

## **Auction Timing and Implications for Default Service Procurements**

**Paul J. Hibbard**, Vice President, Analysis Group, Inc.

Comments On behalf of Direct Energy

PA PUC En Banc Hearing

November 10, 2011

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Good afternoon Chairman Powelson, Vice Chairman Coleman, and Commissioners,

On behalf of Direct Energy, I want to thank you for giving me the opportunity to sit on this panel. My name is Paul Hibbard, I am a Vice President with Analysis Group in its Boston office, and prior to that, up until last May was the Chairman of the Public Utilities Commission in Massachusetts. So I have sat in your chair [or stood in your shoes], and am watching with interest the groundbreaking steps you are taking here to make retail choice real for residential and small commercial customers. I think what you do here will not only benefit residents of Pennsylvania, but will also be a model hopefully for the Commonwealth of Massachusetts, and other states that are struggling with inadequate levels of migration for smaller customers.

In Massachusetts, as seems to be the case here in Pennsylvania in at least some of your utilities' service territories, the migration of residential and small commercial customers has been frustratingly low, despite sincere efforts on the part of stakeholders in the state to move things along. When we enacted restructuring, the vision of our legislature was that most customers in ALL rate classes would be able to benefit from robust, retail competition; not just large commercial and industrial customers. And in this proceeding, and at this time, you are uniquely positioned to create fundamentally new conditions for a transition to a truly competitive market for all customers.

That is why I think the Opt-In Auction structure under discussion is so important. It can be the game changer, one that will deliver immediate benefits for residential and small commercial customers, that can be conducted with minimum risk for ratepayers, and that could spur a qualitative change in the level of migration and the strength of retail competition in the Commonwealth. It can do this by building momentum for choice through the implementation of a strong pilot auction in 2012 followed by a full-scale auction in 2013, creating the conditions for the longer-term vision that the Commission is considering in Phase II of the Retail Markets Investigation.

I am here with my colleague, Andrew Parece who is a Managing Principle in our Boston office, and has designed, implemented and monitored auctions in the electric industry. Andy will provide some comments on an auction structure proposed by Direct and under discussion in the Retail Opt-In Auction Sub-Group, but what I would like to do is first provide a little perspective on auction timing and its link to Default Service (DS) procurements.

As a Commission, in this investigation you are deftly balancing two overriding objectives: the first is to push forward with Commonwealth's commitment to harness competition and full retail access as a means to deliver lowest-cost energy supply to ratepayers over time. The second is the need to be sure that in doing so, you honor contractual commitments and continue to protect customers that, for whatever reason, are not ready to or can not choose a competitive retail supplier. Neither of these goals can be compromised. Fortunately, neither of them needs to be.

We looked carefully at how the DS contracts and procurements for Pennsylvania utilities line up against the potential for administering a Pilot Opt-In auction in late 2012, and Full-Scale Opt-In Auction in 2013. The details are in the presentation we submit today, but what becomes clear upon review of the plans and the data is that there is no impediment to a pilot auction in the range of 10 – 20 percent of default service load in any service territory; and little in the way of opening up enrollment in a full-scale auction in 2013 of anywhere up to 90% of current default service load.

The takeaway from this, for us, is that provided the Commission clearly addresses expectations for DS procurements on a going-forward basis, as described in Direct's comments, you have a great deal of flexibility to pursue an aggressive agenda to promote retail competition while honoring contractual commitments and protecting remaining default service customers.

With those brief introductory comments, I want to thank you again for the opportunity to talk to you today, and look forward to any questions you might have.

## **Recommended Opt-In Auction Approach**

**Andrew Parece**, Managing Principal, Analysis Group Inc.

Comments On behalf of Direct Energy

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My name is Andrew Parece and I am a Managing Principal with Analysis Group, and also am representing Direct Energy in this hearing. I was involved in designing the clock auction format for use in “Standard Offer” service auctions in Massachusetts, and was one of the Auction Monitors on behalf of the NJ Board of Public Utilities in its first Basic Generation Service Auction.

Building on what my colleague Paul Hibbard has discussed, I would like to cover a few key recommendations that relate to the Retail Opt-in Auction approach. I have participated in several of the sub-group conference calls and believe that these recommendations are consistent with the high-level principles that were identified by the sub-group in late September and these discussions have informed the Direct Energy recommendations. While there remain different views on specific parameters, of course, the sub-group has made substantial progress in developing the core elements of the auction approach based on these principles.

There are a few areas related to the auction approach being recommended by Direct Energy that I would like to touch on briefly given the time constraints. These points are also covered in the presentation.

- Definition of eligible participants and bids

First, the eligible participants would be residential and small commercial customers who are on Default Service at the beginning of the enrollment period. These are the only customers to whom the program would be marketed, which should mitigate any potential impact on the existing competitive market

Under the Retail Opt-in Auction program, there would be a bonus payment to customers who opt into the program which would be set by the Public Utilities Commission (PUC) administratively and announced to customers prior to the enrollment period. We are recommending a bonus payment in the range of \$100-\$150 for residential customers, and \$150-\$200 for small commercial customers based on the focus group research presented previously. This research has indicated that the signing bonus is a key element required to motivate customer participation.

