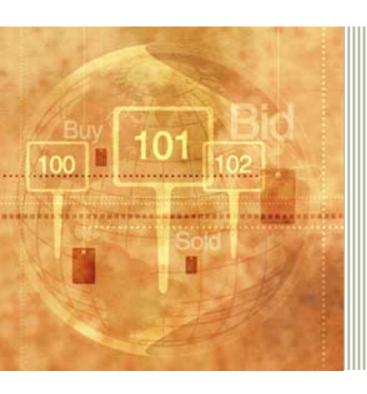
NERA Economic Consulting



Auctions and Procurement New Directions

Chantale LaCasse, Ph.D. Senior Consultant



Open Auctions Now Used in Energy Sector

Sale of energy contracts

 Re-organization of the market (France; Alberta, Canada; Brazil)

Market power mitigation

- Sale of generation capacity entitlements (Texas)
- Sale of purchase power arrangements (Alberta, Canada)

Utility procurement

New Jersey



NJ Procurement Used Open Auction

Open auctions have advantages over traditional RFPs

Transparency

Participants and stakeholders can see the basis for the results

Fairness

All participants are on an equal footing

Maximizing participation

Design that minimizes risks encourages participation

Minimizing procurement cost

- High participation leads to vigorous competition
- Vigorous competition leads to minimum costs



NJ Procurement Was for Full-Requirements

Two types of procurement

- Portfolio of power contracts
- Contract to serve load (full-requirements service)

NJ Utilities chose full-requirements service

- Risk-management function in the hands of competitive market
- Removes some of the regulatory risk



Utility Benefits From Using Auction

Auction minimizes cost of procurement

Fixed-price contracts limit risk

Certainty of costs over bid period

Prices are transparently and competitively set

- Facilitates regulatory oversight
- Facilitates participation of affiliates in the process



Auction Brings Wholesale Market Down to Retail

Benefits of wholesale competition are brought to smaller retail customers

- Suppliers compete to package power products and offer price-risk management
- Minimization of procurement costs translates into lower prices for customers
- Benefits brought directly to smaller customers with no additional retail cost to transaction



Auction Contributes to Development of Markets

Auction format is transparent and open

- Established players have no special advantage
- Encourages new and smaller players to participate

Auction leads to diversified base of suppliers

 Winners at the auction acquire experience in a particular market





Bid Process Has Three Key Elements

All elements combine to determine the level of competition at the auction and the final results:

Product design

Defines exactly the product purchased at the auction

Auction format

Defines the process for bidding

Contingency plan

Defines how utility procures volume not purchased at auction

NERA Economic Consulting



The Experience in New Jersey: Overview



Regulatory Timeline

EDECA: PSE&G, JCP&L, ACECO, RECO were sole providers

of Basic Generation Service (BGS) in their territories

through July 31, 2002

June 2001: The utilities filed a proposal to bid out the

procurement of BGS for the year starting 8/1/2002

December 2001: The Board approved the proposal

February 2002: The auction was held and the Board approved the

auction results



A Bid for a Transition Year

Rates to customers were fixed

Customers would pay auction prices on a deferred basis

Process must be adaptable for the future

- Nature of procurement was and is expected to change
- Auction format must be flexible so that it can be adapted to future procurement needs



Bid Process Was Statewide

Multi-product design

- One product for each utility
- Suppliers could switch their bids from one utility territory to another as auction progressed

Auction format was a clock auction

- Suppliers stated how much they wanted to bid at prices suggested by the Auction Manager
- Prices ticked down if there was excess supply



Criteria for Approval Were Market-Oriented

- Whether the process was conducted as approved
- Whether bidders competed in the auction
- Whether prices were reflective of market conditions



NJ Auction Was Highly Successful

- Active competition
 - More than 20 bidders participated, fifteen were winners
- Final auction prices were low and the full volume was procured
- Board Approval

"This innovative process allows New Jersey's consumers to receive the benefits at the wholesale level"

Jeanne Fox, President, NJ Board of Public Utilities

Cost of auction was paid by fee levied on suppliers

NERA Economic Consulting



The Experience in New Jersey: Details

www.bgs-auction.com



The Product Is Full-Requirements Service

Participants bid on tranches

- A tranche is a fixed percentage of a utility's load
- Percentage set so each tranche is about 100 MW

Winning a tranche

- Commits to supply "full-requirements" service (capacity, transmission, energy and ancillary services)
- Provides a payment equal to the auction clearing price for the utility times the load served



Products in the New Jersey Auction

Utility	BGS Peak Load Share (MW)	Tranche Target	Size of tranche (%)	Size of tranche (MW)		
PSE&G	9,608	96	1.04	100.1		
JCP&L	5,146 51		1.96	100.9		
ACECO	2370	19	4.17	98.8		
RECO	440	4	25.00	110.0		



Bidding Process is a Clock Auction

Auction is multi-round

- In each round bidders state how many tranches they stand ready to serve at the prices for that round
- After each round bidders are given an indication of market response and the Auction Manager provides new prices

Prices tick down

- If a utility is over-supplied in a round, its price goes down next round
- If a utility is not over-supplied, its price does not change

