

FOR BOARD ACTION

Agenda Item # 4.b.

Meeting Date:

2/24/09

SUBJECT:

SLP Unit #3 Turbine Generator Overhaul

REVISED

PREPARED BY:

Nick Davis, Maintenance Supervisor, Power Resources

ITEM DESCRIPTION:

Bid specification packages were distributed to 19 turbine generator repair firms for the Unit #3 turbine generator overhaul. On January 28, 2009 four bids were received for the project. One bid was non-conforming to the specifications and the remaining bids were analyzed.

SLP Unit #3 turbine generator is scheduled for the five-year major maintenance overhaul beginning April 11 through May 23, 2009. The purpose the inspection is to confirm machine integrity and to return the unit to near-new condition and design efficiency. The inspection is an industry standard and is required by our insurance carrier and by prudent utility practices. The unit was last overhauled in 2002.

The bid specification was developed in two workscopes. The first workscope is comprised of the work that is known and identified. Firm bids were requested for Workscope I. The second workscope is comprised of a list of repairs that are anticipated and most likely will be encountered when the machine is disassembled and inspected. The second workscope is a mixture of firm bids and estimates as the work is not defined or the extent of damages known prior to disassembly.

Power Generation Services Inc. is the lowest evaluated bid when estimates of required work from both workscopes are evaluated. Staff estimates that the balance of work can be completed on a time and material basis not to exceed the total of approved funds. All bidders submitted hour rates for various disciplines as part of the bid package for extra work.


Attached is a matrix comparing the bid packages for the combined workscopes.

FOR CAPITAL PURCHASES/BIDS/MAJOR PROJECTS:

The cost for these services has been approved in the 2009 budget.

UTILITY BOARD ACTION REQUESTED:

Staff recommends that the Board approve a purchase order agreement with Power Generation Services Inc. to provide services and parts for the SLP Unit #3 turbine generator overhaul as defined in the specification. The agreement will be for a firm price for Workscope I of \$169,172.00, a time and material price for Workscope II items (as determined by staff) not to exceed \$147,040, and miscellaneous shipping estimated at \$8000.00. Staff request a 10% contingency of \$32,400 making for a total, not to exceed project cost of \$356,612.00.


Acting General Manager

2-24-09
Date

ROCHESTER PUBLIC UTILITIES

SLP Unit #3 Turbine-Generator Overhaul - 2009
 Bid Evaluation
 Adjusted Bids

		S. T. Cotter	Elliott	PGS	TGM Maintenance
1	Grit Blast	10,062.50	19,035.00	20,075.00	Non Conforming Bid
2	NDE	4,235.50	13,565.00	12,325.00	
3	Audit	15,000.00	16,100.00	26,542.00	
4	Alignment	6,665.60	3,250.00	See Note #1 Below	
5	Tech Assistance	75,618.58	105,859.00	105,268.00	
	Bond	4,962.00	4,962.00	4,962.00	
	Work Scope I Total	116,544.18	162,771.00	169,172.00	
1	1st Stage - 24 mh	4,268.00	5,108.00	5,995.00	
2	Intermediate Stage - 24 mh	4,664.00	5,108.00	5,995.00	
3	Diaphragms - 102 mh	14,912.00	8,200.00	12,000.00	
4	Rotor Buckets - 50 mh	6,111.00	3,608.00	5,062.50	
5	Silver Solder - Last Stage - 50 mh	11,112.50	5,011.10	8,550.00	
6	LS Balance - Rotor	15,500.00	8,850.00	5,100.00	
7	7" Bearing	2,093.00	4,255.00	4,500.00	
7	8" Bearing	2,208.00	4,255.00	4,800.00	
7	Thrust Bearing	3,300.00	9,775.00	7,200.00	
8	Journals	37,380.00	12,960.00	8,500.00	
9	Turbine Run Out	550.00	1,080.00	See Note #2 Below	
10	Spill Strips - 17 stages	28,050.00	21,250.00	42,500.00	
11	Erosion Shields	75,936.00	59,127.00	35,500.00	
12	Generator Gas Test	3,659.98	1,300.00	See Note #1 Below	
13	Defoaming Tanks	3,569.89	2,700.00	See Note #1 Below	
	Work Scope II	213,314.37	152,587.10	145,702.50	
	Miscellaneous Shipping		9,660.00	8,000.00	
	Total Work Scope I & II	\$ 329,858.55	\$ 325,018.10	\$ 322,874.50	

Notes:

#1 Included in Item #5 Technical Assistance - Workscope I

#2 Included in Item #6 Low speed balance - turbine rotor - Workscope II

SLP Unit #3 Turbine-Generator Overhaul - 2009

Bid Evaluation

Unadjusted Bids

		S. T. Cotter	Elliott	PGS	TGM Maintenance
1	Grit Blast	10,062.50	19,035.00	20,075.00	Non Conforming Bid
2	NDE	4,235.50	13,565.00	12,325.00	
3	Audit	15,000.00	16,100.00	26,542.00	
4	Alignment	6,665.60	3,250.00	See Note #1 Below	
5	Tech Assistance	75,618.58	105,859.00	105,268.00	
	Bond	4,962.00	4,962.00	4,962.00	
	Work Scope I Total	116,544.18	162,771.00	169,172.00	
1	1st Stage	21,340.00	5,108.00	5,995.00	
2	Intermediate Stage	9,328.00	5,108.00	5,995.00	
3	Diaphragms	53,508.00	36,150.00	12,000.00	
4	Rotor Buckets	20,370.00	3,608.00	4,500.00	
5	Silver Solder - Last Stage	26,670.00	3,608.00	8,550.00	
6	LS Balance - Rotor	15,500.00	8,850.00	5,100.00	
7	7" Bearing	2,093.00	4,255.00	4,500.00	
7	8" Bearing	2,208.00	4,255.00	4,800.00	
7	Thrust Bearing	3,300.00	9,775.00	3,600.00	
8	Journals	37,380.00	12,960.00	8,500.00	
9	Turbine Run Out	550.00	1,080.00	See Note #2 Below	
10	Spill Strips	24,750.00	21,250.00	48,000.00	
11	Erosion Shields	75,936.00	59,127.00	35,500.00	
12	Generator Gas Test	3,659.98	1,300.00	See Note #1 Below	
13	Defoaming Tanks	3,569.89	2,700.00	See Note #1 Below	
	Work Scope II	300,162.87	179,134.00	147,040.00	
	Miscellaneous Shipping		9,660.00	8,000.00	
	Total Work Scope I & II	\$ 416,707.05	\$ 351,565.00	\$ 324,212.00	

Notes:

#1 Included in Item #5 Technical Assistance - Workscope I

#2 Included in Item #6 Low speed balance - turbine rotor - Workscope II



RESOLUTION

BE IT RESOLVED by the Public Utility Board of the City of Rochester, Minnesota, to approve a purchase order agreement with Power Generation Services, Inc. for

Services and Parts for the SLP Unit #3 Turbine Generator Overhaul

The total amount of the purchase order agreement shall be THREE HUNDRED FIFTY-SIX THOUSAND SIX HUNDRED TWELVE AND 00/100 DOLLARS (\$356,612.00) consisting of: 1) a firm price for Workscope I of \$169,172.00, 2) a time and material price for Workscope II items (as determined by staff) not to exceed \$147,040, 3) miscellaneous shipping estimated at \$8000.00, and 4) a contingency of \$32,400.

Passed by the Public Utility Board of the City of Rochester, Minnesota, this 24th day of February, 2009.

President

Secretary