AUSTIN CITY COUNCIL

AGENDA

Recommendation for Council Action

Austin City Council	**Item ID**	73580	**Agenda Number**	
Meeting Date:	8/31/2017	**Department:**	Austin Energy	

Subject

Approve issuance of a rebate to Domain Junction 8 LLC, for energy efficiency measures at its facility located at 11601 Alterra Parkway, in an amount not to exceed $89,645. (District 7)

Amount and Source of Funding

Funding is available in the Fiscal Year 2016-2017 Operating Budget of Austin Energy.

Fiscal Note

A fiscal note is not required.

Purchasing Language:	
Prior Council Action:	
For More Information:	Jeff Vice, Director, Local Government Issues (512) 322-6087; Denise Kuehn, Director, Energy Efficiency Services (512) 322-6138.
Council Committee, Boards and Commission Action:	To be reviewed by the Electric Utility Commission on August 14, 2017 and by the Resource Management Commission on August 15, 2017.
MBE / WBE:	
Related Items:	

Additional Backup Information

Austin Energy requests authorization to issue a rebate to Domain Junction 8 LLC, in an amount not to exceed $89,645, for energy efficiency measures at the Domain 8 Office located at 11601 Alterra Parkway in Austin in Council District 7.

The Domain Junction 8 project is a new construction project with 235,000 square feet of office space. This project utilizes multiple energy efficiency measures including: air conditioning with water-cooled chillers and cooling towers, regenerative elevators, electronically-commutated motors, high-efficiency lighting, and variable frequency drives. The estimated total cost of these measures is $2,810,600; the rebate will cover 3.19% of the total cost.

These improvements are in accordance with Austin Energy's Commercial Rebate Program guidelines and the Energy Conservation Audit and Disclosure (ECAD) Ordinance. This program is one element of the comprehensive Austin Energy 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) are estimated at 599,880 kWh per year and represent a major benefit to the local environment. This project is estimated to prevent the production of the following air emissions: 321.1 metric tons of Carbon Dioxide (CO2), 0.142 metric tons of Nitrogen Oxides (NOX), and 0.360 metric tons of Sulfur Dioxide (SO2). The project savings is equivalent to an estimated 721,119 vehicle miles traveled, the removal of 62 cars from our roadways, or the planting of 8,251 trees or 413 acres of forest in Austin's parks.

FACT SHEET: ENERGY EFFICIENCY REBATE (COMMERCIAL)
Domain 8 Office

Property Name	Domain 8 Office
Customer Name	Domain Junction 8 LLC
Property Address	11601 Alterra Parkway, Austin, TX, 78758
Total Square Feet	234,626
Year Built	2017
Energy Conservation Audit and Disclosure (ECAD) Status[1]	Exempt – New Construction is exempt from ECAD requirements.
Total Measure Costs	$2,810,600
Total Rebate – Not to Exceed	$89,645
% of Total Measure Costs	3.19%
Note(s)	

Estimated cost breakdown:

Total Measure Cost	Percent of Total Cost	Measure
$1,400,000	51.0%	Regenerative Elevators
703,000	25.0%	Lighting
367,000	13.0%	Water-Cooled Centrifugal Chillers
198,000	7.0%	Cooling Towers
44,000	1.5%	HVAC
42,000	1.5%	Variable Frequency Drives
20,000	1.0%	Electronically-Commutated Motors
$2,800,000	100.0%	

Approximately $1.4 million of the $2.8 million 'Total Measure Cost', or 51%, is for the Regenerative Elevators measure. Lighting is the next largest component at $703,000, or 25%, of the 'Total Measure Cost'. Water Cooled Centrifugal Chillers is the third largest, at approximately $367,000, or 13%, of the cost. The Cooling Towers are $198,000, at 7%. Each remaining component is less than 2% of the 'Total Measure Cost'.

Scope of Work

Air conditioning utilizing water-cooled chillers and cooling towers, regenerative elevators, electronically-commutated motors, high-efficiency lighting, and variable frequency drives.

Project Annual Savings (Estimated)	
Kilowatt (kW)	280.67
$/kW	$319.40
Kilowatt-hours (kWh)	599,880

Scope of Work

Measure	Rebate Amount	kW Saved – Estimated	kWh Saved – Estimated	$/kW
Air Conditioning	$504.27	0.70	8,707	$723.25
Regenerative Elevators[2]	$11,751.25	42.58	95,424	$275.95
Water Cooled Chiller	$34,995.61	75.29	117,458	$464.78
Cooling Towers	$5,505.98	17.77	58,490	$309.92
Electronically-Commutated Motors[3]	$505.32	1.68	4,844	$300.69
High-Efficiency Lighting	$7,152.81	64.86	196,729	$110.28
Variable Frequency Drives[4]	$29,229.72	77.79	118,228	$375.77

[1] Owner agrees to comply with TITLE 6. ENVIRONMENTAL CONTROL AND CONSERVATION. CHAPTER 6-7. ENERGY CONSERVATION code (ECAD Ordinance) prior to the issuance of the rebate payment. Since this is a new construction property, benchmark energy usage is not required for the ECAD Ordinance until construction is complete and 12 months of utility data have been collected.

[2] Regenerative is a type of elevator that recycles energy rather than wasting it as heat. When the elevator cab travels down with a heavy load or up with a light load, the motor acts as a generator, transforming mechanical power into electrical power.

[3] Electronically-Commutated Motors (ECMs) control the speed and torque of the motor through pulses of current, reducing peak power when full speed is not required.

[4] Variable Frequency Drives (VFDs) adjust the speed of a pump or motor by varying its input frequency and voltage, thereby reducing its peak power when full speed is not required.