

# RIVERSIDE PUBLIC UTILITIES

**DATE: JUNE 13, 2022** 

## Board Memorandum

#### **BOARD OF PUBLIC UTILITIES**

SUBJECT:

THIRD AMENDMENT TO PROFESSIONAL CONSULTANT **SERVICES** AGREEMENT WITH **WUNDERLICH-MALEC** ENGINEERING. INC. OF GILBERT. ARIZONA FOR **POWER PLANT** CONTROL SYSTEM ENGINEERING AND CONSULTING SERVICES AT RIVERSIDE ENERGY RESOURCE CENTER AND SPRINGS POWER PLANT FOR A THREE-YEAR TERM ENDING ON JULY 1, 2025, IN THE AMOUNT OF \$180,000 FOR A **TOTAL AGREEMENT AMOUNT OF \$450,000** 

#### **ISSUE**:

Consider approval of the Third Amendment to the Professional Consultant Services Agreement with Wunderlich-Malec Engineering, Inc. of Gilbert, Arizona for power plant control system engineering and consulting services at Riverside Energy Resource Center and Springs Power Plant for a three-year term ending on July 1, 2025, in the amount of \$180,000, for a total agreement amount of \$450,000.

#### **RECOMMENDATIONS:**

That the Board of Public Utilities:

- Approve the Third Amendment to the Professional Consultant Services Agreement with Wunderlich-Malec Engineering, Inc., of Gilbert, Arizona for power plant control system engineering and consulting services at the Riverside Energy Resource Center and Springs Power Plant for a three-year term ending July 1, 2025, in the amount of \$180,000, for a total agreement amount of \$450,000; and
- 2. Authorize the City Manager, or designee, to execute the Third Amendment to the Professional Consultant Services Agreement with Wunderlich-Malec Engineering, Inc., including the ability to make non-substantive changes.

### **BACKGROUND:**

Wunderlich-Malec Engineering, Inc. (Wunderlich-Malec) designed and commissioned the Distributed Control Systems (DCS) utilized at the Riverside Energy Resource Center (RERC) and Springs Power Plant (Springs). The DCS is the central computerized control system which integrates numerous plant equipment and supervisory controls for power generation technicians. During normal power plant operations, technicians interact with several systems vital to the proper

functioning of the plant, including turbine and emissions controls as well as the Supervisory Control and Data Acquisition (SCADA) system.

The DCS at each power plant is a custom designed and unique system specific to each facility. Maintaining and troubleshooting the complex control structure requires engineering support from an entity possessing the technical expertise of the customized control systems. Changes in plant operations resulting from regulatory mandates or performance improvements also require indepth engineering evaluations prior to implementation. As equipment connected to the DCS is replaced or upgraded or operating parameters change, the programming within the DCS must be tested and updated as well.

Since the initial commissioning of each power plant, the partnership with Wunderlich-Malec has been essential to maintaining reliability at the highest level. In fact, recent unexpected control system issues were quickly resolved with Wunderlich-Malec's assistance and ensured that the power plants continued operations.

Changes in technology as well as regulatory changes are ongoing. Next year, staff anticipates operational changes from new and additional regulatory mandates and industry performance standards. The continued assistance of Wunderlich-Malec's engineering services will ensure the efficient and successful implementation of these operational changes.

The following illustration outlines the intricate components of the operating system.

#### Distributed Control System Operator Interface Balance of Plant Operating System Data Acquisition Emissions Gas Turbine Operating System Monitoring System Fuel Gas Control Instrument Air System Control System Data Historian **Emissions Control** Emergency Generator Control System System

#### DISCUSSION:

RPU has worked with Wunderlich-Malec at both the RERC and Springs power plants since they were commissioned. Prior to September 2017, the company was only brought in to assist and perform maintenance in an as-needed capacity. Over time, it was determined that annual maintenance and system upgrades were necessary and RPU sought a formal agreement to clearly identify services and costs.

Staff opted for a single source procurement due to the specialized engineering services provided by Wunderlich-Malec. As noted above, Wunderlich-Malec installed and commissioned the original control systems at RERC and Springs. Both DCS systems have been customized to fit the specific operations at RERC and Springs and Wunderlich-Malec is the only vendor that readily meets Riverside's demands for DCS system maintenance and programming. An alternate vendor

not having the programming expertise combined with the proprietary knowledge of the existing and DCS system would expose both facilities to extended outages, equipment damage, and environmental violations.

In September 2017, staff received single source procurement approval for the DCS engineering services with Wunderlich-Malec (referred to as the Original agreement). As a result, staff obtained a fully executed professional consultant services agreement and an open purchase order in the amount of \$45,000.

The agreement expired on September 7, 2018, with no revisions. The First Amendment was approved in October 2018, which extended the agreement term to July 1, 2019, and increased the authorized expenditure by \$45,000 to a total expenditure of \$90,000 for as-needed engineering services.

