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Final Report

**Post-Auction Report on the New Jersey Utilities'  
Basic Generation Service Auction Processes:  
BGS Supply Period Beginning June 1, 2004**

Redacted Version

Submitted to:

New Jersey Board of Public Utilities  
Newark, New Jersey

Submitted by:

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Boston, Massachusetts

CRA Project D04054-00

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# Table of Contents

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	<u>Page</u>
Table of Contents .....	i
Executive Summary .....	1
1. Introduction .....	4
2. Summary of the BGS Auctions .....	7
3. Assessment of the BGS Auctions .....	12
4. Comparison of Bidder Participation Across Years .....	19
5. Analysis of BGS Auction Prices .....	21
6. Recommendations to Improve Future Auctions .....	31
Appendix A: Product Prices and Tranches by Round .....	A1
Appendix B: Post-Auction Checklists .....	B1

## Tables

Table 1. Summary of BGS-FP Auction .....	8
Table 2. Summary of BGS-CIEP Auction.....	10
Table 3. Results of RECO's BGS RFP for Load Served Through NYISO.....	11
Table 4. Auction Prices and FMPs .....	22
Table 5. PJM West Day Ahead Index Prices, Statistics by Year.....	29



## Executive Summary

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This is the final report of Charles River Associates (CRA) to the New Jersey Board of Public Utilities (the BPU, or the Board) regarding our review and oversight of the New Jersey electric utilities' Basic Generation Service (BGS) procurement auction process for the BGS supply period beginning June 1, 2004 (Docket No. EO03050394).

### Background on BGS

#### *Procurement for BGS Supply Period From August 2002 Through July 2003*

CRA was first retained by the New Jersey Board of Public Utilities in September 2001 to oversee and monitor the auction process proposed by four electric distribution companies (EDCs) in New Jersey<sup>1</sup> to procure supplies for Basic Generation Service in Year 4 of the Transition Period (August 2002 through July 2003) as part of the state's electricity restructuring. Among other tasks, CRA was responsible for: providing advice on BGS proposals; providing advice on BGS auction processes, designs, and rules; monitoring the marketing of the auction; reviewing the data and information exchange; monitoring efforts to educate bidders on the auction process and rules; monitoring the administration of the auction; advising on the final auction results; and, providing a report on the auction results with recommendations to improve future auctions.

The BGS auction for Year 4 of the Transition Period concluded in February 2002 and upon the completion of bidding CRA recommended to the Board that it certify the auction results, which it subsequently did. This first BGS auction generally was regarded as a success.

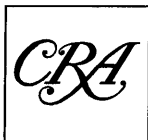
#### *Procurement for BGS Supply Period Beginning August 1, 2003*

In September 2002, CRA was retained again by the BPU to provide similar assistance with regard to auction processes proposed by the EDCs<sup>2</sup> for Year 1 and Year 2 of the Post-Transition Period. While the process outlined in the EDCs' *Proposal for Basic Generation Service Beyond July 31, 2003* was similar in many respects to the first BGS auction, there were some significant new variations, including the linking of auction results to consumer prices and the separation of

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<sup>1</sup> The four EDCs were Public Service Electric and Gas Company (PSE&G), GPU Energy, Atlantic City Electric Company (ACECO) d/b/a Conectiv Power Delivery, and Rockland Electric Company (RECO).

<sup>2</sup> The same four EDCs as for the prior year, except that GPU Energy was now known as Jersey Central Power & Light Company (JCP&L).



## **Executive Summary**

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large customers from small customers in two distinct BGS auctions. Also, JCP&L proposed to implement a "retail pilot program" and to hold a separate bidding mechanism to procure supplies of "green energy." In addition, RECO proposed to utilize an RFP procurement process for about ten percent of its load (specifically, load in its Central and Western Divisions served through the NYISO rather than through PJM).

The BGS auctions for the supply period beginning August 1, 2003 concluded on February 4, 2003. Upon the completion of bidding CRA recommended to the Board that it certify the auction results, which it subsequently did.

### **CRA's Role in Procurement for BGS Supply Period Beginning June 1, 2004**

In its advisory role leading up to the February 2004 auctions, CRA reviewed BGS proposals with respect to Board objectives, provided advice to the Board in the process of approving the BGS processes and rules, and reviewed the BGS auction processes for reasonableness of administration, guidelines for setting the starting prices and auction volumes, the default or contingency plan, and the proposed BGS contracts.

