Technical Consultant's Final Report

To the Delaware Public Service Commission

Delmarva Power & Light's 2012-13 Request for Proposals for

Full Requirements Wholesale Electric Supply for Standard Offer Service

March 5, 2013

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Table of Contents

I. Executive Summary

A. Introduction

The Delaware Public Service Commission (DE PSC) retained Liberty Consulting to monitor Delmarva Power & Light's (Delmarva) 2012-13 Request for Proposals (RFP) for Full Requirements Supply for its Standard Offer Service. Liberty presents this report to the DE PSC with its findings on the process and the auction results of the RFP.

Liberty is based in Quentin, PA and has been providing regulatory consulting services to the energy industry since 1987. Its consultants are experts in electric utility operations and regulatory issues. Liberty has provided energy procurement monitoring services in multiple state jurisdictions and in a broad range of procurement formats.

B. Results

Delmarva's RFP for this period was satisfactory on every level, beginning with a healthy level of participation from regional energy providers. This is the foundation for a competitive bid process with a goal of favorable results for Delmarva customers. The RFP process was run successfully from start to finish, and the ultimate winning bids were favorable in that they were consistent with expectations given current regional market conditions.

Average winning bid prices for this RFP are shown in Table 1, along with the percentage change in price relative to the price it replaces.

Table 1: Weighted Average Winning Bid Price ($/MWh)

Customer Class	2012-13	Change	% Change
RSCI	$76.77	$(13.18)	-14.7%
MGS	$78.16	$5.22	7.2%
LGS	$73.95	$1.98	2.8%
GSP	$70.14	$(0.48)	-0.7%

The customer bill impact of the winning wholesale energy prices are estimated by Delmarva to be as follows in Table 2. More detail on these estimated impacts is provided in Section III: Auction Results & Prices.

Table 2: Estimated Average Monthly Customer Bill Impact[1]

Class	01/01/13	06/01/13	Change	% Change
RS	$ 129.43	$ 125.12	$ (4.31)	-3.3%
SGS	$ 108.87	$ 104.55	$ (4.32)	-4.0%
MGS	$ 937.77	$ 982.84	$ 45.07	4.8%
LGS	$ 13,408.14	$ 13,705.59	$ 297.45	2.2%
GS-P	$ 37,978.33	$ 37,785.27	$ (193.06)	-0.5%

C. Findings & Conclusions

Liberty monitored the auction process in its entirety. Pre-bid monitoring included monitoring of announcements, bidder communication, bidder certification, bid system training, and bid system performance and market assessment. Bid day monitoring included live monitoring of the auction on-site, verification of bids, notification of winners, and contract signing.

Liberty has concluded that each element of entire process, including both the Tranche 1 and Tranche 2 auctions, was run professionally and resulted in bids that were consistent with expectations based on market conditions. Concerning the process and results, Liberty finds no areas in need of attention at this time.

II. RFP Overview

Since 2006, Delmarva has performed an RFP to procure wholesale energy to serve its Standard Offer Service (SOS) customers. SOS customers receive comprehensive default energy service from Delmarva vs. a non-utility, third party supply for generation. Each year, blocks of power to meet the SOS load are purchased from the winning bidders of this multi-tranche auction. The process consists of two tranches, in November and February, and a third, if needed. In this year's process, a third tranche was not needed. The final bid plans defining blocks were provided by Delmarva and are shown in Appendix 1 (Tranche 1) and Appendix 2 (Tranche 2).

Blocks are bid for Residential and Small Commercial and Industrial (RSCI), Medium General Service (MGS), Large General Service (LGS) and General Service-Primary (GS-P). Auctions for each block are held electronically with a web-based system provided by World Energy. Bidders apply for approval, and approved bidders are granted access to and training on the World Energy platform. Tables 3 and 4 display the quantity and size of each block by customer class for Tranche 1 and 2, respectively.

[1] These comparisons are estimates and are subject to change as the adjustments to transmission, procurement cost, and reasonable allowance for retail margin are not included for the supply year beginning 6/1/2013.