In June 2019, the Board of Public Utilities approved the Second Amendment that extended the agreement for three years through July 1, 2022. The amendment authorized an annual budget of \$60,000 per year and increased the total expenditure under the agreement to \$270,000.

Staff evaluated the future control system requirements and negotiated a multi-year extension with fixed hourly rates. The Third Amendment will extend the agreement through July 1, 2025, with an approved budget of \$60,000 per year for as-needed services and increase the total authorized expenditure under the agreement to \$450,000. For the next three fiscal years, staff will continue to review DCS maintenance requirements and seek approval from the Board of Public Utilities through the Fiscal Year Annual Purchase Order process.

**Table 1: Total Authorized Expenditures per Agreement with Wunderlich-Malec** (Note: The third amendment identified shows the amendment under consideration in this report.)

Agreement	Figure Vegre	Annual Amount	Amendment
Revisions	Fiscal Years	Annual Amount	Amount
Original	Fiscal Year 2017-18	\$45,000	
Original Agreement Total			\$45,000
First Amendment	Fiscal Year 2018-19	\$45,000	
First Amendment Total			\$45,000
Second Amendment	Fiscal Year 2019-20	\$60,000	
Second Amendment	Fiscal Year 2020-21	\$60,000	
Second Amendment	Fiscal Year 2021-22	\$60,000	
Second Amendment Total			\$180,000
Third Amendment	Fiscal Year 2022-23	\$60,000	
Third Amendment	Fiscal Year 2023-24	\$60,000	
Third Amendment	Fiscal Year 2024-25	\$60,000	
Third Amendment Total			\$180,000
Total			\$450,000

The negotiated Wunderlich-Malec hourly rate of \$164 is much lower than rates from other vendors that provide this specialized service. Rates from comparable vendors vary from \$240 to \$277 per hour.

Purchasing Resolution No. 23812, Section 602(d) provides an exception to formal and informal procurement when the procurement can only be obtained timely from a single source and the Manager is satisfied that the best price, terms, and conditions for the procurement have been

negotiated. In this case, the procurement can only be obtained from a single source, for the reasons noted above, and complies with all the requirements under this section.

The Purchasing Manager concurs that the recommended actions are in compliance with Purchasing Resolution No. 23812.

#### **STRATEGIC PLAN ALIGNMENT:**

This item contributes to the following strategic priorities and goals from the Envision Riverside 2025 Strategic Plan:

## **Strategic Priority 5, High Performing Government**

Goal 5.4. Achieve and maintain financial health by addressing gaps between revenues and expenditures and aligning resources with strategic priorities to yield the greatest impact.

## Strategic Priority 6, Infrastructure, Mobility & Connectivity

Goal 6.2. Maintain, protect, and improve assets and infrastructure within the City's built environment to ensure and enhance reliability, resiliency, sustainability, and facilitate connectivity.

The item aligns with each of the five cross-cutting threads as follows:

- Community Trust Ensuring that Riverside's power plants can safely and effectively operate and provide electricity to the entire City and its communities serves the greater public good.
- 2. **Equity** This item ensures that the power plants can safely and effectively operate and provide reliable electricity benefitting all RPU's customers.
- 3. **Fiscal Responsibility** The negotiated costs for Wunderlich-Malec's services are significantly lower than other vendors in the similar industry.
- 4. **Innovation** The DCS is the automation and integration of multiple processes required to produce electricity. This agreement supports operational reliability and future plant improvements.
- 5. **Sustainability & Resiliency** RERC and Springs operate during the most critical need for electricity. Having a well maintained DCS for the next three years is essential to sustaining a highly reliable power plant.

## **FISCAL IMPACT:**

The total fiscal impact for Fiscal Year 2022-23 is \$60,000. The proposed Fiscal Years 2022-23 - 2023-24 budget will be considered by the City Council in June. Upon approval, sufficient funds will be available in the Springs Professional Services Account No. 6120120-421000 and RERC Professional Services Account No. 6120130-421000.

For fiscal years 2022-23, 2023-24 and 2024-25, staff will obtain annual purchase orders in the

amount of \$60,000 for as-needed engineering services in accordance with the agreement. Only the actual expenditures will be charged to the Generation Budget.

Prepared by: Daniel E. Garcia, Utilities Deputy General Manager/Power Resources

Approved by: Todd M. Corbin, Utilities General Manager Approved by: Kris Martinez, Assistant City Manager Approved as to form: Phaedra A. Norton, City Attorney

Certifies availability

of funds: Edward Enriquez, Interim Assistant City Manager/Chief Financial

Officer/City Treasurer

#### Attachments:

1. Third Amendment to Professional Consultant Services Agreement with Wunderlich-Malec Engineering, Inc.

- 2. Single Source Justification Form for Wunderlich-Malec Engineering, Inc.
- 3. Presentation