

Ship To
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 Attn: Shipping & Receiving Department
 1355 Capital Boulevard
 Reno, NV 89502

Bill To
 Truckee Meadows Water Authority
 Post Office Box 30013
 Reno, NV 89520
 (775) 834-8000

Purchase Order
 No. 2008-00000032
 DATE 03/05/2008

VENDOR NO. 2192

PURCHASE ORDER NUMBER MUST APPEAR ON ALL INVOICES, SHIPPERS, BILL OF LADING AND CORRESPONDENCE

Vendor
 Electrical Design Technology, Inc.
 4827 Old Redwood Hwy
 SANTA ROSA, CA 95403

DELIVER BY
 SHIP VIA
 FREIGHT TERMS
 PAGE 1 of 1
 ORIGINATOR: Justine Chambers

REFERENCE # Tim Grover

QUANTITY	UNIT	DESCRIPTION	UNIT COST	TOTAL COST
1.0000	Each	Glendale Pump Upgrade - Sparks Zone AFD's - Base Bid Lump Sum 1-2-30-300-7350 - Supplies 471,246.01 03-006	471,246.0100	\$471,246.01
3.0000	Each	Separate source of power - This item was originally omitted from the bid, however TMWA waived this minor omission as a minor bid informality. This bid is still \$85,000 lower than the next low bid submitted and meets the specifications. This PO is issued in accordance with NRS 332. The project was formally bid. This recommendation for award is to the lowest responsive and responsible bidder. The documents are filed in Contract No. 0708-206. The contact person for this project is Tim Grover and can be reached at 775-834-8049. Please direct all invoices to: TMWA, Accounts Payable, P.O. Box 30013, Reno, NV 89520-3013 1-2-30-300-7350 - Supplies 16,500.00 03-006	5,500.0000	\$16,500.00
			TOTAL DUE	\$487,746.01

1% discount for pmt within 10 days.
[Signature]

Special Instructions
Roxi Williams
e-mailed 3-5-08

1355 Capital Blvd. • PO Box 30013 • Reno, NV 89520-3013
☎ 775.834.8080 • ☎ 775.834.8003

To: Justine Chambers
From: Tim Grover *TG*
Date: March 4, 2008
Re: Award Recommendation for Bid No. 0708-206, Glendale Pump Upgrade
Project, Phase 2 – Purchase of Sparks Zone AFD's

Recommendation: I have completed evaluation of Bid No. 0708-206. Award is recommended to Electrical Design Technology, Inc. in the amount of \$487,746.01 for three variable speed drive systems per the specifications and letter of clarification.

Discussion: Three bids were received on February 26, 2008. The lowest price submitted was from Electrical Design Technology (EDT). Bids were also received from Grove Madsen Industries and Granite Electrical Supply. These additional bids were significantly higher than the low bid.

The bid from EDT contained a statement that "VFDs require a separate source of ... power for auxiliary cooling motors and control logic." They listed an additional price of \$5,500.00 per drive (\$16,500.00 total) to add a control transformer to each drive to supply this power internal to the drive cabinet.

The specifications required (Section 26 19 23, paragraph 2.02.H.4) that internal control power transformers be provided. I am recommending that we consider EDT's omission of the control transformers as a minor bid informality. The \$16,500.00 would then be added to the base bid amount and the contract awarded to EDT in the amount listed above. Even with the addition of the cost of the control transformers, the contract amount is \$85,000± under the next lowest bid. It is in TMWA's best interest to award the contract to furnish these AFD's to EDT.

EDT has provided a clarification letter dated March 3, 2008 (copy attached) to some of the other items submitted with their bid. Most importantly, EDT is withdrawing their proposed changes to the terms and conditions of the contract that were required by TMWA's specifications. The letter also clarifies miscellaneous technical items.

The purchase order should specifically reference the clarification letter and make it part of the bid award and also note that liquidated damages will be assessed if the Equipment is not delivered by the guaranteed delivery date of February 20, 2009.

CH2M Hill (copy of memo dated March 4, 2008 is attached) has reviewed the bid proposal and has found that the equipment proposed by EDT meets the specifications with minor acceptable exceptions.

cc: Scott Estes
Wayne Pearson, CH2M Hill

Truckee Meadows Water Authority Glendale Pump Upgrade Project – Phase 2 Medium-Voltage AFD Bid Evaluation

TO: Tim Grover/TMWA
FROM: W. Kurt Vollmers/CH2M HILL *WVH*
COPIES: Wayne Pearson/CH2M HILL
DATE: March 4, 2008
PROJECT NUMBER: 363371.PU.90

Introduction

We have reviewed the three bids received by TMWA on February 26, 2008, for purchase of the Medium-Voltage Adjustable Frequency Drive (AFD) systems to power the Sparks Zone Pumps. Our evaluation of the bids focused on whether or not the proposed equipment meets the technical performance requirements of the specifications. None of the proposals contain detailed shop drawing information, so many of the details associated with the equipment are unconfirmed. These details will be reviewed and confirmed through the normal shop drawing review process.