Table 3: Tranche 1 Bid Plan

Service Type	Blocks	Block Size (MW)
Residential and Small Commercial & Industrial (RSCI)	3	48.3
Medium General Service – Secondary (MGS)	2	45.9
Large General Service – Secondary (LGS)	1	16.3
General Service Primary (GSP)	1	18.1

Table 4: Tranche 2 Bid Plan

Service Type	Blocks	Block Size (MW)
Residential and Small Commercial & Industrial (RSCI)	3	48.2
Medium General Service – Secondary (MGS)	1	45.3

Key to a competitive RFP for power is active participation from power suppliers. In order to ensure adequate participation, Delmarva announces its RFP by issuing a press release to over 90 companies directly, and to media channels. As a result, thirteen companies submitted an expression of interest in this RFP, and 8 ultimately became eligible. Table 5 displays historical participation since 2006, up to and including this most recent auction.

Table 5: Bidder Participation

Participants	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
EOIs	20	18	26	24	12	17	13
Eligible Bidders	14	12	12	11	8	8	8
Actual Bidders	11	11	9	9	8	8	8

Table 6 lists the organizations who successfully bid (won) any of the blocks in Tranche 1 or 2. It is worth noting that 6 of the 8 eligible bidders did win at last one block. This diversity of suppliers is a positive outcome. This diversity is displayed further in Table 7, which displays the percentage of MWs won for delivery in the 2013-14 period, which includes RSCI blocks won in the prior two years which serve RSCI in 2013-14.

Table 6: Tranche 1 & 2 Winning Bidders

Company
DTE Energy Trading, Inc.
Exelon
HESS Corporation
Macquarie Energy LLC
NextEra Energy Power Marketing, LLC
Shell Energy North America (US), L.P.

Table 7: Suppliers for 2013-14

Supplier	%
Constellation	24.9%
Hess	21.0%
DTE	16.4%
Shell	14.7%
Macquarie	9.4%
NextEra	9.2%
Exelon	4.5%
Total	100.0%

III. Auction Results & Prices

A. Bid Activity

Each of the blocks in each of the tranches received ample bids to create a competitive environment and prices that reflect the competition. Liberty attributes this bid activity to a combination of excellent information provided to power suppliers, and a well-run, relatively transparent auction platform provided by World Energy. World Energy's system provides useful bidder feedback to induce competitive bidding behavior. The bid activity for Tranche 1 and Tranche 2 are displayed in Tables 8 and 9, respectively.

Table 8: Tranche 1 Bid Activity

Class/Block	Bidders	Bids
RSCI - Block 1	7	19
RSCI - Block 2	7	13
RSCI - Block 3	7	13
MGS - Block 1	6	12

MGS - Block 2	6	9
LGS	4	7
GSP	4	6

Table 9: Tranche 2 Bid Activity

Class/Block	Bidders	Bids
RSCI - Block 1	6	14
RSCI - Block 2	5	9
RSCI - Block 3	6	10
MGS - Block 1	4	9

B. Prices

Winning bid prices for each block are provided in Table 10. The ultimate winning prices for each block of each tranche were consistent with the expectations set forth by Liberty and World Energy in Liberty's pre-bid market assessments.

The RSCI class averaged $76.77 per MWH, which reflects a 14.7% decrease from the 2009-10 auction prices that they replace. MGS and LGS prices were higher than those of 2011-12 by 7.2% and 2.8%, figures largely influenced by the capacity component of price, to be discussed in more detail in the next section. GS-P service bids came in 0.7% lower than the 2011-12 values.

Table 10: Weighted Average Winning Bid Prices ($/MWh)

Customer Class	2009-10	2010-11	2011-12	2012-13	Change	% Change[2]
RSCI	89.95	85.89	83.02	76.77	(13.18)	-14.7%
MGS	87.37	72.30	72.94	78.16	5.22*	7.2%
LGS	82.38	68.41	71.97	73.95	1.98	2.8%
GSP	80.44	65.95	70.62	70.14	(0.48)	-0.7%

**Due to rounding*

C. Rate Impacts

In an effort to gauge the impact of the most recent auction on its SOS customers, Delmarva has developed a model to calculate the estimated changes to average monthly customer bills by customer class. It is important to note that these are estimates and should not be construed as exact or guaranteed results based only on the wholesale prices of the winning bids as described previously, and are displayed in Table 11. These results are consistent with expectations per the current regional power market conditions, and will be explained in more detail Section IV: Analysis.