The auction would be used to set the fixed price per kWh for all customers who opt-in to the program for a period of one year. Eligible customers would be informed prior to the enrollment period that the fixed price would be lower than the known default service rate at the beginning of the program period (June 1, 2013 for the full-scale auction). The fixed price would not change over the program year, and it would be guaranteed to be lower than the default service rate for six months, assuming that the EDCs move to bi-annual Default Service rate adjustments as recommended by the PUC. After three months, the bonus payment is made to the customer by the EGS. The customer is free to choose an alternative supplier or return to default service without losing the bonus payment or the savings that have accrued.

- Auction mechanism

Next, we are recommending a descending clock auction approach for setting the fixed price per kWh. This approach is relatively simple and it has been used successfully in (wholesale) default service procurements, for example in the New Jersey Basic Generation Service auctions. This auction approach is expected to achieve low prices under robust competition, relative to a sealed one-time bid approach, due to the transparency with respect to the total commitments being bid in each round.

- Other key auction design and program parameters

Lastly, there are many other details that would be specified in the auction rules with guidance from the PUC and staff. Among the more important ones are limits on the number or portion of Default Service customers who can participate, and caps on the portion of opt-in customers that any one supplier can be assigned.

With regard to the scope or scale of the pilot auctions, Direct Energy is recommending a limit of 10%-20% of customers on default service at the beginning of the enrollment period. This percent would vary by EDC based on the level of retail shopping and the absolute number of default service customers. Direct Energy recommends that there be no limit on Default Service customer participation in the full-scale auction. As Paul noted, we believe that it is important for as many customers as possible to experience the benefits of retail choice, consistent with the long-term goals for the Retail Market Initiative as articulated by the PUC, and current default service plans are not likely to be a barrier.

Direct Energy is also recommending that the limits on the winnings of any one supplier in the auction range from 25%-50% of opt-in customers. Such “load caps” have been a common feature of other electricity auctions to ensure robust price competition, diversity of suppliers and address market power.

The customers’ options at the end of the one-year program period are also very important. Direct Energy recommends that Opt-in program customers be guaranteed a fixed price offering by the assigned EGS to whom they are assigned prior to the end of the one-year period. These customers can also choose another supplier or revert to default service at that time and there are no termination fees.

Of course, there are many other details that would be specified in the final auction rules, and approved by the PUC prior to implementing pilot or full-scale retail opt-in auctions. I am very confident that if designed, implemented and marketed appropriately, this Retail Opt-In Auction approach could lead to significant benefits to consumers in Pennsylvania.