We did not evaluate the bids to determine responsiveness from a legal standpoint, nor did we evaluate the commercial terms, payment terms, or warranties.

Recommendation

We recommend that TMWA proceed with procurement of three Siemens Perfect Harmony AFDs in the amount of \$487,746.01. This amount is derived as follows:

Item Description	Price
Bid Item 1: Medium Voltage AFDs (Qty = 3)	\$443,456.01
Bid Item 2: Installation assistance; startup and testing services	\$27,790.00
Price Adder: Specified 4160/480V control power transformer to power auxiliary cooling fans (Qty = 3)	\$16,500.00
Total Adjusted Bid Price	\$487,746.01

This equipment meets the performance specifications with relatively minor exceptions and appears to be a good fit for this application. Even when accounting for the additional cost of the specified 4160/480V internal control power transformers, Electrical Design Technology, Inc. (Siemens) is the low bidder for the AFD equipment.

The proposed AFD units from General Electric and Allen-Bradley also appear to meet the overall performance specifications for the project. Both are significantly higher in cost and are therefore not recommended.

Siemens Perfect Harmony

The proposed Siemens Perfect Harmony AFD appears to meet the overall performance requirements of the specifications, with a few acceptable exceptions:

- 480V control power for the AFD auxiliary cooling fans is specified to be provided internally. The proposal excludes the required 4160/480V control power transformer, but offers an adder to provide it for an additional \$5,500 for each AFD. Bidder has subsequently advised that addition of the specified control power transformer will increase the width of the AFD enclosure to 126 inches.
- In the bid submitted, it is not clear if the specified operator training is included in the bid price. In the information included with the bid it is noted that operator training can be provided for an additional cost of \$4,675. Bidder has subsequently clarified that the specified operator training is included in the bid price.
- A Guaranteed Delivery Date for the equipment is not provided, as requested in the proposal summary; bidder instead states 22-24 weeks ARO (after receipt of order?). This quoted delivery time appears to conflict with the Delivery Schedule noted in the Commercial Items section of the bid proposal which states that shipment will be 22 to 24 weeks after receipt of approved drawings by Siemens. Delivery of the equipment in February of 2009 should not be a problem even if approval of submittals takes as long as 16 weeks (delivery of submittals for initial review / approval is quoted as being 8 to 10 weeks). Bidder has subsequently advised that they will clarify their bid to provide a Guaranteed Delivery Date of February 20, 2009.

When the control power transformer for the auxiliary cooling fans is included, the resulting AFD enclosure quoted by Siemens exceeds the maximum specified width by 4 inches. The space available for the AFDs has been checked; the slightly larger AFD enclosures proposed by Siemens will fit in the existing SEPS Electrical Room. Consequently, this minor exception to the specification is acceptable. Complete and detailed shop drawings were not provided with the bid proposal, so many details are unconfirmed.

Allen-Bradley PowerFlex 7000

The proposed Allen-Bradley (A-B) PowerFlex 7000 AFD appears to meet the overall performance requirements of the specifications with no obvious exceptions. The dimensional data provided meets the requirements of the specifications, indicating that the A-B AFD cabinets will fit in the existing SEPS Electrical Room. A-B states that they can meet the required delivery date. Complete and detailed shop drawings were not provided with the bid proposal, so many details are unconfirmed. The bid price submitted for the A-B AFDs is substantially higher than the adjusted bid price of the low bidder.

General Electric Dura-Bilt5i MV

The proposed General Electric (GE) Dura-Bilt5i MV AFD appears to meet the overall performance requirements of the specifications with a couple of exceptions:

- 480V control power for the AFD auxiliary cooling fans is specified to be provided internally. The proposal notes this power is to be 'Customer Supplied'. No option is listed to provide this power internally. The construction contract documents for the project would need to be modified to provide the required 480V circuits from MCC-5.
- No spares are listed.

The dimensional data provided meets the requirements of the specifications, indicating that the GE AFD cabinets will fit in the existing SEPS Electrical Room. GE states that they can meet the required delivery date. Complete and detailed shop drawings were not provided with the bid proposal, so many details are unconfirmed. The bid price submitted for the GE AFDs is substantially higher than the adjusted bid price of the low bidder.