Evaluation of City Electric Procurement Process

Finance, Audit & Accountability Committee
March 27, 2006
Purpose and Outline

- As part of process to evaluate City’s electricity procurement, today’s briefing is provided as an overview and includes:
  - City’s current electricity use
  - History of City’s electric procurement
  - Comparison of four alternative procurement strategies
  - Factors to consider regarding electricity procurement
  - Summary and next steps
  - Questions and answers
City’s Current Electricity Use

- City consumes about 934,900,000 kWh power per year
  - Water Utilities 45.6%
  - City Facilities (EBS) 22.3%
  - Street Lighting 9.3%
  - Convention and Event Services 7.8%
  - Cultural Affairs 4.9%
  - Aviation 4.6%
  - Park and Recreation 3.3%
  - Other 2.2%
- Total electricity cost estimated $71.9 million per year
History of City’s Electric Procurement

- Prior to deregulation, City purchased electricity from TXU Electric (regulated company)
- Sept 1999, Senate Bill 7 created opportunities for competition in electric retail (deregulation)
- Substantial uncertainty existed as deregulation became effective in Jan 2002
- City considered both independent procurement and aggregation (group purchasing)
  - Council rejected independent bid – Entergy, a Louisiana company bid 6.6¢ per kWh
  - Council opted to aggregate with Public Power Pool (P3) and allow them to negotiate electric procurement on City’s behalf
History of City’s Electric Procurement

- **Rationale for participation in P3**
  - To test the waters safely
  - To share cost of administrative, consulting, and legal
  - To benefit from experience that P3 consultants brought from other deregulated markets
  - To work with other local governments (Dallas County and DISD)
  - To pool our consumption to get better price (economy of scale)
  - To combine our load profile and level the load usage in order to get better price (flat profile better than peaks & valleys)
History of City’s Electric Procurement

- Initial P3 contract achieved positive results
  - Looking back, P3 pricing was 6.37¢ per kWh compared to the independent bid (Entergy) of 6.6¢ per kWh (differences reflect timing of market)
- City has continued aggregation with P3
  - 1st contract term – Jan 2002 to June 2003
  - 2nd contract term – July 2003 to June 2005
  - 3rd contract term – July 2005 to Dec 2006
History of City’s Electric Procurement

- This month, P3 Board began notifying members regarding next contract term to begin Jan 2007
  - Terms of the contract (i.e. length, buying strategies) are not known at this time
  - To prepare for decision, City has already been working with Camp Dresser and McKee (CDM) to consider options
    - City is now considering options and will make recommendation to Finance, Audit and Accountability Committee on April 10th
  - Members must opt-in or opt-out of P3 by April 30
Comparison of Four Alternative Procurement Strategies

- City of Dallas – Public Power Pool (P3)
  - Approximately 100 members in aggregation
  - Council authorizes membership with P3
  - P3 competitively bid and procures power for the City
  - P3 uses multiple rate structure approach to ensure that one account does not subsidize another account

- Cities Aggregation Power Project (CAPP)
  - Approximately 80 city members; consisting primarily of NCTCOG cities
  - Procure as single pool (smaller members benefit from pool buying power)
  - Cities give CAPP authority to buy on the members behalf
Comparison of Four Alternative Procurement Strategies

◆ City of Houston
  ◆ Independent procurement – single rate structure
  ◆ Utilize outside consultants/experts
  ◆ Council approves contract (price index held three weeks)

◆ City of Ft. Worth
  ◆ Independent procurement – two rate structure (water and other)
  ◆ Council provides City Manager signing authority
  ◆ Manager locks rate/contract when market conditions are optimal
Comparison of Four Alternative Procurement Strategies

Note: Houston’s cost is reflective of energy cost in their area of the State.

Note: Cost of electricity most impacted by cost of natural gas and point in time that rates are locked.