# Pennsylvania Retail Markets Investigation

**En Banc Hearing  
Retail Opt-In Auction – EGS Panel**

**Paul Hibbard, Vice President  
Andrew Parece, Managing Principal**

**Prepared on behalf of Direct Energy**

November 10, 2011

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## Outline

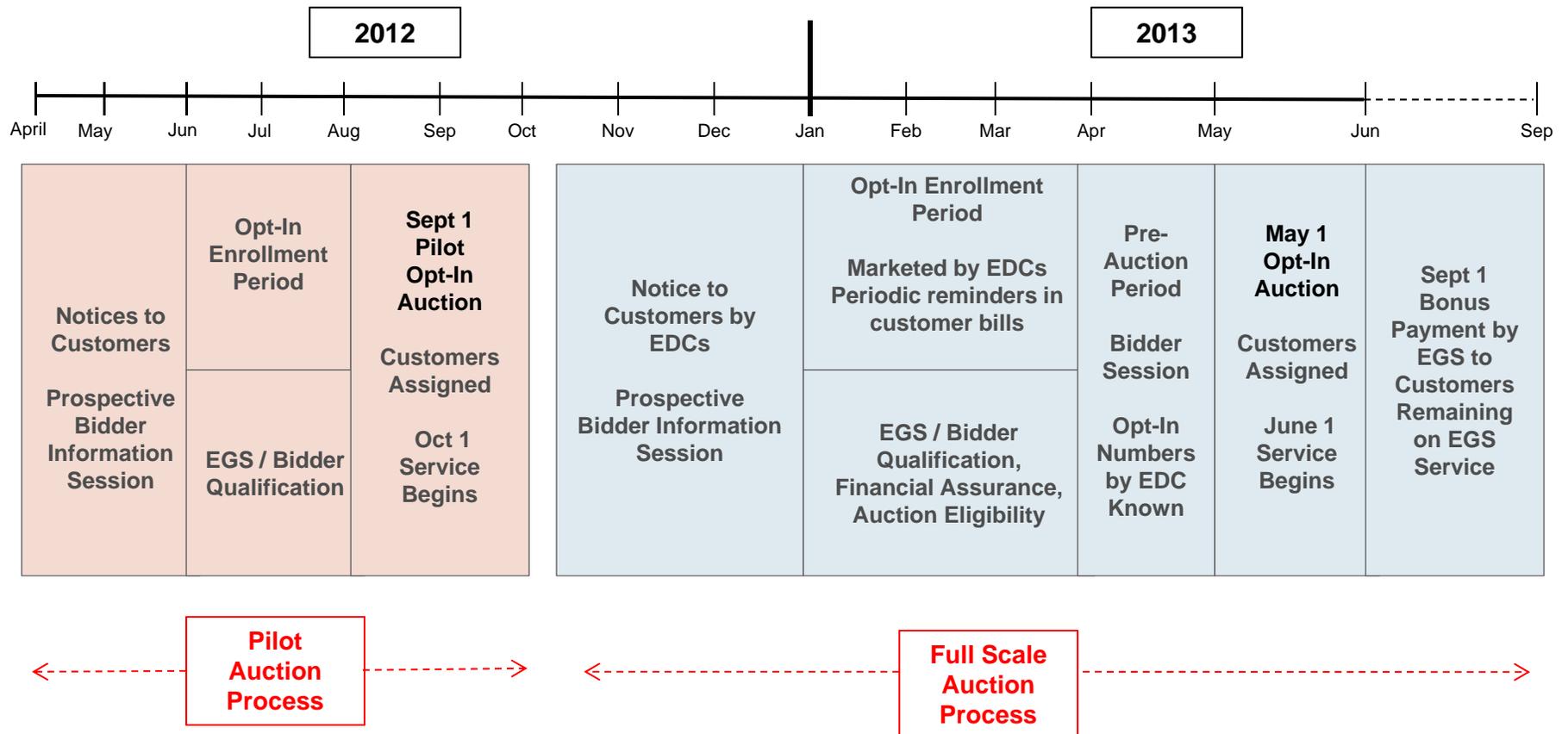
**Recommended Auction Timing and Implications for DS Procurements**

**Recommended Auction Approach**

**Appendix**

# Auction Timing – Pilot and Full Scale Auctions

- Pilot opt-in auction precedes full-scale auction to test process and parameters
- PUC approval of the full-scale auction as part of EDCs default service plans, expected by 3Q 2012



## Opt-in Auction Implications for DS Procurements

- **PA PUC has committed to a rapid transition via accelerated migration mechanism, and eventual exit of EDCs from Default Service**
  - Adjusted Default Service Plans and procurement strategy need to accommodate steps taken by PUC in the current and next Phases of RMI, including:
    - Pilot and full-scale opt-in auction
    - Opt-out auction and/or EDC exit from default service
- **Transition requires adjustment of EDC default service strategies now**
  - Currently-approved default service plans (covering through May 2013)
    - Interpretation and management of existing contracts
      - Block contracts – assurance that contracts will be honored, impacts mitigated
      - Full requirements contracts – no guaranteed load
    - Strategies for minimizing impact on RMI of *planned* procurements under existing plans
  - New or extended default service plans (covering June 2013 through May 2014 or 2015)
    - Firm end date; no more block contracts; short-term procurements; trajectory to end game
    - Clear expectations with respect to migration
- **With careful attention to commission guidance on current, extended DS plans, data show substantial room for a rapid transition (charts below)**
  - Substantial room for pilot auction in late 2012
  - Very small share of existing contracts in place for full auction in June 2013

# Summary of DS Block Contract Commitments

## Residential Default Service Procurement: Energy Not Committed through Block Contracts, June 2013 (Full Scale Auction)

EDC	Energy (GWh)	Percent of June 2013 Energy		Estimated Energy Available for Full Scale Auction (GWh)	
		Not Committed through Existing Contracts	Not Committed through Existing or Planned Contracts	Not Committed through Existing Contracts	Not Committed through Existing or Planned Contracts
Duquesne	805	100.0%	100.0%	805	805
PECO	2,865	96.5%	80.9%	2,763	2,317
PPL	822	86.6%	73.2%	712	602
Met-Ed	1,192	93.6%	93.6%	1,116	1,116
Penelec	1,047	92.8%	92.8%	972	972
Penn Power	332	88.5%	88.5%	294	294
West Penn Power	NA	100.0%	100.0%	NA	NA

Source: EDC DS Procurement Plans, Analysis Group estimates.

