



CITY OF BANNING STAFF REPORT

TO: CITY COUNCIL

FROM: Douglas Schulze, City Manager

PREPARED BY: Brandon Robinson, Electrical Engineering Supervisor
Art Vela, Director of Public Works

MEETING DATE: June 11, 2024

SUBJECT: Accept the Notice of Completion for the Electric Substation Equipment Maintenance Testing Project and Authorize the City Manager to Sign and the City Clerk to Record

RECOMMENDATION:

Staff recommends that City Council accepts the Electric Substation Equipment Maintenance Testing Project as complete, authorize the City Manager to sign and the City Clerk to record the Notice of Completion.

BACKGROUND:

On January 9, 2018, the City Council adopted Resolution 2018-04, awarding the contract for the Electric Substation Equipment Maintenance Testing Project and rejecting all other bids. The project was awarded to Electric Power Systems International, Inc. of Santa Ana, California.

The scope of work included testing of electric power distribution equipment at six substations, including major maintenance and equipment replacement.

The contract, C00229, was first amended in February 2020 thru City Council approval to include Major Maintenance and replacement of seven (7) gas-insulated circuit breakers with air-insulated circuit breakers. This maintenance activities considered the California Air Resources Board (CARB) regulations described in Senate Bill 32 (2016) to reduce sulfur hexafluoride (SF6) emissions from gas-insulated equipment to less than 1% beginning in 2020 to less than 0.5% by year 2050. This amendment increased the contract value by \$829,982.07 for a new contract total of \$980,517.07.

C00229 was amended again in April 2021 thru City Council approval based on recommendations that were identified in the initial maintenance and testing phase of the contract, which included replacements/upgrades to better coordinate system protection, operations and future maintenance tasks. Also identified during this activity were specific maintenance tasks that could be completed by the Utility's powerline technician crews that would help deliver cost savings in the future. This amendment increased the contract value by \$300,000 for a new contract total of \$1,280,517.07.

The contract was amended for a third time in November 2021 thru City Council approval. The principle items of work included engineering support to develop and implement a detailed architecture for proposed SCADA Central System, cyber security aspects, new fiber optic facilities, hardware & software requirements, construction plan, commissioning plan and training. Also included a complete RTU replacement at the Utility's Sunset Substation along with personnel training for the new equipment. This amendment increased the contract value by \$275,000 for a new contract total of \$1,555,517.07.

The final amendment for C00229 came in August 2022. The Utility was fast approaching the 5-yr maintenance interval on Sunset, Ivy and 22nd St Substation transformers, and made the decision to complete much needed maintenance on these three transformers while also adding an LTC (load tap changers) filtration system at our 22nd Street substation transformer. This amendment increased the contract value by \$70,000 for a new contract total of \$1,625,517.07.

JUSTIFICATION:

It was necessary for the Electric Utility to perform the required maintenance on substation equipment since the task hadn't been completed for several years due to the expiration of an agreement between City of Banning and Riverside Public Utilities to provide substation maintenance services. Due to light staffing levels with substation expertise, Electric staff felt it was in the best interest of the City to contact these services.

The contract consisted of testing substation breakers, transformers, switches, protective relays and other equipment by specialty technicians within the six substations; and in accordance with industry standards, specifications and maintenance schedules. Furthermore, the California Public Utilities Commission (CPUC) General Order No. 174 (GO174) defines standards for substation equipment inspection and maintenance protocols. These standards promote worker/operator safety and increased reliability of the grid. Additionally, the Utility is required to maintain industry standards for operation of substation distribution equipment, which includes reduction that use greenhouse gases for operation.

All work was coordinated and inspected by City staff.

FISCAL IMPACT:

The initial contract amount for this project was \$150,535 over a three-year service period. The Utility executed several amendments to the agreement to replace major equipment such as eliminating circuit breakers that carried greenhouse gasses, adding new SCADA equipment and protective devices while replacing older devices, and improving the operation of several substation transformers. The final contract expenditure amount was \$1,583,170.35 over a period of five years.

ALTERNATIVES:

Do not accept the Notice of Completion and provide alternative direction.

ATTACHMENTS:

1. [Attachment 1 - Notice of Completion_EPS Maint.docx](#)