[2] Change and % Change reflect the differences in the 2012-13 RFP prices as compared to the year they replace. For RSCI, the 2009-10 year values are replaced, since RSCI uses a 3-year contract term. This also means that the 2012-13 RFP numbers replace only one-third of the power used by RSCI.

Table 11: Estimated Average Monthly Bill Comparison

Class	01/01/13	06/01/13	Change	% Change
RS	$ 129.43	$ 125.12	$ (4.31)	-3.3%
SGS-ND	$ 108.87	$ 104.55	$ (4.32)	-4.0%
MGS	$ 937.77	$ 982.84	$ 45.07	4.8%
LGS	$ 13,408.14	$ 13,705.59	$ 297.45	2.2%
GS-P	$ 37,978.33	$ 37,785.27	$ (193.06)	-0.5%

IV. Market Analysis

A. Overview

As stated earlier in this report, the winning bid prices were within range of those expected, and reflect market conditions. Liberty has collected market information on energy, capacity, ancillary services which are components of the bid prices.

B. Energy Market

The outlook for regional energy markets was consistent between Tranche 1 and 2, with the latter being slightly lower on a per MWh basis. The market for energy in PJM is currently stable, and futures prices reflect seasonal patterns and growth rates that are to be expected.

Liberty has reviewed futures prices at both the PJM Western Hub, which is a very robust pricing point, as well as in the Delmarva Zone. Western Hub Prices (Exhibit 1) are available throughout the delivery term of this SOS, while Delmarva futures only go out to May of 2014 (Exhibit 2).

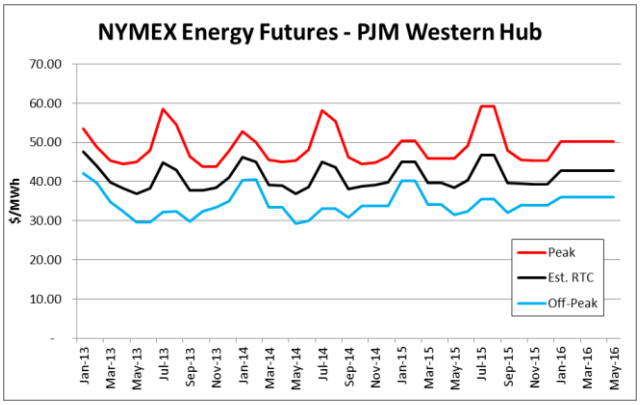
Both the Western Hub and Delmarva futures prices exhibit expected behavior with respect to seasonality and escalation. The prices remain relatively flat and uneventful over the periods covered by this RFP. This is true of both the peak and off-peak prices over this period, as well as the calculated estimate of round-the-clock ("RTC") prices developed by Liberty from the peak and off-peak numbers.

Exhibit 3 displays a plot of Delmarva Zone RTC prices against PJM Western Hub prices, which clearly reflects the expected higher prices in Delmarva, and the consistency of that locational spread. This fact should help to provide confidence in the stability of Delmarva prices as the consistency between the two zones will continue—and the Western Hub prices remain very stable.

Overall, forward prices for wholesale energy in PJM have dropped since Tranche 1. This is a favorable trend and is shown in both the opening bid prices and expected bid prices. However, it is worth noting that some of the benefit from this trend will be offset by a slight upward adjustment in risk premiums applied to the MGS to reflect the higher likelihood of migration to competitive supply.

