



# Power Buying & Aggregation

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# Overview

- GSA: Who are we & goals
- Experiences
- Procurement Methods
- Contract Pricing
- Renewable Power
- Conclusion



# GSA: Who Are We

- GSA as an agency manages Federal real property/leases and purchases various products and services needed by the Federal Government
- GSA's Energy Center of Expertise in conjunction with GSA Regional associates provides expertise to GSA and other agencies in the various energy related areas such as energy efficiency, energy tracking, energy procurement, and utility areawide contracts



# Deregulated Electric Market Activities

- GSA's goal is to be active in procuring deregulated retail power in all deregulated states
- GSA has shopped for retail power in the following areas: CT, MA, RI, NH, ME, NY, NJ, PA, DE, MD, DC, OH, IL, TX, & CA
- GSA has 16 active power contracts in 9 states and DC
- 11 different contractors
- 793 MW of peak load under contract
- Approx. \$194 million/year under contract
- One national contractor – Strategic Energy



# GSA Power Contracts

<b>LOCATION</b>	<b>CONTRACTOR</b>	<b>TERM MOS.</b>	<b>TOTAL ANNUAL KWH</b>	<b>DEMAND (MW)</b>	<b>TOTAL VALUE/YR</b>	<b>AVG. \$/KWH</b>
DC/MD	Pepco Energy Svcs	36	2,113,000,000	425	\$87,900,000	\$0.0416
New York City	AES New Energy	36	401,768,000	101	\$43,391,000	\$0.1080
Upstate NY	Select Energy	36	50,000,000	10	\$3,000,000	\$0.0602
CA	Strategic Energy	15	102,000,000	20	\$8,906,000	\$0.0873
Baltimore	Pepco Energy Svcs	32	222,500,000	38	\$8,822,500	\$0.0397
Texas	TXCommercialEnergy	36	142,700,000	35	\$6,992,400	\$0.0490
Texas	Tractabel Energy	36	77,000,000	15	\$4,141,000	\$0.0538
Texas	GEXA Energy	36	43,000,000	8	\$2,494,000	\$0.0580
MA/ME	TransCanada	24	237,200,000	55	\$10,231,094	\$0.0431
IL	Exelon	44	242,714,000	50	\$9,709,000	\$0.0400
PA	GreenMtn/Strategic	8 to 36	34,000,000	9	\$1,721,000	\$0.0506
NJ	Pepco Energy Svcs	30	18,000,000	6	\$1,186,500	\$0.0659
NJ	Pepco Energy Svcs	16-17	45,787,700	10	\$2,546,500	\$0.0556
NJ	First Energy	30	8,500,000	2	\$507,300	\$0.0597
Michigan	FirstEnergy	20	27,000,000	4	\$1,267,600	\$0.0469
Michigan	Strategic Energy	32	17,282,000	5	\$913,450	\$0.0529
			<b>3,782,451,700</b>	<b>793</b>	<b>\$193,729,344</b>	<b>\$0.0512</b>



# GSA Experiences

- Most of the contracted load is in the corridor from Washington, DC to Boston
- 56% of the consumption is in the Washington, DC area
- Approx. 35% of the consumption is for GSA buildings and that represents approx. 46% of GSA's national electric consumption
- 65% of the contracted load is for other agencies
- Average contract price is \$0.0512/kWh
- Avg. contract prices range from 3.97 to 10.8 cents/kWh



# Buying Group Features

When buying for other agencies GSA generally requires an interagency commitment (MOA) to the buy prior to inclusion in the group so that GSA can go quickly to award

- MOAs are subject to certain conditions which are expressed in the solicitation
- Generally group like accounts together for pricing purposes
- Try to minimize cross account subsidization and maximize economies of scale



# Procurement Methods

- GSA has used a lowest priced technically acceptable procurement method to select suppliers (exception DC/MD buy)
- All buys are now two step – meaning that all technical submissions are obtained prior to obtaining price
- GSA obtains pricing in one of two ways:
  - Paper Fax (“Old Fashioned Method”)
  - Internet Auction Platform



# Pricing Approaches

- All pricing obtained to date has been some form of firm fixed price
- All auction pricing is a flat \$/kWh
- The “Old Fashioned” pricing is more varied with flat \$/kWh pricing; rate schedule like pricing; and fixed percentage discounts off of Standard Offer Rates
- For DC/MD load in future, I foresee some form of rate schedule like pricing (on/off peak w/summer/winter – unsure about demand)



