

Energy Service Company

- An **Energy Service Company** (ESCO) is a professional business providing a broad range of comprehensive energy solutions including designs and implementation of energy savings projects
- The ESCO performs an in-depth analysis of the property, designs an energy efficient solution, installs the required elements, and maintains the system to ensure energy savings.
- The savings in energy costs is often used to pay back the capital investment of the project over a five, ten, or twenty year period, or reinvested into the building to allow for capital upgrades that may otherwise be unfeasible.
- If the project does not provide returns on the investment, the ESCO is often responsible to pay the difference



ESCO Responsibilities

- Identify and evaluate energy-saving opportunities;
- Develop engineering designs and specifications;
- Manage the project from design to installation to monitoring;
- Arrange for financing;
- Train your staff and provide ongoing maintenance services;
- Guarantee that savings will cover all project costs

USD #116 ESCO Request For Proposal

- ❑ Original 60 page RFP was released on November 4, 2009.
- ❑ All buildings were included in RFP proposals
- ❑ Scope of original survey included consideration of addition of multipurpose rooms, central air conditioning and energy management upgrades.
- ❑ Eleven companies were in the initial site visits
- ❑ Proposals were due back to the District January 4, 2010
- ❑ The district received 4 RFP responses and proposals from Ameresco.
- ❑ ESCO interview committee(Preston, Don, Carol and Ota) interview all four companies during the week of January 26th.
- ❑ Additional professional consultant provided by Department of Commerce and Economic Opportunity.
- ❑ During late January and February all references were checked and verified.

Energy Savings Contractor Summary

□ Control Technology and Solutions

- Teutopolis \$298K
 - Excellent reference, satisfied with all work, met schedules, worked well with changes and owner input, savings validated. Hired back for other multiple other projects. 3.2 mil.
- Lake Land College \$20 Million
 - Extensive multi-phased projects, excellent reference, well satisfied with all steps of the process, met schedule, worked well with owner, supervision on site at all times, made changes as needed, validated savings. Rehired for continuous projects.
- Prairieview-Ogden \$924K
 - Actually visited site, very satisfied with work, performance and energy savings. Much attention paid to details and finishing of the entire job. Installed Geo-Thermal system, energy savings lighting and ventilation.

Energy Audit

- The cost of the energy audit can be rolled into your performance contract. It must be paid in full if you do not sign a performance contract, so you need to have funds set aside. If your criteria are not met, you do not pay for the audit.
- Perform Energy Audit
 - Complete Survey of UHS for all Energy Savings.
 - Fees \$15K (Requires Board Approval)
 - Determine if it is budget neutral and project pay back meets criteria.

Energy Audit

Energy Conservation Measures UHS and Other

- Replace lighting with energy efficient lighting
 - Install motion, infrared, light switching sensors in all rooms and corridors
 - Install daylight sensors
 - LED exit signs
 - All other efficient lighting
 - Building Automation System, install Digital Direct Controls and replace compressed air pneumatic controls for the entire building
 - Replace electric motors with efficient electric motors.
 - Installation of variable frequency drives in place of constant drive system
 - Research renewable energy sources, i.e., solar hot water supply, replacing current hot water system.
 - Replace current steam trap system with more energy efficient steam traps building wide.
 - Replacement of current steam heat exchanger with more efficient heat exchange technology.
 - Water Conservation; urinals, faucet aerators, water valves, faucets, shower heads and other control devices.
- Add to UHS Audit.
 - Complete lighting efficiency King(28), Prairie(19), Thomas Paine(19), Wiley (29), Yankee Ridge (21)and Leal (16)
 - Replace inefficient lights remaining in the build
 - Motion sensors for corridor lights.
 - Day night sensors for exterior security lighting
 - Replace gym lighting at Leal, T-5 high bay lighting.



Staff Recommendation for 3/16/2010

- ❑ Authorize Energy Audit of UHS/other
- ❑ Potential for all energy improvements to be budget neutral
- ❑ Grant opportunities are available
- ❑ Cost of energy audit can be rolled into Energy Performance Contract.
- ❑ Target potential savings work to be completed yet in the summer of 2010