FOR BOARD ACTION

Agenda Item# 7

Meeting Date:

9/27/05

SUBJECT:

Engineering Services Agreement -

Cascade Creek Unit 2 Winter Operation

PREPARED BY:

Tony Dzubay, RPU Power Production Engineer

ITEM DESCRIPTION: In May, 2000 a contract was signed between the City of Rochester and Turbo Power & Marine Systems, Inc. for the purchase of a Pratt & Whitney Twin Pac combustion turbine generator. The unit was placed in commercial service on May 5, 2002 at the Cascade Creek facility.

Although the unit was principally purchased for warm-weather operation, it included a cold-weather operation enhancement. System conditions have required the unit to be operated in the winter months much more than originally conceived. Due to this, small improvements have been made to continually improve the operation of the CT in the winter months. However, RPU has encountered additional minor problems with operation in cold weather that would be addressed by this proposed package.

The Enclosure Heaters and Secondary Air Damper Control System would heat the enclosure of each Gas Generator (engine). This would be accomplished by heaters placed inside the enclosures and dampers installed over the cooling-air inlet to seal off the enclosure itself. The heated enclosure would keep fuel oil in its liquid state, keep any exposed water from freezing, enhance the ease of movement for all mechanical devices and allow RPU personnel to safely and effectively work on the engine during cold temperatures, which is presently very difficult

This proposal includes all parts, software upgrades and any technical support from P&W during and after installation. P&W staff indicates that this project can expedited to be installed before the winter season. RPU staff will work closely with P&W to ensure the accelerated start and completion of this project.

The attached proposal gives an outline of the project along with time frame and pricing. Funds for this expenditure are included in the annual Cascade Creek Cost Center budget

UTILITY BOARD ACTION REQUESTED:

Staff recommends that the Board approve a purchase order agreement in the amount of \$73,000 for the engineering services required for a cold-weather operation improvement for one FT8 Twin Pac from Pratt & Whitney Power Systems, Inc.

ROCHESTER PUBLIC UTILITIES

Pratt & Whitney Power Systems

Date: August 15, 2005

Rochester Public Utilities 4000 East River Road NE Rochester, Minnesota, 55906-2813

Attention: Mr. Tony Dzubay

Dear Tony,

Pratt & Whitney Power Systems, Inc. ("PWPS") is pleased to provide Rochester Public Utilities (RPU) ("BUYER") with this proposal for Enclosure Heaters and Secondary Air Damper Control System for enhance reliable operation on cold days on the one FT8 Twin Pac at the Cascade Creek Unit 2 location in Rochester, MN

The scope of the services to be provided in this offer is outlined herein. Please note that this offer is valid for a period of thirty (30) days from the date of this letter. To accept this offer, please have an authorized RPU person sign where indicated on Page 3 and return this entire document to my attention, keeping a copy for your records

We are confident that this offer meets your needs; however, if you have questions, please call the undersigned at (860) 565-6935.

Sincerely,

Jerry McCormick
Customer Service Manager
Pratt & Whitney Power Systems, Inc.
E-mail: jerry mccormick@pw.utc.com

Pratt & Whitney Power Systems

SCOPE OF WORK

PWPS RESPONSIBILITIES

PWPS will provide Buyer with following items:

- 1 Parts to install gas turbine enclosure secondary air controlled damper per PWPS Installation Drawing IPE24103, configuration GR2 (ambient operation range of –40 degrees F to 120 degrees F)
- 2. Parts to install gas turbine enclosure heaters and to hook up electrically the heaters and secondary air damper actuators per PWPS Retrofit Drawing IPE24317, sheets 1 through 11, configuration GR1. Note that there is no sheet 3 for this drawing.
- 3 Updated site specific prints and electrical schematics
- 4 Control software revision to automatically control the secondary air dampers and enclosure heaters.
- 5. PWPS Technical Office support as required.

CUSTOMER RESPONSIBILITIES

Buyer will be responsible for the installation of the equipment. If Buyer requires technical on site assistance from PWPS, this will be provided at additional fees as listed in the Preferred Service Agreement.

Craft Labor including electricians and electrical technicians are to be provided by the Customer as required to support and complete all work activities

Customer is responsible for supplying all parts, consumables, specialty tooling, or heavy equipment (cranes, rigging, etc.) required while performing the work, except as otherwise specified in the PWPS Responsibilities section of this proposal.

Customer O&M personnel are responsible for lock-out/tag-out and de-energization of the equipment as necessary.

PRICING, PAYMENT AND PERIOD OF PERFORMANCE

Pricing

The hardware required to retrofit the one twinpac for gas turbine enclosure secondary air controlled dampers and enclosure heaters, including documentation, is \$73,000 US Dollars.

	Total Price
Retrofit Hardware for Enclosure Secondary Air Dampers and Heaters, Engineering Documentation and Controls Software Update	\$73,000.00

If RPU also accepts the proposal for the AGC, there will be a reduction in this proposal total price of \$2,000 for a total price of \$71,000.00. This is due to combining the Controls Engineering effort for both proposals into one software revision. But the implementation of each proposal on site can occur at different times.

Any on-site PWPS technical assistance to implement this proposal will be invoiced per the rates in the current Preferred Service Agreement.

Pratt & Whitney Power Systems

Payment

Invoices will be issued for payment per the following schedule

90% upon delivery of the equipment to site 10% upon delivery of the documentation

Payment is due net thirty (30) calendar days from date of the invoice.

Period of Performance

The standard lead time for the manufacturing of this equipment is 90 calendar days. PWPS will expedite as best possible to meet RPU requirements

PROPRIETARY STATEMENT

The entire commercial and technical proposal and the correspondence and communications concerning this proposal collectively the "Proposal" developed by Pratt and Whitney Power Systems, Inc (PWPS) and provided to Purchaser are the property of PWPS.

This quotation document is proprietary to PWPS and is furnished in confidence solely for use in considering the merits of the quotation and for no other direct or indirect use. By accepting this document from PWPS, the recipient agrees:

- 1 To use this document and the information it contains, exclusively for the above stated purpose and to avoid use of the information for performance of the proposed work by the recipient or disclosure of the information.
- 2. To make no copies of any part thereof without the prior written permission of PWPS, which permission should not be unreasonably withheld
- 3 To avoid publication or other disclosure of this document or the information it contains.
- 4 To return this document when it is no longer needed for the purpose for which furnished, or upon request of PWPS.

OTHER TERMS

This offer is subject to the terms herein and the Terms and Conditions of the Preferred Service Agreement between PWPS and RPU.

Feel free to contact me anytime if you have any questions or would like to discuss this proposal in more detail.

Sincerely, Pratt & Whitney Power Systems, Inc.

Jerry McCormick
Customer Service Manager
Pratt & Whitney Power Systems, Inc.

FT8 Engineering Services Proposal

ACCEPTANCE: Rochester Public Utilities		
Signature	 	· · · · · · · · · · · · · · · · · · ·
_		
Printed Name / Date	 	



RESOLUTION

BE IT RESOLVED by the Public Utility Board of the City of Rochester, Mi purchase order agreement with Pratt & Whitney Power Systems, Inc. for	innesota, to approve a
Cascade Creek Unit 2 Winter Operation One FT8 Twin Pac	

The amount of the agreement to be SEVENTY-THREE IHOUSAND AND 00/100 DOLLARS (\$73,000.00).

Passed by the Public Utility Board of the City of Rochester, Minnesota, this 27th day of September, 2005.

Preside	•nt	 	
1103100	/11t		