Exhibit 1: Energy Forward Prices – PJM Western Hub

Prices as of Tranche 1



Prices as of Tranche 2

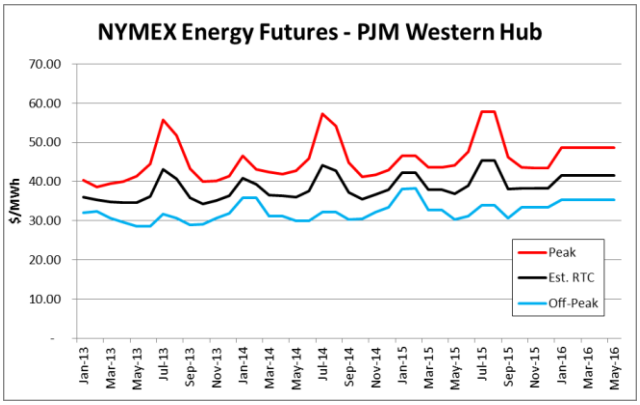
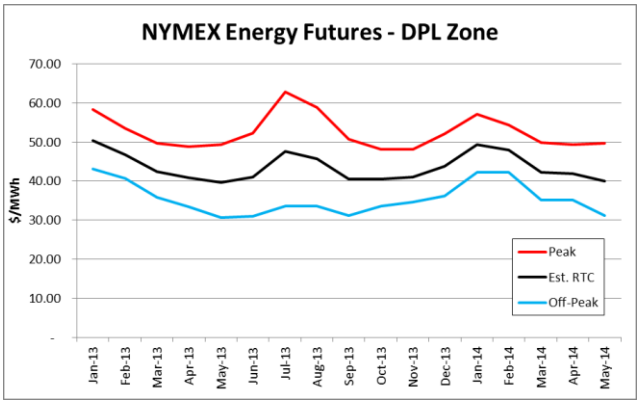


Exhibit 2: Energy Forward Prices – DPL Zone

Prices as of Tranche 1



Prices as of Tranche 2

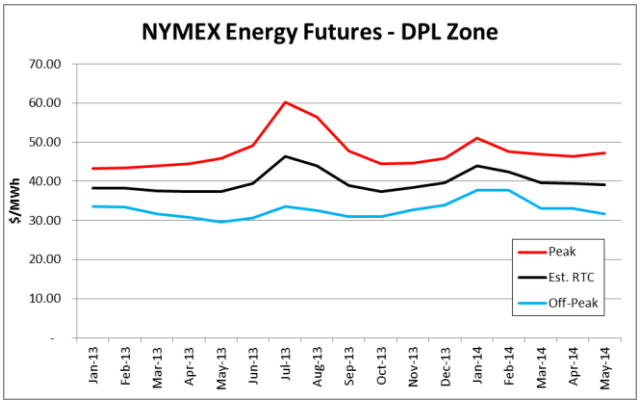
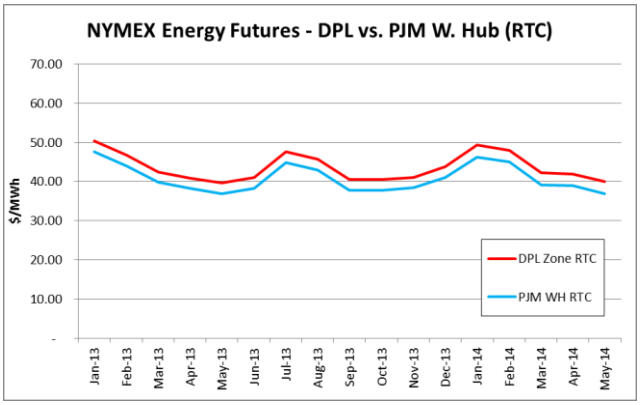
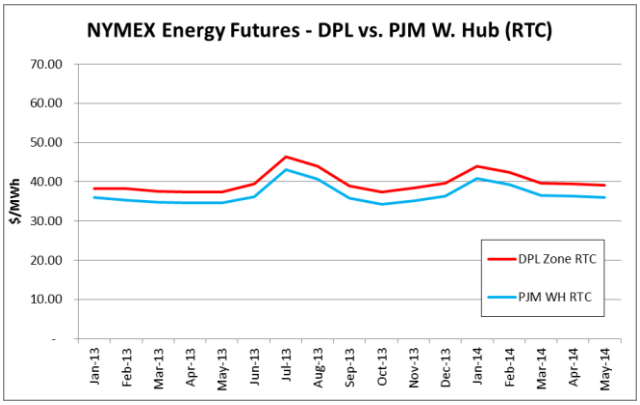


Exhibit 3: Energy Forward Prices – DPL vs. PJM Western Hub

Prices as of Tranche 1



Prices as of Tranche 2



C. Fuel Market Outlook

As an extension of Liberty's review of energy forwards, we also reviewed the underlying fuel markets that drive energy prices by assessing forward markets. Liberty has reviewed NYMEX futures prices for the primary fuel commodities in PJM—natural gas, coal and oil. Exhibit 4 displays the outlook for gas prices at Henry Hub, which reflects normal seasonal behavior and reasonable escalation. Exhibit 5 for coal displays fairly smooth price escalation that is expected and reasonable. Oil (Light Sweet Crude, Exhibit 5) have in fact increased since the Tranche 1 auction, but since oil-fired generation plays such a miniscule role in PJM, it does not impact our auction materially.

