



STAFF REPORT

DATE: NOVEMBER 20, 2012
 TO: HONORABLE MAYOR AND CITY COUNCIL
 FROM: ROD FOSTER, CITY MANAGER/GENERAL MANAGER *RF*
 PREPARED BY: DAVID X. KOLK, ELECTRIC UTILITY DIRECTOR *DK*
 SUBJECT: AWARD OF BID FOR VARIOUS TRANSFORMERS FOR THE ELECTRIC UTILITY

RECOMMENDED ACTION

It is recommended that City Council award the Bid for Various Size Transformers for the Electric Utility Department to Howard Industries in the amount of \$89,889.36.

GOAL STATEMENT

The proposed action will support the City's goal to provide safe, reliable, affordable, and environmentally sustainable electric service.

BACKGROUND

The electric utility purchases distribution transformers into inventory when the need arises to upgrade, replace, or install a new transformer for an electric customer. The electric utility also orders back-up transformers due to long delivery times. At this time, the electric utility has a requirement for pad mounted transformers to be used for service upgrades and for back-up.

On September 27, 2012, staff issued a Notice Inviting Bids for Various Size Transformers for the Electric Utility, NIB-RG-13-002. The Notice Inviting Bids and related documents were distributed through BidNet, the City's online bid system. The Notice Inviting Bids was also posted at City Hall. A public bid opening was held at 2:30 pm., on October 23, 2012, at the Electric Department Administrative Offices, and nine bids were received.

ISSUES/ANALYSIS

The bids were evaluated as to compliance with the specifications. Distribution transformers are also evaluated for the total life cycle cost over each transformer's useful lifetime. This evaluation is performed using a combination of loss calculations supplied by the transformer manufacturer and the unit cost quoted by the vendor, and demonstrates the cost of the transformer over its "in-service" life. The transformer that has the lowest initial capital cost plus energy losses over the

expected life losses results in the lowest overall cost. The formula used to evaluate the lowest overall cost was provided to potential bidders in the bid documents.

A Transformer Load Loss Evaluation showing the evaluated cost of the transformers over their useful lifetime is attached. A Bid Analysis, showing the purchase price and delivery times quoted by each vendor, is also attached. One Source submitted three separate bids from three separate manufacturers and Howard Transformers submitted two bids utilizing different technology in the transformer cores. Howard Transformers with the amorphous core was the lowest responsive and responsible bidder. The total bid amounts from each vendor are as follows:

1. ABB	\$ 83,657.10
2. CG Power Systems	\$ 84,062.24
3. ERMCO	\$ 86,937.01
4. Howard Transformers (Amorphous Core)	\$ 89,889.36
5. Howard Transformers (Silicon Core)	\$ 84,510.48
6. One Source (General Electric)	\$102,013.39
7. One Source (General Electric Alternate)	\$ 84,471.69
8. One Source (Cooper)	\$ 98,423.16
9. Wesco Distribution	\$ 99,660.13

FISCAL IMPACTS

Funds have been approved and are available in the FY 12/13 Electric Department budget, in the New Development Expense Account Number 520-8000-8008-3890-0107-000.

ALTERNATIVES

1. City Council may provide alternate direction to staff.

ATTACHMENTS

Bid Analysis
Transformer Load Loss Evaluation

ATTACHMENT 1

BID ANALYSIS

VARIOUS TRANSFORMERS

BID DATE: 10/23/12

CITY OF COLTON
 BID ANALYSIS

VARIOUS TRANSFORMERS BID DATE: 10/23/12		ABB c/o Pacific Utilities Pleasant Hill, CA		CG POWER SYSTEMS Washington, MO		ERMCO c/o McAvooy & Markham Irvine, CA		HOWARD TRANSFORMERS c/o Young & Co. Pasadena, CA		HOWARD TRANSFORMERS c/o Young & Co. Pasadena, CA		
ITEM #	QTY	DESCRIPTION	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT
1	4	300 KVA Normal profile padmount transformer, Radial feed, 12470 Delta primary voltage with external taps (two over, two under). Elastimold bushing wells, on/off primary loadbreak switch and dual sensing bay-o-net fuses. Secondary voltage to be 208Y/120, three-phase with Nema spade termination.	\$8,785.00	\$37,863.35	\$8,699.00	\$37,492.69	\$9,066.00	\$39,074.46	\$9,198.00	\$39,643.38	\$8,569.00	\$36,932.39
2	4	500 KVA Normal profile padmount transformer, Radial feed, 12470 Delta primary voltage with external taps (two over, two under). Elastimold bushing wells, on/off primary loadbreak switch and dual sensing bay-o-net fuses. Secondary voltage to be 208Y/120, three-phase with Nema	\$10,625.00	\$45,793.75	\$10,805.00	\$46,569.55	\$11,105.00	\$47,862.55	\$11,658.00	\$50,245.98	\$11,039.00	\$47,578.09
		Delivery:	91 Days		112 Days	CG Power	84 Days	ERMCO	112 Days	Howard Amorphous Core	98 Days	Howard Silicon Core
		Manufacturer:	ABB									
		Total of Award:										

