



CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: February 11, 2014

TO: Mayor and Councilmembers

FROM: Water Resources Division, Public Works Department

SUBJECT: Contract For Re-Commissioning The City's Hydroelectric Plant

RECOMMENDATION: That Council:

- A. Find it in the City's best interest to waive the formal bidding process, as authorized by City Charter Section 519 and Santa Barbara Municipal Code Section 4.52.070 (L) and authorize the Public Works Director to award a contract to SOAR Technologies, Inc., in the amount of \$526,158 to re-commission the City's Gibraltar Conduit Hydroelectric Plant, including operating and maintaining the plant for one year, approve expenditures up to \$78,924 to cover any cost increases that may result from necessary change orders for extra work; and
- B. Award a professional services contract in the amount of \$38,450 to Rockwell Construction Services, LLC, to provide construction management and inspection services, and approve expenditures up to \$5,768 to cover any costs related to unanticipated extra work.

DISCUSSION:

BACKGROUND

The City owns the Gibraltar Conduit Hydroelectric Plant (Plant), located at 1402 San Roque Road, which receives water from the City's Gibraltar Reservoir via Mission Tunnel. In 1985, the Plant was regulated by the Federal Energy Regulatory Commission (FERC) and produced electrical power which was sold to Southern California Edison (SCE). The Plant was idled in 1998 when costs associated with the Plant's operation, maintenance and regulatory compliance exceeded revenues from power sales.

In 2010, Brown and Caldwell performed a cost-benefit analysis for restarting the Plant and concluded it would be economically feasible to restart the Plant if a FERC license exemption could be obtained, which required City ownership of the land under the Plant.

Brown and Caldwell's estimate for Plant rehabilitation was \$409,000; but this was a planning level estimate that did not include replacement of a critical valve costing \$99,000, automated control systems costing \$62,000, and replacing electrical and

control equipment, at a cost of approximately \$100,000 for a total contract cost of \$605,082.

Staff successfully worked with the federal government to have the land beneath the Plant deemed surplus property. This allowed Council to purchase the land. A FERC letter, dated November 21, 2013, stated that the Plant was exempt from licensing requirements. Council also authorized execution of a Renewable and Alternative Power Public Water and Wastewater Agency Agreement with SCE to allow Plant-generated electrical power to be fed into SCE's power grid.

PROJECT DESCRIPTION

The project scope for restarting the Plant includes replacing, renovating and upgrading the existing equipment to better regulate water flows through the facility, and installing modern sensors, telemetry, and programmable logic controllers to manage the power production and feed into the SCE power grid. It is proposed that the contractor be responsible for operating and maintaining the Plant for one year after re-commissioning the Plant. All costs associated with the reliable operation of the Plant during the one-year period would be the contractor's responsibility, unless unforeseen problems arise that are unrelated to the re-commissioning work.

CONTRACTOR SELECTION

The Goleta Water District (GWD) owns a similar sized hydroelectric plant at their Van Horne Reservoir, which was in need of repair and renovation. GWD sent a Request for Proposal (RFP) for turbine generator replacement and upgrades of the Plant to twenty-one qualified engineering contractor firms. As a result of this competitive process, in 2011, GWD awarded a contract to General Pump and SOAR Technologies, Inc. (SOAR). The project was successfully completed to GWD's satisfaction.

Through a competitive RFP process, GWD selected Rockwell Construction Services (RCS) to perform construction management and inspection services, including contract and design review of SOAR's work on GWD's hydroelectric plant. RCS was selected for their expertise in hydroelectric technology and electronic control systems. RCS also successfully performed similar services for Goleta Sanitary District on the district's recent \$29.5M capital improvement project at their wastewater treatment plant.

Based on GWD's positive experience with SOAR and on recommendations from agencies with similar facilities, in 2012 the City issued a purchase order to SOAR for \$10,000 to provide professional services to obtain necessary agreements from SCE for the Plant. In 2013, SOAR's purchase order was increased by \$12,996, for a total of \$22,996, to identify all work necessary to renovate and modernize the Plant.

Based on GWD's recent competitive RFP process, positive experience by City staff with SOAR and RCS, and the many positive recommendations staff has received for both firms on their proven ability and relevant experience on similar hydroelectric projects, staff recommends that Council find it in the City's best interest to waive the formal bidding process, as authorized by City Charter Section 519, and to authorize the Public

Works Director to award contracts to both SOAR and RCS to re-commission the Plant. The contract with SOAR for re-commissioning the Plant and operating and maintaining the Plant for one year would be in the amount of \$526,158, plus approval of expenditures up to \$78,924 to cover cost increases that may result from contract change orders. The contract with RCS for construction management and inspection services would be in the amount of \$38,450, plus approval of expenditures up to \$5,768 to cover costs related to unanticipated extra work.

FUNDING AND BUDGET IMPACTS

The negotiated proposals with SOAR and RCS are both acceptable to perform the specified contract services. Copies of SOAR's and RCS's proposals are available for public review at the City Clerk's office. There are sufficient appropriated funds in the Water Fund to cover the cost of services. It is estimated that once the Plant is operational, the power sales to SCE will result in annual revenues of \$210,000 to the Water Fund, which equates to the project paying for itself in less than five years. At its meeting of December 9, 2013, the Board of Water Commissioners voted 5-0-0 to concur with the staff recommendation.

The following summarizes all estimated total Project costs:

ESTIMATED TOTAL PROJECT COST

Initial Condition Assessment of the Plant (SOAR)	\$ 22,996
Land Purchase	\$ 65,000
Review of Re-commissioning Proposal (RCS)	\$ 10,000
Interconnection Facilities (SCE)	\$ 117,291
Re-commissioning Contract w/Change Order Allowance (SOAR)	\$ 605,082
Construction Management/Inspection (RCS)	\$ 44,218
TOTAL PROJECT COST	\$ 864,587

SUSTAINABILITY IMPACT:

Re-commissioning the Plant will result in the production of clean and renewable hydroelectric power. It has been estimated that, initially, the Plant can produce 1874 megawatt hours (MWh) of power annually. Because of siltation at Gibraltar Dam, the amount of power generation will decline over time, and eventually will reach a steady annual production of 1657 MWh, which is enough to meet the electrical demand of approximately 300 single family homes.

PREPARED BY: Catherine Taylor, Water System Manager/RLR/mh

SUBMITTED BY: Rebecca Bjork, Acting Public Works Director

APPROVED BY: City Administrator's Office