

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

AGENDA DATE: 10/01/2015

SUBJECT: Approve issuance of a rebate to Clarion Partners for performing energy efficiency improvements at the Lantana Ridge Apartments located at 6636 W. William Cannon Dr., in an amount not to exceed \$94,989.

AMOUNT & SOURCE OF FUNDING: Funding is available in the Fiscal Year 2015-2016 Operating Budget of Austin Energy.

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

FOR MORE INFORMATION CONTACT: Jeff Vice, Director, Local Government Issues (512) 322-6450; Denise Kuehn, Director, Energy Efficiency Services (512) 322-6138.

BOARD AND COMMISSION ACTION: September 15, 2015 – To be reviewed by the Resource Management Commission. September 21, 2015 – To be reviewed by the Electric Utility Commission.

Austin Energy requests authorization to issue a rebate to Clarion Partners, in an amount not to exceed \$94,989, for an energy efficient measure completed at the Lantana Ridge Apartments. The Lantana Ridge Apartments are located at 6636 W. William Cannon Dr., Austin, Texas 78745, in Council District 8.

The property comprises 17 buildings and 354 apartment units, with a total of 311,968 square feet of conditioned space. The average rent for the one bedroom units ranges from \$1,067 to \$1,398 and the two bedroom units ranges from \$1,513 to \$1,586, depending on amenities. The energy efficiency measure completed at this property was duct sealing. The estimated total cost of the project is \$122,293; the rebate will cover approximately 78% of the total cost.

These improvements are in accordance with Austin Energy's Multifamily Rebate Program. This program is one of the elements of Austin Energy's comprehensive Resource, Generation and Climate Protection Plan, to realize 700 MW of energy efficiency and 200 MW of demand response by 2025. The original plan, approved by City Council in April 2010 and updated in December 2014, is designed in part to reduce local air pollution through energy conservation, reduce peak demand, reduce the need to purchase additional generation and assist customers in reducing electric consumption.

The avoided kilowatt hours (kWh) estimated at 544,460 kWh per year represents a major benefit to the local environment. This project prevents the emission of the production of the following air pollutants: 326.9 metric tons of Carbon Dioxide (CO₂), 0.228 metric tons of Nitrogen Oxides (NO_x), and 0.206 metric tons of Sulfur Dioxide (SO₂). The project savings is equivalent to an estimated 734,032 vehicle miles traveled, the removal of 62.6 cars from our roadways, or the planting of 8,399 trees or 420 acres of forest in Austin's parks.

PROJECT FACT SHEET – Lantana Ridge Apartments/Clarion Partners

Property Name	Lantana Ridge Apartments		
Customer Name	Clarion Partners		
Property Address	6636 W. William Cannon Dr., Austin, TX 78745		
Average Rent:	1BR \$1,067 to \$1,398 / 2BR \$1,513 to \$1,586		
Number of Units	354	Contractor	Leelynn Energy Solutions
Housing Type:	Market Rate	Total Measure Costs	\$122,293
		Total Rebate – Not to Exceed	\$94,989
		% of Total Measure Costs	78%
ECAD Status	In Compliance	Rebate per Unit	\$268

PROJECT ANNUAL SAVINGS AT 100% OCCUPANCY		SCOPE OF WORK	
kW Saved – Estimated	285	Duct Sealing – Furrdown (99%) and Up-flow (1%)	
\$/kW – Estimated	\$333		
kWh Saved – Estimated	544,460		

MONTHLY SAVINGS PER CUSTOMER - ESTIMATED	
Dollar Savings per Residential Customer from efficiency improvements	\$14

Measures Performed in last 10 Years at Lantana Ridge Apartments	Completion Date	Rebate Amount
Compact Fluorescent Lightbulbs	2010	\$24,969
Solar Screens	2011	\$48,330

