



**CITY COUNCIL
COMMUNICATION:**

ITEM _____

**OFFICE OF THE CITY MANAGER
CITY OF DES MOINES, IOWA**

02-075

SYNOPSIS -

AGENDA:

FEBRUARY 4, 2002

SUBJECT:

PROFESSIONAL
SERVICES
AGREEMENT FOR
ENERGY DATA
ANALYSIS SYSTEM
AT THE
WASTEWATER
RECLAMATION
FACILITY

On August 14, 2001, the City Engineer approved posting a Request for Proposals (RFP) on the City of Des Moines Webpage for the Wastewater Reclamation Facility (WRF) Energy Data Analysis System. Two firms responded and Automatic Systems and Control, Inc. (Dave Engle, President, 796 - 11th Street, Marion, Iowa) was chosen as the firm having the system that would best fit the process control system at the WRF. The Energy Data Analysis System will allow operations and management personnel at the WRF to make decisions on energy usage and production to reduce operating costs.

FISCAL IMPACT -

Funds in an amount not to exceed \$104,175 were approved in the 2001-02 Wastewater Reclamation Authority (WRA) Capital Program Budget - WRF Energy Data Analysis System - Account 544190 - Fund EN267 - Organization ENG990000 - Project/Grant WRA 075 - Activity ID 01-2002-006.

TYPE:

RESOLUTION
ORDINANCE
RECEIVE/FILE

RECOMMENDATION -

Authorize the Mayor to sign an agreement with Automatic Systems and Control, Inc. for providing equipment, services, and training for an Energy Data Analysis System at the WRF.

SUBMITTED BY:

WILLIAM STOWE
PUBLIC WORKS
DIRECTOR

BACKGROUND -

JEB E. BREWER, P.E.
ACTING CITY
ENGINEER

The WRF has been analyzing various methods of cost reduction. The major costs of operation at the facility are personnel and energy consumption. In the past few years, personnel costs have been reduced through attrition.

The next area to be analyzed is energy consumption. The WRF spends more than \$1,000,000 each year on energy. The facility is subject to

demand charges, which can exceed \$30,000 in any month. The facility also has the capability of satisfying up to one third of its energy needs by on-site production of electricity using methane produced in the digesters. The high cost of energy and the large number of areas where energy is utilized at the WRF require that software be used for analysis. The system will also require that hardware be installed at locations throughout the facility to provide information to the software.

On August 14, 2001, an RFP for an Energy Data Analysis System was posted on the City of Des Moines Webpage. Proposals were received from two firms on September 7, 2001. Both respondents gave presentations on their proposals to the selection committee. The selection committee consisting of Phil Koundakjian, Royce Hammitt, and Mike Hall scored each respondent on the following criteria:

- Qualification and Interest
- Project Overview and Work Plan
- Timely Completion of Project
- Cost of Service
- Quality and Thoroughness of Proposal
- Unique Services or Qualifications

Automation Systems and Controls, Inc. received the higher score based on compatibility with the existing WRF process control system.

The WRF Energy Data Analysis System will cost \$104,175 for the software, hardware, training, and installation. With energy costs exceeding \$1,000,000 each year and demand charges that exceed \$30,000 a month, the program will pay for itself in two to three years.
