

**Tools, Knowledge, and Expertise
for Successful Energy
Procurements**

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**Capitol Region Council of
Governments (CRCOG)**

- Overview of Reverse Auctions
- Procurement Process
 - Price to Beat Analysis
- A Look at the State of Connecticut's Procurement

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Overview of Reverse Auctions



- Real-time, online auctions
- Energy Suppliers bid against one another to try and win your business
 - In a normal (i.e. forward) auction, bidders raise their bids as the auction progresses
 - In a reverse auction, bidders submit lower and lower bids as the auction progresses
- Five minute intervals
 - The bulk of the bidding activity occurs in the last 20 seconds

Reverse Auction Process

Start Partners Customers Markets Leads Deals **RFPs** Contracts Sites Suppliers Utilities Contacts Reports

New RFP | [View RFP](#) | [Bid History](#) Time: 10:56:43 AM EST

RFP Bid History: 1023 - Natural Gas

Auction Information

Auction Start Time: 9/24/2003 1:00:00 AM EST	RFP Status: Closed: Awarded
Auction End Time: 10/27/2003 12:30:00 PM EST	Time Left: Auction Ended
Opening Bid (\$/Dth): 8.50000	Total Bids: 14
Low Bid (\$/Dth): 5.53000	Low Bidder:

Auction Generated Savings

First Bid (\$/Dth): 8.5
 Best Bid (\$/Dth): 5.53
 Your Total Usage: 100,651 Dth
 Cost - First Bid: \$855,533.50
 Cost - Best Bid: \$556,600.03

Total Auction Generated Savings :

\$298,933.47 or 34.94 %

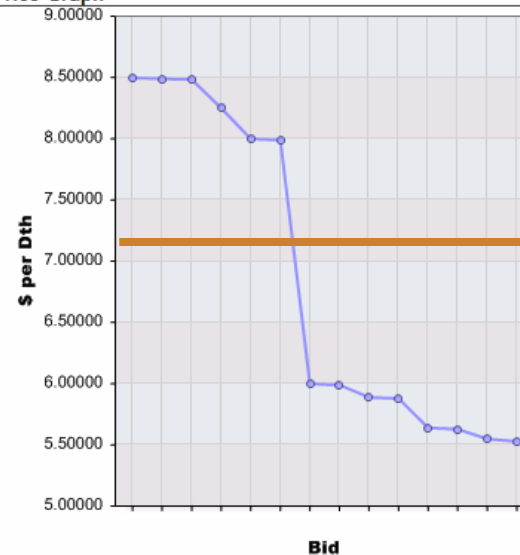
Market Benchmark Savings

Price-to-Compare (\$/Dth): 7.2
 Best Bid (\$/Dth): 5.53
 Your Total Usage: 100,651 Dth
 Cost - Price-to-Compare: \$724,687.20
 Cost - Best Bid: \$556,600.03

Total Market Benchmark Savings :

\$168,087.17 or 23.19 %

Price Graph



Auction RFPs are posted for Energy Consumers

Energy Suppliers Bid Competitively for Contracts

Benchmark Price

Auction Architecting Enables Price Testing

RFPs: Start

RFP Number: Status: State: TDM:

Customer: Type: Utility:

Total RFP Records Found: 152

RFP	Type	Customer	State	Utility	Term	Pricing	Usage	UQM	Bids	Best Bid	Time Left
1134	ELE		MD	Baltimore Gas & Electric Company (BGE)	24	Fixed	379,484,999	kWh	14	0.05600	Ended
1135	ELE		MD	Pepco (Potomac Electric Power Company)	24	Indexed	99,598,315	kWh	5	0.01900	Ended
1136	ELE		MD	Pepco (Potomac Electric Power Company)	24	Baseload A	120,927,497	kWh	6	0.06173	Ended
1137	ELE		MD	Pepco (Potomac Electric Power Company)	24	Fixed	99,598,315	kWh	6	0.06300	Ended
1138	ELE		MD	Pepco (Potomac Electric Power Company)	24	Fixed	42,625,593	kWh	6	0.06470	Ended
1139	ELE		MD	Baltimore Gas & Electric Company (BGE)	24	Fixed	75,355,000	kWh	26	0.05400	Ended
1140	ELE		MD	Baltimore Gas & Electric Company (BGE)	24	Fixed	75,355,000	kWh	8	0.05555	Ended
1141	ELE		MD	Baltimore Gas & Electric Company (BGE)	24	Fixed	8,023,700	kWh	12	0.06130	Ended
1142	ELE		MD	Baltimore Gas & Electric Company (BGE)	24	Fixed	56,487,200	kWh	18	0.05480	Ended
1143	ELE		MD	Baltimore Gas & Electric Company (BGE)	24	Fixed	56,487,200	kWh	8	0.05663	Ended
1144	ELE		MD	Baltimore Gas & Electric Company (BGE)	24	Indexed	56,487,200	kWh	11	0.01500	Ended
1145	ELE		MD	Baltimore Gas & Electric Company (BGE)	24	Baseload A	56,561,600	kWh	6	0.05465	Ended
1146	ELE		MD	Baltimore Gas & Electric Company (BGE)	24	Fixed	4,419,271	kWh	19	0.05920	Ended
1147	ELE		MD	Baltimore Gas & Electric Company (BGE)	24	Fixed	145,008,000	kWh	15	0.05600	Ended
1148	ELE		MD	Baltimore Gas & Electric Company (BGE)	24	Fixed	15,170,400	kWh	15	0.05750	Ended
1149	ELE		MD	Baltimore Gas & Electric Company (BGE)	24	Fixed	14,141,400	kWh	15	0.05640	Ended
1150	ELE		MD	Baltimore Gas & Electric Company (BGE)	24	Fixed	37,197,300	kWh	17	0.05550	Ended
1151	ELE		MD	Baltimore Gas & Electric Company (BGE)	24	Fixed	30,928,036	kWh	7	0.05611	Ended
1152	ELE		MD	Baltimore Gas & Electric Company (BGE)	24	Fixed	4,042,500	kWh	22	0.05780	Ended
1153	ELE		MD	Baltimore Gas & Electric Company (BGE)	24	Fixed	47,554,500	kWh	20	0.05570	Ended
1154	ELE		MD	Baltimore Gas & Electric Company (BGE)	24	Fixed	379,484,999	kWh	7	0.05580	Ended
1155	ELE		MD	Baltimore Gas & Electric Company (BGE)	24	Fixed	379,484,999	kWh	6	0.05560	Ended

- Running Multiple Auctions enables discovering the costs of various parameters
 - Green Power Mix
 - Pricing Product
 - Term Length
 - Special Conditions

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Procurement Process



World Energy Exchange's unique process:

- Creates transparency, promoting competition and driving down prices
 - Instant feedback forces suppliers to sharpen their pencils
 - Price transparency can minimize the premium for renewables
- Allows price discovery – CRCOG can test the market with a variety of scenarios to determine the sweet spot
- Simplifies bidding, reducing administrative costs for suppliers and creating lower prices for large buyers
 - All qualified suppliers have an equal opportunity to win the business
 - No protests have ever been filed regarding one of our events



The World Energy Exchange's unique process:

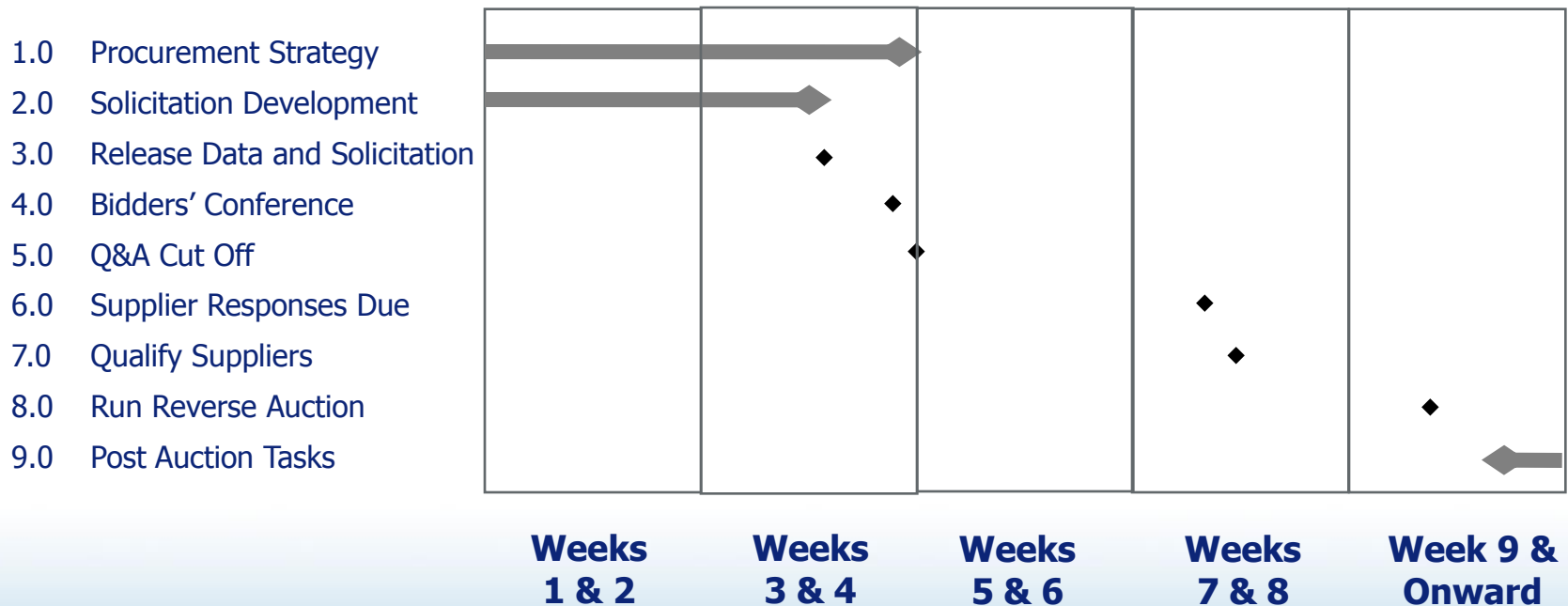
- Speeds up award times, minimizing risk premiums
- Provides data management – All procurement information is captured on the platform
 - Secure access to data for various stakeholders (hierarchy)
 - Run reports on contracts, accounts, usage, and bid history
 - Complete auction and process documentation book supplied for audit purposes (Regulatory, SOX)
- Helps CRCOG achieve objectives such as budget certainty, cost savings, and fulfillment of green energy requirements at the lowest price

More than Just Auctions

Planning Process	Platform Execution	Peace of Mind
<ul style="list-style-type: none">■ Market Rules Intelligence■ Future Price Trend Analysis■ Aggregation Marketing■ Load Pulling, Database Build■ Tariff Analysis■ Supplier Sourcing & Vetting■ Contract Terms Analysis■ Auction Structuring<ul style="list-style-type: none">– Products– Contract Terms– Green Power Mix– Tranche Architecting– Signatory■ RFQ Development■ Qualification of Suppliers■ Process/Project Management	<ul style="list-style-type: none">■ Reverse Auction Price Discovery■ Decision Analysis	<ul style="list-style-type: none">■ Contracting Support■ Process Audit & Compliance Documentation■ Ongoing Contract, Site & Usage Monitoring■ Ongoing Support■ Management Reporting

Sample Procurement Schedule

- After the we have received commitment of participation, LOAs, copies of bills, etc., this timeline will commence.
- The schedule may change depending upon the amount of time the CRCOG chooses to devote to developing a procurement strategy, supply solicitation, energy market developments, how long it takes the utility to supply account data, etc.