Switching

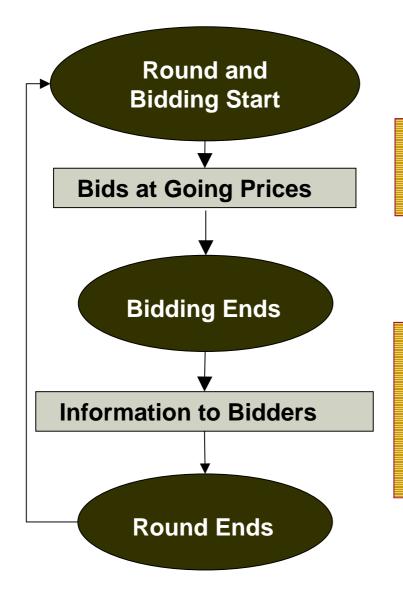
 Bidders can switch from one utility to another and take advantage of any price differences not warranted by differences in cost

Prices Tick Down When There Is Excess Supply

Round 1	Utility	Price	#bid	# to buy	Ratio
	PSE&G	7.000¢/kWh	192	96	2.0
	JCP&L	7.000¢/kWh	68	51	1.3
	ACECO	7.000¢/kWh	23	19	1.2
	RECO	7.325¢/kWh	4	4	1
Round 2	Utility	Price	#bid	# to buy	Ratio
	PSE&G	6.825¢/kWh	144	96	1.5
	JCP&L	6.963¢/kWh	85	51	1.7
	ACECO	6.983¢/kWh	38	19	2.0
	RECO	7.325¢/kWh	12	4	3



A Typical Round



Bids are numbers of tranches for each product that providers are willing to serve at the going prices for the round

Indication of total tranches bid this round

Going Prices for next round

Price for a product ticks down if number of tranches bid greater than tranches available



Additional Auction Rules

- Total bids cannot increase: A bidder can switch from one product to another or can decrease its offer
- Bid is a binding obligation to supply: If the price for a utility does not tick down, the bidder cannot decrease the number of tranches bid for the utility
- Bidding stops on all EDCs at once: Bidders can switch from one utility to another throughout
- Same price for identical products: All bidders are given the same price per kWh for a given utility



Auction Has Competitive Safeguards

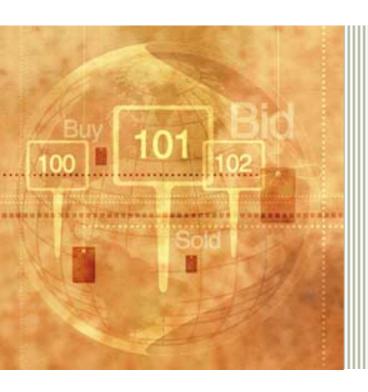
- Volume adjustment: If bidder interest is not sufficient, the auction volume is reduced
 - Ensures that there are enough competitors per tranche to be procured to drive prices down
- Load caps: Any one bidder is limited to bidding on one-third of a utility's load
 - Mitigate possible influence of any one bidder
 - Limit a utility's exposure to default from any one supplier
- Association rules: Bidders must bid independently and fairly against each other
 - Mitigate possible influence of group of bidders acting in concert



Volume Adjustment Requires Contingency Plan

- Any volume not bought at auction would be purchased on spot markets
 - Additional measures could include hedges and demand management
- Auction is the only opportunity for suppliers to serve BGS customers through a fixed-price contract
- Contingency plan thus serves to encourages participation and supports competitive safeguards

NERA Economic Consulting



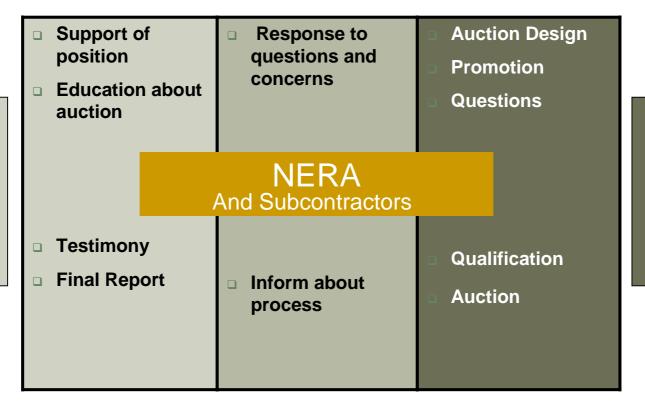
ProjectDevelopment



NERA's Role in New Jersey

Utilities Policy Decisions

Board Approvals



Bidders participants

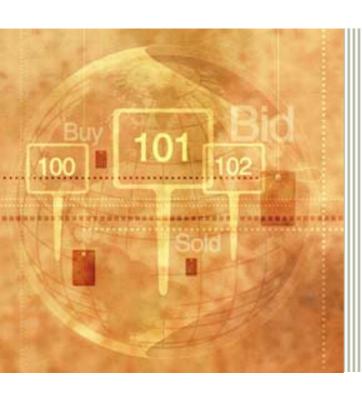
Board Consultant Reviewing and monitoring



Some Tasks Require Lead Time

Months prior to auction	9	8	7	6	5	4	3	2	Month of auction			
Task												
Customize design												
Develop contract												
Set qualification criteria												
Regulatory support												
Inform and consult												
Develop forms and manuals												
Qualify bidders												
Run auction & analyze results												

NERA Economic Consulting



Auctions and Procurement New Direction

Chantale LaCasse, Ph.D. Senior Consultant (415) 637-3319 (202) 466-9258 www.nera.com