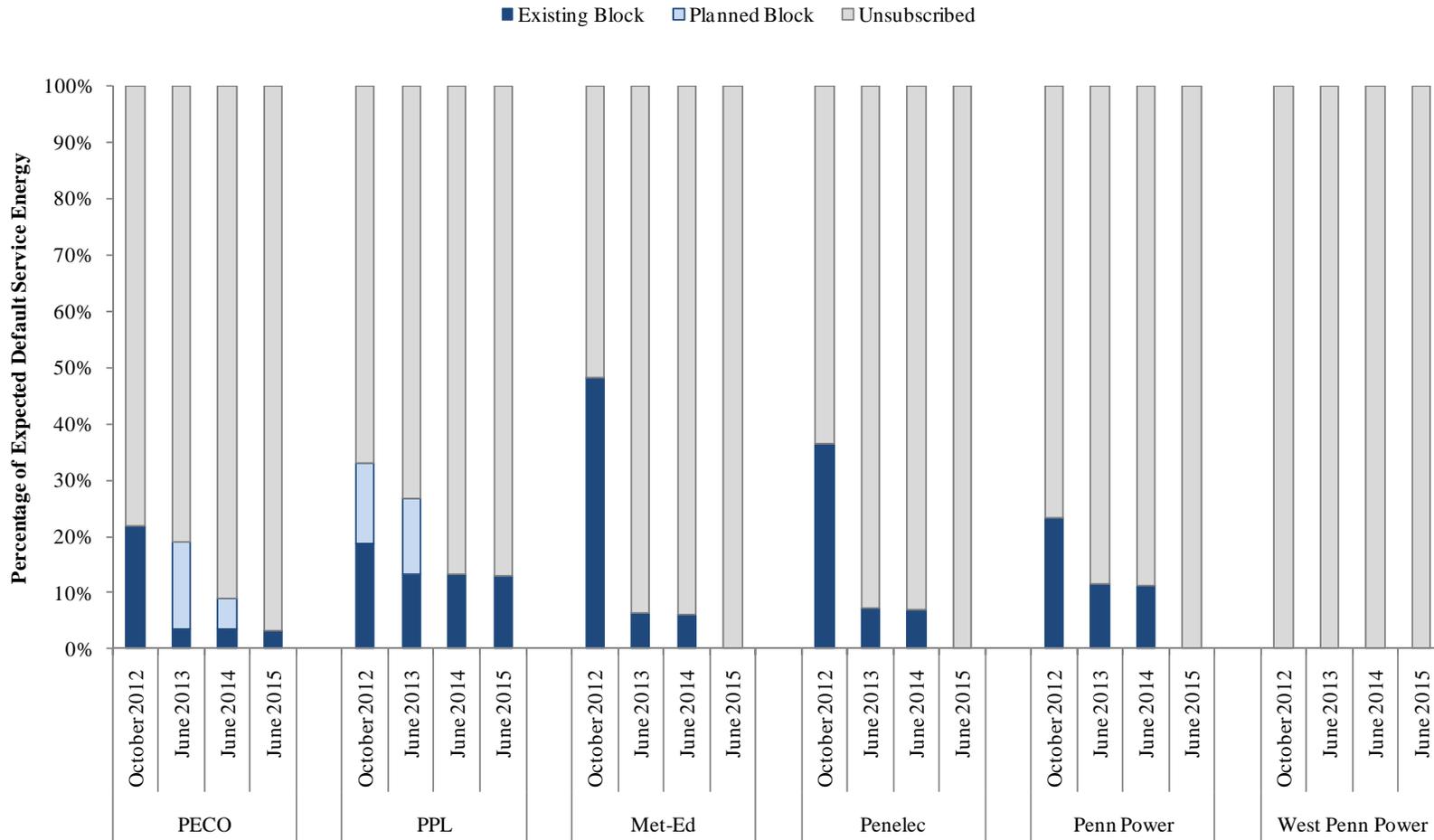
## Residential Default Service Procurement: Energy Not Committed through Block Contracts, October 2012

EDC	Energy (GWh)	Percent of October 2012 Energy		Estimated Energy Available (GWh)	
		Not Committed through Existing Contracts	Not Committed through Existing or Planned Contracts	Not Committed through Existing Contracts	Not Committed through Existing or Planned Contracts
Duquesne	805	-	-	-	-
PECO	2,865	78.0%	78.0%	2,235	2,235
PPL	822	81.1%	67.0%	667	550
Met-Ed	1,192	51.9%	51.9%	619	619
Penelec	1,047	63.6%	63.6%	666	666
Penn Power	332	76.6%	76.6%	255	255
West Penn Power	NA	100.0%	100.0%	NA	NA

Source: EDC DS Procurement Plans, Analysis Group estimates.

# Summary of DS Block Contract Commitments (cont.)

**Status of Default Service Procurements at Various Future Time Periods  
Residential Segment**



Note:

Unsubscribed energy includes energy designated for full-requirement service and spot purchase.

Sources:

EDCDS Procurement Plans, Analysis Group estimates.