Multifamily Program Averages for Duct Seal – Previous 1 Year Participation					
Measure	Avg\$/kW	% of project cost paid	Avg kWh per project	Avg # of Units per Project	Avg annual dollar Savings per customer
Duct Seal	\$583	89%	121,951	126	\$96

**CITY OF AUSTIN – PURCHASING DEPT.
RECOMMENDATION FOR COUNCIL ACTION
VENDOR NAME: 1ENERGY SYSTEMS INC.**

AGENDA DATE: 10/01/2015

SUBJECT: Authorize negotiation and execution of a contract with **1ENERGY SYSTEMS INC.** for the purchase of an energy storage system for Austin Energy in an amount not to exceed \$3,000,000.

AMOUNT & SOURCE OF FUNDING: Funding is available in the Fiscal Year 2015-2016 Capital Budget of Austin Energy.

FISCAL NOTE: A fiscal note is required.

PURCHASING: Critical Business Need.

PRIOR COUNCIL ACTION: N/A

BOARD AND COMMISSION ACTION: September 15, 2015 - To be reviewed by the Resource Management Commission. September 21, 2015 - To be reviewed by the Electric Utility Commission.

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

FOR MORE INFORMATION CONTACT: Gage Loots, Corporate Purchasing Manager, 512-322-6251

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.

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

DATE: 10/01/2015

SUBJECT: Authorize execution of power purchase agreements with one or more qualified offerors for 200 to 275 megawatts of utility-scale, solar-generated electricity, in an estimated amount of \$22,500,000 to \$31,000,000 per year, and a total estimated amount of \$445,000,000 to \$620,000,000 with contract terms ranging between 15 and 25 years.

AMOUNT AND SOURCE OF FUNDING: Funding will be provided through Power Supply Adjustment and GreenChoice® revenue.

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

PRIOR COUNCIL ACTION: Approved Council Resolution No. 20150402-020.

FOR MORE INFORMATION: Jeff Vice, Director, Local Government Issues (512) 322-6087; Pat Sweeney, Director, Energy and Market Operations (512) 322-6292; Khalil Shalabi, VP, Energy Market Operations & Resource Planning (512) 322-6520, Cheryl Mele, Chief Operating Officer (512) 322-6062.

BOARDS AND COMMISSION ACTION: September 15, 2015 – To be reviewed by the Resource Management Commission. September 21, 2015 – To be reviewed by the Electric Utility Commission.

On December 11, 2014, the Austin City Council adopted the Austin Energy Resource, Generation, and Climate Protection Plan to 2025 which established the strategic energy policy for Austin Energy. Part of that plan envisioned contracting for up to 600 megawatts (“MW”) of utility-scale solar generation by 2017.

On April 2, 2015, the Austin City Council approved Resolution 20150402-020 directing the City Manager to issue a Request for Proposals for up to 600 MW of solar generation. The offers provided Austin Energy with competitively priced renewable solar energy and environmental attributes and the opportunity to continue progress toward its goal of having 55% of its energy resources come from renewable sources by 2025. The recommended solar purchases and existing renewable commitments are projected to result in Austin Energy achieving 40% renewable energy after the projects begin commercial operation by December 31, 2016.

These utility-scale solar contracts will provide for the purchase of the full output of solar power projects to be constructed in the West Texas Region of ERCOT. The solar projects are expected to come online by the end of 2016. Agreements will run for terms of 15 to 25 years and will not require Austin Energy to invest any funds in the construction, operation, or maintenance of the projects during that period. The agreements will each provide for a non-escalating fixed price per megawatt-hour of energy produced, the quantity of which will vary in accordance with the actual availability of solar resources. The agreements are projected to increase the Power Supply

Adjustment by up to 1% during the first four years of the agreement with neutral to slightly positive impacts in later years. The rate impact of this action is expected to be within affordability limits. The table below illustrates total estimated bill impacts by representative customer types.

