

COUNCIL ACTION FORM

SUBJECT: POWER PLANT UNIT #7 COAL MILL PARTS

BACKGROUND:

This purchase is for mill parts needed for planned mill rebuilds associated with routine maintenance and inventory replenishment for the Power Plant's Unit #7 coal mills. This equipment is used for pulverizing coal into a powder used as fuel in the Unit's Boiler.

A total of two mills provide coal for Unit #7, and both must be operating for the Plant to be fully operational. If they are not kept in operation, the Power Plant may need to purchase electricity or start up one or both diesel-fired peaking units in order to supplement generating capacity. This would also require suspension of burning refuse-derived fuel (RDF). Having these mills out of operation would likely lead to significantly higher production costs and greater land-filling of the county's garbage. Additionally, coal that is poorly ground also leads to inefficiency, unstable fire and increases in the potential for flameouts.

In November, 2013 the original equipment manufacturer's field engineer spent two days reviewing plant operation of these coal mills and inspecting the mills internally. The engineer strongly recommended that the coal mills be rebuilt in the very near future to continue safe operation. The internal components are worn to the point that fine coal is accumulating in the worn parts. Coal accumulation in the mill can cause localized hot spots and the mill can catch fire or, in a worst case situation, explode. The parts being procured are the parts recommended for replacement by the field engineer. **The existing running coal mill components will not last until the plant's conversion to natural gas in 2016.**

Many of the parts have a long lead time and are being ordered now so that they are on hand for the next maintenance outages, which are planned for late spring 2014 and fall 2014.

On November 18, 2013, an invitation to bid document was issued to five firms. The invitation was advertised on the Current Bid Opportunities section of the Purchasing webpage, and was also sent to one plan room.

On December 4, 2013, one bid was received as shown on the attached report labeled Attachment A. Staff has reviewed and concluded that the bid submitted by Alstom Power, Inc., Windsor, CT, is acceptable. Subsequently, Staff determined that not all of the parts listed are needed at this time. As a result, the list has been revised as shown on Attachment B. The bid document included the provision *"The City reserves the right to award this contract in whole or by line item. Therefore, each line item must be bid as a standalone price."* This provision enabled

staff to make this revision. **Based on the revisions, the total dollar amount for the parts needed is \$141,131.99**, which is also shown on Attachment B.

Alstom Power is a very large international company, and is the original equipment manufacturer (OEM) for the coal mills and the replacement parts that need to be ordered. Since these are parts from the original manufacturer, staff believes that the parts will meet our performance needs. In addition, Alstom Power is a reputable provider and its representatives have historically provided excellent service to the City.

Funding is available from the approved FY 2013/14 Electric Production operating budget for Unit #7 Boiler Pulverizer parts, which contains \$175,000 for parts.

ALTERNATIVES:

1. Award a contract to Alstom Power, Inc., Windsor, CT, for the purchase of Unit #7 Coal Mill Parts in the amount of \$141,131.99 (inclusive of sales-tax)
2. Reject the single bid received and direct staff to delay purchase of these replacement parts.

MANAGER'S RECOMMENDED ACTION:

The purchase of these mill parts in advance of major maintenance work will reduce the risks of delays on planned mill rebuilds, and will also help reduce downtime due to unplanned mill equipment failures. Having a coal mill fail and remain down for an extended period of time would increase the risk of incurring significant cost for purchased power, particularly during peak times.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as stated above.