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## Outline

**Recommended Auction Timing and Implications for DS Procurements**

**Recommended Auction Approach**

**Appendix**

## **Recommended Retail Opt-In Auction Approach**

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### **Direct Energy recommendations for the Retail Opt-in Auctions**

- **Definition of eligible participants and bids**
- **Auction mechanism**
- **Other key auction design parameters**
- **Customer assignment and post-auction follow-up**

**Direct Energy recommendations are consistent with high-level principles identified by Opt-In Auction Subgroup (Sept. 20, 2011)**

## Definition of Eligible Participants and Bids

- **Eligible participants for the opt-in auctions: residential and small commercial customers who are on default service at the beginning of the enrollment period**
- **Opt-in auctions will be comprised of two key elements**
  - Price: Fixed price per kWh for all customers within a EDC/rate class
  - Bonus Payment: Fixed payment made by EGSs to assigned customers within a EDC/rate class
- **Opt-In auction will be used to set the fixed price per kWh of service to opt-in customers**
  - Prior to the enrollment period, eligible participants will be informed that the fixed price will be guaranteed to be lower than the known default service rate at the beginning of the program period
  - This guaranteed one-year fixed rate per kWh will therefore be lower than the default service rate for at least six months, the time period at which DS prices may change
- **Bonus payment will be set administratively, with the fixed price per kWh set at auction:**
  - Bonus payment would be set administratively and announced before the auction enrollment period begins; consistent statewide, with separate levels for residential and commercial customers
  - Opt-in customers can switch to another EGS or to default service at any time; they will receive the bonus payment if they remain with the EGS for at least three months
  - Preliminary recommended bonus payment: Residential \$100-\$150, Small Commercial \$150-\$200
  - PUC should allow flexibility to specify the bonus payment prior to the opt-in auction enrollment period, based on market conditions, stakeholder feedback and market research

## Auction Mechanism

- **Bonus Payment: approved by PUC, announced to suppliers and participants in advance of opt-in auction enrollment period**
  - Bonus payment = fixed dollar amount per opt-in customer assigned to EGS
- **Bid amount: Fixed price per kWh determined by auction clearing price (EDC/rate-class specific)**
  - Bid is fixed price per kWh for 1-year for specified percent of opt-in customers (since opt-in customer volume will be known in advance of auction, percent or number of customers are interchangeable )
  - The known DS rate at the beginning of the program period (June, 2013) will be the auction starting price or “price to beat” and will be announced prior to the auction
- **Descending clock auction mechanism recommended**
  - Relatively simple and likely to achieve lowest price with robust competition
  - EDCs announce the starting price by rate class
  - Price is reduced in increments by the auctioneer over multiple rounds, with each bidder specifying the percent of opt-in customers they agree to serve at the current “round” price
  - Price is reduced until the percentage bids equal 100 percent of the opt-in customers, which determines the auction clearing price for the EDC/rate class
  - Competition and transparency drive auction prices downward (versus sealed bid auction or one-time bids)

## Other Key Auction Design Elements

### ■ **Opt-in auction customer limits**

- Pilot Opt-in auction: Limit pilot auction to 10%-20% of customers on default service depending on level of retail shopping and absolute number of default service customers
- Pilot learnings will be integrated into full-scale auction implementation
- Full-scale opt-in auction: No limit on number of participants in full-scale auction

### ■ **Load caps – limits on winnings of any one supplier**

- Recommend 25%-50% cap on the proportion of opt-in customers that any one supplier can be assigned, by EDC and rate class, depending on level of retail shopping and absolute number of default service customers

### ■ **Definition of small commercial customers for inclusion in the auction**

- EDCs propose (subject to PUC approval) definition of eligible small commercial customers
- Based on the smallest commercial class by EDC, or target of 25 kW threshold (whichever is larger); recommend disaggregating to high load-factor and low load-factor sub-segments

### ■ **Opt-in auction customers' options at the end of 1-year program period**

- Customer remains with EGS unless they choose another EGS or choose to return to default service
- Opt-in auction customers will be guaranteed a fixed-price offer for extending service with the EGS

### ■ **PUC should allow flexibility in specifying customer limits prior to the beginning of enrollment period and load caps prior to the auction depending on market conditions and bidder interest**

## Customer Assignment and Post-Auction Follow-up

- **At the conclusion of the Opt-In Auction customers are randomly assigned to bidders in proportion to auction winnings, subject to volume limits / caps (if any)**
  - Limits on the proportion of customers in a EDC/rate class that can be served by one EGS, and/or the total number of customers who can opt-in can be imposed during the auction
- **A bidder who wins 20% of the opt-in customers in a rate classes is randomly assigned 20% of the customers from this rate class that have opted into the program**
  - Random selection based on number of customers for residential
  - For small commercial classes, sub-segments by high-low load and/or load factors may make random assignment more equitable
- **EGSs inform assigned opt-in customers of their new generation supplier prior to service date, with service period of 1 year, and ability to change suppliers at any time**
  - Service date is common to all EGS bidders who are assigned opt-in customers
- **Assigned Opt-in program customers can change supplier at any time**
  - EGSs pay bonus to customers 3 months after service is initiated, if customer remains on EGS service at that time

