

Energy Savings Performance Contract Update



CITY OF KNOXVILLE

02/04/2011

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Purchasing Division, City of Knoxville



Purpose

- To update City Council on the status of the City's Energy Savings Performance Contract with Ameresco

Magnitude of Project

- Encompasses 98 buildings, 40 parks/athletic fields and 3 golf courses
- Project includes
 - Site examination
 - Utility billing data analysis
 - Building energy modeling
 - Development engineering
 - Investment grade financial assessment
 - Implementation/Construction of Energy Conservation Measures over two year period
- 15 year contract term with 12.8 year pay back period
- Guaranteed to yield an average of \$1.47M in annual savings for a 26% reduction in utility costs
- Guaranteed savings begin January 2012

Complete

- Domestic Water complete at all locations
- Irrigation controllers installed @ Whittle Springs Golf Course, Holston River Pk, Victor Ashe Pk, Ashley Nicole Pk, Caswell Pk and Ridley Helton Pk (100% Complete)
- Design for pond at Whittle Springs Golf Course complete
- Building envelope (garage doors/insulation) complete
- Pool covers: Complete at all locations
- Chiller for Convention Center set by helicopter in December
- Solar array at Convention Center
 - Installation of docking system complete
 - Solar panel installation complete
 - Inverter set by helicopter in December

Ongoing

- Whittle Springs Pond: Received TDEC approval and submitted permit applications to both COE & TVA. Awaiting COE & TVA approval
- Lighting:
 - 90% complete at Facility Services
 - 99% complete at Fire Department (will proceed with fire annex and training center once current training courses are complete).
 - 75% complete at Locust Street Garage
 - 99% complete at Safety Building
 - 95% complete at Parks & Recreation facilities.
 - 80% complete at the Civic Auditorium & Coliseum.
- Installation of Well at World's Fair Park
 - Hit water at 560 ft resulting in better than expected water flow
 - Site returned to original status
 - Connection of well to the vault to occur in near future
- Energy Management System (EMS) installation 95% complete at Coliseum. Began EMS installation at Fire stations in early January

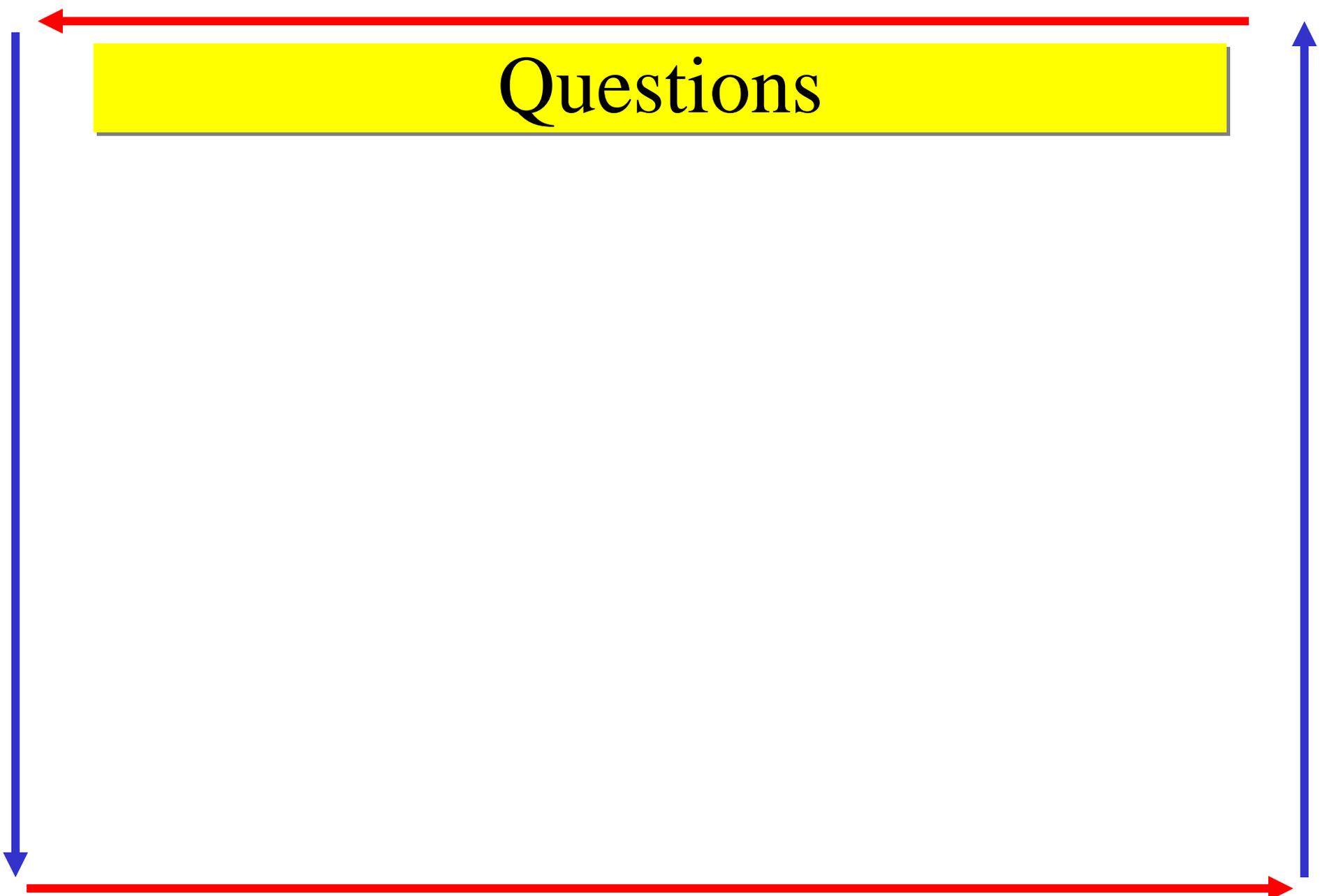
Upcoming

- Solar water heater installation at 4 fire stations in February
- Energy Management System
- Final lighting locations are Convention Center & Jacobs Bldg
- Vending Misers
- Hydronic VFD upgrades at Fire Dept HQ & City County Bldg
- Boiler installation at Convention Center
- High efficiency transformers for Civic Auditorium & Fire HQ
- PC Power Management
- Whittle Springs Pond
- City County Building
- Get 3rd party verifier in place
- All to be complete by 12/31/11



Bottom Line

- Costs
 - Construction Cost \$13,470,609
 - Invoiced to date (\$6,220,341)
 - Remaining Construction Costs \$7,250,268
- Project was 65% complete as of 1/31/11 putting us 11% ahead of schedule
- Ahead of schedule with no significant problems



Questions

02/04/2011

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