Exhibit 4: Henry Hub Gas Forward Prices

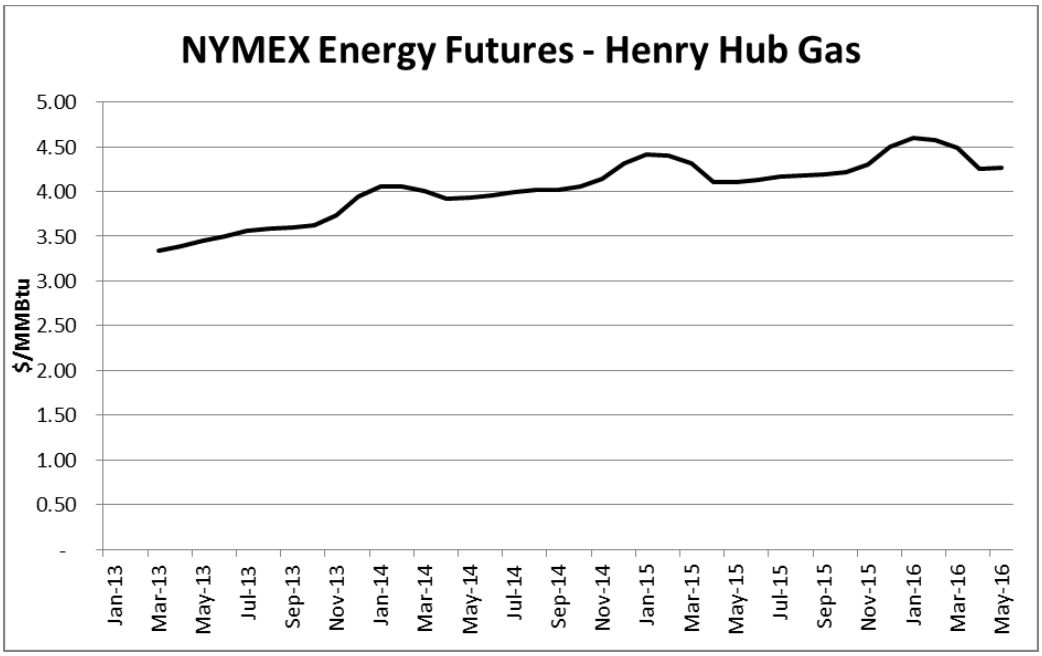


Exhibit 5: Central Appalachian Coal Forward Prices

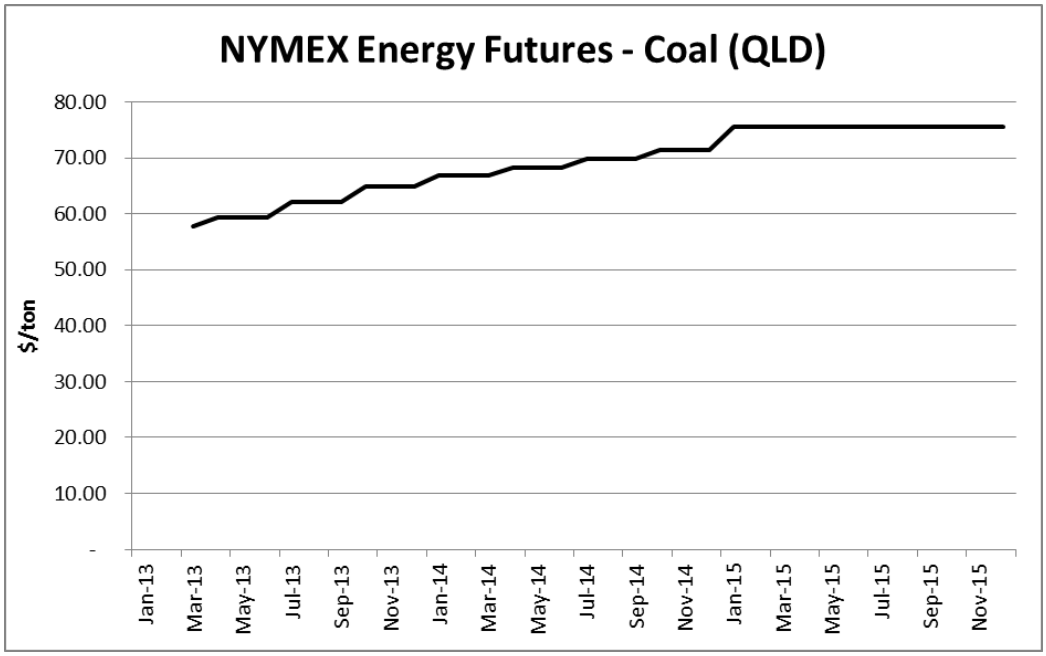
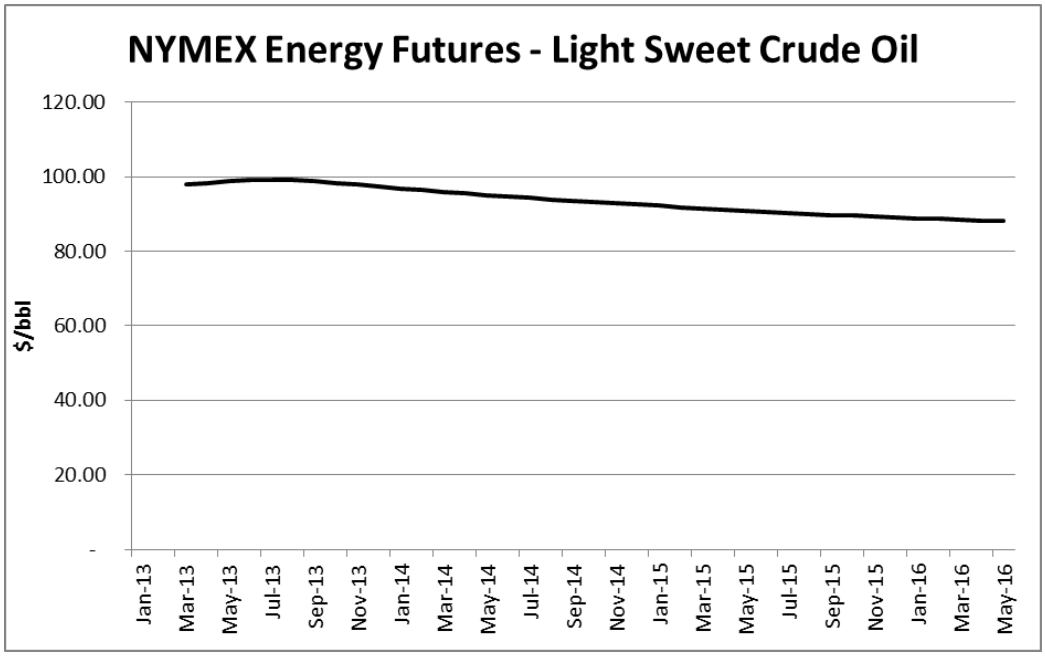


Exhibit 6: Crude Oil Forward Prices



D. Capacity Market

PJM uses the Reliability Pricing Model (RPM) for its capacity market. Results of the RPM auction reflect a jump in DPL Zone prices from a level of $169.63/MW-day in the 2012/2013 base residual auction to $245.09/MW-day in the 2013/2014 auction. This has caused only a slight increase in the target SOS prices for the RSCI class since this higher capacity price is only one of the three years of data used. The

2014/2015 auction results show a substantial decrease in DPL Zone price to $142.99, and the 2015/16 price is $165.78.

However, the MGS class SOS period is for just 12 months, and therefore realizes a greater impact from the higher 2013/14 capacity prices. The MGS class bears most of this increase, offsetting much of the year-over-year savings from lower wholesale energy prices.

The reason for the greater impact to MGS is that it has experienced a reduction in its load factor. To illustrate from Tranche 1, year over year, MGS peak load contribution (PLC) grew from 133 to 138 MW, while its energy fell from 663 GWh to 615 GWh. Thus, MGS takes a larger slice of the spike in capacity prices due to its PLC, while having fewer MWHs over which to spread this cost.