# Timely Award

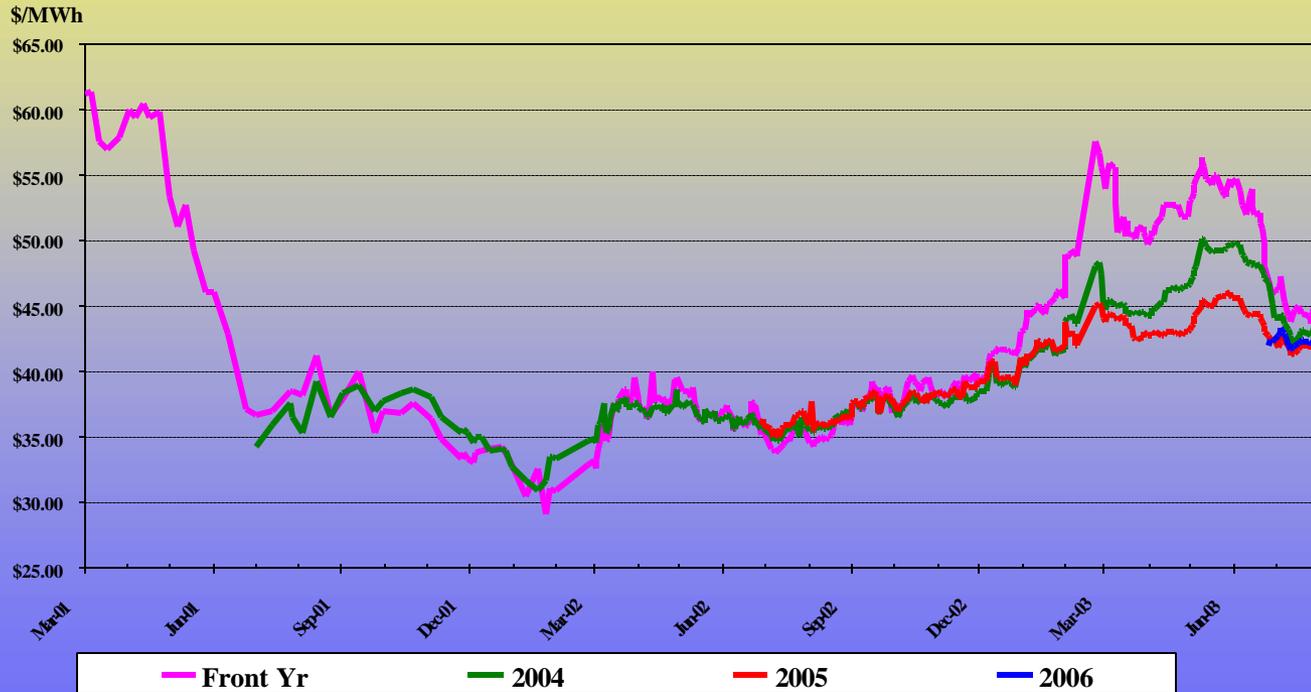
- Suppliers do not want to sit on their prices due to market volatility
- “Old Fashioned” pricing in by 10 a.m. with award by 4 p.m. the same day
- Internet auction pricing awarded by close of business the next day



