

FOR BOARD ACTION

Agenda Item # 6.a.

Meeting Date: 2/24/09

SUBJECT: Emission Reduction Project
Mechanical Construction I Contract – Change Order 002

PREPARED BY: Wally Schlink
Director of Power Resources

ITEM DESCRIPTION:

The RPU Board approved the contract identified as Mechanical Construction I with Moorhead Machinery & Boiler Company for the installation of the major new equipment related to the SLP Emission Reduction Project. The firm lump sum price of the contract was \$7,408,702.

This work is substantially complete and staff is in the process of bringing the various Request For Information (RFI) and Engineering Change Orders (ECO) to completion which add up to approximately \$761,343.77 and are defined in the Engineer's Attachment A: Mechanical I Change Order Summary which is attached.

Attached is also a recommendation from the Project Engineer.

FOR CAPITAL PURCHASES/BIDS/MAJOR PROJECTS:

Request is for a contract change order with the scope as identified on the Engineer's Summary and the authorized amount of the contract increased by \$250,000. This amount is included in the project contingency and will not increase the overall project budget.

UTILITY BOARD ACTION REQUESTED:

Staff requests Board approval of Change Order 002 to the Mechanical Construction I contract which is a change of scope and will require additional funds in the amount of \$250,000. The value of the contract will increase to \$7,658,702.


General Manager


Date

ROCHESTER PUBLIC UTILITIES

February 16, 2009

Mr. Walter Schlink
Director of Power Resources
Rochester Public Utilities
RPU Business Office
4000 East River Road NE
Rochester, MN 55906-2813

Subject: Change to Mechanical I Construction Contract

Dear Mr. Schlink:

This letter is to request a change to the Mechanical I Construction Contract. The Project requests increasing the contingency amount from \$535,000 to \$785,000 (an increase of \$250,000). The additional funds being requested will come from the overall project contingency, thus will not result in budget overages.

The reasons for this request are as follows:

The change order summary (Attachment A) shows the additional work scope costs and projected contingency requirements. As shown in the attachment, the contingency overage is estimated to be \$226,344.

Of the projected contingency costs of \$761,344, approximately 88 percent of the work is complete and considered to be fixed. The costs have already been submitted by the contractor or have been formally approved by the Project. Additional costs associated with equipment vendor issues have been back-charged appropriately thus reducing the Project exposure by as much as \$158,000.

The additional contingency will be sufficient to cover the remaining work to be completed by the contractor and to account for worst-case negotiation costs on disputed items. The Project does not foresee additional work or charges other than shown nor does it anticipate using all of the additional contingency funds being requested at this time.