E. Ancillary Services Market

Ancillary service-related costs are reflected by the bidders, but do not make up a large portion of or impact on SOS prices. Ancillary services cost increased slightly, but are relatively insignificant when compared to Capacity and Energy prices, and did not have a material impact on the Delmarva's customers.

V. Process Analysis

Liberty was assigned the task of monitoring Delmarva's RFP process with respect to a number of specific administrative requirements. The following is an assessment of each area:

A. Notification of the RFP to the market place

In order to ensure adequate participation, Delmarva announces its RFP by issuing a press release to over 90 companies directly, and to media channels. This announcement is displayed in Appendix 3. It included basic information to prospective bidders and instructions for acquiring more information and registering on Delmarva's RFP website. As a result, thirteen companies submitted an expression of interest in this RFP, and 8 ultimately became eligible. Liberty finds that this task was performed to expectations.

B. Information dispersal

Delmarva provided all materials for expressing interest and registering for the auction on its RFP website. Once approved, bidders were able to acquire all key administrative, technical, and schedule information. Liberty finds that information was dispersed appropriately and that the website, as foundation for information dispersal, worked according to plan.

Delmarva also held a webinar with detailed information on the entire RFP process, which was attended by 15 individuals. The webinar included a review of changes since the previous RFP and instructions for all aspects of RFP participation. Liberty found that the webinar was run well and was informative.

C. Determination of applicant eligibility

Interested bidders were required to submit to Delmarva their Credit Application, Confidentiality Agreement, PJM certification, and FERC certification by the deadline. It was ultimately determined that 8 of the 13 interested parties became eligible to bid.

Liberty finds that this eligibility process was performed to standards.

D. Bid ranking

On the day of each auction tranche, each block is made available on a scattered 15-minute ending time, so as to allow bidders time to evaluate each offering. Each RSCI block was offered first, followed in order my MGS, LGS and finally the GS-P block.

Liberty was present in Baltimore with Delmarva and World Energy representatives, and were joined by DE PSC staff by teleconference. After all blocks ended, Liberty reviewed each bid with Delmarva and confirmed the winning bid, the organization, and the price.

E. The awarding of transactions

After the completion of each tranche, and review between Delmarva and Liberty, Delmarva contacted each bidder. Winning bidders were notified and were provided with contracts customized for their organization, bid size and winning bid price.

F. Full Requirements Service Agreement signing

Delmarva worked with each winning bidder to complete the Full Requirements Service Agreements, and provided copies of each executed agreement to Liberty for review. On the Thursday after each auction, Liberty presented the auction results to the DE PSC, and these were subsequently approved.

VI. Conclusions

Liberty has concluded that the entire process, including both the Tranche 1 and Tranche 2 auctions were run professionally and resulted in bids that were consistent with expectations based on market conditions. Liberty finds no areas in need of attention at this time, and therefore makes no recommendations on areas in need of improvement.

Appendix 1: Tranche 1 Final Bid Plan

Delmarva DE SOS RFP 2013
Final - Tranche 1

	as of:	11/19/2012
	SOS	Eligible
Service Type	**PLC (MW)**	**PLC (MW)**
Residential and Small Commercial & Industrial	289.5	308.3
Medium General Service -Secondary	137.8	268.9
Large General Service -Secondary	16.3	119.9
General Service - Primary	18.1	416.9
Total	**461.7**	**1114.0**

	Contract Term		
Service Type	**12 Month**	**36 Month**	**Total**
	6/1/13-5/31/14	**6/1/13 - 5/31/16**	
Residential and Small Commercial & Industrial		100.0000%	100.0%
Service Classifications: R, R-TOU, R-TOU-ND, R-TOU-SOP			
SGS-ND, SGS-SH, SGS-WH, OL, ORL, X.			
Approximate Total PLC		289.5	289.5
Block Size %		5.5556%	
Approximate Block Size (MW)		48.3	
Total Number of Blocks		6	
Tranche 1 blocks		3	
Tranche 2 blocks		3	
Medium General Service - Secondary	100.0%		100.0%
Service Classifications: MGS-S			
Approximate Total PLC	137.8		137.8
Block Size %	33.3333%		
Approximate Block Size (MW)	45.9		
Total Number of Blocks	3		
Tranche 1 blocks	2		
Tranche 2 blocks	1		
Large General Service - Secondary	100.0%		100.0%
Service Classifications: LGS-S			
Approximate Total PLC	16.3		16.3
Block Size %	100.0%		
Approximate Block Size (MW)	16.3		
Total Number of Blocks	1		
Tranche 1 blocks	1		
General Service - Primary	100.0%		100.0%
Service Classifications: GS-P			
Approximate Total PLC	18.1		18.1
Block Size %	100.0%		
Approximate Block Size (MW)	18.1		
Total Number of Blocks	1		
Tranche 1 blocks	1		

