Energy Management: Street Light Electric Procurement

January 17, 2007
Purpose of Briefing

- Provide update on energy procurement for Street Lights
- At initial briefing on December 4, 2006, City Council directed staff to open process for more competition
  - Request for Proposal (RFP) advertised
  - 93 REPs registered with Public Utility Commission were notified
  - 10 REPs submitted proposals
- This briefing will address:
  - Background information
  - How energy markets work
  - Process for procuring energy for Street Lights
  - Recommendation and future steps
Background information

- Since 2002, all energy accounts (except street lights) have been under Public Power Pool (P3) aggregation program
  - April 2006, Council approved withdrawal from P3 at end of December 2007

- Energy for Street Lights has been purchased from TXU at Price To Beat (PTB) rate
  - TXU Energy PTB ended January 1, 2007
  - No price certainty for energy for Street Lights

- Recommend executing contract for energy for Street Lights for 2007
  - Lower costs (if current trends hold)
  - Price certainty
  - Will end at same time as other Dallas electric load contract with P3
Background information

- Procurement is **only for energy** for Street Lights
  - Procurement is **not for maintenance** of Street Lights
  - Procurement is not for electricity accounts/load already contracted through P3 until December 2007

- Procurement for energy for approximately 85,000 lights
  - 9,000 owned by State
  - 6,000 owned by City
  - 70,000 owned by TXU-ED (Electric Delivery) – leased by City

- ~84,000,000 kwh/yr (84,000 MWH/yr) or 10% of city-wide electricity use
How energy markets work

- Contract for energy for Street Lights will be with Retail Electric Provider (REP)
- REP does not own generation
- REP has to buy fuel and contract with facilities to generate electricity with that fuel
- REP does not buy fuel or contract with generators until they have customer
  - Generation market changes day to day (unit availability/generation mix, etc.)
  - Fuel market changes by minute
    - While natural gas is not only means of electricity generation in Texas, it is used as base fuel for bidding electricity cost
    - New York Mercantile Exchange (NYMEX) gas futures contracts
    - Most volatile commodity (+/- 10% in a day not uncommon)
How energy markets work
Natural Gas Prices & Electric Prices

Gas market and electric price changes over 4 days

$8.20/MMBTU ($0.0722/kwh)

$7.87/MMBTU ($0.0697/kwh)

Change from $0.0722/kwh to $0.0697/kwh equates to $280K annual cost difference on street lights
How energy markets work
Contracting with Volatility

- Two primary options for contracting with REP
  - Fixed pricing simplest
    - Decision must be made quickly (i.e. within 5 minutes)
    - Significant premium charged for holding price open
    - Prices can be withdrawn by REP if market moves up
  - Gas index pricing – recommended
    - Formula based
    - Allows time to make a decision without bids changing
    - Can be held open for a day with little risk
How energy markets work
Gas Index Pricing Formula

Electricity Price = (GP x HR) + RA

- GP – Gas Price as traded on the NYMEX
- HR – Heat Rate relates gas input to electricity output
- RA – Retail Adder – accounts for ancillary services, REP profit, other costs to get retail power

- Heat Rate (HR) and Retail Adder (RA) fixed in REP bid
- Gas price (GP) set when lock occurs
  - Based on NYMEX trading at time of lock
  - Recommend locking GP automatically over 5 day period following contract approval
    - Given market volatility City should not ‘bet’ on a good price on a given day
    - Mitigates risk of price run up on day of signing
Process for procuring energy for Street Lights

- State law exempts electricity from competitive bidding and normal purchasing process
- Process initially proposed by staff and consultants was to seek proposal from 4 REPs determined by consultants to be best able to meet City needs
- December 4, 2006 – City Council directed staff to open process for more competition
  - Request for Proposal (RFP) advertised
  - 93 REPs registered with Public Utility Commission were notified in addition to vendors registered with the City
  - RFP closed on December 29, 2006
  - 10 REPs submitted proposals
Process for procuring energy for Street Lights – evaluation criteria

- Financial stability
- Renewable energy credits for 40% of load
- Agreement with required contract terms
- Other contract terms and conditions
- Level of experience
- Proposed imbalance (swing) allowances
- Assurance of timely and accurate invoices
- Assurance of timely meter switches
- Approach on customer service
- Invoicing
### Process for procuring energy for Street Lights – proposal scoring

#### First round proposal scoring

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#### Second round evaluation will be based on:

- REP agreement on City contract terms and conditions (pass/fail)
- Proposed cost of electricity
Process for procuring energy for Street Lights

- 3 REPs determined to be unable to meet City needs based on review of proposals submitted and evaluation criteria
  - Liberty Power
    - Insufficient documentation of financial stability
    - Did not respond to several RFP requirements
  - ConEdison Solutions
    - Did not agree to required price rate structure
    - Limited level of experience (only 8 MW in Texas)
    - Did not agree to required contract terms
  - StarTex Power
    - Audited financial statements show insufficient working capital
    - Unreasonable contract provisions, e.g. one late payment defaults entire contract
Process for procuring energy for Street Lights

- Based on initial review of proposals submitted and evaluation criteria, 7 REPs under further review
  - GLO/Reliant Energy Solutions
  - Suez Energy Resources
  - WPS Energy Services
  - Strategic Energy
  - TXU Energy
  - GEXA Energy
  - Direct Energy

- Contract terms and conditions are being finalized with 7 REPs that met minimum qualifications
  - If any REP does not agree to City’s terms, they will be eliminated from final pricing round
  - Best and final offers are required January 23, 2007 by 5:00 p.m.

- Recommendation by staff and authorization by City Council – prior to noon on Wednesday, January 24, 2007
  - REP selected and gas index formula set, but final price not set until gas price locked through January 31, 2007
Process for procuring energy for Street Lights – price lock solution

- Locking gas price automatically over 5 day period following contract approval
- Price will be based on settlement (closing price) for each of 5 days of trading following signing
- 11 month average price for 2007 will be averaged over 5 day period
  - Prices will be set by January 31, 2007 at close of business
  - Price verified by consultant team
Recommendation and future steps

- Recommend approval on January 24, 2007 of Street Light energy procurement based on gas index pricing methodology
  - Contract for 11 months to expire end of December 2007 simultaneously with accounts currently assigned to P3
  - Natural gas based formula for Street Light energy with price to be determined 5 days after Council approval
  - 40% renewable energy credits to be included

Future Steps

- Evaluate success of pilot approach and use of gas index pricing
- Establish City’s strategies for independent procurement for entire load to address city needs beginning January 2008
- Determine methodologies for future procurements; i.e., fixed price, gas index price, delegate authority to CMO; City’s risk tolerance, etc.
- Summer or Fall 2007 execute contract for City-wide electric procurement starting January 2008