



CITY OF GLENDALE, CALIFORNIA
REPORT TO THE:

Joint City Council Housing Authority Successor Agency Oversight Board

March 27, 2018

AGENDA ITEM

Report: Unit No. 9 Chiller Motor Replacement at the Grayson Power Plant (GPP)

- 1. Resolution adopting Specification No. 3669 for the Grayson Power Plant (GPP) Unit No. 9 Chiller Motor Replacement, and directing the City Clerk to advertise for bids

COUNCIL ACTION

Public Hearing Ordinance Consent Calendar Action Item Report Only

Approved for 3/27/18 calendar

ADMINISTRATIVE ACTION

Signature

Submitted by:
Stephen M. Zurn, General Manager, GWP

SR

Prepared by:
Michael De Ghetto, Chief Assistant General Manager, GWP

Camilo Ruiz, Sr. Mechanical Engineer

Approved by:
Yasmin K. Beers, City Manager

Reviewed by:
Michael J. Garcia, City Attorney

by

Robert P. Elliot, Director of Finance *MR*

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RECOMMENDATION

Glendale Water & Power (GWP) respectfully recommends that the City Council adopt Specification No. 3669 for the Grayson Power Plant (GPP) Unit No. 9 Chiller Motor Replacement, and direct the City Clerk to advertise for bids. Specification No. 3669 is on file and available in the City Clerk's office.

BACKGROUND/ANALYSIS

Unit No. 9 at GPP is an LM 6000 Combustion Turbine Generator (CTG) and it is rated to provide 49.5MW of generation capacity. The CTG and balance of plant, including the air inlet chiller/cooling tower system, has been in service since its commissioning in 2004.

During the first week of February, GWP had problems with the Trane chiller unit. After troubleshooting and inspection, it was concluded that the chiller unit has a bad motor and requires replacement.

The power output derived from the CTG is partly dependent on the ambient air temperature, and the output decreases with higher air temperatures because of the physics of the combustion cycle in the turbine. To ensure a constant power output, Unit No. 9 has a chiller/cooling tower system to cool the air intake on the CTG. When in operation, the chiller/cooling tower system is designed to hold a constant CTG compressor inlet air temperature of 48 degrees F° when the ambient air conditions are as high as 110 degrees F° dry bulb and 20% RH. Without the chiller, and when ambient temperatures are high, especially during the third quarter, the CTG will not be able to deliver its full capacity of 49.5MW.

The total estimated cost of replacing the chiller motor is \$232,000.

Therefore, it is respectfully recommended that the City Council adopt Specification No. 3669 for the Grayson Power Plant Generating Unit No. 9 Chiller Motor Replacement Project, and direct the City Clerk to advertise for bids.

FISCAL IMPACT

The total cost for this project is estimated to be \$232,000. In addition, a contingency of \$23,200 is requested to cover indeterminate additional repairs that may be discovered after inspection.

Upon award, a Resolution of Appropriation will be requested based on the lowest responsible and responsive bid amount.

ALTERNATIVES

Alternative 1: The City Council may elect to adopt Specification No. 3669 and direct the City Clerk to advertise for bids.

Alternative 2: The City Council may elect to not adopt Specification No. 3669. This may result in the need to purchase short-term additional generation capacity from outside the City at a cost determined by market prices at the time of the purchase.

Alternative 3: The City Council may consider any other alternative not proposed by staff.

CAMPAIGN DISCLOSURE

Not applicable.

EXHIBIT(S)

Not applicable.

RESOLUTION NO. _____

**A RESOLUTION OF THE COUNCIL OF THE CITY OF GLENDALE,
CALIFORNIA ADOPTING GLENDALE WATER & POWER SPECIFICATION
NO. 3669 FOR THE UNIT NO. 9 CHILLER MOTOR REPLACEMENT AT THE GRAYSON
POWER PLANT AND DIRECTING THE CITY CLERK TO ADVERTISE FOR BIDS**

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF GLENDALE;

SECTION 1. The specifications and plans, on file in the Glendale Water & Power Engineering Office for furnishing labor, material, and equipment for the Replacement of the Unit No. 9 Chiller Motor at the Grayson Power Plant, in the including the various documents incorporated therein, are hereby approved, adopted, and shall hereafter be known as Glendale Water & Power Specification No. 3669.

SECTION 2. The City Clerk is hereby directed to advertise for bids for work, equipment and materials described in Specifications No. 3669 adopted by this Resolution.

Adopted this ____ day of _____, 2018.

Mayor

ATTEST:

City Clerk

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES)
CITY OF GLENDALE)

I, Ardashes Kassakhian, City Clerk of the City of Glendale, do hereby certify that the foregoing Resolution No. _____ was duly adopted by the Council of the City of Glendale, California, at a regular meeting held on the ____ day of _____, 2018 and that the same was adopted by the following vote:

Ayes:
Noes:
Absent:
Abstain:

City Clerk

[Signature]
APPROVED AS TO FORM
PRINCIPAL ASSISTANT CITY ATTORNEY
DATE *March 27, 2018*

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