



City of Grand Island

Tuesday, October 14, 2003

Council Session

Item G14

#2003-280 - Approving Bid Award for Substation Transformer Testing and Inspection Services

Background:

The City of Grand Island owns seven 13.8kV distribution substations. These substations are vital to providing uninterrupted electrical service to the Grand Island population. Within these substations are a total of ten 22.5 MVA distribution transformers with Load Tap Changers (LTCs). An LTC makes automatic adjustments to maintain the distribution voltage at a constant level. These transformers are the most expensive assets in the distribution system. Manufacturers recommend a thorough inspection and testing every five years. This inspection and testing was last performed in 1996. In addition to the distribution substation transformers, the decision was made to obtain bids for electrical testing of all generation related transformers. Bids were requested on a "per transformer" basis to allow elimination from the scope of work any transformers that may be unavailable for testing during the time the contractor is on site. A total of twenty-two transformers, ten LTCs, and one underground cable were included in the bid specifications.

Discussion:

Testing and inspection services were estimated to cost \$200,000. Requests for bids were mailed to prospective contractors and advertised in The Grand Island Independent. The specifications (including addendum #1) requested two bids:

- 1) Electrical testing of all twenty-two transformers and one underground three phase cable. Inspection, maintenance, and contact replacement (where applicable) of ten LTCs.*
- 2) Major component replacement of ten LTCs in the event that problems are discovered during the above inspections.*

Bids from six firms were received:

1) Waukesha Electric Systems – Maitland, FL - Base Bid: \$83,600 - Major LTC Work: \$4,750 plus materials per transformer. 2) GE Energy Services - Denver, CO - Base Bid: \$86,650 - Major LTC Work: No Bid. 3) Electro-Test and Maintenance, Inc. - Rapid City, SD - Base Bid: \$112,243 - Major LTC Work: No Bid. 4) Solomon Corporation – Solomon, KS - Base Bid: \$154,268 - Major LTC Work: No Bid. 5) Siemens Industrial Services – Grimes, IA - Base Bid: \$203,940 - Major LTC Work: No Bid. 6) Dashiell Corporation – Deer Park, TX - Base Bid: \$360,600 - Major LTC Work: No Bid.

The Utilities Department has had no recent problems with any of its LTCs. Major problems are not anticipated to be found during inspection. However, in the event that problems are

discovered, a separate bid was requested to address fixing the problems. Only one company attempted to provide a bid for major LTC component replacement. The other companies opted to provide a repair estimate upon discovery of problems. The price range for an LTC kit (includes all major components potentially requiring replacement) is between \$14,000 and \$17,000. Of this amount, the average cost of components actually replaced is approximately \$5,000 per LTC.

An initial evaluation was made of the lowest three bids. Waukesha Electric Systems took no exceptions. They quoted a labor price for major LTC component replacement with the components being additional. GE's bid package did not include a bid for major LTC work because of a failure to receive addendum #1 (which requested the second bid for major LTC work). In addition, their "per transformer" prices contained N/A for all generation related transformers. Electro-Test and Maintenance also took no exceptions. Their bid acknowledged receipt of addendum #1, however, no bid for major LTC work was made.

Recommendation:

Waukesha Electric Systems presented the lowest bid with no exceptions. It is the only company to attempt a price for the major LTC work. Waukesha is a major transformer manufacturing company with many years of experience in the transformer maintenance industry. Waukesha personnel potentially involved with this project have an average experience of 15 years. It is recommended that Waukesha Electric Systems be awarded the bid for Substation Transformer Testing and Inspection Services in the amount of \$83,600. In addition, it is recommended that a maximum of \$97,500 (\$9,750 per LTC) be awarded to Waukesha Electric Systems for major LTC component replacement.

Fiscal Effects:

Funds are available from the Utilities Department Enterprise Fund 520.

Alternatives:

Award the bid for Substation Transformer Testing and Inspection Services to another company.

Staff Contact: Gary R. Mader; Dale Shotkoski



Dale M. Shotkoski, Assistant City Attorney

*Working Together for a
Better Tomorrow, Today*

BID OPENING

BID OPENING DATE: September 8, 2003 at 11:00 a.m.

FOR: Quotation for Substation Transformer Testing and Inspection Services

DEPARTMENT: Utilities

ENGINEER'S ESTIMATE: \$200,000.00

FUND/ACCOUNT:

PUBLICATION DATE: August 14, 2003

NO. POTENTIAL BIDDERS: 6

SUMMARY

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|--------------------|---|--|--|
| Bidder: | <u>Dashiell Corporation</u> Deer Park, TX | <u>Electro-Test & Maintenance</u> Rapid City, SD | <u>Solomon Corp.</u> Solomon, KS |
| Exceptions: | Noted | None | None |
| Bid Price: | \$360,600.00 | \$112,243.00 | \$154,268.00 |
| Bidder: | <u>Waukesha Electric Sys</u> Maitland, FL | <u>Siemens</u> Grimes, IA | <u>GE Energy Services</u> Denver, CO |
| Exceptions: | None | None | Noted |
| Bid Price: | \$83,600.00 | \$203,940.00 | \$86,650.00 |

cc: Gary Mader, Utilities Director
Bob Smith, Assistant Utilities Director
Travis Burdett, Phelps Control Center
Dave Kuhlman, Platte Generating Station
Marlan Ferguson, City Administrator

Dale Shotkoski, Purchasing Agent
Laura Berthelsen, Legal Assistant

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R E S O L U T I O N 2003-280

WHEREAS, the City of Grand Island invited sealed bids for Substation Transformer Testing and Inspection Services, according to plans and specifications on file at the Utility Engineering Office at Phelps Control Center; and

WHEREAS, on September 8, 2003, bids were received, opened and reviewed; and

WHEREAS, Waukesha Electric Systems of Maitland, Florida, submitted a bid in accordance with the terms of the advertisement of bids and plans and specifications and all other statutory requirements contained therein, such bid being in the amount of \$83,600.00; and

WHEREAS, Waukesha Electric Systems' bid is less than the engineer's estimate for such project; and

WHEREAS, it is recommended that an additional amount at a maximum of \$97,500 (\$9,750 per load tap charger) be awarded to Waukesha Electric System for major load tap charger component replacement.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the bid of Waukesha Electric Systems of Maitland, Florida, in the amount of \$83,600.00 for substation transformer testing and inspection services is hereby approved as the lowest responsible bid.

BE IT FURTHER RESOLVED, that an additional amount at a maximum of \$97,500 (\$9,750 per load tap charger) be awarded to Waukesha Electric System for major load tap charger component replacement.

BE IT FURTHER RESOLVED, that a contract for such project between the City and such contractor be entered into, and the Mayor is hereby authorized and directed to execute such contract on behalf of the City of Grand Island.

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Adopted by the City Council of the City of Grand Island, Nebraska, October 14, 2003.

RaNae Edwards, City Clerk

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| Approved as to Form | ☐ _____ |
| October 10, 2003 | ☐ City Attorney |