Appendix 2: Tranche 2 Final Bid Plan

Delmarva DE SOS RFP 2013
Final - Tranche 2

	as of:	1/28/2013
	SOS	Eligible
Service Type	PLC (MW)	PLC (MW)
Residential and Small Commercial & Industrial	288.9	309.2
Medium General Service -Secondary	135.8	268.8
Large General Service -Secondary	N/A	N/A
General Service - Primary	N/A	N/A
Total	**424.7**	**578.0**

	Contract Term		
Service Type	**12 Month**	**36 Month**	**Total**
	6/1/13-5/31/14	**6/1/13 - 5/31/16**	
Residential and Small Commercial & Industrial		100.0000%	100.0%
Service Classifications: R, R-TOU, R-TOU-ND, R-TOU-SOP			
SGS-ND, SGS-SH, SGS-WH, OL, ORL, X.			
Approximate Total PLC		288.9	288.9
Block Size %		5.5556%	
Approximate Block Size (MW)		48.2	
Total Number of Blocks		6	
Tranche 1 blocks		3	
Tranche 2 blocks		3	
Medium General Service - Secondary	100.0%		100.0%
Service Classifications: MGS-S			
Approximate Total PLC	135.8		135.8
Block Size %	33.3333%		
Approximate Block Size (MW)	45.3		
Total Number of Blocks	3		
Tranche 1 blocks	2		
Tranche 2 blocks	1		

Appendix 3: RFP Announcement

delmarva power

A PHI Company

NEWS RELEASE

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FOR IMMEDIATE RELEASE
October 3, 2012

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Delmarva Power Issues RFP for Wholesale Electric Power for Delaware Customers

Pre-Bid Conference to be held Oct. 24

NEWARK, Del. – Delmarva Power today announced a Request for Proposals (RFP) for wholesale electric power supplies to meet its Standard Offer Service (SOS) obligation in the state of Delaware. Standard Offer Service is the market-based, fixed-price electricity Delmarva Power buys on behalf of its customers who do not purchase their electricity from competing retail suppliers and who do not choose the option of hourly-priced service.

Delmarva Power is requesting proposals to supply approximately 470 megawatts (MW) of electricity. Peak load contributions by customer class include approximately 290 MW for the combined Residential, Small Commercial and Industrial customers; 140 MW for the Medium General Service-Secondary (MGS-S) customers; 15 MW for the Large General Service-Secondary (LGS-S) customers; and 25 MW for the General Service-Primary (GS-P) customers.

A pre-bid conference for prospective bidders will be held on Oct. 24, 2012. The conference will review the general RFP structure, process improvements, the Delmarva Power bid plan for its Delaware customers and the power supply contract.

The RFP is being issued in accordance with the Delaware Public Service Commission (DPSC) terms and conditions established in Docket No. 04-391 for the competitive provision of electric service beginning on and after June 1, 2013. It is structured as a multi-phase bidding process with pre-bid preparation activities which started on Oct. 3, 2012. The first round of bidding will begin on Nov. 26, 2012 and the final round will conclude in early February 2013. The winning bidders will be awarded service contracts to supply electricity for Delmarva Power customers beginning on June 1, 2013. Further details regarding the RFP or the pre-bid conference can be found by visiting the RFP website: www.delmarva.com/derfp. The website will provide interested parties with additional contact information.

Delmarva Power, a public utility owned by Pepco Holdings, Inc. (NYSE: POM), provides safe and reliable energy to nearly 500,000 electric delivery customers in Delaware and Maryland and over 123,000 natural gas delivery customers in northern Delaware.