In its monitoring role of the FP (Fixed Price) and CIEP (Commercial and Industrial Energy Price) auctions, CRA monitored the marketing and information efforts; advised the BPU on the significance of the indicative bids, the auction starting prices, and the tranche sizes; monitored the administration of the auctions, including speed of rounds and price tick down for each round; monitored the bidding for possible anticompetitive behavior; and advised the BPU on whether the final auction results reflected the approved auction processes. Finally, with this report, CRA assesses the auction results and provides recommendations to improve future auctions.

As requested by Board Staff, CRA's monitoring activities for the RECO RFP process were less intensive.

### **CRA's Findings and Recommendations**

CRA determined that the implementation of the BGS auction process for Year 2 of the Post-Transition Period sufficiently met the criteria CRA proposed be used to evaluate the process. Lessons learned from the experiences of the BGS auctions held in 2002 and 2003 (including past CRA recommendations) led to very smooth auction processes this year. Of course improvements are always possible. As discussed in section 6, we believe that continued attention to the points below will contribute to repeated success in future auctions.



## Executive Summary

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- Decisions on all issues that may affect the auction should be finalized as early as possible. We note that there appeared to be less last-minute lobbying efforts this year by prospective bidders, which we consider a positive development.
- Schedules and deadlines for providing data and information should be adhered to as faithfully as possible, and when delays do occur, notice should be provided immediately as to when the missing data and information will be made available. We observed very few delays this year.
- Rigorous stress testing of the auction software should occur well before the auctions are to commence and advance contingency planning — including the preparation of “stock messages” — should occur well before the auction to better ensure that bidders are fully and clearly informed in the event of abnormal occurrences, such as auction software failures. During the trial and actual auctions this year we observed no software or system problems.
- The number of EDC representatives who will have access to sensitive auction information should be minimized to reduce the real or perceived likelihood of either intentional or inadvertent improper exchanges of information.
- More precise protocols should be developed for the process of releasing information immediately after the Board’s approval (assuming this is the case) of the auction results.



## 1. Introduction

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The New Jersey Board of Public Utilities retained Charles River Associates to review and oversee the New Jersey Electric Utilities' Basic Generation Service auction processes for Year 2 of the Post-Transition Period (Docket No. EO03050394). This report is CRA's post-auction assessment of those BGS auction processes.

Following the successful BGS auctions held in February 2002 and February 2003, the Board's Decision and Order of June 18, 2003, directed the EDCs to file by July 1, 2003 BGS procurement proposals for Year 2 of the Post-Transition Period and beyond. The proposals filed by the EDCs were similar to the BGS auctions held in February 2003.

As in previous years, opportunities for interested parties to conduct discovery and file comments were provided through the July-September period. Legislative Board hearings were held on September 10, 2003. Two informal conferences also were held to develop consensus on issues related to the Supplier Master Agreements.

CRA reviewed submissions and comments, participated in discussions with the representatives of and consultants to the Ratepayer Advocate, and provided input to Staff as it prepared its submissions and comments.

On October 22, 2003, the Board approved the joint proposals subject to certain modifications and directed the EDCs to submit compliance filings by November 7, 2003.

By its Order of December 2, 2003, the Board approved (with modifications and clarifications) the EDCs' joint proposals for two descending clock auctions to secure electricity for Year 2 of the Post-Transition Period (June 1, 2004 through May 31, 2005), as well as a portion of the electricity required for Year 3 and Year 4 (ending May 31, 2006 and 2007, respectively). The Board directed the EDCs to procure approximately one-third of the BGS-FP load for a 12-month period and one-third for a 36-month period. As well, the Board approved a pilot program for three tranches of BGS load that would otherwise have been included in JCP&L's one-year FP product: these tranches were withheld from the auction and will be served through JCP&L's must-run non-utility generation (NUG) contracts and priced at the winning auction price for JCP&L's one-year FP tranches. The Board also directed the EDCs to procure one-hundred percent of the BGS-CIEP load for a 12-month period. Additionally, the Board authorized RECO's proposed RFP process for its non-PJM load.

Bids for the RECO RFP process were submitted on January 22, 2004, and the Board certified the results of this process through its Order of January 28, 2004.



