

COUNCIL ACTION FORM

SUBJECT: STANGE TRANSFORMER LTC INSTALLATION

BACKGROUND:

This project is for the installation of a City supplied transformer load tap changer (LTC) at the Stange substation. Transformer LTC's are needed to regulate distribution feeder voltage at the substation. LTC's have many moving mechanical parts that require regular, routine maintenance. Over time these mechanisms require more extensive work and the entire mechanism must be replaced or refurbished. This project involves the more extensive replacement of the Stange substation LTC with a fully refurbished unit. It is important to replace this LTC to avoid a catastrophic failure, since LTC failures have been known to result in extensive damage to the transformer, which is much more expensive to repair or replace.

This work requires that the substation transformer be removed from service, which in turn will require switching the feeder loads served by the transformer to other substations. While Electric Services typically has adequate capacity to allow for planned outages of this kind, it is desirable to minimize exposure of the electric system to a second outage possibility through the use of a contracted service provider that is well prepared to complete this work. This will assure competent completion of the installation and minimize the period of time that the transformer is out of service. The project will be completed during an outage scheduled for early to mid spring 2012.

On January 11, 2012, the bid document was issued to nineteen potential bidders. The project was also advertised on the Current Bid Opportunities section of the Purchasing webpage and was sent to one planroom.

On January 25, 2012, six bids were received as demonstrated on the attached report. Electric Services staff reviewed the bids and determined that the bid submitted by North America Substation Services (NASS) was non-responsive, since there were no prices submitted with the bid.

Staff performed extensive evaluation of the apparent low bid in the amount of \$44,404.08 submitted by Tri-City Electric Company of Iowa. During the evaluation, staff contacted the references submitted with the bid and discovered that this bidder has historically (based on these references submitted) done work at facilities that are primary metered at 13.8kv with smaller transformers (2500 kva) with no LTC distribution equipment. Our transformer is a 25,000kva Substation class with a LTC. Staff found no history or reference for this firm to perform this type of work on a Substation Class transformer 15 MVA or larger. Additionally, this bidder is proposing a one month outage which is not acceptable. Buying the LTC leads to shorten outage time would put the

cost about the same as next highest bidder. Based on these findings, staff recommends that the apparent low bidder not be considered for this project.

Staff has concluded that the apparent second low bid in the amount of \$58,003.64 submitted by Utilities Plus Energy Services, Inc., Elk River, Minnesota is acceptable. This bidder meets our minimum technical requirements and has performed work on a transformer like ours at another location in Iowa. The contact person at that location was pleased with this bidder's work and would use them again. Additionally, the bidder can start work within one to two weeks after award and complete work in four to five days, providing new leads for LTC .

Funding is available from the approved 2011/12 Electric Services budget, which contains \$210,000 for Minor Distribution Substation Improvements.

ALTERNATIVES:

1. Award a contract to Utilities Plus Energy Services, Inc., Elk River, MN, for the Stange Transformer LTC Installation in the amount of \$58,003.64.
2. Award this contract to the low bidder.
3. Reject all bids and delay the Stange transformer LTC installation.

MANAGER'S RECOMMENDED ACTION:

This project will address the need to replace the Stange Road Substation LTC, which is necessary in order to regulate distribution feeder voltage. It is crucial to have this work done to avoid a much more expensive transformer failure in the event of an LTC failure.

Utilizing an inexperienced contractor significantly increases the risk of project delays, cost overruns and low quality results. Utilities Plus has history of performing projects of this size and scope successfully and can meet the outage scheduled duration.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby awarding a contract to Utilities Plus Energy Services, Inc., Elk River, MN, for the Stange Transformer LTC Installation in the amount of \$58,003.64.



**INVITATION TO BID NO. 2012-106
STANGE TRANSFORMER LTC INSTALLATION**

Bidder:	Tri-City Electric Company of Iowa, Davenport, IA	Utilities Plus Energy Service, Inc., River, MN	SPX Transformer Solutions, Inc., Waukesha, WI	Eaton Corp., Urbandale, IA	S.D. Myers, Inc., Tallmadge, OH	North American Substation Services, Altamonte Springs, FL
BASE						
Perform the Stange transformer LTC installation as specified	\$44,404.08	\$58,003.64	\$59,518.75	\$90,620.00	\$104,105.65	Non-Responsive
Sales and/or Use taxes (7%) included in the above amount	\$2,068.08	\$3,750.00	\$3,893.75	To be determined	\$6,810.65	
OPTION 1:						
Additional cost if transformer needs drying out	\$4,890.40	\$3,531 / day	\$250.00 / hr	\$4,500.00 / day	\$7,757.50 / day	
Sales and/or Use taxes (7%) included in the above amount	\$274.40	\$231.00	Plus 7%	To be determined	\$507.50	
OPTION 2:						
Additional cost if extra heating of core and coil is needed	\$4,890.40	\$3,531 / day	\$250.00 / hr	\$4,500.00 / day	\$7,040.60 / day	
Sales and/or Use taxes (7%) included in the above amount	\$274.40	\$231.00	Plus 7%	To be determined	\$460.60	