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## Outline

**Recommended Auction Timing and Implications for DS Procurements**

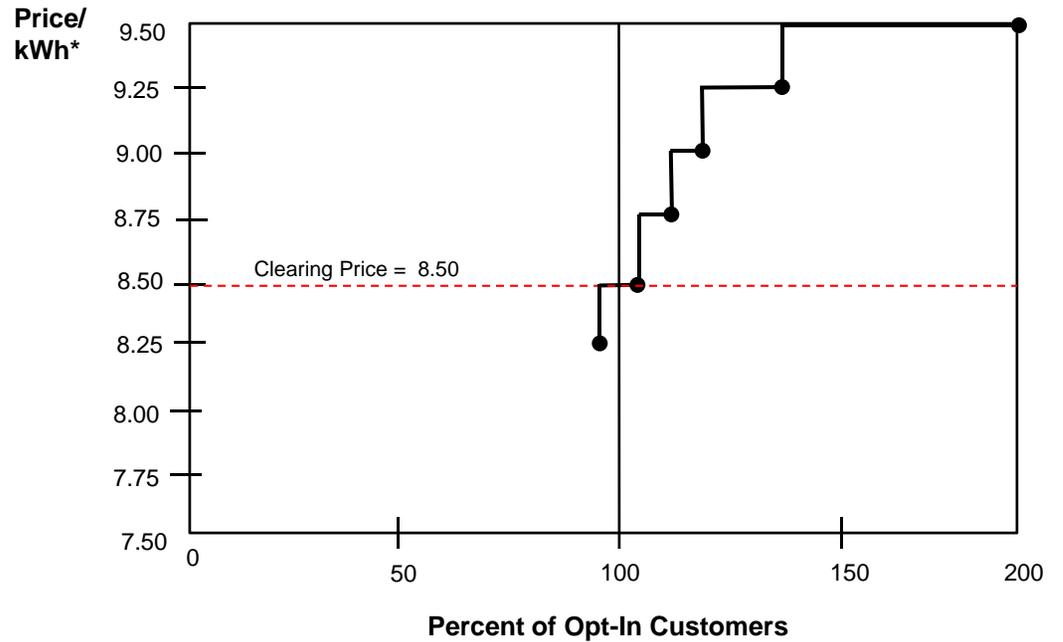
**Recommended Opt-In Auction Approach**

**Appendix**

# Descending Clock Auction Mechanism

Aggregate Bids By Round			
Round	Price	Total Shares	Status
1	9.50	200	Losing
2	9.25	140	Losing
3	9.00	120	Losing
4	8.75	110	Losing
5	8.50	104	4 Rationed
6	8.25	96	96 Winning

Winning Bidders		
Bidder	Price	Share of Opt-In Customers
1	8.50	34
2	8.50	14 + 1 rationed
3	8.50	30
4	8.50	18+ 3 rationed
Total		100



\* Bid increments are shown as uniform for illustration; In practice bid increment will decrease as volume approaches 100 percent of opt-in customers

Bidder 1		
Round	Price	Bid
1	9.50	60
2	9.25	40
3	9.00	40
4	8.75	35
5	8.50	34
6	8.25	34

Bidder 2		
Round	Price	Bid
1	9.50	40
2	9.25	30
3	9.00	20
4	8.75	20
5	8.50	20
6	8.25	14

Bidder 3		
Round	Price	Bid
1	9.50	40
2	9.25	40
3	9.00	35
4	8.75	35
5	8.50	30
6	8.25	30

Bidder 4		
Round	Price	Bid
1	9.50	60
2	9.25	30
3	9.00	25
4	8.75	20
5	8.50	20
6	8.25	18

