

FOR BOARD ACTION

Agenda Item # 6.a.

Meeting Date:

9/26/06

SUBJECT:

SLP Unit 4 Boiler Chemical Cleaning
Change Order to Purchase Order 10233 issued to Babcock & Wilcox for
Professional Services

PREPARED BY:

Wally Schlink, Director of Power Resources

ITEM DESCRIPTION:

SLP Unit 4 boiler is a pulverized coal, natural circulation boiler that was manufactured by The Babcock & Wilcox Company and went into service in December of 1969. The operating conditions of the boiler are 520,000 pounds of steam per hour at 1,350 p.s.i.g. and 955° F.

The high operating pressure and temperature cause compounds, primarily iron and copper, in the water and steam to plate out and adhere to the water side of the boiler tubes which causes overheating, tube failures, corrosion and inefficiencies. The process to remove these compounds is chemical cleaning. The need to chemical clean is governed by the amount of deposits in a given area of the tube surface. Unit 4's volume of deposits exceeded the guideline for chemical cleaning. The last time the unit was chemically cleaned was approximately 18 years ago.

At the March 2006 Utility Board meeting, the Board approved issuing a purchase order to Babcock & Wilcox in the amount of \$252,279.80 to provide the chemical cleaning and this was accomplished very successfully in April 2006 during the boiler outage. The estimate of deposits removed was based on tube samples and in retrospect the boiler was much dirtier than the tube samples indicated. During the cleaning 5,424 total pounds of iron were removed and 616 total pounds of copper. The spent chemical and rinses must be disposed of appropriately which includes disposal of some chemicals as hazardous waste. The extremely dirty condition of the boiler and the additional volumes of deposits caused additional costs to be incurred including direct disposal costs, additional testing costs, extended stand by times for personnel and equipment. The additional costs incurred was \$76,819.69

This project is an approved 2006 Major Maintenance project and is included in the current year's budget.

UTILITY BOARD ACTION REQUESTED:

Staff recommends that the Board approves a change order to Purchase Order 10233 in the amount of \$76,819.69 which brings the total approved amount to \$329,099.49 for additional work related to the chemical cleaning of SLP Unit 4 Boiler.

General Manager

Date

SLP Unit 4 Boiler Chemical Cleaning
Change Order to Purchase Order 10233

Proposal	Actual	Item
43,554.00	43,554.00	Chemicals
13,470.00	13,470.00	Personnel
29,880.00	29,880.00	Equipment
62,160.00	117,402.15	Waste Disposal
0.00	6,090.00	Disposal Standby-Frac Tanks
0.00	7,350.00	Disposal Standby-Personnel
0.00	2,430.00	Waste pH Adjustment
0.00	2,072.25	Testing
\$149,064.00	\$222,248.40	Sub-Total
29,812.80	44,449.68	20% B&W Mark Up
24,475.00	42,315.52	B&W Service & Chemical Specialist
0.00	20,085.89	Sales Tax
\$203,351.80	\$329,099.49	Total Amount
\$252,279.80		P.O. Amount
\$76,819.69		Change Order Required



RESOLUTION

BE IT RESOLVED by the Public Utility Board of the City of Rochester, Minnesota, to approve a change order to purchase order #10233 in the amount of \$76,819.69 for additional work related to the chemical cleaning of Silver Lake Plant Unit 4. The total amount of the purchase order will be \$329,099.49.

Passed by the Public Utility Board of the City of Rochester, Minnesota, this 26th day of September, 2006.

President

Secretary