- Separate the accounts by rate code and determine usage on a month by month basis (use historical usage for future months)
- Use the Mass Hub forward prices – adjusted for the CT Load Zone as the commodity price
- Calculate the Capacity costs based upon the Capacity Tags assigned by the LDC and ISO published forward prices
- Determine the Retail Adder (excluding Capacity) that covers other ISO costs, supplier margin, line losses, etc.
- Add the Commodity price, capacity costs and retail adder to calculate the retail price
- Multiply the retail price by the kWh usage in each month
- For those months in which the utility rate is known and published, we use the utility rate as opposed to our calculated retail price
- Calculate the load weighted price for the term
- Load weighted price is the Price to Compare for a particular RFP

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The State of CT Procurement



Case Study: State of CT – Electricity (2007)

Situation

- State of Connecticut conducted its first auction in September of 2007
 - Auctioned: 505K MWh
- Auctions for 8, 20, and 32 month terms
- Firm Fixed Pricing and Peak/Off Peak Pricing was obtained. Both pricing products were awarded.
- Pricing was also obtained for various green percentages: 0%, 5%, 25%, and 100%.

Results

- The State was able to procure electricity with a 20% green component and *realized* savings of 18%
- Total contract value awarded: \$89M
- All accounts were awarded for 20 months
- The following agencies awarded contracts: Office of Policy and Management, Dept of Transportation, University of Connecticut, Connecticut State University, the Judicial, Legislative, and Executive Branches
 - Divided into 8 tranches

State procures 20% green and generates savings

Case Study: State of CT – Electricity (2008)

Situation

- State of Connecticut conducted its second auction in October of 2008
 - Auctioned: 600K MWh
- Auctions for 24, 36, and 48 month terms
- Firm Fixed Pricing and Peak/Off Peak Pricing was obtained. Both pricing products were awarded.
- Pricing was also obtained for various green percentages: 0%, 3%, 5%, 10%, 15% and 25%.

Results

- The State was able to procure electricity with a 18% green component and projected savings of 2%
- Total contract value awarded: \$250M
- All accounts were awarded for 36 or 48 months
- The following agencies awarded contracts: Office of Policy and Management, Dept of Transportation, University of Connecticut, Connecticut State University, the Judicial, Legislative, and Executive Branches
 - Divided into 6 tranches

State procures 18% green and generates savings

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The CRCOG Program



- Decision Making and the Procurement Committee
- Performance Clause and Fees
- How to Sign Up

The CRCOG Program

Decision Making and the Procurement Committee

- Modeled on the CRCOG Natural Gas Consortium
- Procurement Committee: group of volunteers
- Obligations of the Electricity Procurement Committee
 - First auction, participate in formulation/review of Supplier Terms and Conditions for RFQ
 - Before auction, help CRCOG staff evaluate RFQ responses of vendors to determine participation
 - Before auction, formulate Decision Matrix which ranks priorities (i.e. term of contract, price, % green, etc)
 - Be present at auction
 - Directly after auction, use Decision Matrix to come to a conclusion on who to contract with under what scenario and advise CRCOG (**note: this is the same day of the auction**)

The CRCOG Program

Performance Clause and Sliding Scale Fee

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- CRCOG and World Energy will charge fees (to be paid by the winning supplier) that are billed along with your kWh in your monthly invoice
- Fees dependant on Auction Generated Savings (difference between utility rate/price to beat and CRCOG Consortium rates)
- Sliding Scale Fee Breakdown:

% Auction Generated Savings	CRCOG	World Energy	TOTAL FEE
>10%	\$.00061	\$.00100	\$.00161
6-10%	\$.00060	\$.00090	\$.00150
1-5%	\$.00055	\$.00080	\$.00135
<1%	\$.00050	\$.00070	\$.00120

- Participation Commitment Form (by March 16th)
- Information on your electricity accounts (ASAP)
 - Signed Letter of Authorization for World Energy to work with your utility
 - Copy of one recent bill (after January 2009) for **each** account
 - Listing of accounts to participate in program
 - Copy of your current supplier agreement (if you have one)
- Side Letter (before the RFQ is released)
 - Like the CRCOG Natural Gas Consortium, we ask that you sign a side letter giving CRCOG the right to contract on your behalf with suppliers
 - CRCOG will make available the RFQ Supplier Terms and Conditions before you are required to sign a side letter