



# City of Grand Island

Tuesday, August 12, 2008

Council Session

## Item G15

**#2008-210 - Approving Bid Award for Substation Transformer  
Maintenance Services**

Staff Contact: Gary R. Mader; Wesley Nespor

# **Council Agenda Memo**

**From:** Gary R. Mader, Utilities Director  
Wesley Nespor, Asst. City Attorney/Purchasing

**Meeting:** August 12, 2008

**Subject:** Approving Substation Transformer Maintenance Services

**Item #'s:** G-15

**Presenter(s):** Gary R. Mader, Utilities Director

## **Background**

The Grand Island Electric System utilizes distribution substations interconnected with a transmission loop. Each substation contains large distribution transformers to lower the voltage from the transmission level of 115,000 volts (115 kV) to the distribution level of 13,800 volts (13.8 kV). These transformers are the most expensive single component within a substation. The older substations contain General Electric transformers manufactured in the late 1960's. In that era, General Electric used transformer bushings referred to as "Type U" in their high voltage equipment. The bushing is an insulated device that sticks above the transformer to receive line or bus bar connections at the appropriate voltage. Over the past forty years, operational experience has revealed a design flaw with this particular type of bushing.

Over time, the oil that fills the bushings causes deterioration of the internal layers of insulation, which can lead to severe failure. The Utilities Department has monitored this potential failure for years and routine testing shows the progression of the flaw and the need for replacement of bushings in five transformers. The required replacement bushings were purchased earlier this year and are in stock, ready for installation. The Utility Department engineering staff developed specifications for replacement of the transformer bushings, and included additional known repair needs to be done while these older units are out of service for the bushing replacements. The contract for Substation Transformer Maintenance Services includes bushing replacement as well as repairs of several minor oil leaks and valve replacements.

## **Discussion**

The request was advertised in accordance with City procurement requirements. Specifications were sent to six regional contractors specializing in this type of work. Bids were publicly opened at 11:00 a.m. on July 29, 2008. Five bids were received. The following table summarizes the bid results:

Company	Exceptions	Best Case Labor	Full Price Labor
Solomon Corporation	Yes	\$ 51,873.60	\$102,752.10
Clarifications			
Electro-Test & Maintenance, Inc.	Only	\$ 64,183.95*	\$133,134.75*
R.B. Watkins, Inc.	No	\$ 98,975.00	\$133,750.00**
Waukesha Electric Systems	Yes	\$154,240.50	\$217,424.00
Siemens Energy & Automation, Inc.	Yes	\$307,185.00	\$316,387.00

\*Evaluated bid price – Original bid price did not include Nebraska Sales Tax or electrical tests.

\*\*Watkins did not include testing in their bid price.

The transformer maintenance activities can vary greatly in price depending on whether or not the oil in the transformer must be completely drained. Many times, this is unknown until the work is actually performed. Bidders were required to submit a price for best case labor assuming no transformers require draining and full price labor assuming all transformers require draining. The contract is proposed for award based upon the full price labor bid with invoicing reflecting the actual labor required. Bids were evaluated based upon three primary factors; minimum bid price, maximum bid price and responsiveness to specifications. Four of the bids were under the engineer's estimate of \$300,000. The highest bid was not considered further.

Of the four bids under the estimate, Solomon's bid of \$102,752.10 took exception to mobilization charges and did not contain any supporting documentation. The bid did not include the required information regarding the experience and qualifications of the personnel intended for the job. Their bid did not include any documentation regarding the proposed work and is evaluated as not responsive to the specifications.

The bid submitted by Electro-Test and Maintenance, Inc., contained adequate documentation as well as recommended electrical tests to be performed before and after bushing installation. Their original bid did not include Nebraska Sales Tax. The evaluated bid price including the recommended electrical tests and all applicable Nebraska Sales Tax is \$133,134.75. The bid is evaluated as compliant with the specifications.

The bid submitted by R.B. Watkins for \$133,750.00 contained adequate documentation regarding the proposed work and is evaluated as compliant with the specifications.

The bid submitted by Waukesha Electric Systems for \$217,424.00 contained detailed information and was evaluated as compliant with the specifications.

### **Alternatives**

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Move to approve
2. Refer the issue to a Committee
3. Postpone the issue to future date
4. Take no action on the issue

### **Recommendation**

City Administration recommends that the Council award the contract to Electro-Test and Maintenance, Inc., of Rapid City, SD for a total of \$133,134.75 which includes the recommended electrical tests before and after bushing installation and all applicable sales tax. Electro-Test and Maintenance, Inc. submitted the lowest bid meeting the specifications.

### **Sample Motion**

Move to approve the contract for Substation Transformer Maintenance Services to Electro-Test and Maintenance, Inc., for \$133,134.75.

