy in that wholesale market and manage risks to satisfy the fixed-price obligation for customers.

2. PECO's Plan relies on default service supply products that are well-tested in the marketplace. Specifically, the Plan predominantly relies on FPFR products to

[36] FPFR product suppliers have the responsibility for continuously satisfying the uncertain and constantly changing supply requirements at the agreed-upon price, and therefore must manage the associated costs and risks through their supply portfolio decisions.

supply default service customers with peak loads up to 500 kW. These products have been successfully procured by PECO in DSP I and are frequently procured by utilities in Pennsylvania and in other jurisdictions. In fact, FPFR product solicitations are the most prevalent form of default service procurement for smaller customers (i.e., other than large industrial and commercial customers) in restructured jurisdictions.[37]

3. The types of products relied upon under the Plan have been shown to be reasonably priced. Specifically, the high levels of participation in the open solicitations for FPFR products, and my quantitative analysis of the prices from PECO's recent fixed-price full requirements residential default service supply solicitations under DSP I, indicate that the prices of such products are reasonable, considering the costs and risks assumed by the winning bidders in these solicitations to the benefit of customers.

4. FPFR products provide significant benefits for customers. The seller of a FPFR product is responsible for assuming, managing, and covering the financial costs and risks associated with electricity supply, while customers receive price stability benefits that protect against adverse market and/or generation cost outcomes. Sellers of FPFR products must satisfy their obligation, regardless of how much market prices or generation costs may increase during the delivery period and regardless of the default service load level. Yet if market prices decrease after these types of supply contracts are signed, customers may elect

[37] Examples of specific jurisdictions in which full requirements supply products are procured include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Jersey, Ohio, Pennsylvania, Rhode Island, and Washington D.C.

service from a lower cost competitive retail supplier. The Commission has recognized the benefits of reliance on full requirements products in a default service portfolio, as it states in its Second Default Service Rulemaking Order:

> The [full requirements] process insulates default supply customers from the volatility associated with wholesale market conditions with the supplier bearing the risks of factors such as customer migration, weather, load variation and economic activity.[38]

> We do express a preference for continued reliance by DSPs on the [full requirements] approach to the extent this method best suits the DSP's particular procurement needs.[39]

5. PECO's Plan continues the use of a standard supply contract, which lets bidders know the terms and requirements of the default service supply obligation well in advance of the bid due date, and therefore allows qualified bidders to submit firm bid prices knowing that these contract terms and conditions will not change. The use of a standard contract also assures qualified bidders that selection of the winning bidders will involve an objective process. Consequently, the use of a standard contract encourages participation in the solicitations from a large number of potential suppliers.

6. PECO's Plan is also prudent because it includes tailored supply portfolios for different customer classes that take into account any benefits of price stability, the different shopping propensity of each customer class, and the desire to further develop the competitive retail market in PECO's service area.

---

[38] *Second Default Service Rulemaking Order,* p. 54.

[39] *Second Default Service Rulemaking Order,* p. 56.

25. Q. Has the Commission supported the use of tailored supply portfolios for each customer class?

A. Yes. Specifically, in its Second Default Service Rulemaking Order, in its discussion of the "prudent mix" requirement under Act 129, the Commission states:

> The Commission notes there was substantial unanimity on this point and agrees with the parties that the "prudent mix" standard should be interpreted to allow for a class-specific product mix that best matches the needs of each DSP customer class.[40]

26. Q. Please discuss the tailored supply portfolio for the Large Commercial and Industrial customer class under DSP II and the rationale for any changes from DSP I.

A. For the Large Commercial and Industrial customers (peak demands greater than 500 kW), PECO will offer a default service based on spot market prices, and has removed the one-year fixed-price service option for these customers provided during calendar year 2011 under DSP I. At this point, the competitive retail market for Large Commercial and Industrial customers in PECO's service area is well developed, with 96%[41] of the load in this class switched to service from competitive retail suppliers. As a result, there is no need for a one-year fixed-price service to be offered by the utility.

[40] *Second Default Service Rulemaking Order*, p. 69.

[41] Source: PECO. Data is for the week ending January 3, 2012, and includes customers who will be switched to EGSs within 45 days. Percentage of load is based on PLC values.