# Example: PPL Default Service Procurements

## PPL Current Procurement Schedule Residential Segment

### Percent of Expected Default Service Energy Procured for Different Future Dates

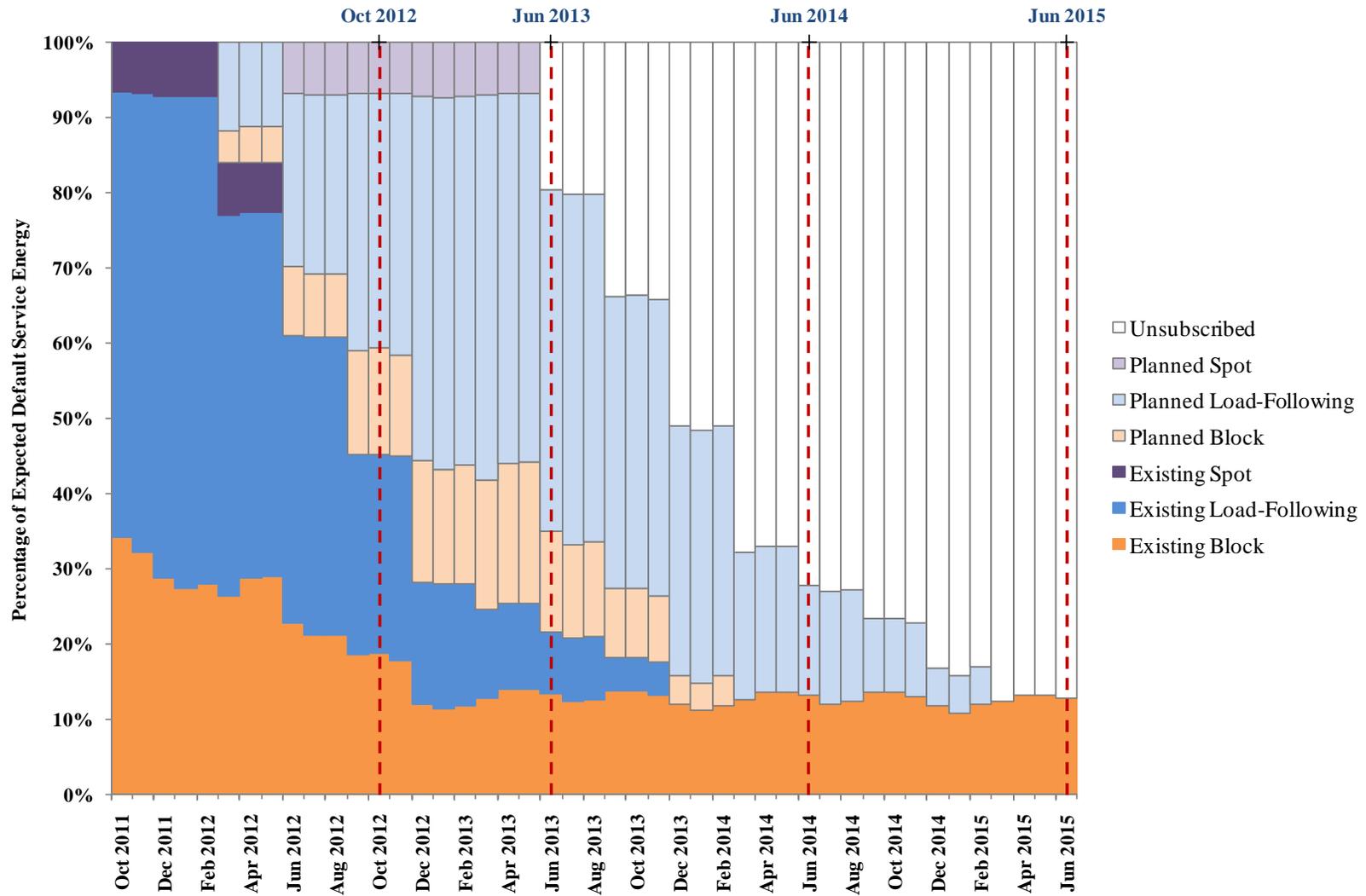
	October 2012	June 2013	June 2014	June 2015	
<b>Existing Contracts</b>					
FR	26.4%	8.2%	-	-	Load following contract percentage
Block	18.9%	13.4%	13.1%	12.9%	Block contract percentage
Existing Total	45.2%	21.6%	13.1%	12.9%	<i>Existing; only block committed</i>
<b>Planned</b>					
FR	33.9%	45.3%	14.7%	-	Load following planned procurements
Block	14.1%	13.4%	-	-	Block contract planned procurements
Planned Total	48.1%	58.7%	14.7%	0.0%	<i>Approved / planned but not contracted</i>
<b>Total</b>	<b>93.3%</b>	<b>80.3%</b>	<b>27.8%</b>	<b>12.9%</b>	
Spot	6.7%	0.0%	0.0%	0.0%	

Percent of October 2012 DSS Load not covered by contracted *block* contracts **81.1%**

Percent of June 2013 DSS Load not covered by contracted *block* contracts **86.6%**

# Example PPL Default Service Procurements (continued)

Status of Default Service Procurements Over Time: PPL, Residential



## Do Full Requirements Contracts Entail Obligations?

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**Current default service plans and contracts are designed to procure supply through load-following contracts that shift the risk for customer volumes to suppliers**

**Similarly, Default Service Plans, Settlements, RFP Materials, and FRS contracts clearly indicate that suppliers will be providing a share of Default Service load, that Default Service load is uncertain, and the no guarantees are made for certain levels of load**

**Relevant language on FRS obligations from:**

- Commission decisions
- Default service plans
- Default service procurements
- Contracts

## FRS Obligations: PA Public Utilities Commission

- The major benefit associated with the FR approach is that the procurement function is delegated to the electric supplier which is presumably better equipped with the necessary personnel and infrastructure to perform the activities associated with acquiring electric supplies in the complex and ever changing wholesale market environment. *The FR 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.*

*Pennsylvania Public Utility Commission, Final Order, Docket No. L-2009-2095604, September 22, 2011, p. 54, (emphasis added).*

