

**COUNCIL ACTION FORM**

**SUBJECT: APPROVAL OF PRELIMINARY PLANS AND SPECIFICATIONS FOR STANGE ROAD SUBSTATION TO AMES POWER PLANT 161/69 KV TRANSMISSION LINE CONSTRUCTION**

**BACKGROUND:**

This project is for the construction of a 161 kV transmission line from the Stange Road substation to the Ames Power plant substation. The proposed contract is a continuation of the interconnection project started in FY 2003/2004. The completed 161 kV system plan includes the following three transmission elements: the west tie line to Central Iowa Power Cooperative's (CIPCO) Boone Junction Substation (previously placed in service), the "in-town" transmission line which interconnects Ames' two 161/69 kV substations and will be constructed under this bid, and finally, the south tie line to MidAmerican Energy Company's (MEC) NE Ankeny substation (to be constructed under a future bid once a franchise is obtained). The four 161 kV substation terminals needed to complete this 161 kV system plan have all been constructed.

**The construction of this portion of the 161 kV tie line project has value to the City even with delay in the southbound portion of the line.** The overall 161 kV system plan provides power to Ames' existing 69 kV system via the two 161kV/69 kV transformers located at the Stange and Ames Power Plant substations. Currently only the transformer at the Stange Rd. substation is connected to the 161 kV system. **By constructing this "in-town" section of transmission line, Ames will still be limited to only the outside 161 kV tie line to CIPCO for importing larger amounts of power, but will be able to utilize its second 161kV/69 kV transformer at Ames Plant Substation as an alternate path to this source. This provides valuable redundancy for system reliability should either transformer fail or need to be removed from service for inspection or maintenance purposes. This redundancy is particularly important during the summer months when peak power usage is an issue.** The construction of this line at this time will also permit the use of existing materials purchased under prior contracts which are in storage, and should be placed in service soon.

The Engineer's estimate for the proposed project is \$4,200,000. Funding is available as follows:

Approved FY 2008/2009 CIP for interconnection project	\$4,900,000
Funds carried over from the approved FY 2007/2008 CIP	<u>851,899</u>
Total	\$5,751,899

This work was originally bid in July 2006. Three bids were received, the lowest of which exceeded the engineer's estimate by 22% and was subject to adjustment based on metals prices. It was determined that market conditions at that time were reflected in the responses, causing dramatic increases in both labor and materials prices. Bids were rejected and the project delayed on August 22, 2006.

**ALTERNATIVES:**

1. Approve preliminary plans and specifications for Stange Road Substation to Ames Power Plant 161/69 kV Transmission Line Construction, and establish December 10, 2008, as the bid due date, and December 16, 2008, as the date of public hearing and award of contract.
2. Delay construction of the Stange Road Substation to Ames Power Plant 161 kV transmission line.

**MANAGER'S RECOMMENDED ACTION:**

Construction of the transmission line from the Stange Road substation to the Ames Power Plant substation will enable utilization of the existing Ames Plant 161kV/69kV transformer as an alternate path to the CIPCO 161kV interconnection. This will allow for improved reliability, particularly during the summer months when peak power usage is an issue.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby approving the preliminary plans for Stange Road Substation to Ames Power Plant 161/69 kV Transmission Line Construction, and establishing December 10, 2008, as the bid due date, and December 16, 2008, as the date of public hearing and award of contract.