27. Q. Please discuss the tailored supply portfolio for the Medium Commercial customer class under DSP II and the rationale for any changes from DSP I.

A. Under DSP I, 85% of the default service supply portfolio for the Medium Commercial customer class consists of FPFR products with one-year, non-overlapping, delivery periods. By the end of the DSP I period, the solicitations for these one-year products are held twice, approximately eight months and four months before delivery begins. The other 15% of the default service supply portfolio is comprised of spot-priced products.

Since the start of the DSP I period, the competitive retail market for the Medium Commercial class has developed substantially. Seventy-eight percent[42] of Medium Commercial load has switched to competitive retail suppliers, indicating that this class has significant opportunities to elect competitive service options from EGSs and has a high propensity to do so, and thereby suggesting that this class of customers does not require as much price stability in its default service rates as it may have in the past. As a result, under PECO's proposed DSP II, the supply portfolio for the Medium Commercial customer class generally involves shorter-term products. The Plan for these customers involves a portfolio that is entirely comprised of six-month (as opposed to one-year) FPFR products, in which all of the products are replaced every six months. In addition, the time period before the start of delivery has been shortened to ensure that default service rates are more reflective of contemporaneous market prices. The solicitation for any given product is held approximately two-to-

[42] Source: PECO. Data is for the week ending January 3, 2012, and includes customers who will be switched to EGSs within 45 days. Percentage of load is based on PLC values.

four months (as opposed to four-to-eight months) before delivery of the product begins.

The spot price component of the Medium Commercial default service portfolio has been removed in DSP II, because the DSP II portfolio for these customers has already been designed to reflect shorter-term pricing through the replacement of one-year products (in DSP I) with six-month products (in DSP II), and with shorter times between procurement and delivery. Furthermore, the removal of the spot-priced supply in the portfolio decreases the risk that supply costs over a coming period deviate substantially from expectations at the time that the rates for that period are set, thereby reducing the likelihood of large after-the-fact rate reconciliations which can cause rates to deviate from contemporaneous market prices in unanticipated ways. In sum, PECO's proposed portfolio for the Medium Commercial class reflects shorter-term pricing and should further promote retail market development.

28. Q. Please discuss the tailored supply portfolio for the Small Commercial customer class under DSP II and the rationale for any changes from DSP I.

A. Under DSP I, 70% of the default service supply portfolio for the Small Commercial customer class consists of FPFR products with one-year, non-overlapping, delivery periods. By the end of the DSP I period, the solicitations for these products are held twice, approximately eight months and four months before delivery begins. 20% of the default service supply portfolio for this customer class consists of FPFR products that span a delivery period of two years (plus the extra five months necessary to allow subsequent products to synchronize with the PJM planning year cycle), with delivery

ending May 31, 2013. The other 10% of the default service supply portfolio is comprised of spot-priced products.

Since the start of the DSP I period, the competitive retail market for the Small Commercial class has developed substantially. Fifty-two percent[43] of Small Commercial load has switched to competitive retail suppliers, indicating that this class has opportunities to elect competitive service options from EGSs and has a considerable propensity to do so, and thereby suggesting that this class of customers does not require as much price stability in its default service rates as it may have in the past. Consequently, PECO has not included two-year fixed-price products in the DSP II supply portfolio for this class. DSP II for the Small Commercial class involves a portfolio that is comprised of one-year FPFR products, in which half of the products are replaced every six months. In addition, the time period before the start of delivery has been shortened to ensure that default service rates are more reflective of contemporaneous market prices. The solicitation for any given product is held approximately two-to-four months (as opposed to four-to-eight months) before delivery of the product begins.

The spot price component of the Small Commercial default service portfolio has been removed in DSP II, because the DSP II portfolio for these customers has already been designed to reflect shorter-term pricing through the replacement of two-year products (in DSP I) with one-year products (in DSP II), and with shorter times between procurement and delivery. Furthermore, the removal of the spot-priced supply in the

[43] Source: PECO. Data is for the week ending January 3, 2012, and includes customers who will be switched to EGSs within 45 days. Percentage of load is based on PLC values.

portfolio decreases the risk that supply costs over a coming period deviate substantially from expectations at the time that the rates for that period are set, thereby reducing the likelihood of large after-the-fact rate reconciliations which can cause rates to deviate from contemporaneous market prices in unanticipated ways. In sum, PECO's proposed portfolio for the Small Commercial class reflects shorter-term pricing and should further promote retail market development.

