

AGENDA



Recommendation for Committee Action

Austin Energy Utility Oversight Committee	Item ID	50330	Agenda Number	3.
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Meeting Date:	9/24/2015	Department:	Austin Energy
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Subject

Discussion and possible action regarding negotiation and execution of a contract with 1ENERGY SYSTEMS INC., for the purchase of a 1.5 megawatt energy storage system to be installed at Austin Energy's Kingsbery Substation, in an amount not to exceed \$3,000,000.

Amount and Source of Funding

Funding is available in the Fiscal Year 2015-2016 Capital Budget of Austin Energy.

Fiscal Note

A fiscal note is attached.

Purchasing Language:	Critical Business Need.
Prior Council Action:	
For More Information:	Gage Loots, Corporate Purchasing Manager, 512-322-6251
Boards and Commission Action:	September 21, 2015 - To be reviewed by the Electric Utility Commission.
MBE / WBE:	This contract will be awarded as a sole source and is exempt from City Code Chapter 2-9D Minority and Women Owned Business Enterprise Procurement Program.
Related Items:	

Additional Backup Information

This contract is for the purchase of a 1.5 megawatt Energy Storage System (ESS). Austin Energy is implementing a pilot project to install the ESS in the Kingsbery Substation as a part of integrating the Community Solar project.

Energy storage is a key component in Austin Energy's renewable energy strategy due to its ability to address intermittency and variability in renewable energy sources (e.g. photovoltaic). ESS's are currently in the developmental phase and uniform standards are in early development. Additionally due the relative lack of maturity of the technology and variability in application, projects require significant and specific research, analysis, and study to appropriately specify, procure, design, install, commission, and validate an ESS.

Austin Energy has been working with 1Energy, an ESS integrator and control system supplier to study how to integrate Austin Energy's Kingsbery Community Solar installation with the distribution system. Austin Energy partnered with 1Energy to apply for, and has received a \$1,000,000 New Technology Implementation Grant from the Texas Commission on Environmental Quality (TCEQ) for purchasing and implementing a demonstration ESS at

Kingsbery. Additionally, Austin Energy has joined a consortium led by 1Energy called the Modular Energy Storage Association (MESA) that is focused on developing the first ESS standard for interoperability. The MESA-ESS standard will address open architecture for integration of the various major ESS components and utility IT infrastructure with the purpose of reducing future integration costs.

Austin Energy will use the analysis derived from the earlier study to optimize how energy will be dispatched over a five year reporting period and will include performance requirements that are warrantied. Austin Energy will validate the technology and value of storage and this project will help guide future strategies and projects to deploy additional ESS assets.

This pilot project will implement three key technologies:

1. 1Energy's Communication System (MESA compliant, open, and non-proprietary architecture)
2. 1Energy's Intelligent Controller (optimizing the economic use of storage assets)
3. Tesla's Stationary Battery Storage System

An evaluation committee comprised of senior staff evaluated 1Energy's proposal and determined they were the only MESA compliant integrator able to meet the functional requirements for this project and were evaluated based on personnel qualifications, software technical qualifications, battery technology, systems integration experience, and total estimated cost.

Due to the specific and unique characteristics of Austin Energy's Kingsbery Community Solar project, the importance of piloting an open and interoperable ESS architecture in anticipation of future ESS deployments, the limited number of companies with utility scale ESS experience, and 1Energy's detailed analysis and knowledge of AE's specific application, Austin Energy is designating this purchase as a Critical Business Need in accordance with Senate Bill 7, as adopted by the City of Austin as Resolution No. 040610-02. 1Energy will be required to comply with the standards and principles of the MBE /WBE Procurement Program. Austin Energy will work with 1Energy and the Small & Minority Business Resources Department (SMBR) to identify potential subcontracting opportunities and obtain MBE /WBE availability lists.