



City of Grand Island

Tuesday, June 25, 2002

Council Session

Item G10

#2002-179 - Approving Bid Award for Digital Panel Meters

The Electric Department is in the process of upgrading equipment to conform with current industry practice. The following components are being added or replaced: digital relays, circuit breakers, communications equipment and panel meters.

Almost all of our existing panel meters are analog which was industry standard until about 20 years ago. A major deficiency with analog meters is they are hardwired for a particular Current Transformer and Potential Transformer ratio. As Grand Island increases current carrying limits on distribution feeders, the existing analog meters no longer indicate correctly. Digital panel meters also give an indication of items such as power quality, which is becoming important in the future environment. A single digital panel meter measures multiple quantities through programmable instrument transformer ratios. A single type of digital panel meter will replace multiple types of analog panel meters. This reduces both total meter count and simplifies inventory.

Discussion:

The cost of digital panel meters is comparable to analog meters. The cost is sufficiently low that meters can be purchased individually, without taking bids. However, savings can be realized by obtaining competitive bids for quantity purchase. A single type of digital meter ensures consistency and simplifies design, programming, and operation. Rather than purchase digital panel meters individually, it is preferable to purchase a sufficient quantity to satisfy forthcoming needs. 110 meters were specified.

The defacto standard for panel meters is the Bitronics (Recently purchased by Alstom.) digital meter. Several manufacturers can furnish meters comparable to the Bitronics meter. Specifications were written around the Bitronics meter but generic enough to allow other vendors to bid with only minor exceptions.

Some exceptions are tolerable and represent mainly variations in display philosophy. Other exceptions cannot be tolerated. For our applications, digital panel meters must be DC powered, so they can indicate correctly during a power loss. They must be capable of severe current overloads, so they do not open current transformers during fault conditions. Some manufacturers market multiple lines of digital panel meters; the less expensive meters are incapable of meeting the most critical requirements.

Specifications were prepared and advertised in accordance with City Purchasing Code.

A total of eight bids were received from six manufacturers. Of those eight meters, four were

for the lower tier meters. Each of the six bidders produce meters that will fully comply with the intent of the Specifications, two of these manufacturers choose to offer only their less expensive, non-compliant products. The following information states the bids and the exceptions for each one. 1)Statec/Statec/PM130P-U-5-IAC - Exceptions - Will not accept 125 VDC control power input. Will not measure total harmonic distortion. Max withstand current is 250 A for 1 second. Notes - This is an alternate bid for Satec - Total Bid (including tax and shipping) \$37,322.00 2)Kriz-Davis/Statec/PM130P-U-5-IAC - Exceptions - Will not accept 125 VDC control power input. Will not measure total harmonic distortion. Max withstand current is 250 A for 1 second. Notes - This is an alternate bid for Kriz-Davis - Total bid including tax and shipping \$42,325.80 3)Electro Industries/Electro Industries/DMMS300-V-A-KW-120-115A-SF485 - Exceptions - Stated no exceptions on their bid, however, the part number given indicated a couple of exceptions. Will not accept 125 VDC control power input. Max withstand is 50 A for 3 seconds - Notes - Electro Industries makes but did not offer a higher quality meter. Total bid including tax and shipping \$43,142.00 4)Wesco/PML/P6200A0A0B0A0A0R - Exceptions - Will not display min/max values on front panel (only available through a computer download). Max withstand current is 120 A for 1 second. Notes - PML makes but did not offer a higher quality meter. Total bid including tax and shipping \$45,357.40 5)Satec/Satec/PM172P-U-5-ACDC - Exceptions - Stated no exceptions, however, further research indicates one minor exception. Max withstand current is 300 A for 1 second. Notes - The meter will continue to operate at the specified low temperature, however, at a lower accuracy. Total bid including tax and shipping \$75,673.00 6)Kriz-Davis/Satec/PM172P-U-5-ACDC - Exceptions - Max withstand current is 300 A for 1 second. Notes - The meter will continue to operate at the specified low temperature, however, at a lower accuracy. Total bid including tax and shipping \$83,135.80 7)Alstom/Alstom/Multicomm RTH Meter - Exceptions - Min amps per phase are not included. Frequency min/max is not included. Notes - Alstom recently purchased the Bitronics line of meters. Total bid including tax and shipping \$90,750.00 8)Dutton Lainson/Schlumberger/Q1000 - Exceptions - Minor - Notes - There may be a premium grade of meters. Since the Bitronics style is adequate, this possibility was not investigated. Total bid including tax and shipping \$369,505.40.

