ITEM # <u>38</u> DATE: 05-28-19

## **COUNCIL ACTION FORM**

SUBJECT: POWER PLANT UNIT 7 TURBINE GENERATOR OVERHAUL PROJECT - REPORT OF BIDS

## BACKGROUND:

On April 23, 2019 the City Council approved plans and specifications for the Unit 7 Turbine Generator Overhaul Project. The Unit 7 Turbine Generator is scheduled to be disassembled, inspected, and repaired at the same time as the Unit 7 Boiler Repair Project. This work is required to replace worn parts and inspect the turbine and generator for repairs that may be needed to prevent unplanned turbine/generator outages, prevent costly turbine/generator damage, and increase turbine/generator reliability.

Repairs and replacement of worn parts will be completed as the inspection progresses. Experience has shown that certain parts require replacement every major overhaul and some parts become unusable during the disassembly process. This overhaul and parts replacement is required and recommended by boiler and machinery insurance carriers and follows accepted industry standards. This bid is for labor and materials for the inspection and repairs Unit 7 Turbine Generator. There is a separate bid for spare parts that are made available to the contractor for this repair.

Bid documents were issued to sixty-one firms and three plan rooms. The bid was advertised on the Current Bid Opportunities section of the Purchasing webpage and a Legal Notice was published on the websites of a contractor plan room service with statewide circulation and the lowa League of Cities.

On May 23, 2019, five bids were received as shown on the attached report. The specifications and bids are complex, and staff feels that additional time is needed to evaluate each bid in order to recommend an award that best meets the City's needs.

The Engineer's estimate for the cost of the total project is \$2,440,000.

The approved FY 2018/19 Capital Improvements Plan includes the following funding for the Unit 7 Turbine Generator Overhaul.

2018/19 GE Tech Support TOTAL	\$2,550,000
2019/10 GE Toch Support	\$300,000
2018/19 Labor/Materials	\$1,500,000
2017/18 Engineering/Parts	\$750,000

## **ALTERNATIVES:**

- Accept the report of bids and delay award for the Unit 7 Turbine Generator Overhaul Project until power plant staff is able to perform a thorough review and determine a recommended company to award the contract to.
- 2. Award a contract to the apparent low bid.
- 3. Reject all bids and direct staff to rebid.

## **MANAGER'S RECOMMENDED ACTION:**

Staff needs additional time to fully evaluate the bids before recommending action by the City Council. By choosing alternative No. 1, staff will have enough time to evaluate each bid to ensure the City receives these services at the best price.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative #1 as stated above.

	ITB 2019-120 UNIT 7 TURBINE GENERATOR OVERHAUL BID SUMMARY					
BIDDER:	HPI, LLC Houston, TX	CT Cotter Turbine Services, Inc Clearwater MN	GE, Windsor, CT	PSG Co, Turbine Generator Maintenance, Cape Coral, FL	MD&A Latham, NY	
BASE BID:						
Supply all materials, labor, and equipment to perform steam turbine generator major overhaul including the replacement of parts, inspection and repairs necessary for Unit 7 Turbine Generator as specified in the Invitation to Bid 2019-120 documents for the following lump sum amounts of:	\$411,464.00	\$437,830.00	\$525,029.00	\$649,900.00	\$811,112.00	
Sales and/or Use taxes included in the amount above			To be determined by COA	\$43,863.00	\$0.00	
ALTERNATE No. 1:						
Major Repair of First Stage Nozzle Parts:	\$11,797.00	\$15,600.00	\$16,593.00	\$11,100.00	\$12,165.00	
ALTERNATE No. 1A:						
Major Repair of First Stage Nozzle Parts:	\$15,870.00	\$10,800.00				
ALTERNATE No. 2:						
Major Repair of First Stage Deflector:	\$43,378.00	\$47,520.00	\$22,417.00	\$14,900.00	\$28,910.00	
ALTERNATE No. 2A:						
Major Repair of First Stage Deflector:		\$34,450.00				
ALTERNATE No. 3:						
Major Repair of First Stage Rotating Blades & Diaphragms (Stationary Blades):	\$41,119.00	\$32,100.00		\$46,000.00	\$50,080.00	
ALTERNATE No. 4:						
Major Repair of Second thru Fifth Stage Rotating Blades:		No Bid				
ALTERNATE No. 5:						
Major Repair of Second thru Fifth Stage Diaphragms (Stationary Blades):		\$107,000.00	\$71,732.00	\$38,600.00	\$73,716.00	
ALTERNATE No. 5A:						
Major Repair of Second thru Fifth Stage Diaphragms (Stationary Blades):		\$102,240.00				
ALTERNATE No. 6:						
Major Repair of 12th thru 15th Stage Diaphragms (Stationary Blades):						
ALTERNATE No. 7:						
Major Repair of 12th thru 15th Stage Rotating Blades:						
ALTERNATE No. 8:						
Surface Preparation and Re-coating internals of Main Lube Oil Tank	No Bid			\$24,400.00	No Bid	
ALTERNATE No. 10:  Provide Two (2) On-Site Turbine Specialist during Outage	Included in base bid	1) included in base bid	\$117,576.00	\$2,800/Weekday, \$3,600/Weekend Day	1) included in base bic	
ALTERNATE No. 10B						
Provide Two (2) On-Site Turbine Specialist during Outage			\$123,696.00			
ALTERNATE No. 11:						
Provide One (1) On-Site Generator Specialist during Outage	Included in base bid	included in base bid		\$2,500/Weekday, \$3,300/Weekend Day	\$24,090.00	
ALTERNATE No. 12:						
Repowering and Boring (re-pour Babbitt) of Four Main Shaft Journal Bearings:	\$27,892.00	-	\$64,571.00	\$25,550.00	\$30,172.00	
ALTERNATE No. 13:	<b>AAT TOTO</b>	<b>A D D D D D D D D D D</b>	<b>*</b> * * * * * * * * * * * * * * * * * *	420.255.55	<b></b>	
Turbine Rotor Low Speed Spin Balance	\$27,537.00	\$25,260.00	\$42,857.00	\$23,000.00	\$40,000.00	
GRAND TOTAL	\$563,187.00	\$665,310.00	\$860,775.00	\$877,313.00	\$1,070,245.00	

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BIDDER:	HPI, LLC Houston, TX	CT Cotter Turbine Services, Inc Clearwater MN	GE, Windsor, CT	PSG Co, Turbine Generator Maintenance, Cape Coral, FL	MD&A Latham, NY	
Alternate Pricing Offered:						
Option 1 In Shop Rotor Blast		\$23,220.00				
Option 2 Clean & Inspect		\$11,640.00				
Option 3 Shipping Single driver w/ truck		\$6,900.00		\$2,700.00		
Option 3 Shipping Single driver w/ different truck		\$3,450.00				
Oil Flush	\$86,135.00					
Credit for performing a 24-hour Maintenance Oil Flush in lieu of High Velocity Oil Flush				-\$40,000.00		
Full Crew Mob/DeMob				\$32,400.00		
GE Alt #1-Generator Test & Inspect			\$26,323.00			
GE Alt #2 - Startup Specialist (2daysx10 hr days)			\$17,694.00			
GE Alt #3-Exciter Specialist (2daysx10hr days)			\$17,694.00			
GE Alt #4 - Performance Bond			\$5,000.00			

Alternate or Additional Pricing Proposed

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