29. Q. Please compare the tailored supply portfolio for the Residential customer class under DSP II with the tailored supply portfolio under DSP I and provide the rationale for any changes in design.

A. Under DSP I, the default service supply portfolio consists of FPFR products, block energy products, and spot market purchases. Twenty-five percent of the portfolio is comprised of block products with seasonal, one-year, two-year, and five-year periods, and spot purchases. The block products are purchased in quantities that are targeted to comprise 20% of the overall necessary supply, leaving a targeted 5% of the supply portfolio to be satisfied through spot purchases.[44] The other 75% of the DSP I portfolio is comprised of FPFR products: 45% is comprised of products with two-year delivery periods that overlap annually,[45] and 30% is comprised of products with one-year delivery periods that do not overlap. By the end of the DSP I period, the solicitations for the FPFR products are held approximately eight months and four months before delivery begins.

[44] While these are the targeted percentages, in many hours the actual percentages deviate significantly from these targeted percentages, and the actual percentages over longer periods of time may also deviate significantly from these targeted percentages, due to uncertainty about customer usage and customer migration levels.

[45] Some of these are actually 29-month products, because they include the extra five months necessary to allow subsequent products to synchronize with the PJM planning year cycle.

PECO's proposed DSP II Residential supply portfolio includes the following modifications to the DSP I portfolio:

- No new block energy products are procured under DSP II. As the existing block products expire, they are replaced by FPFR products with deliveries that terminate at the end of the DSP II period.[46]

- While the remainder of the portfolio retains the same basic mix of products (a mix of one-year and two-year FPFR products with the ratio of one-year products to two-year products remaining 40%-to-60%),[47,48] the procurement timing is changed. Specifically, the delivery periods of these products overlap on a semi-annual basis under DSP II. In other words, while the FPFR supply products are replaced only once per year under DSP I, DSP II involves more frequent replacements of these products, but with generally less supply volume replaced at each replacement. By replacing supply products twice per year instead of once, while reducing the amount of supply that is replaced at each replacement, there will be greater "smoothing" of the changes in default service rates, which should reduce the chance of "rate shock" for these customers. The procurement

[46] The pre-existing five-year block energy product, and the associated spot purchases, will remain throughout the DSP II period because this product does not expire until December 31, 2015, after the DSP II period has concluded.

[47] In DSP I, 75% of the Residential supply is procured through FPFR products, with 30% of the Residential supply procured through one-year FPFR products and 45% of the Residential supply procured through two-year FPFR products. In other words, of the Residential supply that is procured through FPFR products, 40% is comprised of one-year products and 60% is comprised of two-year products.

[48] As previously noted, one exception to this general contract mix is that the two-year product to be procured in Fall 2013 has been shortened to an 18-month product in order to reduce the amount of supply contract volume with deliveries beyond the DSP II period.

timing for these products under DSP II differs from that under DSP I in one additional way. Specifically, after the first procurement to be held in Fall 2012, each product is procured two-to-four months before the start of delivery of that product. In contrast, the later procurements for the FPFR products in DSP I are held approximately eight months and four months prior to delivery. All else equal, the shortened procurement lead times will make the default service rates more in line with contemporaneous market prices.

30. Q. Why do you support PECO's plan to replace expiring block contracts and spot purchases with FPFR contracts?

A. First of all, as I described earlier, FPFR products offer significant price stability benefits to customers, and my analysis shows that the prices obtained in PECO's FPFR product solicitations have been reasonable given the costs and risks that the suppliers of these products assume to the benefit of customers. In contrast, renewal of the "block-and-spot" approach (procuring block products, and making spot purchases to reconcile the difference between the block quantities and the actual load) would expose customers to greater price and volume related risks in DSP II, especially given the level of development of the competitive retail market that has been achieved in PECO's service area. Furthermore, these risks could be further magnified to the degree that the competitive retail market continues to develop and new enhancements are put in place to promote retail competition in PECO's service area.

