

## A G E N D A



## Recommendation for Council Action (Purchasing)

Austin City Council	Item ID:	10172	Agenda Number	44.
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Meeting Date:	October 20, 2011
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Department:	Purchasing
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### Subject

Authorize award, negotiation, and execution of a purchase contract with UNISON SOLUTIONS, INC., Dubuque, IA, or one of the other qualified offerors to RFP No. SMH0124, for the purchase of a biogas conditioning system for the Hornsby Bend Biosolids Management Plant in an estimated amount not to exceed \$1,206,300.

### Amount and Source of Funding

Funding is available in the 2011-2012 Capital Budget of Austin Water Utility.

### Fiscal Note

A fiscal note is attached.

Purchasing Language:	Best evaluated proposal of three proposals received.
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Prior Council Action:	
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For More Information:	Shawn Harris, Supervising Sr. Buyer / 505-7351
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Boards and Commission Action:	Recommended by the Water and Wastewater Commission.
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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 solicitation.
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Related Items:	
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### Additional Backup Information

This contract is for the purchase of a biogas conditioning system necessary to support the operation of the newly acquired biogas-fired engine/generator being installed at Hornsby Bend Biosolids Management Plant (Hornsby Bend). The biogas conditioning system is used to remove impurities from the biogas before being introduced into the engine/generator. The new generator replaces two 400 kilowatt (kW) generators installed in the 1980s. The existing units were operated without biogas conditioning, which caused significant mechanical problems and eventually led to the failure of the units. These units are no longer functioning, serviceable, or repairable.

The biogas produced from the digesters is at a very low pressure, is saturated and contains hydrogen sulfide, siloxane and other trace contaminants. The biogas treatment system removes or otherwise reduces these contaminants prior to being used in the engine.

Use of biogas can result in significant economic and environmental benefits. Biogas has not been used at Hornsby Bend since the failure of the existing cogeneration system. Carbon emissions are directly reduced as both electricity and gas consumption at the site can be offset by the energy produced by the proposed system. Currently, biogas not used in the boilers is flared to the environment to help reduce the impact on the environment. No natural gas or supplemental fuel source for the boilers is present on-site.

This size of the new generator will be capable of consistently generating more energy than the estimated 500kW to 700 kW the Hornsby Bend facility uses, thereby offsetting the plant's energy use and generating a credit to the water utility.

Electricity produced from the new generator will be renewable as it uses biogas produced from the sludge treatment process and therefore requires no fossil fuels. The result will demonstrate distributed green power generation, reduce the facility's operating costs, and offset on-peak operation of the plant. Through this effort, Austin Water will be contributing to Austin Energy's effort to avoid building new power generation plants and will help the City meet a key goal of the Austin Climate Protection Plan, which is to power all City facilities with 100% green power by 2012.

As a part of the biogas generation project at Hornsby Bend Biosolids Management Plant, this action could provide an estimated 4,432,492 kWh/year of generated electricity and reduce approximately 2,867 tons of carbon dioxide equivalents. These savings are equivalent to 5,033,527 vehicle miles traveled, removal of 628 cars from our roadways, the planting of 98,297 trees, or 4,915 acres of forest in Austin's parks.

A City of Austin team with expertise in this area evaluated the proposals and unanimously chose this proposal as the best to provide this system. Evaluation criteria included the total evaluated cost of the system, the technical system concept and solution proposed, and the proposed project schedule.

This request allows for the development of an agreement with a qualified offeror that Council selects. If the City is unsuccessful in negotiating a satisfactory agreement with the selected offeror, negotiations will cease with that provider. Staff will return to Council so that Council may select another qualified offeror and authorize contract negotiations with this provider.

MBE/WBE solicited: 2/1

MBE/WBE bid: 0/0

### **PROPOSAL ANALYSIS**

- a. Adequate competition.
- b. Thirty notices were sent, including two MBEs and one WBE. Three proposals were received, with no response from the M/WBEs.

**APPROVAL JUSTIFICATION**

- a. Best evaluated proposal received.
- b. The Purchasing Office concurs with Austin Energy's recommended award.
- c. Advertised on the Internet.