

**CITY OF AUSTIN – AUSTIN ENERGY
RECOMMENDATION FOR COUNCIL ACTION**

AGENDA DATE: 10/11/2012

SUBJECT: Authorize negotiation and execution of an agreement between the City of Austin/Austin Energy and Autogrid for the implementation of a Demand Response Optimization and Management Server (DROMS) platform provided by AutoGrid under its U.S. Department of Energy ARPA-E 2011 GENI Program award for use in the deployment of Austin Energy's demand response program.

AMOUNT & SOURCE OF FUNDING: Funding is available from the Department of Energy to Autogrid, the fiduciary agent for the grant. Austin Energy will provide an in-kind match of staff time equivalent to \$124,000, available in the Fiscal Year 2012-2013 Operating Budget of Austin Energy, Conservation Rebates and Incentive Fund.

FISCAL NOTE: There is no unanticipated fiscal impact. A fiscal note is not required.

FOR MORE INFORMATION CONTACT: Scott Jarman, P.E., Acting Director, Energy Efficiency Services, at 482-5307 or Karen Poff, P.E., Engineer, Energy Efficiency Services, at 322-6464 or Sarah Talkington, P.E., Engineer, Energy Efficiency Services, at 482-5393.

PRIOR COUNCIL ACTION: N/A

BOARD AND COMMISSION ACTION: To be reviewed by the Electric Utility Commission on September 17, 2012 and by the Resource Management Commission on September 18, 2012.

Austin Energy's Energy Efficiency Services requests authorization to enter into an agreement with Autogrid, Dover, Delaware, the fiduciary agent of a grant from the Department of Energy.

AutoGrid, an internet technology service provider, has been selected by the U.S. Department of Energy to develop advanced demand response capabilities under its U.S. Department of Energy ARPA_E 2011 GENI Program award. As part of this effort, AutoGrid has developed a Demand Response Optimization and Management Server (DROMS) platform. The DROMS is an open-standard, cloud –based demand response platform that supports all communication channels to integrate a variety of end-user loads (e.g., thermostats, energy management systems, EV charging stations, etc.) across all customer segments, providing utilities with a single system for monitoring and controlling all demand side resources.

AutoGrid has selected Austin Energy as a sub-recipient of the grant and will deploy its DROMS platform for use in Austin Energy pilot demand response projects over a 36-month period. During this period Austin Energy will provide staff time to collaborate with AutoGrid to determine potential customer service, business and financial benefits that next-generation demand side management might deliver with the available ISO market structure. Under Phase 1, Austin Energy will use the DROMS as part of a pilot program to design two new automated demand response capabilities and associated programs for trial and evaluation included controlled ("smart") electric vehicle charging and monitoring control and forecasting of selected residential loads.

Based on the results of Phase 1, AutoGrid and Austin Energy may expand the pilot to include Open ADR-based AutoDR for commercial and industrial facilities. Through this effort, Austin Energy will evaluate the participation of these facilities in peak capacity management and ancillary services, and expand the residential and electric vehicle demand response programs.

This collaboration with AutoGrid will support Austin Energy in developing an efficient demand response program that facilitates demand response across multiple vendors and customer sectors, enabling Austin Energy to exceed its desired demand response goal of 50 MW by 2020. The grant period is October 1, 2012 to October 1, 2015. The administration of this grant will not require hiring of new employees.