City of Houston Budget and Fiscal Affairs Committee

Electricity Procurement Update

Degember 1, 2011



Electricity Procurement

- Current electricity contract with GLO / Reliant expires June 30, 2013
- Currently no ability to lock in future prices beyond June 30, 2013
- Regulatory changes coming soon that may cause prices to increase
 - Need to act now and not wait for 2013
- Electricity pricing now tracks financial markets
 - Volatility has increased since 2004
 - Need to act quickly to lock in market prices when they are favorable

Procuring Electricity in Texas

 Wholesale Power Generators









 Transportation and Distribution Companies (CenterPoint Energy)









- Retail Electric Providers
 - Must contract with REP









- Tx. Local Gov't Code §252.022(a)(15) exempts electricity from competitive bid mandate
 - However, still a good mechanism to ensure best deal obtained!
- March 2011 Electricity Procurement Panel formed with major internal and external energy consumers, GSD and energy experts

Electricity Procurement Panel Jim Moncur, Chair

Internal Voting Members:

- Stephanie Emmers (GSD)
 - Gertha Ferguson, alternate
- Jim McCoy (PWE)
 - Kate Bechtold, alternate
- Kirk Rummel (HAS)
 - Michael Lee, alternate
- Tina Paez (ARA)
 - Juan Olquin, alternate
- Jennifer Olenick (FIN)
 - William Jones, alternate

External Voting Members:

- Peter McStravick (Houston First)
 - Lisa Smith, alternate

Internal Non-Voting Members:

- Laura Spanjian (Mayor's Sustainability Director)
- James Cargas (Legal)
- Zubi Anyaoku (Legal)
- Humberto "Beto" Bautista (GSD, City Engineer)
- Calvin Curtis (GSD)

External Non-Voting Members:

- Stephanie Kroger (Andrews Kurth)
- Kiki Dikman (Choice Energy)
- Lizzie Jones (Choice Energy)

- Apr. 22, 2011 Request for Qualifications issued to Retail Electric Providers
- 5 responses received











- June 25, 2011 Request for Proposals issued
- Participants narrowed to 3 finalists







- October 4, 2011 Professional energy consultant retained: Choice Energy Services
- Andrews Kurth LLP already under contract for energy legal services





Heat Rate Product Defined

Heat Rate is a measure of the average cost efficiency of the fleet of generation plants in Texas. The more efficient the generation, the lower and less expensive the heat rate.

Natural Gas Price can be either NYMEX or Houston Ship Channel published prices.

Retail Adder is all ancillary charges and supplier's margin.

Energy Price* = (Heat Rate x Nat. Gas Price) + Retail Adder

*Does not include transmission and distribution (T&D) or other pass through charges



Heat Rate Forecast to Increase

EPA Cross State Air Pollution Rules to be implemented January 1, 2012

- Result expected to be the closure of at least one low cost, high polluting coal plant in Texas.
- •Such plant closures will put added strain on a Texas grid that is already near demand capacity.
- •New generating capacity will come from higher cost gas fired plants which will raise the price of the Texas heat rate.

Heat Rate Formula Examples

Energy Price = (Heat Rate x Nat. Gas Price) + Retail Adder

Example 1: Heat Rate is 10

Energy Price = $(10 \times \$4.00) + \$9.00 = \$49.00$ per MWh

Example 2: Heat Rate increased to 11

Energy Price = $(11 \times \$4.00) + \$9.00 = \$53.00$ per MWh

Difference between \$49.00 and \$53.00 is ~\$5,000,000 year



Proposed Electricity Products

Everything Except Lights:

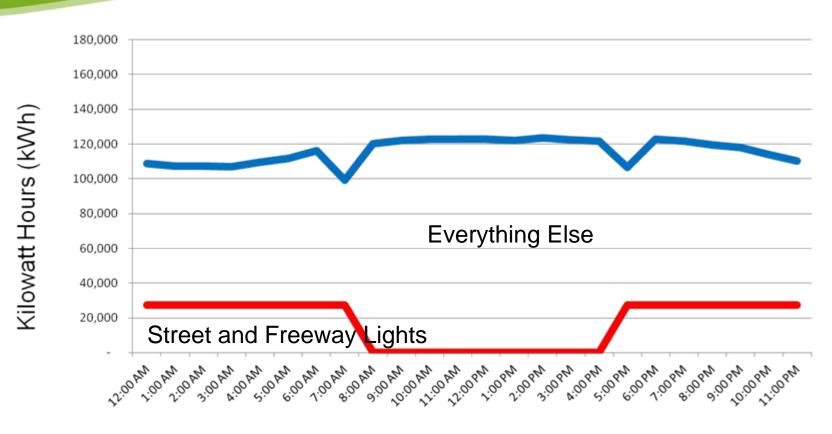
- 90% of total City load
- Heat Rate Product
 - With heat rate locked at contract execution, less risk than current contract
 - Only natural gas floats with market, until locked
- Potential Savings: ~23%

Street and Freeway Lights:

- 10% of total City load
- LMP Product
 - LMP is the surplus power sold at deep discounts in 15 minute intervals
 - More volatile
 - Cheapest and less volatile during off-peak hours (10pm to 6am)
 - This matches when street and freeway lights are needed
- Potential Savings: ~40%

Proposed Electricity Products





Time of Day

Proposed Ordinance

Option 1: Limited Delegation of Authority to Mayor

- No more than 90 Days to negotiate final contracts and ensure most favorable market conditions
- Parameters of delegated authority:
 - 1. Candidates from existing finalist of RFQ and RFP process
 - Maximum price equal to current price
 - 3. Lowest price
 - Other favorable factors
- Allows winning bidder to immediately cover their position on market

Option 2: Traditional Contract Approval

- Once contract negotiations complete, must wait for favorable market conditions
- Winning bidder must hold offer worth ~\$270M open for 14+ days it takes to obtain Council approval
- Winning offer contains
 "premium" contingency in case
 market moves up while Council
 approval is pending not truly
 the lowest possible price

Proposed Delegation Similar to Bond Transactions

- Typical bond transaction are structured as "parameter" deals.
- An example of such delegation taken from our last bond ordinance is as follows:

"Pursuant to the Authorizing Law ... the Mayor or the City's Director of Finance ... are hereby authorized to act on behalf of the City in selling and delivering Bonds and carrying out other procedures .. including without limitation determining the manner in which the Bonds can be sold and delivered, the prices at which the Bonds will be sold ..."

Proposed Electricity Products: Factors to Consider

- Price Primarily a commodity purchase
- Quality of service and experience
- 15% MWBE procurement
- Demonstrated ability to manage and serve 1.25 billion kWh/year load
- Demonstrated ability to accurately invoice 4,300 meters electronically each month
- Financial security for performance (S&P grade A or higher)
- Beneficial contract terms
- Right to add and delete up to 10% without penalties
- Unlimited swing in actual versus scheduled consumption
- Option to procure Renewable Energy Credits (RECs)
- Houston presence

Proposed Selection Process: Timeline

- Dec. 1 Special meeting of the Budget and Fiscal Affairs Committee
- Dec. 7 or 14 City Council delegates authority to Mayor to select best deal from finalists
- 90 day period commencing upon Council delegation Electric Procurement Panel, will:
 - Finalizes contract negotiations
 - Request final heat rate and adder prices
- Winning bidder and Mayor sign contract
- Winning bidder immediately covers its contract position in heat rate market

Proposed Electricity Products

Overall Anticipated Savings: ~25% Beginning in FY 2014

Estimate depends on timing and price of natural gas, as well as final contract negotiations