Purchasing Division of Legal Department  
**INTEROFFICE MEMORANDUM**



Dale M. Shotkoski, Assistant City Attorney

*Working Together for a  
Better Tomorrow, Today*

**BID OPENING**

**BID OPENING DATE:** July 29, 2008 at 11:00 a.m.

**FOR:** Substation Transformer Maintenance Services

**DEPARTMENT:** Utilities

**ESTIMATE:** \$300,000.00

**FUND/ACCOUNT:** 520

**PUBLICATION DATE:** June 25, 2008

**NO. POTENTIAL BIDDERS:** 6

**SUMMARY**

<b>Bidder:</b>	<b><u>R.B. Watkins, Inc.</u></b>	<b><u>Siemens Energy &amp; Automation, Inc.</u></b>
	Stow, OH	Grimes, IA
<b>Bid Security:</b>	\$6,687.50	Federal Insurance Company
<b>Exceptions:</b>	None	Noted

<b>Bid Price:</b>	<b><u>Best Case Labor</u></b>	<b><u>Full Price Labor</u></b>	<b><u>Best Case Labor</u></b>	<b><u>Full Price Labor</u></b>
<b>Substation G:</b>	\$13,687.25	\$15,489.50	NA	\$39,037.00
<b>Substation H North:</b>	\$13,687.25	\$15,489.50	NA	\$38,914.00
<b>Substation H South:</b>	\$13,687.25	\$15,489.50	NA	\$39,703.00
<b>Unit #3 Res Supply:</b>	\$ 2,505.50	\$11,311.50	\$7,673.00	\$16,875.00
<b>Unit #2 GSU:</b>	\$10,519.25	\$13,481.50	NA	\$29,297.00
<b>Substation A:</b>	\$13,692.25	\$15,494.50	NA	\$38,957.00
<b>PGS Unit #1 GSU:</b>	\$14,361.25	\$15,004.00	NA	\$40,637.00
<b>Materials (all trans):</b>	\$ 6,360.00	\$ 7,245.00		\$ 9,295.00
<b>Mobilization – Qty 4:</b>	\$ 4,000.00	\$16,000.00		\$63,021.00
<b>Sales Tax:</b>	<u>\$ 6,475.00</u>	<u>\$ 8,750.00</u>		<u>\$ 651.00</u>
<b>Total:</b>	\$98,975.00	\$133,750.00	\$307,185.00	\$316,387.00

**Bidder:** Solomon Corporation  
Solomon, KS  
**Bid Security:** Travelers Casualty  
**Exceptions:** Noted

Electro-Test & Maintenance, Inc.  
Rapid City, SD  
Merchants Bonding Company  
Noted

<b>Bid Price:</b>	<u>Best Case Labor</u>	<u>Full Price Labor</u>	<u>Best Case Labor</u>	<u>Full Price Labor</u>
Substation G:	\$5,907.00	\$13,085.00	\$4,610.00	\$10,640.00
Substation H North:	\$5,907.00	\$13,809.00	\$4,610.00	\$10,640.00
Substation H South:	\$5,907.00	\$13,809.00	\$4,610.00	\$10,640.00
Unit #3 Res Supply:	\$3,380.00	N/A	\$3,425.00	\$ 8,575.00
Unit #2 GSU:	\$5,177.00	\$10,912.00	\$4,090.00	\$ 9,890.00
Substation A:	\$5,907.00	\$13,809.00	\$4,610.00	\$10,640.00
PGS Unit #1 GSU:	\$8,072.00	\$18,832.00	\$4,090.00	\$11,940.00
Materials (all trans):	Included	Included	\$4,800.00	\$ 8,480.00
Mobilization – Qty 4:	\$8,223.00	\$11,774.00	\$11,800.00	\$29,640.00
Sales Tax:	<u>\$3,393.60</u>	<u>\$ 6,722.10</u>	-	-
<b>Total:</b>	<b>\$51,873.60</b>	<b>\$102,752.10</b>	<b>\$46,645.00</b>	<b>\$111,085.00</b>

**Bidder:** Waukesha Electric Systems  
Waukesha, WI  
**Bid Security:** Liberty Mutual Insurance Co.  
**Exceptions:** Noted

<b>Bid Price:</b>	<u>Best Case Labor</u>	<u>Full Price Labor</u>
Substation G:	\$16,650.00	\$27,500.00
Substation H North:	\$16,650.00	\$27,500.00
Substation H South:	\$16,650.00	\$27,500.00
Unit #3 Res Supply:	\$ 5,900.00	\$16,750.00
Unit #2 GSU:	\$12,925.00	\$23,775.00
Substation A:	\$16,650.00	\$27,500.00
PGS Unit #1 GSU:	\$12,925.00	\$28,275.00
Materials (all trans):	\$ 4,800.00	\$ 4,800.00
Mobilization – Qty 4:	\$41,000.00	\$41,000.00
Sales Tax:	<u>\$10,090.50</u>	<u>\$14,224.00</u>
<b>Total:</b>	<b>\$154,240.50</b>	<b>\$217,424.00</b>

cc: Gary Mader, Utilities Director  
Dale Shotkoski, City Attorney  
Jeff Pederson, City Administrator  
Travis Burdett, Assist. Utilities Director

Bob Smith, Assist. Utilities Director  
Wes Nespor, Assist. City Attorney  
Pat Gericke, Utilities Admin. Assist.

RESOLUTION 2008-210

WHEREAS, the City Electric Department invited sealed bids for Substation Transformer Maintenance Services; and

WHEREAS, on July 29, 2008, bids were received, opened and reviewed; and:

WHEREAS, Electro-Test and Maintenance, Inc., of Rapid City, South Dakota 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 \$133,134.75; and;

WHEREAS, the bid of Electro-Test and Maintenance, Inc., is less than the estimate for the Substation Transformer Maintenance Services.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the bid of Electro-Test and Maintenance, Inc., of Rapid City, South Dakota, in the amount of \$133,134.75 for Substation Transformer Maintenance Services is hereby approved as the lowest responsible bid.

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Adopted by the City Council of the City of Grand Island, Nebraska, August 12, 2008.

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Margaret Hornady, Mayor

Attest:

\_\_\_\_\_  
Paul Briseno, Deputy City Clerk

Approved as to Form	☐ _____
August 7, 2008	☐ City Attorney