Note: P3 amended their process after 2004, to ensure ability to lock prices at optimal times.
Factors to Consider Regarding Electricity Procurement

1. Market conditions
   A. Volatility
   B. Change in structure
   C. Competition
2. Administration
3. Economies of scale
4. Electric consumption (load) profile
5. Dallas County and DISD
6. City electric generation opportunities
Factors to Consider – Market Conditions – 1a. Volatility

- Regardless of approach – cost of electricity most impacted by cost of natural gas and point in time that rates are locked
  - Competitive bids are typically decided by $0.001 per kWh
  - For Dallas, this could equate to about $900,000 per year
  - **Significant price risk** is involved in determining the point in time to lock rate
  - Process must allow flexibility to lock electric rate quickly if market conditions warrant
  - P3 modified their procedures after 2004 to ensure quick reaction to market changes
Factors to Consider – Market Conditions – 1b. Change in Structure

- Nodal pricing planned Jan 2009 will increase cost for Dallas
  - Cost incurred to relieve congestion is charged only to customers served from nodes that are perceived to be causing the congestion
- Nodes are much smaller than current zones
- Instead of 4 different transmission prices under Zonal Model, there could be up to 3200 different transmission prices in addition to congestion costs under Nodal Model
- Metropolitan areas without local generation will bear brunt of congestion charges
- P3 has interest of all members in mind, even though some issues such as Nodal Pricing effect P3 members differently
Factors to Consider – Market Conditions – 1c. Competition

- Purchasing strategies impact which Retail Electric Provider (REP) bids, thus impacting price
  - Complex pricing unit structure could discourage REPs from bidding on P3 load
  - General Land Office (GLO) opted to not bid on P3 load for current contract term
    - They want to deal directly with end-users
    - GLO offers 2% tax savings that other REPs can not offer
    - Could equate to about $1.5m per year for City
- City is unable to serve as our own REP – definition does not permit municipal corporations
- An independent procurement would allow further consideration of buying wholesale or through power broker
  - Require additional expertise not currently available
  - Require use of REP for processes beyond generation, i.e. delivery of power, scheduling, etc.
Factors to Consider – 2. Administration

- P3 charge to City to administer process for 2-year term – about $610,000
  - Shared cost of administrative, consulting, and legal
  - P3 consultants bring expertise from other deregulated markets
  - P3 controls process including bid, negotiation, final contract terms and primary communication with REP

- City cost to administer process for 2-year term – about $400,000
  - City knowledge base and familiarity with deregulated market has grown since 2002 through working with P3 and other consultants
  - For independent procurement, necessary to contract with expert/consultant and to hire energy specialist to provide contract administration
  - Independent procurement would allow City to simplify pricing structure for City only accounts
Factors to Consider – 3. Economies of Scale

- Initial thought was that bigger is better and achieves better prices
  - Dallas load is significant enough to create REP interest and competition independently
    - About 934,900,000 kWh power per year
    - City represents about 35% of P3 total load
- City of Dallas is the second largest municipal user in the state and only large city that is currently part of an aggregation
- An aggregation approach benefits smaller members more than it benefits large members
  - If not addressed, aggregation could result in some accounts subsidizing other accounts
  - To avoid subsidies, P3 implemented complex approach with more than 2,000 pricing units
Factors to Consider – 4. Electric Consumption (Load) Profile

- Level load profile and usage are factors that impact pricing
  - Flat profile better than peaks & valleys
  - DWU accounts have flat thus attractive profile
  - Other City accounts benefit more from DWU if City buys independently

![MW Demand CY2004](image)
Factors to Consider – 5. Dallas County and DISD

- Overlapping jurisdictions
  - Dallas County and DISD are both members of P3
  - Staff have initiated conversation with both entities regarding next procurement
  - Opportunity exists for City to partner or share cost with one or both of these entities if we withdraw from P3 together, i.e. consulting costs
  - Dallas citizens do not benefit if City improves position yet negatively impacts either the County or DISD
Factors to Consider – 6. City Electric Generation Opportunities

- City has unique assets that may provide opportunity for some electric generation
  - Green power – renewable sources
  - Adds flexibility to our electric purchasing strategies
  - Mitigate impact that rising natural gas costs have on electric rate
  - Reduced transmission costs
  - Mitigate nodal pricing
- Opportunities are being reviewed
  - McCommas Landfill
  - Transfer Stations
  - Wastewater treatment plants
- Currently investigating how these opportunities can be maximized if we remain in P3
Summary and Next Steps

◆ Summary
  - Staff must be accountable for use of taxpayers money as City consumes about 934,900,000 kWh power per year (estimated cost of $71.9 million each year)
  - Regardless of approach – cost of electricity most impacted by cost of natural gas and point in time that rates are locked
  - Due to significant risk and potential for cost increases, caution must be exercised as this process is evaluated

◆ Next Steps
  - Staff to continue analysis of procurement strategy
  - Staff recommendation to FA&A Committee (April 10)
  - Council action to opt-in or opt-out of P3 aggregation (April 12 or April 26)
Questions and Answers