CITY OF COLTON
 BID ANALYSIS

VARIOUS TRANSFORMERS BID DATE: 10/23/12		ONE SOURCE Oceanside, CA		ONE SOURCE Oceanside, CA		ONE SOURCE Oceanside, CA		ONE SOURCE Oceanside, CA		WESCO DISTRIBUTION Industry, CA	
ITEM #	QTY	DESCRIPTION	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
1	4	300 KVA Normal profile padmount transformer, Radial feed, 12470 Delta primary voltage with external taps (two over, two under). Elastimold bushing wells, on/off primary loadbreak switch and dual sensing bay-o-net fuses. Secondary voltage to be 208Y/120, three-phase with Nema spade termination.	\$10,600.00	\$45,686.00	\$9,100.00	\$39,221.00	\$10,015.00	\$43,164.65	\$10,141.00	\$43,707.71	
2	4	500 KVA Normal profile padmount transformer, Radial feed, 12470 Delta primary voltage with external taps (two over, two under). Elastimold bushing wells, on/off primary loadbreak switch and dual sensing bay-o-net fuses. Secondary voltage to be 208Y/120, three-phase with Nema spade termination.	\$13,069.00	\$56,327.39	\$10,499.00	\$45,250.69	\$12,821.00	\$55,258.51	\$12,982.00	\$55,952.42	
		Delivery: Manufacturer: Total of Award:	84 Days General Electric	84 Days General Electric	84 Days General Electric Alternate	54 Days COOPER	55 Days Cooper				

ATTACHMENT 2

LOAD LOSS EVALUATION

VARIOUS TRANSFORMERS

BID DATE: 10/23/12

TRANSFORMER LOAD LOSS EVALUATION

VARIOUS TRANSFORMERS
FOR THE ELECTRIC DEPT.
BID DATE: 10/23/12

TRANSFORMER SIZES	VENDORS				
	ABB %Pacific Utilities Pleasant Hill, CA	CG Power Systems Washington, MO	ERMCO %McAvoy & Markham Irvine, CA	Howard Transformers %Young & Co Pasadena, CA	Howard Transformers %Young & Co Pasadena, CA
1 300 KVA Normal Pad Mount 208Y/120					
NO LOAD	586	599	597	225	619
LOAD	2,226	2,451	2,486	2,496	2,241
QUANTITY	4	4	4	4	4
UNIT PRICE	\$8,785.00	\$8,699.00	\$9,066.00	\$9,198.00	\$8,569.00
DELIVERY	91 Days	112 Days	84 Days	112 Days	98 Days
EVALUATED PRICE PER EACH	\$15,836.62	\$16,017.10	\$16,636.50	\$15,196.43	\$15,771.73
EVALUATED TOTAL COST	\$63,346.47	\$64,068.41	\$66,545.98	\$60,785.70	\$63,086.91
2 500 KVA Normal Pad Mount 208Y/120					
NO LOAD	813	811	851	330	918
LOAD	3,986	4,326	4,128	3,936	3,702
QUANTITY	4	4	4	4	4
UNIT PRICE	\$10,625.00	\$10,805.00	\$11,105.00	\$11,638.00	\$11,039.00
DELIVERY	91 Days	112 Days	84 Days	112 Days	98 Days
EVALUATED PRICE PER EACH	\$21,840.12	\$22,613.67	\$22,766.38	\$20,789.78	\$22,246.38
EVALUATED TOTAL COST	\$87,360.47	\$90,454.67	\$91,065.51	\$83,159.10	\$88,985.53
Manufacturer:	ABB	CG Power Systems	ERMCO	Howard Amorphous Core	Howard Silicon Core

TRANSFORMER LOAD LOSS EVALUATION

VARIOUS TRANSFORMERS
FOR THE ELECTRIC DEPT.
BID DATE: 10/23/12

TRANSFORMER SIZES	ONE SOURCE Oceanside, CA	ONE SOURCE Oceanside, CA	ONE SOURCE Oceanside, CA	ONE SOURCE Oceanside, CA	WESCO DISTRIBUTION Industry, CA
1. 300 KVA Normal Pad Mount 208Y/120					
NO LOAD	239	483	420	420	
LOAD	2,290	2,803	3,156	3,156	
QUANTITY	4	4	4	4	
UNIT PRICE	\$10,600.00	\$9,100.00	\$10,015.00	\$10,141.00	
DELIVERY	84 Days	84 Days	56 Days	55 Days	
EVALUATED PRICE PER EACH	\$16,410.90	\$16,731.34	\$18,057.04	\$18,192.81	
EVALUATED TOTAL COST	\$65,643.60	\$66,925.36	\$72,228.17	\$72,771.23	
2. 500 KVA Normal Pad Mount 208Y/120					
NO LOAD	295	750	825	825	
LOAD	3,910	4,610	4,059	4,059	
QUANTITY	4	4	4	4	
UNIT PRICE	\$13,069.00	\$10,499.00	\$12,821.00	\$12,982.00	
DELIVERY	84 Days	84 Days	54 Days	55 Days	
EVALUATED PRICE PER EACH	\$22,114.65	\$22,512.97	\$24,384.20	\$24,557.68	
EVALUATED TOTAL COST	\$88,458.59	\$90,051.89	\$97,536.79	\$98,230.70	
Manufacturer:	General Electric	General Electric Alternate	Cooper Power Systems	Cooper Power Systems	Cooper Power Systems