

RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: AUGUST 8, 2016

ITEM NO: 9

SUBJECT: **AGREEMENT WITH ENERGY OPTIONS, INC. TO PERFORM COOLING TOWER MAINTENANCE AT THE CLEARWATER POWER PLANT REQUEST FOR PROPOSALS NO 1587 - IN THE AMOUNT OF \$138,479**

ISSUE:

Approval of an agreement with Energy Options Inc., of Paramount, California, to perform cooling tower maintenance at the Clearwater Power Plant in the amount of \$138,479.

RECOMMENDATIONS:

That the Board of Public Utilities:

1. Approve the agreement between Energy Options Inc. and the City of Riverside for cooling tower maintenance at the Clearwater Power Plant, in the amount of \$138,479; and
2. Authorize the City Manager, or his designee, to execute the Agreement.

BACKGROUND:

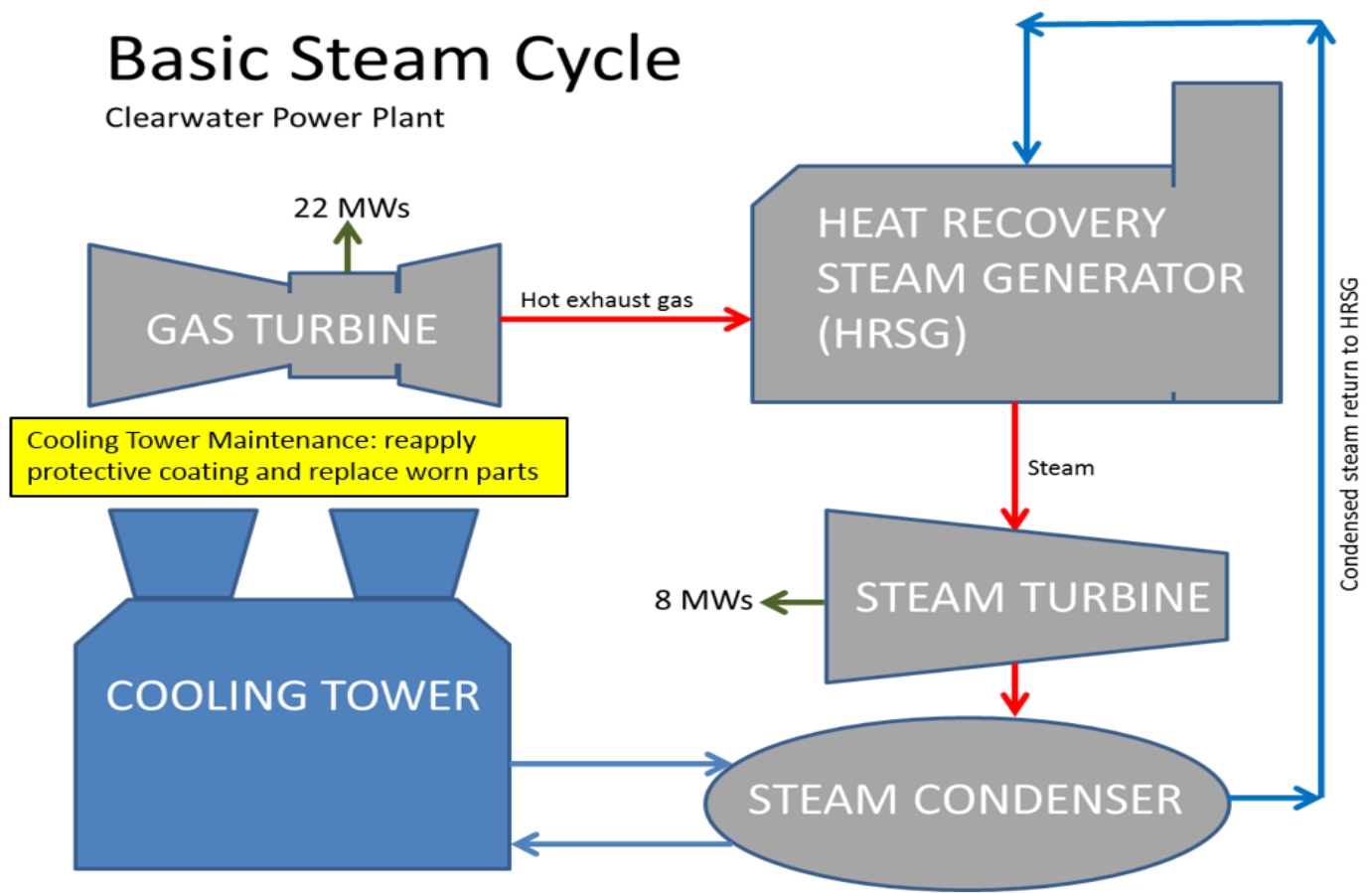
In September 2010, Riverside Public Utilities (RPU) finalized the purchase of the Clearwater Power Plant (Clearwater), located in Corona, CA. Clearwater is a combined cycle facility that produces a total of 30 megawatts of electricity. The electricity make-up consists of 22 megawatts (MW) generated through a primary gas turbine plus an additional 8 MW from a heat recovery steam generator (HRSG). The primary gas turbine generates waste heat that heats water to produce steam processed through the HRSG to turn another generator that produces an additional 8 MW of electricity. The additional electricity from the HRSG does not consume more fuel and makes Clearwater more efficient.

The cooling tower is a vital component of the system converting waste heat to steam. It cools the steam generated from the HRSG and condenses it back to water so it can be recycled to produce steam again. The condensing process ensures maximum electric power output and recovers ninety-five percent of the steam. The cooling tower is continually exposed to wet and corrosive conditions. A recent inspection resulted in a recommendation to perform routine maintenance on worn parts and reapply protective coating on the portions of the structure exhibiting corrosion.

The following diagrams represents the mechanics the steam cycle in the Clearwater power plant, with the cooling tower portion consideration in this report.

Basic Steam Cycle

Clearwater Power Plant



Request for Proposal No. 1587 was posted on February 18, 2016, and closed on March 30, 2016. The City received two proposals. After evaluation staff recommends selecting the proposal from Energy Options Inc. as providing the lowest overall cost and the best service guarantee.

Request for Proposal No. 1587:

Company Name	Location	Proposed Amount
Energy Options Inc	Paramount, CA	\$138,479
CJS Cooling Tower Services	Norco, CA	\$144,100

The Purchasing Services Manager concurs with the recommendations above.

FISCAL IMPACT:

The fiscal impact is \$138,479. Sufficient funds are available in the Clearwater Maintenance-Generating Plant Account No. 6120140-424131.

Prepared by: Reiko A. Kerr, Public Utilities Assistant General Manager/Resources
 Approved by: Girish Balachandran, Public Utilities General Manager
 Approved by: John A. Russo, City Manager
 Approved as to form: Gary G. Geuss, City Attorney

Certifies availability of funds: Laura Chavez-Nomura, Public Utilities Assistant General Manager/Finance

Attachment: Professional Consultant Services Agreement-Energy Options