## Introduction

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Both the BGS-CIEP and BGS-FP auctions began on the morning of February 2, 2004. The BGS-CIEP auction closed after 52 rounds on February 6, 2004. The BGS-FP auction closed on February 10, 2004 after 71 rounds. The Board certified the results of both auctions at its Board Agenda Meeting of February 12, 2004. In both cases the Commissioners voted unanimously for approval.

CRA's efforts in assisting the Board through this process are summarized as follows:

- Reviewing submissions from the EDCs and other parties and advising the Board as to whether the proposed energy procurement processes would likely achieve the Board's objectives.
- Preparing memoranda and engaging in discussions with Staff on various specific issues, including uniform versus discriminatory pricing schemes and price "tick-down" rules.
- Monitoring the marketing and communications efforts of the EDCs and their Auction Manager (NERA — National Economic Research Associates), including attending bidder information sessions.
- Reviewing draft auction rules, protocols, and other documents, and providing input and advice to the Auction Manager.
- Assisting Staff with its review of indicative bids, starting prices, and auction volumes.
- Participating in and monitoring trial auctions.
- Monitoring the FP and CIEP auctions and, after the conclusion of bidding, advising the Board as to whether the final results reflect the approved auction processes and generated an outcome that is consistent with competitive bidding, market determined prices, and efficient allocation of the rights and obligations to supply BGS-FP and BGS-CIEP loads.
- Participating with Board Staff, the EDCs, and the Auction Manager in a post-auction review of the BGS auction process.

CRA's final task is the preparation of this post-auction report, which is organized as follows.

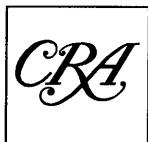
- Section 2 summarizes the auctions in table format, highlighting key indicators and measures.



## **Introduction**

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- Section 3 provides our assessment of the BGS auctions, focusing on key issues and questions.
- Section 4 compares bidder participation across the three years in which BGS auctions have been held.
- Section 5 discusses our analysis of BGS auction prices.
- Section 6 contains our recommendations for improving future auctions.
- Appendix A includes charts showing round-by-round product prices and the number of active tranches statewide.
- Appendix B includes our post-auction checklists that were delivered to the BPU at the close of the auction.





## 2. Summary of the BGS Auctions

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### 2.1. The FP and CIEP Auctions

#### 2.1.1. FP Auction

The FP auction began with the opening of round 1 at 8:55 a.m. on Monday, February 2, 2004. It concluded with the close of round 71 at 1:50 p.m. on Tuesday, February 10, 2004.

[REDACTED] The tranche target for the auction was 101 tranches [REDACTED].

No volume adjustment was made during the auction, so the pre-auction tranche target and EDC-specific load caps were unchanged for the auction.

At the February 12, 2004, Board Agenda Meeting, the Commissioners voted unanimously to accept the results of the FP auction.

Table 1 below shows pertinent indicators and measures for the FP auction.



## Summary of the BGS Auctions

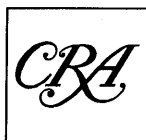
**Table 1. Summary of BGS-FP Auction**

Product (years):	PSE&G		JCP&L		ACECO		RECO		Total	
	1	3	1	3	1	3	1	3	1	3
BGS-FP peak load share (MW)	8,615.7		5,089.3		2,109.0		374.8		16,188.8	
Total tranches needed	28	28	12	15	8	7	2	1	50	51
Starting tranche target in auction	28	28	12	15	8	7	2	1	50	51
Final tranche target in auction	28	28	12	15	8	7	2	1	50	51
Tranche size (% of BGS-FP load)	1.18%		2.27%		4.55%		25.00%			
Tranche size (approximate MW)	101.36		115.67		95.83		93.70			
Starting load cap (# tranches)	10	10	4	5	4	3	2	1		
Final load cap (# tranches)	10	10	4	5	4	3	2	1		
Quantity procured (# tranches)	28	28	12	15	8	7	2	1	50	51
Quantity procured (% BGS-FP load)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
# Winning bidders	■	■	■	■	■	■	■	■	■	■
Maximum tranches sold to any one bidder	■	■	■	■	■	■	■	■		
Minimum and maximum starting prices prior to indicative bids (cents/kWh)										
Starting price at start of auction (cents/kWh) *										
Price paid to winning bidders (cents/kWh) **	5.479	5.515	5.325	5.478	5.473	5.513	5.566	5.597	5.445 <sup>3</sup>	5.505

\* Price shown in "Total" column is the average across the EDCs weighted by each EDC's "Starting tranche target in auction".