# Example FRS Obligations: PPL

PPL	Statement Regarding Default Service Supplies
<b>Petition for Default Service Plan</b>	For both the Residential and Small C&I Customer Classes, each load following tranche will be a fixed percentage of the customer class' default service load with that percentage estimated to produce tranches of approximately 50 MW of load at peak, based on current PPL Electric forecasts... <i>The MW size of each tranche will depend on the Company's actual POLR load at the time of delivery.</i> (p. 28) (emphasis added)
<b>Joint Petition for Settlement</b>	For both the Residential and Small C&I Customer Classes, each load following tranche will be a fixed percentage of the customer class' default service load with that percentage estimated to produce tranches of approximately 50 MW of load at peak, based on current PPL Electric forecasts. <i>The MW size of each tranche will depend on the Company's actual POLR load at the time of delivery.</i> (p. 11) (emphasis added)
<b>Default Service Request for Proposals (RFP) Process and Rules (July 2009)</b>	<i>The actual Default Service Load for each Customer Group will depend upon many factors including, but not limited to, customer migration to EGSs and weather conditions. The maximum peak load of each Customer Group may be higher or lower than the 2011 Projected PLC. Respondents to this RFP ("RFP Bidders") are responsible for evaluating the uncertainties associated with Default Service Load for each of the Customer Groups.</i> (p. 11) (emphasis added)
<b>Default Service Program Supply Master Agreement Between PPL Electric Utilities Corp. and [Seller]</b>	<p>The amount of Monthly Settlement Load with respect to any calendar month during the delivery Period shall be determined in terms of megawatt-hours ("MWh") of energy. The MWh of Energy shall be equivalent to the amount of Energy equal to the Seller's Specified Percentage multiplied by Default Load as measured by PJM and adjusted by Buyer as appropriate." (p. 20)</p> <p>This Agreement is for the purchase and sale of Full Requirements Service that will be delivered in quantities expected to be used or sold over a defined period(s) in the normal course of business, and it is the intention at the inception and throughout the term of this Agreement and each Transaction hereunder that the Agreement will result in physical delivery and not financial settlement, and the quantity of Full Requirements Service that Seller must deliver and Buyer must receive will be determined by the requirements of the Default Service Load served by Buyer, and, as such, <i>the Agreement does not provide for an option by either Party with respect to the quantity of Full Requirements Service to be delivered or received during performance of the Agreement.</i> (p. 34) (Emphasis added)</p>

## Example FRS Obligations: PECO

PECO	Statement Regarding Default Service Supplies
<b>Joint Petition for Settlement</b>	Seventy-five percent (75%) of the Residential class load will be served through competitively procured contracts in the form of the Full Requirements SMA for load-following, full requirements default supply service. (p. 8)
<b>Request for Proposals For Full Requirements Products (Fall 2011)</b>	<p>A Fixed-Price Default Supplier serving one tranche in a particular Class provides full-requirements service for the percentage of that Class' Default Load represented by one tranche. The total number of tranches of Fixed-Price Default Load placed into each Class is based on that Class' annual Peak Load Contribution ("PLC") on the PECO system in accordance with PJM as well as the percentage of Default Load represented by Fixed- Price Default Load. The MW-Measure is calculated as the annual PLC for the Fixed- Price Default Load of the Class divided by the total number of tranches. <i>This figure is calculated for reference purposes only.</i> (p. 9) (Emphasis added)</p> <p>The actual Fixed-Price Default Load or Spot-Price Default Load for each Class will depend upon many factors including, but not limited to, customer migration to EGSs and weather conditions. The maximum peak load of each Class may be higher or lower than the PLC utilized to determine the MW-Measure of tranches for each Class. <i>RFP Bidders are responsible for evaluating the uncertainties associated with Default Service Load for each of the Classes during the supply periods.</i> (p. 10) (Emphasis added)</p>
<b>Default Service Program Supply Master Agreement Between PECO Energy and [Seller]</b>	<p>The amount of Monthly Settlement Load with respect to any calendar month during the Delivery Period shall be determined in terms of megawatthours (MWh) of Energy. The MWh of Energy shall be equivalent to the product of Specified Percentage and the Default Service Load for the Customer Supply Group. (p. 20)</p> <p>This Agreement is for the purchase and sale of Full Requirements Service that will be delivered in quantities expected to be used or sold over a defined period(s) in the normal course of business, and it is the intention at the inception and throughout the term of this Agreement and each Transaction hereunder that the Agreement will result in physical delivery and not financial settlement, and the quantity of Full Requirements Service that Seller must deliver and Buyer must receive will be determined by the requirements of the Default Service Load served by Buyer, and, as such, <i>the Agreement does not provide for an option by either Party with respect to the quantity of Full Requirements Service to be delivered or received during performance of the Agreement.</i> (p. 34) (Emphasis added)</p>