Sincerely,



Roger B. Anderson, P.E., PMP
Project Manager

RBA/dlk

Attachment A: Mechanical I Change Order Summary

RFI/ECN No.	Description	Cost
RFI 20.04-001	Missing PJFF Beam	\$ 775.50
RFI 20.04-002	Booster Fan Concrete Inertia Base	\$ -
RFI 20.04-003	PJFF Compartment Wall Insulation	\$ -
RFI 20.04-004	Inlet / Outlet Manifold Installation	\$ -
RFI 20.04-005	Damaged PJFF Module #2	\$ 8,700.00
RFI 20.04-006	PJFF Inlet Damper Connection, Weather Enclosure Plate & Anchor B	\$ 10,147.09
RFI 20.04-007	Electrical Transformer Unloading	\$ 1,151.85
RFI 20.04-008	Repair Baghouse Inlet Ducts to make airtight	\$ 8,684.50
RFI 20.04-009	Outlet Nozzle/Manifold Installation Interference	
RFI 20.04-010	Pump House / Lime Slurry Suction Pipe	\$ 1,649.55
RFI 20.04-011	Supply and Return Lines to SDA Penthouse	\$ 6,259.05
RFI 20.04-012	Lime Slurry Return Lines from tank to pump house-pinch valves	\$ -
RFI 20.04-013	Insulation at Weather Enclosure and PJFF Hopper Doors	\$ -
RFI 20.04-014A	Seal weld (10) outlet ducts on the bag house outlet manifold	\$ 5,058.76
RFI 20.04-014B	Add weld at the SDA / Support Ring to hopper transition	\$ 1,761.75
RFI 20.04-015	PJFF Weather Enclosure Roof Cables-relocate	\$ -
RFI 20.04-016	Lime Slurry Piping and Fittings-Confirm Materials	\$ -
RFI 20.04-017	PJFF Stair Tower Anchor Bolt Discrepancy-Modify base	\$ 3,395.98
RFI 20.04-018	PJFF Instrumentation Connection-Supply (10) 1" plugs and seal weld	\$ 939.36
RFI 20.04-019	Instrument Air Supply Change	\$ -
RFI 20.04-020	Air Supply Pipe Flex Hose (Mark No. 3-20) -Supply (170) Pieces	\$ 2,045.64
RFI 20.04-021	Hopper Discharge Connection-weld backside of (10) flanges	\$ 3,163.22
RFI 20.04-022	Wet Insulation	\$ -
RFI 20.04-023	Precip Column Anchor Bolt Projection	\$ -
RFI 20.04-024	Hopper Heater junction Box Support Channel & Thermocouple Stud	\$ 782.82
RFI 20.04-025	SDA Hopper Outlet Duct Support Discrepancy	\$ 5,215.30
RFI 20.04-026	Access Steel at Lime Silo Pumphouse Anchor Bolt Discrepancy	\$ 1,291.42
RFI 20.04-027	Emergency Eye Wash / Showers	\$ 49,576.80
RFI 20.04-028	Condensate Transfer Piping	\$ 9,261.00
RFI 20.04-029	Ash Hopper Level Indicators	\$ 2,007.75
RFI 20.04-030	NCC Couplings for Ash Piping	\$ 6,507.18
RFI 20.04-031	Ash Piping Specs from NCC on Wall Thickness	\$ -
RFI 20.04-032	Cable Tray Connections at Column 18	\$ 4,555.48
RFI 20.04-033	Lead Paint Removal	\$ 1,559.36
RFI 20.04-034	1/4" Air Supply Lines to Ash Intake and Swing Gates	\$ -
RFI 20.04-035	Pulse Jet Air Piping- Supply lines to Reservoirs & Poppet Dampers	\$ -
RFI 20.04-036	1/4" NPT Openings on the Pulse Jet Air (PJA) Regulators	\$ 718.20
RFI 20.04-037	Ash Silo Swing Gate Interference	\$ 1,278.90
RFI 20.04-038	Ash Pipe Support "D"	\$ 1,972.95
RFI 20.04-039	Roll Up Doors	\$ 39,152.52
RFI 20.04-040	PDC Access platform concrete	\$ 2,034.90
RFI 20.04-041	Piping and Valves around CBEEC Air Compressor	\$ 1,005.82
RFI 20.04-042	Opening in 8" Spring Actuated Air Intake Valve	\$ 1,514.10
RFI 20.04-043	Air Vent for Condensate Tank	\$ 988.38
RFI 20.04-044	Ash Silo Monorail Weather Enclosure Interference	\$ 297.48
RFI 20.04-045	Bridge Crane Cable Reel Support	\$ 1,801.14
RFI 20.04-046	Condensate Tank Interior Paint Repair	\$ 453.60
RFI 20.04-047	Baghouse Stainless Steel Side Plates	\$ -
RFI 20.04-048	Booster Fan and SDA Enclosure Interference	\$ 7,940.60
RFI 20.04-049	Slaker Level Drain Discrepancy	\$ 4,670.40
RFI 20.04-050	Aeration Piping	\$ -
RFI 20.04-051	Ash Silo Aeration Piping Clarification	\$ -