\*\* Price shown in "Total" column is the average across the EDCs weighted by each EDC's "Final tranche target in auction".

<sup>3</sup> When the three JCP&L tranches to be served through NUG contracts are factored in, this weighted average price is 5.438¢/kWh.



## Summary of the BGS Auctions

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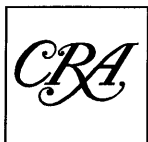
### 2.1.2. CIEP Auction

The CIEP auction began with the opening of round 1 at 8:30 a.m. on Monday, February 2, 2004. It concluded with the close of round 52 at 9:35 a.m. on Friday, February 6, 2004.

[REDACTED] The tranche target for the auction was 108 tranches [REDACTED]. No volume adjustment was made during the auction, so the pre-auction tranche target and statewide load cap were unchanged for the auction.

At the February 12, 2004, Board Agenda Meeting, the Commissioners voted unanimously to accept the results of the CIEP auction.

Table 2 below shows pertinent indicators and measures for the CIEP auction.



## Summary of the BGS Auctions

**Table 2. Summary of BGS-CIEP Auction**

	PSE&G	JCP&L	ACECO	RECO	Total
BGS-CIEP peak load share (MW)	1,634.8	700.7	348.7	28.5	2,712.7
Total tranches needed	65	28	14	1	108
Starting tranche target in auction	65	28	14	1	108
Final tranche target in auction	65	28	14	1	108
Tranche size (% of BGS-CIEP load)	1.54%	3.570%	7.14%	100.00%	
Tranche size (approximate MW)	25.15	25.03	24.91	28.50	
Starting load cap (# tranches)					36
Final load cap (# tranches)					36
Quantity procured (# tranches)	65	28	14	1	108
Quantity procured (% BGS-CIEP load)	100	100	100	100	100
# Winning bidders	■	■	■	■	■
Maximum tranches sold to any one bidder	■	■	■	■	■
Minimum and maximum starting prices prior to indicative bids (\$/MW-day)					■ ■
Starting price at start of auction (\$/MW-day)*	■	■	■	■	■
Price paid to winning bidders (\$/MW-day)**	\$52.01	\$54.98	\$49.90	\$57.69	\$52.56

\* Price shown in "Total" column is the average across the EDCs weighted by each EDC's "Starting tranche target in auction".

\*\* Price shown in "Total" column is the average across the EDCs weighted by each EDC's "Final tranche target in auction".

### 2.2. The RECO RFP Process

Given CRA's more limited involvement with the RECO RFP process, the summary for this process is more concise than for the two auctions.

The RECO RFP was issued to secure a fixed price for RECO's supply needs (both energy and capacity) for approximately 45 MW of load in its areas served through the NYISO (rather than through PJM). The RFP was released to 28 prospective bidders on December 12, 2003.



## Summary of the BGS Auctions

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RECO and Staff received proposals (six for a one-year fixed energy price, four for a three-year fixed energy price, five for a one-year fixed capacity price, and four for a three-year fixed capacity price) on January 22, 2004. After reviewing the proposals and discussing them with RECO and Staff, on January 23, 2004 the Board certified the final results and winning bids and bidders as determined by RECO (under Staff oversight). CRA did not oversee the RFP process or review the RFP bids.

The winning bids and bidders for energy and capacity for RECO's BGS load served through the NYISO were as follows:

**Table 3. Results of RECO's BGS RFP for Load Served Through NYISO**

Product	Supply Period	Winning Bidder	Winning Bid
Energy	June 1, 2004-May 31, 2005	Mirant Americas Energy Marketing, LP	\$50.50/MWh
	June 1, 2005-May 31, 2007	Morgan Stanley Capital Group	\$51.25/MWh
Capacity	June 1, 2004-May 31, 2005	Constellation Power Source Inc.	\$1,620.00/MW-month
	June 1, 2005-May 31, 2007	Morgan Stanley Capital Group	\$1,800.00/MW-month

