Thursday, February 4, 2010

Austin Energy RECOMMENDATION FOR COUNCIL ACTION

Item No. 2

Subject: Approve an ordinance authorizing acceptance of \$7,492,700 in American Recovery and Reinvestment Act (ARRA) grant funds from the U.S. Department of Energy (DOE), and amending the Fiscal Year 2009-2010 Austin Energy Operating Budget Special Revenue Fund of Ordinance No. 20090914-002 to appropriate \$7,492,700 for Energy Conservation Measures to be implemented in City of Austin facilities and the addition of four Full Time Equivalents (FTE) employees for implementing Energy Conservation measures in City of Austin facilities.

Amount and Source of Funding: Funding is available from the Department of Energy (DOE) through the American Recovery and Reinvestment Act (ARRA) of 2009 for the grant period of December 28, 2009 to December 27, 2012. No match is required.

Fiscal Note: A fiscal note is attached.

For More Information: Karl Rabago, Vice-President, Distributed Energy Services, 322-6098; Scott Jarman, P.E., Consulting Engineer, Energy Efficiency Services, 482-5307.

Boards and Commission Action: Recommended by the Resource Management Commission and the Electric Utility Commission.

The U.S. Department of Energy (DOE) has awarded Austin Energy \$7,492,700 in ARRA grant funds to implement Energy Conservation Measures in City of Austin facilities. This program will generate jobs that will help infuse the green construction industry, make City facilities more energy efficient, reduce operational costs, and reduce the City of Austin's carbon footprint in accordance with the Austin Climate Protection Plan.

The acceptance of these funds will allow Austin Energy to implement Energy Conservation Measures in City facilities that involve many City departments, and could save more than five million kilowatt-hours of electricity annually. The work involved in completing the projects could generate the equivalent of approximately 100 green jobs and also reduce carbon and other emissions.

The energy efficiency measures include:

- Renovation of HVAC systems at the Technicenter Building. The recommendations for this facility include the installation of new digital controls, heating and cooling systems repairs and upgrades, modifications of water heating systems, and a thermal energy storage system.
- Retrofit of exterior lighting systems with new technologies such as Light Emitting Diodes (LEDs) and Induction Lighting in application like surface parking lots and parking garages. These types of lighting technologies can reduce the carbon footprint of parking garage operations by as much as 50%.
- Replacement of two aged, biogas/diesel generators at the Hornsby Bend sludge treatment facility with modern dedicated biogas generation equipment to create renewable energy from methane. The grant will partially fund (\$1.25 million) this measure and Austin Water Utility will fund the balance.
- Installation of interior lighting upgrades and lighting controls. This measure will include installing new high efficiency lamps in existing T8 fixtures, lighting retrofits, and the installation of lighting controls such as photocells, occupancy sensors, and day lighting controls. Similar projects have been implemented by Austin Energy in the past, but funding was limited. Large scale implementation with this

federal funding will result in significant energy savings and carbon reductions. This measure includes hiring two (2) new full time employees for the duration of the grant period.

- Optimize performance of energy systems by recommissioning activities such as: reprogramming or recalibrating equipment, making repairs where necessary, and installing localized controls as needed. Austin Energy staff has identified 15 facilities as viable candidates for recommissioning and other smaller facilities will be evaluated for the installation of localized controls like programmable thermostats. This measure includes hiring two (2) new full time employees for the duration of the grant period.
- Increase insulation, seal ducts and building envelope, install weather stripping, and other energy improvements at smaller facilities such as Fire and Emergency Medical Services stations and Parks facilities.

Project Procurement Plan
Energy Conservation Measure - Procurement Method
Technicenter HVAC Renovations - Existing Performance Contract
Exterior Lighting Retrofits - New Solicitation
Biogas Generation - TBD, Austin Water Utility
Interior Lighting Retrofits - Re-solicitation of existing contract
Systems Optimization - Existing Interlocal (TAMU) and New Solicitation
Weatherization - New Solicitation