Recommendation:

After carefully evaluating the bids, it is the recommendation of the Utilities Department that Satec's bid for \$75,673.00 be accepted. This is the lowest price acceptable level meter listed. The Utilities Department has purchased two of Satec's lower level meters for evaluation purposes and has been impressed with their quality. Satec's higher-level meter meets all primary specifications with only one minor exception.

Fiscal Effects:

Expenditure of \$75,673 from Electric Enterprise Fund 520.

Alternatives:

Award to Kriz Davis/Satec at \$83,135.80. See attached RESOLUTION.

Staff Contact: Gary R. Mader;Dale Shotkoski



Dale M. Shotkoski, Assistant City Attorney

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Better Tomorrow, Today*

BID OPENING

AMENDED

Being amended due to Satec had also submitted an alternate bid which was not noticed till after the bid's were opened.

BID OPENING DATE: June 12, 2002 @ 11:00 a.m.
FOR: (110) 3-Phase Digital Panel Meters
DEPARTMENT: Utilities
ENGINEER'S ESTIMATE: \$150,000
FUND/ACCOUNT: 520
PUBLICATION DATE: May 24, 2002
NO. POTENTIAL BIDDERS: 8

SUMMARY

Bidder: <u>Wesco Distribution, Inc.</u> Grand Island, NE	<u>Dutton-Lainson Company</u> Hastings, NE
Bid Security: Liberty Mutual Insurance Co.	Continental Casualty Co.
Exceptions: Noted	Noted
Bid Price: <u>\$45,357.40</u> w/sales tax	<u>\$369,505.40</u> w/sales tax
Bidder: <u>Satec, Inc.</u> Summit, NJ	<u>Electro Industries/Gaugetech</u> Westbury, NY
Bid Security: \$3,570.00	\$2,158.00
Exceptions: None	None
Bid Price: <u>\$75,673.00</u> w/sales tax Alternate Bid: <u>\$37,322.00</u> w/sales tax	<u>\$43,142.00</u> w/sales tax

Bidder: Alstom T& D, Inc.
Bethlehem, PA

Bid Security: \$5,000.00

Exceptions: Noted

Bid Price: \$90,750.00 w/o sales tax

Kriz-Davis Co.
Grand Island, NE

St. Paul Guardian Insurance

Noted

Bid Price: \$83,135.80 w/sales tax
Alternate Bid: \$42,325.80 w/sales tax

cc: Gary Mader, Utilities Director
Travis Burdett, Electrical Engineer II
RaNae Edwards, City Clerk
Dale Shotkoski, Purchasing Agent
Laura Berthelsen, Legal Assistant

Bid specs. given to Travis Burdett, Phelps Control

(110) 3-Phase Digital Panel Meters

P-728

RESOLUTION 2002-179

WHEREAS, the City of Grand Island invited sealed bids for One Hundred Ten (110) 3-Phase Digital Panel Meters, according to plans and specifications on file with the Purchasing Division of the Legal Department; and

WHEREAS, on June 12, 2002, bids were received, opened and reviewed; and

WHEREAS, Satec, Inc. of Summit, New Jersey, 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 \$75,673.00 with sales tax; and

WHEREAS, Satec, Inc.'s bid is less than the engineer's estimate for such project.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the bid of Satec, Inc. of Summit, New Jersey, in the amount of \$75,673.00 with sales tax for one hundred ten (110) 3-phase digital panel meters is hereby approved as the lowest responsive bid.

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Adopted by the City Council of the City of Grand Island, Nebraska on June 25, 2002.

RaNae Edwards, City Clerk

Approved as to Form	☐
June 21, 2002	☐ City Attorney