

A G E N D A



Recommendation for Council Action (Purchasing)

Austin City Council

Item ID:

50207

Agenda Number

43.

Meeting Date:

10/1/2015

Department:

Purchasing

Subject

Authorize 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 \$3,030,000.

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 24, 2015 - Forwarded to Council by the Austin Energy Utility Oversight Committee. September 21, 2015 - Unanimously approved by the Electric Utility Commission on a 11-0 vote.

Related Items:

MBE / WBE:

This contract will be awarded in compliance with City Code Chapter 2-9D Minority Owned and Women Owned Business Enterprise Procurement Program. No subcontracting opportunities were identified; therefore, no goals were established for this contract.

Additional Backup Information

The contract is for the purchase of a 1.5 megawatt (MW) Energy Storage System. Austin Energy is implementing a pilot project to install the storage system at the Kingsbery Substation as a part of integrating the Community Solar Project. The substation and Community Solar Project are located northeast of Springdale Road and Airport Boulevard in Council District 3 and close to the boundary of Council District 1.

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). Energy Storage Systems are currently in the developmental phase and uniform standards are in early development. Also, 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 Energy Storage System.

Austin Energy has been working with 1Energy, an Energy Storage System integrator and control system supplier to study how to integrate the 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 for purchasing and implementing a demonstration Energy Storage System at Kingsbery. Additionally, Austin Energy has joined a consortium led by 1Energy called the Modular Energy Storage Association (MESA) which is focused on developing the first storage system standard for interoperability. The MESA Energy Storage System standard will address open architecture for integration of the various major Energy Storage System components and utility information technology 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 Energy Storage System 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 the Kingsbery/Community Solar project, the importance of piloting an open and interoperable Energy Storage System architecture in anticipation of future storage system deployments, the limited number of companies with utility scale storage system experience, and 1Energy's detailed analysis and knowledge of Austin Energy'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.