San Mateo County Community College District October 22, 2014

BOARD REPORT NO. 14-10-103B

TO: Members of the Board of Trustees

FROM: Ron Galatolo, Chancellor

PREPARED BY: Josè D. Nuñez, Vice Chancellor of Facilities Planning, Maintenance and Operations, 358-6836

APPROVAL OF CONTRACT AWARD FOR DISTRICTWIDE UTILITY MEASUREMENT AND VERIFICATION PROJECT

The Districtwide Utility Measurement and Verification Project is a Design-Build Project that will provide for the design and construction of an energy measurement and verification and management system to be implemented at Cañada College, College of San Mateo, and Skyline College. The project is a significant step toward measuring and managing how buildings operate throughout the District. When complete, it will provide key upgrades to existing systems and add necessary hardware and software systems to monitor, trend, analyze and control utility use across the District. The project upgrades the District's existing building management system, creates a robust energy information system, and builds on a legacy of innovation by providing advanced analytical functions.

An essential element of this project is to replace the existing Building Management System (BMS) main controllers and software system. Installed more than ten years ago, the existing BMS has outlived its useful life. In fact, many of the system components are no longer supported by their original manufacturer. All of the existing BMS controllers will be replaced with new controllers. By utilizing this modern hardware and innovative BMS software, system level information (i.e. lighting and heating, ventilation and air conditioning) will feed directly into the energy information system while enabling facilities staff to monitor and control system functionality.

The existing Energy Information System (EIS) hardware across the District will also be replaced and enhanced with new hardware and a new EIS software platform that integrates with the BMS system. New utility meters will be added to almost all buildings across the District to monitor utility usage by each building, to include electrical, gas, heating and cooling water as well as domestic water. A new energy usage electronic "Dashboard" will be provided to track and display the Energy Information System data. The Dashboard will be accessible via the web and can be custom tailored for several user groups. This will enable the District to provide the energy usage information of the different buildings and campuses across the District – essentially bringing SMCCCD buildings to life as learning laboratories themselves. The Dashboard will be utilized by the Facilities Department to track energy usage and building performance, and can also be used by students, faculty, staff and the public to learn about the energy usage conservation efforts across the District.

Additionally new Analytics software will be provided that has the ability to store, categorize and analyze the data from the BMS and EIS systems to provide actionable information to the Facilities Department to address performance gaps and equipment problems and issues in the future.

Government Code sections 4217.10 through 4217.18 authorize the District's Governing Board, without advertising for bids, to enter into one or more energy service contracts with any person or entity, pursuant to which that person or entity will provide electrical or thermal energy or conservation services to the District, if the anticipated cost to the District for said utility energy savings provided by the energy conservation services provided under the contract will be less than the anticipated marginal cost to the District of energy that would have been consumed by the District in the absence of those energy service contracts. Lawrence Berkeley Labs has estimated installations of metering systems and monitoring software help organizations generally reduce energy consumption by 5% - 15%. Staff have implemented similar monitoring based commissioning efforts and have realized results of 15% - 22%. Using 15% as a reasonable baseline for estimated reduction, SMCCCD would realize approximately $130,000 annually in electricity savings alone. Additional savings in water and gas usage are expected to bring this number closer to $150,000 resulting in a simple payback of approximately 15 years.

Staff were supported by professional engineering consultants GRD Energy and Alfa Tech Consulting Enterprises in developing a Request for Proposal (RFP) for this energy services project, to reach the goals described. The District issued the RFP on June 27, 2014 to nine different Bay Area licensed contractors specializing in Building Management Systems and Energy Information Systems, requesting proposals. Mandatory pre-proposal conferences were held on July 2 and July 9 and eight of the invited contractors attended. The District received seven written proposals on August 15, 2014, from the following contractors:

- Enovity, Inc.
- Honeywell International
- Johnson Controls, Inc.
- Schneider-Electric
- Siemens Industry Inc.
- Southland Industries, Inc.
- Syserco, Inc.

A selection committee, including the Vice Chancellor and Director of Facilities, Campus Facility Managers, the Energy Management Coordinator, representatives of ITS, and the Swinerton Management and Consulting Construction Manager assigned to this project, reviewed and evaluated all proposals. In view of the complexity of the proposals, the selection committee invited all seven firms to present their proposed solutions in person. All seven firms accepted this invitation and on September 11-12, 2014 presented their solutions to the committee. After an initial analysis of written proposals and presentations, on September 19 the selection committee issued a short list of three firms to proceed to the second round of the selection process, as follows:

- Schneider-Electric
- Siemens Industry Inc.
- Syserco, Inc.

The selection committee held interviews with each of the three firms on September 23-24, 2014 to further consider the merits of each firm's Proposal. Based on final ranking of the submittals, inclusive of initial proposals and presentations, second round presentations, and responses to requests for clarification, on September 25, staff invited Schneider-Electric and Siemens Industry, Inc. to submit their best and final offer. Each firm responded with their best and final offer as follows:

Firm	Initial Proposal	Final Proposal
Schneider Electric	$ 2,447,486	$ 2,173,815
SIEMENS	$ 2,865,950	$ 2,360,190

The selection committee has thoroughly analyzed the qualifications of participating firms, and the value of the proposed solutions, and recommends Schneider-Electric as providing the best overall value. The selection committee finds it is in the best interest of the District to procure the energy conservation services reflected in the Schneider-Electric Proposal as an energy service contract pursuant to Government Code sections 4217.10 through 4217.18. Pursuant to the code, public notice has also been given in a local newspaper publication two weeks prior to this regular scheduled board meeting regarding the intent to take this action to establish an alternative energy conservation services contract.

This project will be funded by Measure A general obligation bond funds.

RECOMMENDATION

It is recommended that the Board of Trustees authorize the Executive Vice Chancellor to execute a contract with Schneider-Electric for the Districtwide Utility Measurement and Verification Design-Build Project in an amount not to exceed $2,173,815 as an energy service contract pursuant to Government Code sections 4217.10 through 4217.18.