DATE: 9/25/2012

ITEM #: I-3

TO: MAYOR AND CITY COMMISSIONERS

FROM: GENE RATZLAFF, DIRECTOR OF ELECTRIC UTILITIES

SUBJECT: ASSESSMENT UPDATE OF TURBINE/GENERATOR No. 7

The City of Coffeyville Electric Department has authorized Guernsey to perform a feasibility study to add a combustion turbine and heat recovery steam generator (HRSG) using the waste heat to repower the existing Unit 7 steam turbine generator and associated auxiliary equipment.

The Electric Department needs to perform an assessment to identify potential repairs or modifications that should be implemented to allow continued use of the existing turbine generator to coincide with the life cycle of a new combustion turbine and HRSG. This information will be included in the feasibility study. Guernsey has no prior experience or familiarity with our power plant.

The City of Coffeyville Electric Department has an existing engineering services agreement with Sega Engineering, and in 2009 Sega performed a power plant assessment and is familiar with the power plant equipment. The new proposal is to specifically determine the integrity of Unit 7 and identify potential repairs and modifications needed in the long term to coincide with the life of the new additional generation.

RECOMMENDATION:

Staff recommends the Finance Director be authorized to execute a purchase order in the not to exceed amount of $23,500 to Sega Inc. for engineering services.

RESOLUTION NO. R-12-93

A RESOLUTION TO AUTHORIZE THE ISSUANCE OF A PURCHASE ORDER TO SEGA INC. TO PERFORM A PLANT ASSESSMENT UPDATE OF UNIT #7 TURBINE/GENERATOR FOR THE CITY OF COFFEYVILLE ELECTRIC UTILITY.

BE IT RESOLVED by the Board of Commissioners of the City of Coffeyville, Kansas that the Finance Director be and is hereby authorized and directed to issue a purchase order in a not to exceed amount of $23,500 to Sega Inc. for engineering services for the Coffeyville Electric Utility.

ADOPTED THIS 25th DAY OF September, 2012.

_____
David George, Mayor

ATTEST:

_____
Cindy Price, City Clerk

APPROVED AS TO FORM AND LEGALITY:

_____
Paul Kritz, City Attorney

September 13, 2012

City of Coffeyville
P.O. Box 1629
Coffeyville, KS 67337

Attention: Mr. Mike Shook

Re: City of Coffeyville
Power Plant Assessment
Sega Proposal No. 387Q-12241, Rev. 1

SUBJECT: PROPOSAL TO PROVIDE PLANT ASSESSMENT SERVICES

Dear Mr. Shook:

Sega Inc. (Sega) is pleased to submit this revised proposal to provide plant assessment services for the generation facilities owned and operated by the City of Coffeyville. This proposal is based on conversations with Mr. Mike Shook on August 27, 2012 and September 13, 2012.

PROJECT DESCRIPTION

The City of Coffeyville is currently contemplating the addition of a combustion turbine and heat recovery steam generator (HRSG), coupled with a steam repowering of the existing Unit 7 steam turbine generator and its associated heat balance auxiliary equipment.

The City of Coffeyville wants to perform an assessment to identify potential repairs or modifications that should be implemented to allow continued use of that Unit to coincide with the life cycle of a new combustion turbine and HRSG.

SCOPE OF SERVICES

Sega will provide the following engineering services in support of the project:

1. Visit the plant to:

    a. Collect applicable equipment drawings, operation and maintenance manuals, heat balance data, nameplate data, maintenance records, inspection and testing data and operating data.

    b. Specific major equipment that will be addressed on Unit 7 include the following:

        1) Boiler Feed Pumps.

2) Condensate Pumps.

3) Deaerator.

4) Feedwater Heaters.

5) Turbine.

6) Generator.

7) Cooling Tower.

c. Walkdown the units to visually inspect accessible equipment.

d. Interview plant operating and maintenance personnel.

2. Update or develop recommendations for equipment inspections and repairs needed to allow continued use of the equipment for the anticipated life of the new combustion turbine/HRSG, based on the information collected.

3. Develop opinions of probable costs to perform equipment inspections and perform recommended repairs.

4. Prepare report to summarize assessment findings, recommendations, and opinions of probable cost.

PROJECT STAFF

Keenan Johnson, P.E., will be the project manager for the project and will be responsible for the execution of the work. Jeff Crawford, P.E. will be assigned as the project mechanical engineer. Other Sega staff will support the project as needed.

PROJECT SCHEDULE

Sega will conduct the initial plant visit within one (1) week after Notice to Proceed. A draft report recommending specific equipment inspections/overhauls or replacement will be issued for Owner review within eight (8) weeks of Notice to Proceed.

COMPENSATION

Sega proposes to conduct this assessment on a time and expenses basis with a not-to-exceed cost of $23,500 using the attached Rate Schedule for Professional Services.

Our proposal is based on two (2) site visits (one (1) initial and one (1) follow-up trip). If selected, a Task Authorization will be prepared and executed per the engineering services agreement dated June 28, 2006 between the City of Coffeyville and Sega, Inc.

CLARIFICATIONS

1. The following services have not been included:

    a. Assessment of any of Unit 7's existing electrical systems.

    b. Assessment of any of Unit 7's control systems.

    c. Development of any specifications for repair or refurbishment of the existing equipment or potential new equipment.

    d. The steam conditions for the existing steam turbine generator will not change.

2. This proposal is valid for sixty (60) days.

Sega appreciates the opportunity to submit this revised proposal and we look forward to continuing to work with City of Coffeyville on this important project. If you have any questions or comments regarding this proposal, please contact me.

Sincerely,

SEGA INC.

Keenan E. Johnson, P.E.

KEJ/slf

Enc.

c: Steve Hinderliter
Kirk Duncan

RATE SCHEDULE FOR PROFESSIONAL SERVICES

EFFECTIVE THROUGH DECEMBER 31, 2012

ENGINEERING SERVICES

Corporate Officer, Senior Application Specialist	$ 250.00/hr.
Project Manager	$ 175.00/hr.
Project Engineer	$ 165.00/hr.
Senior Engineer, Senior Specialist	$ 145.00/hr.
Staff Engineer, Staff Specialist	$ 130.00/hr.
Engineer, Specialist	$ 110.00/hr.
Assistant Engineer, Assistant Specialist	$ 100.00/hr.

TECHNICAL AND SUPPORT SERVICES

Senior Engineering Assistant	$ 100.00/hr.
Engineering Assistant	$ 85.00/hr.
Senior Drafting Technician	$ 70.00/hr.
Drafting Technician	$ 60.00/hr.
Engineering Secretary / Engineering Aide	$ 50.00/hr.
Technical Documentation	$ 40.00/hr.
Clerk / Typist	$ 30.00/hr.

PROJECT-RELATED EXPENSES

1. Approved outside special consultants are billed at actual cost plus 10 percent.
2. Travel and living expenses are billed at actual cost plus 10 percent, except for personal automobile mileage that is billed according to the IRS guideline.
3. Reproduction costs such as printing, blueprints, and binding are billed at commercial rates.
4. Shipping charges are billed at cost.
5. Equipment, material, and subcontracted construction are billed at cost plus 25 percent.
6. Daily travel and living expenses incurred during long duration on-site work may be consolidated into a mutually agreeable per-diem charge.
7. Site office facilities and equipment are billed at actual cost plus 10 percent.