Under the block-and-spot approach, there is no fixed-price guarantee for load following service as there is with FPFR products; instead, the costs due to unforeseen circumstances, such as large deviations in loads and prices from forecasted values (due to factors such as customer migration, unexpected weather patterns, changes in customer usage patterns, plant outages or transmission line outages, fuel price shocks, unexpected economic growth levels, and unanticipated ancillary services costs), are passed on to customers in their default service rates. When a default service portfolio is supplied in part or in full by block products and spot purchases (to reconcile the difference between the block quantities and the actual load), in any given hour the utility pays a fixed-price on a quantity (the quantity specified in the block contract) that may be much less or much more supply than it actually needs. As default service load deviates from forecasted quantities, the utility would either take corrective actions to rebalance its portfolio or rely on the volatile spot market to purchase supply when needed and/or sell excess supply when not needed.

Since block products involve fixed-cost commitments that do not vary with the load obligation, if PECO were to renew the block-and-spot approach, and market prices decline and customers exercise their option to switch to a competitive retail supplier, PECO could be left with excess supply that it would be forced to sell at a loss to be recovered from increasingly fewer default service customers, or the default service customers would find that an unexpectedly high portion of their default service supply portfolio is composed of above-market contracts, resulting in higher default service rates. In fact, default service rates could tend to increase as market prices decline. In the extreme, it could become difficult to recover the costs solely from

default service customers, and this would raise issues regarding how the burden of the cost recovery would be shared among all customers. On the flip side, if market prices were to increase and customers then switched back to default service, then PECO would need to make supply purchases in the now high-priced market in order to meet its load requirements, and this would drive up default service rates.

Competitive retail market development has been significant, and this magnifies the risks to customers under the block-and-spot approach, because there is an increased potential for substantial and unanticipated customer switching (both to and from default service), and therefore there is an increased potential for retained load quantities that deviate significantly from forecasted values. Since deliveries began under DSP I, we have witnessed substantial increases in customer switching, including residential customer switching. Residential customer load being served by a competitive retail supplier in PECO's service area has increased from about zero in 2010 to 25% recently.[49] Given the developments to date with respect to the competitive retail market for residential customers, the aspects of PECO's Plan that are designed to further develop this market, and the desire by various parties to encourage greater customer switching, I would be especially concerned about renewing the block-and-spot approach, as the risks to customers under this type of approach increase when there is an increased chance of customer migration.

I also do not believe that it would be preferable to engage in new fixed-cost supply commitments (that do not vary with load) like block energy products due to the

[49] Source: PECO. The 25% figure is applicable to the week ending January 3, 2012, and includes customers who will be switched to EGSs within 45 days. Percentage of load is based on PLC values.

uncertainty related to the pending Retail Market Investigation. In its July 28, 2011, Order in this docket, the Commission made the following charge:

> …[W]e direct this Commission's Office of Competitive Markets Oversight to initiate Phase II of this Investigation and provide recommendations to this Commission which will present specific proposals for changes to the existing retail market and default service model, including any necessary regulatory or legislative changes. The recommended changes should be targeted to the improvement of Pennsylvania's retail electric market by providing for a more informed and involved consumer population, additional products and services as well as increased participation and investment in Pennsylvania's retail electricity market by EGSs…[50]

It is possible that significant shifts in customer migration could result from the decisions made in that proceeding, further magnifying the risks to customers under the block-and-spot approach.

31. Q. Do you believe that PECO's decision not to engage in new block energy contracts, and instead engage in additional FPFR products, is in line with recent Commission guidance?

A. Yes. Specifically, in its Second Default Service Rulemaking Order, the Commission states:

> [W]e will not require nor do we specifically endorse the use of the [managed portfolio] approach at this time. We do express a preference for continued reliance by DSPs on the [full requirements] approach to the extent this method best suits the DSP's particular procurement needs.[51]

[50] *Investigation of Pennsylvania's Retail Electricity Market*, Docket No. I-2011-2237952 (Order entered July 28, 2011), p. 13.

[51] *Second Default Service Rulemaking Order*, p. 56.

32. Q. Mr. Fisher, does PECO's proposed DSP II include flexibility to accommodate changes to default service policy that might result from decisions made in the Commission's Retail Market Investigation?

A. Yes. PECO's proposed DSP II incorporates this flexibility in several ways. First, the default service supply product portfolios for the Large Commercial and Industrial and Medium Commercial classes do not include any supply products with delivery periods that extend beyond May 31, 2015, the end of the DSP II period. As a result, the Commission can easily adopt a similar plan or a very different plan for the period starting June 1, 2015, without the need to face situations involving pre-existing default service supply products with deliveries that extend into this period.