<i>Customer Type</i>	2017 Bill Difference		
	<i>Monthly</i>	<i>Annual</i>	<i>%</i>
Average Residential	\$0.28	\$3.36	0.26%
Small Office	\$0.31	\$3.72	0.23%
Convenience Store	\$3.61	\$43.32	0.36%
Large Grocery Store	\$123.83	\$1,485.96	0.34%
Medium Tech Firm	\$243.22	\$2,918.64	0.35%
Large Tech Firm	\$912.08	\$10,944.96	0.41%
Extra Large Tech Firm	\$5,472.51	\$65,670.12	0.39%
Transmission	\$786.09	\$9,433.08	0.40%

PRICE ANALYSIS

- a. Adequate competition.
- b. Thirty-three respondents to RFP with over 149 proposals.

APPROVAL JUSTIFICATION

- a. Top evaluated proposal(s).
- b. The recommended proposer(s) meet(s) the requirements of the RFP.



MEMORANDUM

TO: Mayor and City Council Members

CC: Marc A. Ott, City Manager

FROM: Larry Weis, General Manager 

DATE: September 8, 2015

SUBJECT: Schedule for Updates on Independent Analysis of 2025 Generation Plan & Addressing Potential Addition of Utility Scale Solar

On August 27, 2015, the Austin Energy Utility Oversight Committee (AEUOC) recommended a resolution to City Council that would direct the City Manager to bring forth a plan by October 1, 2015, addressing the potential addition of 600 Megawatts (MW) of utility scale solar by 2017. City Council has yet to adopt the resolution, and Austin Energy has received several follow-up requests from Council Members about this item. In response to those requests, this memo provides an update on Austin Energy's intended timeline for presenting plan updates, as well as solar procurements currently underway.

In 2011, City Council passed Resolution No. 20110310-003, which, in part, requires that any acquisition of generation resources (including power purchase agreements) over 10 MW come before Council for briefing and public comment prior to being placed on an agenda for Council action. This requirement was added prior to adoption of the Council Committee structure, and Austin Energy intends that its briefing to the AEUOC on September 24 will satisfy this requirement for upcoming solar power purchase agreements.

In addition to the potential purchase of utility scale solar, the following schedule includes review and discussion of the independent study of the Austin Energy Resource, Generation and Climate Protection Plan to 2025 ("2025 Generation Plan") being completed by Navigant. This is an integral step in evaluating the acquisition of up to 600 MW of utility-scale solar generation, at a cost of approximately \$1.7 billion.

September 15 – Resource Management Commission

- Briefing on potential purchases of utility scale solar

September 21 – Electric Utility Commission Meeting

- Briefing on assumptions used by Navigant in its analysis
- Briefing and discussion on potential purchase of utility scale solar

September 24 – Austin Energy Utility Oversight Committee Meeting

- Briefing on assumptions used by Navigant in its analysis
- Briefing, public comment and committee recommendation on purchases of utility scale solar

October 1 – City Council Meeting

- Briefing on a plan for 600 MW utility scale solar by 2017
- Consideration of a power purchase agreement for utility scale solar

October 1 – 15

- Austin Energy receives draft Navigant report
- Electric Utility Commission members receive draft Navigant report

October 15 – 18

- Austin Energy receives final Navigant Report

October 19 – Electric Utility Commission Meeting

- Presentation of final Navigant report

October 22 – Austin Energy Utility Oversight Committee Meeting

- Presentation by Austin Energy and Navigant of final report

As you can see from the timeline above, Austin Energy plans to bring forward a solar power purchase agreement in the near future, contingent upon the ability to successfully negotiate favorable terms. Moving forward, the solar goals should be considered in a holistic manner with the entire energy portfolio, accounting for all aspects of the 2025 Generation Plan, the ERCOT market, the EPA's Clean Power Plan and potential impacts to customers. Therefore, waiting for the results of the Navigant report is instrumental in understanding how best to proceed with our energy generation future.

Please let me know if you have questions.