**2014-109 MILL PARTS FOR UNIT 7 BID
SUMMARY**

			BIDDER:	
			Alstom Power, Inc. Windsor, CT	
Description	Alstom Part #	Qty	Unit Price	Total
Inner Core (with inspection door)	RW-1034	2	\$2,408.75	\$4,817.50
Inner Cone Drum Section	RW-1033	2	\$2,823.00	\$5,646.00
Deflector Ring	MP-7658A	2	\$1,083.68	\$2,167.36
Separator Body (Stationary & Removable Section)	RQ-581	2	\$62,130.00	\$124,260.00
Bullring Assembly	RQ-943	2	\$7,993.13	\$15,986.26
Bowl Extension Ring	RQ-946A	2	\$1,895.00	\$3,790.00
Restriction Angle	RQ847	2	\$578.00	\$1,156.00
Bowl Wear Plate	RQ-916	2	\$688.00	\$1,376.00
Seal Washers	MP-7454A	60	\$2.32	\$139.20
Mill Side Liner	RQ-664N	6	\$479.00	\$2,874.00
Mill Side Liner	RQ-665N	6	\$509.43	\$3,056.58
Mill Side Liner	RQ-666N	6	\$460.23	\$2,761.38
Mill Side Liner	RQ-667N	6	\$421.28	\$2,527.68
Mill Side Deflector	RQ-689N	6	\$140.43	\$842.58
Separator Body Liner	RQ-681N	6	\$288.03	\$1,728.18
Separator Body Liner	RQ-686N	6	\$299.30	\$1,795.80
Separator Bottom Liner	RQ-585A	12	\$202.95	\$2,435.40
Converter Head Turning Vane	RQ-568	2	\$602.70	\$1,205.40
Inlet Elbow Shaft	MP-7989-E	2	\$998.35	\$1,996.70
Inlet Elbow Wear Liners	MP-7988-E	4	\$257.28	\$1,029.12
Groove Pin - damper	MP-7965D	6	\$6.97	\$41.82
Primary Riffle Elements		4	\$1,903.43	\$7,613.72
Secondary Riffle Elements		8	\$1,084.45	\$8,675.60
Whizzer Blade	EX-1518	6	\$114.80	\$688.80
Return Air Block Off	RQ-879	1	\$690.00	\$690.00
Return Air Block Off Liner	RQ-878	1	\$386.00	\$386.00
11" Orifice; 9 1/8" Dia.	3A2000A	1	\$846.00	\$846.00
11" Orifice; 9 3/4" Dia.	2A9722A	1	\$831.00	\$831.00
11" Orifice; 11" Dia.	2A9720A	2	\$533.00	\$1,066.00
11" Orifice; 9 3/8" Dia.	2A9724A	1	\$845.00	\$845.00
11" Orifice; 9 1/2" Dia.	2A9723A	1	\$854.85	\$854.85
11" Orifice; 9 5/8" Dia.	3A-5104A	1	\$855.00	\$855.00
11" Orifice; 9" Dia.	2A9726A	1	\$853.83	\$853.83
90 Degree 11"R; X=0"; Y=11"	3A-2609-A	4	\$2,321.00	\$9,284.00
90 Degree 11"R; X=13"; Y=2'-0"	3A-5102-A	4	\$2,949.00	\$11,796.00
90 Degree 2'-9"R 0" EXT	2A-3343-A	11	\$3,039.00	\$33,429.00
90 Degree 2'-9"R 2 1/2" EXT	2A-6243-A	2	\$3,372.00	\$6,744.00
90 Degree 2'-9"R 12 1/2" EXT	2A-6467-A	2	\$3,488.00	\$6,976.00
90 Degree 2'-9"R 14 1/2" EXT	2A-6337-A	1	\$3,518.00	\$3,518.00
60 Degree 2'-9"R 0"	2A-6333-A	1	\$3,264.00	\$3,264.00
50 Degree 2'-9"R 0"	2A-3340-A	2	\$2,969.00	\$5,938.00
45 Degree 2'-9"R 0"	2A-6463-A	4	\$2,723.00	\$10,892.00
40 Degree 2'-9"R 0"	2A-3339-A	2	\$2,777.00	\$5,554.00
40 Degree 2'-9"R 3 1/2"	3A-5103-A	2	\$2,825.00	\$5,650.00
30 Degree 2'-9"R 0"	2A-3338-A	19	\$2,328.00	\$44,232.00
25 Degree 2'-9"R 0"	2A-4697-A	2	\$2,658.00	\$5,316.00
20 Degree 2'-9"R 0"	2A-3336-A	3	\$2,303.00	\$6,909.00
10 Degree 2'-9"R 0"	2A-3335-A	1	\$2,378.00	\$2,378.00
10 Degree 2'-9"R 8"	2A-7963-A	1	\$2,793.00	\$2,793.00

Sub-total:	\$370,511.76
7% Sales Tax:	\$25,935.82
Freight:	\$12,967.91
OVERALL:	\$409,415.49



**2014-109 MILL PARTS FOR UNIT 7 REVISED
BID SUMMARY**

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Deflector Ring	MP-7658A	2	\$1,083.68	\$2,167.36
Separator Body (Stationary & Removable Section)	RQ-581	0	\$62,130.00	\$0.00
Bullring Assembly	RQ-943	1	\$7,993.13	\$7,993.13
Bowl Extension Ring	RQ-946A	0	\$1,895.00	\$0.00
Restriction Angle	RQ847	0	\$578.00	\$0.00
Bowl Wear Plate	RQ-916	2	\$688.00	\$1,376.00
Seal Washers	MP-7454A	60	\$2.32	\$139.20
Mill Side Liner	RQ-664N	0	\$479.00	\$0.00
Mill Side Liner	RQ-665N	0	\$509.43	\$0.00
Mill Side Liner	RQ-666N	0	\$460.23	\$0.00
Mill Side Liner	RQ-667N	1	\$421.28	\$421.28
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Separator Body Liner	RQ-686N	0	\$299.30	\$0.00
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10 Degree 2'-9"R 8"	2A-7963-A	1	\$2,793.00	\$2,793.00

Sub-total: \$119,779.51
 7% Sales Tax: \$8,384.57
 Freight: \$12,967.91
OVERALL: \$141,131.99