

COUNCIL ACTION FORM

SUBJECT: APPROVAL OF PRELIMINARY PLANS AND SPECIFICATIONS FOR SUBSTATION CONTROL PANEL INSTALLATIONS

BACKGROUND:

This project involves the purchase and installation of six 69 kV Relay panels which are needed to upgrade transmission line relaying at Dayton Avenue, Mortensen Road, Ontario Road and Stange Road Substations. These additional relay panels are included in the Engineering Services Contract for the Vet Med Substation Expansion as an optional scope of work since they are part of the same 69kV transmission "loop" that extends from Stange Rd. Substation to Dayton Ave Substation.

Transmission relays at these other line terminals work in coordination with the relays at Vet Med Substation to perform optimal system protection to isolate transmission line faults quickly. The relays will record information on voltage fluctuations, faults and power quality. Therefore it is an important upgrade to perform in coordination with the Vet Med Expansion Project for optimal system coordination and protection. These relay upgrades replace aging electromechanical relays with faster microprocessor relays which require less maintenance and will isolate faults more quickly, thereby maintaining better service reliability to Ames' electric customers. Funds are available for this purchase within the remaining CIP funds allocated for the Vet Med Substation Expansion Project.

The Engineer's estimate of the cost of material and installation included in this bid is \$190,000. It should be noted that the majority of the equipment installation will be accomplished by City crews, but some oversight may be needed from the equipment supplier. Therefore, some installation assistance is included in the specifications.

The approved FY2010/11 CIP for Electric Services for the Vet Med Expansion Project includes approximately \$3,940,000 currently allocated for completion of the Vet Med Expansion Project, plus an additional \$350,000 that is in a project for Vet Med Substation Voltage Support. Therefore, the full \$350,000 is currently available for this purchase as the Vet Med Expansion Project continues to remain within its budget.

ALTERNATIVES:

1. Approve the plans and specifications for the substation control panel installations and set May 25, 2011, as the bid due date and June 14, 2011, as the date of hearing and award of contract.
2. Do not approve the plans and specifications at this time and delay the control panel upgrades.

MANAGER'S RECOMMENDED ACTION:

This purchase is necessary in order to improve reliability to Ames' electric system by replacing aging, electromechanical relays with faster microprocessor-based relays which require less maintenance. This new equipment will isolate faults more quickly, thereby maintaining better service reliability to Ames' electric customers. The funding for this work is found in the Vet Med Substation Voltage Support project budget.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 approving the plans and specifications for the substation control panel installations and set May 25, 2011, as the bid due date and June 14, 2011, as the date of hearing and award of contract.