

# RIVERSIDE PUBLIC UTILITIES

## Board Memorandum

**BOARD OF PUBLIC UTILITIES**

**DATE:** JUNE 06, 2016

**ITEM NO:** 5

File ID – 16-1723 - Consent

**SUBJECT:** APPROVE A THREE YEAR AGREEMENT FOR REQUEST FOR PROPOSAL NO. 1618 TO PROVIDE DEMINERALIZED WATER SERVICES AT THE RIVERSIDE ENERGY RESOURCE CENTER (RERC) AND CLEARWATER POWER PLANT – TO GE MOBILE WATER, INC. – IN THE AMOUNT OF \$800,000 PER YEAR

**ISSUE:**

The issue for Board of Public Utilities consideration is approval of a three-year agreement, with three one-year extensions with GE Mobile Water, Inc., Norfolk, Virginia in the amount of \$800,000 annually, for demineralized water services at the Riverside Energy Resource Center (RERC) and Clearwater power plants.

**RECOMMENDATIONS:**

That the Board of Public Utilities:

1. Approve the Demineralized Water Service Agreement between GE Mobile Water, Inc. and the City of Riverside for demineralized water services at the RERC and Clearwater power plants for a term of three (3) years starting July 01, 2016 and ending June 30, 2019 with the option to execute three (3) one (1) year extensions, in the amount of \$800,000 per year; and
2. Authorize the City Manager, or his designee, to execute the Agreement including making minor, non-substantive changes for an annual cost not to exceed amount of \$800,000 per year.

**BACKGROUND:**

The RERC and Clearwater facilities require demineralized water to produce reliable and environmentally compliant electricity. Demineralized water is high quality purified water that is a result of multiple stages of water treatment. The water purification process requires continual equipment monitoring as untreated water undergoes several treatment stages before it reaches water purity acceptable for power plant use. Water treatment expertise is recommended to assist in managing this critical process effectively. Demineralized water is vital for compliance with gas turbine exhaust air emissions regulations and California Energy Commission's Condition of Exemption for "zero liquid discharge" (ZLD) and without it the facilities cannot produce electrical power.

RERC uses reclaimed water from the adjacent Riverside Regional Water Quality Control Plant to process up to 30,000 gallons of ultra-pure demineralized water during each hour of power plant operation. Because of RERC's ZLD designation, contracted mobile demineralized water treatment systems are the most cost-effective approach. The alternative option requires significant capital investments to redesign and add equipment currently not installed at the plants and would result in ongoing operating cost and increases the waste disposed by the facility.

The Clearwater Power Plant is a combined cycle facility. A combined cycle facility, recovers gas turbine exhaust waste heat to produce usable energy without a subsequent increase in fuel consumption. At Clearwater, water is heated to produce steam and generate an additional 8 megawatts of electricity. Additionally, demineralized water is vital to the compliance with South Coast Air Quality Management District air emissions regulations.

Request for Proposal No. 1618 was posted on April 06, 2016, and closed on April 21, 2016. The City received two proposals, as noted below. After evaluation, staff recommends the proposal from GE Water and Process Technologies. Their proposal provided the lowest overall cost and the best guarantee for service. GE Water has also provided this service since 2006 (current contract expires June 30, 2016) and staff is very satisfied with the level and quality of services provided.

Request for Proposal No. 1618: The RFP proposals were based on the minimum usage of 5 million gallons:	
GE Mobile Water, Inc.	\$226,330
Evoqua Water Technologies	\$227,446

The contract is for a three-year term beginning July 1, 2016, with three one-year optional extensions.

Water usage is directly proportional to unit operation and impacts demin water costs. Historical budgets for demineralized water services have been based on prior years expenditures combined with anticipated run profiles for the units (determined using the Ascend Production Cost Modeling software) during the planned budget year. Each fiscal year staff will review its expenditures based on the anticipated run hours and water usage and request Board approval through the annual purchase order process.

The Purchasing Services Manager concurs with the recommendations above.

**FISCAL IMPACT:**

The estimated annual fiscal impact is not expected to exceed \$800,000. Sufficient funds are included in the RERC and Clearwater Maintenance-Generating Plant Account Nos. 6120130-424131 and 6120140-424131 in fiscal year 2016/17 and 2017/18 budgets, approved by the Board of Public Utilities on March 14, 2016, and pending City Council approval. Subsequent year(s) will be budgeted as part of the budget process.

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: GE Mobile Water, Inc. Services Agreement