

COUNCIL ACTION FORM

SUBJECT: POWER PLANT UNIT 8 TURBINE GENERATOR OVERHAUL

BACKGROUND:

The Unit 8 Turbine Generator is scheduled to be disassembled, inspected, and repaired at the same time as the Unit 8 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 are required and recommended by the original equipment manufacturer and boiler and machinery insurance carriers and follows accepted industry standards.

The Engineer's estimate of the cost of this project is \$2,488,000.

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

| | |
|-------------------------|--------------------|
| 2019/20 Materials/Parts | \$1,000,000 |
| 2019/20 Construction | \$1,650,000 |
| 2019/20 GE Tech Support | <u>\$350,000</u> |
| TOTAL | \$3,000,000 |

ALTERNATIVES:

1. Approve the preliminary plans and specifications for the Unit 8 Turbine Generator Overhaul and set July 29, 2020, as the bid due date and August 11, 2020, as the date of hearing and award of contract.
2. Do not approve which would delay this critical repair.

MANAGER'S RECOMMENDED ACTION:

The Unit 8 Turbine-Generator is scheduled for a major overhaul during the outage for the Unit 8 Boiler Tube Repair Project, tentatively scheduled for winter of 2020. Turbine-generator overhauls are typically performed in the industry about every 5-7 years to restore unit efficiency and to maintain good unit life and reliability. Without this overhaul, the Power Plant's performance and reliability would degrade considerably over time.

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