Attachment A: Mechanical I Change Order Summary

RFI/ECN No.	Description	Cost
RFI 20.04-052	PJFF Module Roof Penetration	\$ -
RFI 20.04-053	Access Landing Platform @ EL. 1023'-3"	\$ 5,218.85
RFI 20.04-054	Electrical Panel Support Structure	\$ 3,122.99
RFI 20.04-055	Ash Fitting Interference with Penthouse Sleeve Opening	\$ -
RFI 20.04-056	Ash Pipe Intake Vent for SDA	\$ 1,274.70
RFI 20.04-057	Painting of Ash Silo Pipe	\$ -
RFI 20.04-058	Ash Exhauster Discharge Pipe Penetration Discrepancy	\$ 1,358.70
RFI 20.04-059	Aeration Piping Inteferece with Blower Piping and Knife Gate Valve	\$ 1,286.25
RFI 20.04-060	Ladder Landing on N. Side of PJFF	\$ 1,071.92
RFI 20.04-061	Lime Silo Slice Gap/Leak	\$ 3,552.05
RFI 20.04-062	Fall Protection at Lime Silo Dust Filter Platform/Ladder	\$ -
RFI 20.04-063	Unloader Level Floor Grating	\$ -
RFI 20.04-064	Outlet Duct Elevation Discrepancy	\$ 6,042.90
RFI 20.04-065	Additional Ash Silo Supports and Penetrations	\$ 11,798.57
RFI 20.04-066	Condensate Tank Pressure Gauge and Thermocouple Openings	\$ 647.64
RFI 20.04-067	Ash Silo Exhauster to Pulse Filter Piping Tie In to Pulse Filter Discrep	\$ -
RFI 20.04-068	Ash Silo Unloading Level Equipment Anchoring	\$ 403.20
RFI 20.04-069	Ash Silo Pulse Jet Silo Vent Filter Exhaust Piping	\$ -
RFI 20.04-070	Door No. 10 Interference	\$ 225.50
RFI 20.04-071	Cable Bus Tray Support	\$ 3,572.69
RFI 20.04-072	SDA Weather Enclosure Platform Girt Framing	\$ 13,524.88
RFI 20.04-073	4" Vacuum Equalizing Piping & Reciever Support	\$ 2,580.90
RFI 20.04-074	Lime Silo/Pump House Flashing	\$ 3,181.10
RFI 20.04-075	Friday Work Hours	\$ 12,355.35
RFI 20.04-076	Pipe Sleeves in Ash Silo for Air and Water	\$ 1,057.00
RFI 20.04-077	Booster Fan Bearing Cooling Hoses	\$ -
RFI 20.04-078	SDA Piping	\$ -
RFI 20.04-079	Tempered Water for Eye Wash	\$ -
RFI 20.04-080	Additional Lagging Supports and Girt Modifications	\$ 20,299.01
RFI 20.04-081	SDA Inlet Duct Support Modification	\$ 828.70
RFI 20.04-082	Ash Silo Sounding Enclosure	\$ 8,617.94
RFI 20.04-083	Instrument Air	\$ 2,353.05
RFI 20.04-084	Valve Tags	\$ -
RFI 20.04-085	Fabric Filter Vent Fan and SDA Louver Framing	\$ 2,906.00
RFI 20.04-086	Potable Water Tie-in	\$ 11,557.35
RFI 20.04-087	PDC West Access & Cable Tray Support	\$ 11,048.40
RFI 20.04-088	Tempered Water Loop for Eyewash/showers	\$ 487.79
RFI 20.04-089	Pinch Valve for Lime Slurry Return	\$ 2,209.20
RFI 20.04-090	Lime Slurry Pipe Leaks	\$ 9,332.40
RFI 20.04-091	Lime Silo Platform Lagging Discrepancy	\$ 23,492.22
RFI 20.04-092	Ash Silo Hoist Extension Cost Estimate	\$ -
RFI 20.04-093	Pulse Jet Air Pipes	\$ 11,419.80
RFI 20.04-094	SDA Pressure Differential Ports	\$ 903.66
RFI 20.04-095	SDA Platform Insulation Cost Estimate	\$ 2,830.00
RFI 20.04-096	Opacity Monitor Flange	\$ 993.30
RFI 20.04-097	SDA Inlet Duct Support Interference	\$ 4,732.31
RFI 20.04-098	Lime Pump House Insulation	\$ 4,200.00
RFI 20.04-099	Lime Dilution Water Valve	\$ 939.75
RFI 20.04-100	Firewater Pipe Supports at CLR Devices	\$ 653.10
RFI 20.04-101	Inlet Duct Port/Tap Interferences	\$ 2,908.40
RFI 20.04-102	Chimney Adaptor Detail Discrepancy	\$ -
RFI 20.04-103	Painting Adjustment Prices	\$ (13,394.00)