Second, the earliest solicitations for Residential and Small Commercial supply products with delivery periods that extend beyond May 31, 2015 (the end of the DSP II period) are not until January 2014 and September 2014, respectively. As a result, there is a significant amount of time for the Retail Market Investigation to conclude before any new supply commitment extending beyond the DSP II period is made. If the decision in the Retail Market Investigation warrants PECO changing the scheduled solicitations for supply commitments beyond May 31, 2015, then there should be ample time for PECO to submit such changes to the Commission for approval prior to the solicitations being conducted in 2014. Furthermore, as Mr. McCawley explains in his testimony, in the event that legal developments result in PECO no longer serving as the default service provider for its service area after May 31, 2015, there should be ample time to adjust PECO's solicitations for products that

extend beyond May 31, 2015. In the meantime, these solicitations remain scheduled because they allow for the option for a fairly seamless continuation of the laddered procurement cycle established in DSP II,[52] and they avoid subjecting Residential and Small Commercial customers to a "hard stop" with regard to their supply products which can result in rate volatility associated with replacing a large portion of default service supply in a short period of time at the end of the DSP II period. In its Default Service Recommendations Order, the Commission recognized the rate stability concerns associated with this type of "hard stop" situation:

> [S]everal parties, including Exelon, Duquesne and OCA, raised the concern that if no short-term contracts extend beyond the end date of the default service plan, this will result in a "hard stop" that will require default service providers to purchase significant supply at the end of the plan under a singular market condition. These commenters recommend that the Commission permit EDCs to use a laddering approach, and suggest that laddering supply purchases at different times and having overlapping delivery periods may promote rate stability. The Commission believes that these concerns may be legitimate and we recognize that some EDCs may have delivery periods that extend beyond the end date of the next plan under a laddered approach, hence the use of our language recommending that EDCs "…limit or eliminate…" overhanging short-term contracts.[53]

Finally, PECO's proposed DSP II provides flexibility because it relies on full requirements supply products, and does not involve the procurement of any new fixed-cost supply commitments that do not vary with load, like block energy products. As I have explained previously, this is especially valuable given the

---

[52] The Commission has repeatedly emphasized the importance of "laddering" contracts in procuring default service supply. For example, the Commission has stated, "We agree with those parties that utilizing such practices as laddering contracts, with varying procurement periods and contract durations over multiple procurements provide definite benefits in terms of minimizing the impacts of market volatility and decreasing customer risk." (*Second Default Service Rulemaking Order*, pp. 62-63.)

[53] *Default Service Recommendations Order*, pp. 20-21.

increased customer migration activity that already has been observed in PECO's service area, and given the uncertainty related to the pending Retail Market Investigation, which could further affect customer migration.

33. Q. Mr. Fisher, is PECO's Plan designed to further develop the competitive retail market?

A. Yes. While relying on the basic default service model that has facilitated and supported the significant retail market development to date, PECO's DSP II includes various concrete steps to further develop this market. These steps pertain to the underlying supply product portfolio mix, as well as explicit initiatives to further develop the market.

34. Q. How is the supply product portfolio mix under DSP II designed to further develop the competitive retail market?

A. As I have described, the overall DSP II product mix generally consists of shorter-term products than the product mix in DSP I. More specifically, the delivery periods of the supply products, and the times from the solicitations to the deliveries, are generally shorter than they are in DSP I. By appropriately shortening the terms of FPFR products, default service rates are generally more reflective of contemporaneous market prices, against which competitive retail suppliers have the opportunity to compete. Furthermore, by using FPFR supply products, price transparency for customers is improved and this in turn can facilitate retail market development. Specifically, the reduced possibility of large future rate reconciliations due to deferred

charges or credits provides customers and EGSs with a more reliable price-to-compare benchmark against which to compare competing retail offers.

35. Q. Is PECO proposing to take any additional steps to enhance retail competition in DSP II?

A. Yes. PECO witnesses Brian D. Crowe and John J. McCawley describe these steps in their testimony.

IV. CONCLUSION

36. Q. Does this conclude your direct testimony?

A. Yes, it does.