# Pricing Reality - Timing

## Electric Forward Market Report Annual On-Peak (5x16) - PJM Western Hub

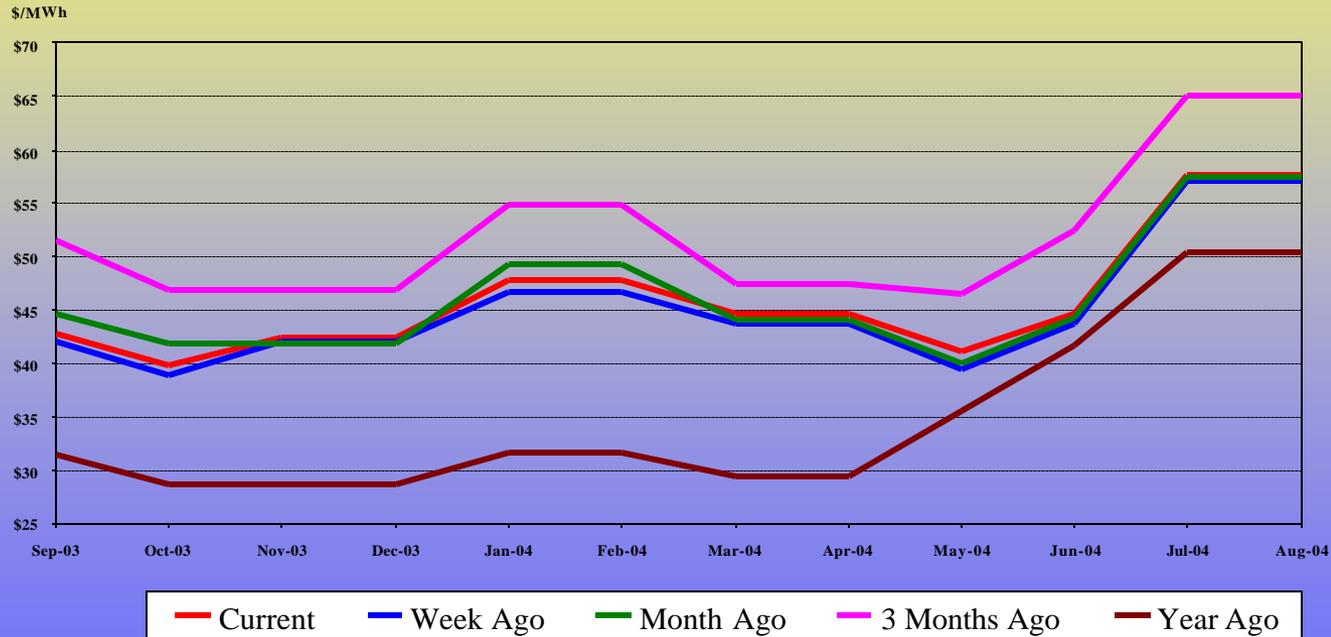
Report Date: Aug 11, 2003





# Pricing Reality - Timing

**Electric Forward Market Report**  
**Front Year, Monthly PJM Western Hub On-Peak (5x16)**  
Report Date: Aug 11, 2003





# Pricing Reality - Timing

## Natural Gas, Henry Hub

Forward Market (NYMEX) 12 Month Strip 8/11/2003





# Pricing Reality - Timing

- In my view, the primary factor in determining the price you obtain (provided you ask for reasonable things) is WHEN you ask for your price
- GSA's buys to date have all been heavily dependent on market timing
- I think that as markets develop we are going to need to become more sophisticated about pricing and managing price volatility
- To date, we have simply locked in a price for a given period and for the most part we have had the luxury of reasonable utility default or standard offer rates to return to
- Increasingly, default or standard offer rates will be some form of market based rate that no longer functions as an effective price hedge



# Pricing Thoughts

- Without a pricing “safety net” it will be incumbent on the buyer to manage price risk over time
- Why bother? Because most of our budgets are set at least 12-18 months ahead of time and they cannot easily withstand a plus or minus of 10-20% per year variation
- And, with natural gas, steam, and electric prices generally moving in the same direction at the same time the budgetary situation is magnified



# Pricing Thought

- One thought is to fix the price for power in a given market for a price sensitive term (relatively high prices – short term and *vice versa*)
- In addition to that base term, one could add additional time and price it as an index price plus margin
- The margin price offered would be evaluated so that the additional term could be exercised without competition
- A clause similar to DESC's that converts indexed prices to firm fixed prices would be included in the contract
- Early in the contract the Govt. would establish pricing targets for the out years and if those targets were met, then the Govt. would extend the contract at the target prices



# Renewable Power

- GSA is purchasing renewable power under its power contracts in TX, PA, DC/MD, NY, NJ, and CA
- GSA is buying renewable power for EPA in OH, MA, PA & NY and will soon in DC
- GSA is buying renewable power for DOE, USDA, World Bank, Dept. of Interior, Dept. of Labor and GSA in DC/MD totaling about 4 million kWh/mo
- GSA purchases renewable power for the Park Service's Statue of Liberty and Ellis Island in NJ and for the Liberty Bell in Philadelphia
- GSA anticipates significant purchases of renewable power by both GSA and other Federal agencies in the next few years



# Conclusion

- In select markets, electricity is becoming a commodity at both the wholesale and retail level
- Power markets are still immature and the post-ENRON fallout has slowed market development
- Natural gas is driving electric pricing and increasing off peak power prices and volatility
- Renewable power is poised to take off
- Price risk management will be a growing concern
- Sharp divide regulated/deregulated states