Attachment A: Mechanical I Change Order Summary

RFI/ECN No.	Description	Cost
RFI 20.04-104	Booster Fan Enclosure and SDA Walkway Heating and Ventilation	\$ 13,967.76
RFI 20.04-105	Misc. Mechanical Changes	\$ 6,438.60
RFI 20.04-106	Lime Grit Screw Reorientation/Modifications	\$ 13,372.51
RFI 20.04-107	Heat Traced Piping Extra Work	\$ 9,828.00
RFI 20.04-108	SDA Man-Door Addition	\$ 1,807.06
RFI 20.04-109	Booster Fan Enclosure Interference w/ Outlet Duct Support	\$ 6,088.08
RFI 20.04-110	Reinstallation of the Platform over the Outlet Duct to the Chimney	\$ 9,522.90
RFI 20.04-111	Lagging around Booster Fan base.	\$ 4,016.25
RFI 20.04-112	Sound Enclosure Modification for Electrical Panel	\$ 7,089.25
RFI 20.04-113	Bearing Cooling Pump Modification	\$ 23,596.65
RFI 20.04-114	Dilution Water Pump Modification	\$ 8,976.45
RFI 20.04-115	Air Heater Expansion Joint Support Modification	\$ -
RFI 20.04-116	Chimney Sleeve Reinsulation	\$ 7,942.06
RFI 20.04-117	Ash Silo Grit Screw Enclosure	\$ 36,232.89
RFI 20.04-118	Atomizer Extension Tubes	\$ 1,335.13
RFI 20.04-119	Sealing doors and sill plates	\$ 13,157.33
RFI 20.04-120	Gutter @ SDA & Lower Baghouse Walkway	\$ 5,733.21
RFI 20.04-121	Sealing Precipitator Plate Inside Boiler Building	\$ 3,301.60
RFI 20.04-122	NCC Ash Silo Vacuum Breaker Ducting	\$ 5,850.70
RFI 20.04-123	Insulating the SDA Inlet Damper Bottom	\$ 2,068.57
RFI 20.04-124	Booster Fan Bearing Cooling Flow Indicators and Globe Valves	\$ 2,019.15
RFI 20.04-125	Installing 2 new pumps purchased by RPU	\$ 5,449.50
RFI 20.04-126	Additional insulation and lagging of the SDA building and floor drain	\$ 16,096.62
	Additional heaters and Ash Silo vent damper (ZEC Estimate)	\$ 36,626.21
RFI 20.04-127	(Not applicable under this Contract)	\$ -
RFI 20.04-128	Tempered Water Tank Heaters and Insulation (ZEC Estimate)	\$ 3,000.00
ECN 1, 4, 5 & 7	Added/Revised Platforms	\$ 15,472.00
ECN 2	Cable Tray Support Steel Changes (Disputed amount of \$34,370. The \$152.00 shown assumes the Project is responsible for all disputed costs with no deduction to the Base Contract).	\$ 152.00
ECN 3	Revised North Annex Structural Steel (Disputed amount of \$23,428.5. The \$38,280 shown assumes the Project is responsible for all of the disputed costs).	\$ 38,280.00
ECN 6	Added SDA Turning Vane Field Assembly	\$ 17,257.32
ECN 8	Added SDA Weather Enclosure Field Assembly	\$ 38,883.04
ECN 9	Added Condensate Steam Blanketing Line	\$ 57,191.40
ECN 10	Added Air/Heater Duct Supports	\$ 11,111.93
Misc. No. 001	Ash Silo Unloader Level Interior Lagging	\$ 9,996.00
Misc. No. 002	Offset piping to separate Dilution and Potable water systems	\$ 4,072.95
Misc. No. 003	Deduct for un-used start-up hours	\$ (52,663.47)
Misc. No. 004	API WO #008	\$ 171.95
Misc. No. 005	IDC Door	\$ 668.75
Misc. No. 006	Atomizer Damage & Repair	\$ (2,678.50)
Total Contingency Requirements		\$ 761,343.77
Delta From Approved (\$535,000)		\$ (226,343.77)



RESOLUTION

BE IT RESOLVED by the Public Utility Board of the City of Rochester, Minnesota, to approve Change Order 002 to the Mechanical Construction I contract with Moorhead Machinery & Boiler Company for the Silver Lake Plant Unit 4 Emissions Reduction Project which is a change of scope as identified on the Engineer's Summary, and the authorized amount of the contract increased by \$250,000. This amount is included in the project contingency and will not increase the overall project budget. The value of the contract will increase to \$7,658,702.

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

President

Secretary