ITEM # <u>13</u> DATE: 04-13-21

COUNCIL ACTION FORM

<u>SUBJECT</u>: FIELD TECHNICAL SERVICES FOR STEAM ELECTRIC PLANT UNIT 8 TURBINE-GENERATOR MAJOR OVERHAUL

BACKGROUND:

The Unit 8 turbine-generator is planned to undergo a major overhaul this summer in which it will be disassembled, inspected, repaired, and reassembled. The turbine-generator for Unit 8 was manufactured by General Electric (GE) and placed into service in 1982. The major overhaul of the turbine-generator is necessary to replace worn parts and inspect the turbine and generator for repairs that may be needed to prevent unplanned outages, prevent costly turbine-generator damage, and improve the reliability and efficiency of the unit.

Major turbine-generator overhauls are generally performed every 5-10 years, usually based upon accumulated hours of operation and/or the number of startups and shutdowns, but also may be necessary due to the emergence of some issue or problem with the turbine or generator that needs to be addressed. As a general rule, the greater number of hours of operation and the number of startups and shutdowns, the more urgent the need to perform a major overhaul. The most recent major overhaul of Unit 8 turbine-generator occurred in 2013.

GE is the original equipment manufacturer (OEM) of Unit 8's turbine-generator. Because of the knowledge and experience required to disassemble, inspect, repair, and reassemble the turbine-generator correctly, a field service technician from GE will be needed onsite during the overhaul to oversee all facets of the project. As the OEM, GE has the technical reference information and drawings necessary to support the overhaul and repair of the turbine-generator, much of which is proprietary and not available outside of GE. Therefore, GE is exclusively recommended by City staff as the sole source provider of the field technical services needed to support the major overhaul of Unit 8 turbine-generator.

The approved Capital Improvements Plan includes the following funding for the Unit 8 Turbine Generator Overhaul.

TOTAL	\$3,000,000
2019/20 GE Tech Support	\$ 350,000
2019/20 Construction	\$1,650,000
2019/20 Materials/Parts	\$1,000,000

It is assumed that GE's onsite technical services will be needed for 8 weeks, 6 days a week, and 10 hours per day. The proposed estimated price of GE's technical services is \$242,800.

Contracts awarded to date on this project are:

Argo (Parts) (City to pay sales tax)	\$1	,077,109.00
Sales tax	\$	74,711.63
MD&A (Parts) (Sales tax included)	\$	148,606.16
Power Plant Services (Parts) (Sales tax included)	\$	139,388.20
Burns & McDonnell (engineering) -	\$	41,000.00
Blade Runner (Contractor) (City to pay sales tax)	\$	699,800.00
Sales tax TBD after completion of work		
General Electric (this Council action)		242,800.00
TOTAL	\$2	2,423,414.99

ALTERNATIVES:

- a. Waive the City's Purchasing Policies and Procedures for competitive bidding of professional services and approve GE as the sole source provider of field technical services for the major overhaul of Unit 8's turbinegenerator.
 - b. Award a contract to provide field technical services for the overhaul of Unit 8 turbine-generator to General Electric Steam Services, Inc., Midlothian, Virginia, in the estimated amount of \$242,800.
- Direct staff to solicit competitive proposals for field technical services for the Unit 8 turbine-generator overhaul from firms other than the OEM of the Unit 8 turbinegenerator.
- 3. Do not contract for field technical services for Unit 8 turbine-generator overhaul.

CITY MANAGER'S RECOMMENDED ACTION:

This project will complete the overhaul of the Unit 8 turbine-generator. It is crucial to perform this work in order to maintain the reliability and efficiency of the unit. General Electric is the original equipment manufacturer of the turbine generator and field technical services provide by GE during the work onsite is critical to the success of the project.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as stated above.