

# **City of Grand Island**

## Tuesday, March 04, 2003 Council Session

### Item I2

#2003-64 - Approving General Work Change Order #4 - Final - Burdick Station GT-2 and GT-3 - Combustion Turbine Project - Utilities Department

#### Background:

The Industrial Company (TIC) from Steamboat Springs, Colorado was awarded the General Construction Contract for the installation of utility combustion turbine generators on December 4, 2001. The contract includes the erection of the combustion turbines, foundations, piping systems, electrical duct banks, area drainage, transformers, circuit breakers, substation modifications, fire protection, fuel oil and natural gas systems, controls systems, pollution control systems, roads and buildings; essentially the entire project.

#### Discussion:

Since construction began there have been numerous additions and changes as the system and subsystem specific information has become available and engineering design finalized. Proposed Final Change Order No. 4 to the General Construction Contract covers the below listed additions and changes. Our engineering consultants, Sargent and Lundy, and the Utilities Department staff have reviewed each change. In this Change Order, an amount of \$1,236,419.00 is associated with the costs incurred as a result of delivery and schedule problems by the turbine supplier, General Electric.

#### Summary of Change Order No. 4:

Revised cable tabulation for additional substation control and relaying circuits, as vendor and City information was received for final design. \$60,178.00

Revised switchyard drawings - added 4,000 feet of cable for grounding, increased size from 250 to 500 kcmil. \$54,860.00

Revised electrical drawings and schematics for balance of Plant relays, metering, and lockout relays. \$76,187.00

Revised cable tabulation - relocated Distributed Control System cabinet from turbine floor to Electrical Equipment Building. \$66,877.00

Heat trace due to drawing revisions - from adding fuel oil piping to GT-1 to eliminate 35 year old piping on GT-1 and add it to the new system. \$10,302.00

Premium time to improve schedule delay. \$135,743.00

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Productivity loss impact due to GE material delivery. \$1,096,911.00

PCC relay panels - additional breaker failure relays, verification of existing circuits, and additional electrical testing were required to complete full integration to the existing Grand Island systems. \$121,569.00

Burdick control room panel - finalized protective relaying, additional electrical \$ 16,203.00 testing for full systems integration. \$16,203.00

Fuel pump control panel added relaying for dual pump sequencing. Original GE design had two, dual pump skids. Pump design was revised to a single dual pump skid. \$8,177.00

GEEPE fuel oil tubing rework. \$3,765.00

TOTAL \$1,650,772.00

#### Recommendation:

The Utilities Department recommends authorizing this Change Order #4 to the General Contract Work Contract at the Burdick Generating Station for an addition to the contract price of \$1,650,772.00. This results in a final contract price of \$13,962,822.42.

#### Fiscal Effects:

Bonded project. Pursuit of the Liquidated Damage provisions of the Turbine Generator Contract with General Electric Company is underway for these costs attributable to GE.

#### Alternatives:

None recommended. See attached RESOLUTION.

Staff Contact: Gary Mader; Dale Shotkoski

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DELETE: \$

#### CHANGE ORDER # 4

TO: TIC, The Industrial Company 2211 Elk River Road P.O. Box 774848 Steamboat Springs, CO 80477

ADD: \$ <u>1,650,772.00</u>

Project: GENERAL CONTRACT WORK - CT ADDITION BURDICK GENERATING STATION

and/or

You are hereby directed to make the following change in your contract:

1. Additional payment of the items listed on the attached spreadsheet.

The original Contract Sum	\$ <u>10,997,615.00</u>			
Previous Change Order Amounts	\$1,314,435.42			
The contract Sum is increased by this Change Ord	der \$1,650,772.00			
The total modified Contract Sum to date	\$ <u>13,962,822.42</u>			
Approval and acceptance of this Change Order acknowledges understanding and agreement that he cost and time adjustmens included reprsent the complete values arising out of and/or incidental to the Work described therein.  APPROVED: CITY OF GRAND ISLAND				
Ву:	Date			
Attest:	Approved as to Form, City Attorney			
ACCEPTED: TIC, THE INDUSTRIAL COMPANY				
Bv:	Date			

#### RESOLUTION 2003-64

WHEREAS, on December 4, 2001, by Resolution 2001-328, the City Council for the City of Grand Island awarded the bid for general contract work on combustion turbines at Burdick Station to The Industrial Company of Steamboat Springs, Colorado; and

WHEREAS, it has been determined that modifications to the work to be performed by The Industrial Company are necessary; and

WHEREAS, such modifications have been incorporated into Change Order No. 4; and

WHEREAS, the result of such modifications will increase the contract amount by \$1,650,772.00 for a total contract price of \$13,962,822.42.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the Mayor is hereby authorized and directed to execute Change Order No. 4, between the City of Grand Island and The Industrial Company of Steamboat Springs, Colorado to allow the modifications set out in Exhibit "A" attached hereto.

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Adopted by the City Council of the City of Grand Island, Nebraska, March 4, 2003.

RaNae Edwards, City Clerk

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