City of Chula Vista

Legislation Details (With Text)

File #:	15-0061	**Name:**	
Type:	Consent Item	**Status:**	Passed
		In control:	City Council
On agenda:	4/14/2015	**Final action:**	4/14/2015
Title:	RESOLUTION NO. 2015-066 OF THE CITY COUNCIL OF THE CITY OF CHULA VISTA APPROVING AN AGREEMENT WITH SAN DIEGO MECHANICAL ENERGY IN THE AMOUNT OF $62,128 TO UPGRADE THE CENTRAL PLANT CONTROLS AT THE POLICE HEADQUARTERS		
Sponsors:			
Indexes:			
Code sections:			
Attachments:	1. Item 7 - Attachment 1 - Agreement, 2. Item 7 - Attachment 2 - Disclosure Statement, 3. Item 7 - Attachment 3 - PDHQ Controls Upgrade RFP Information, 4. Item 7 - Resolution		

Date	Ver.	Action By	Action	Result
4/14/2015	1	City Council	approve	Pass

RESOLUTION NO. 2015-066 OF THE CITY COUNCIL OF THE CITY OF CHULA VISTA APPROVING AN AGREEMENT WITH SAN DIEGO MECHANICAL ENERGY IN THE AMOUNT OF $62,128 TO UPGRADE THE CENTRAL PLANT CONTROLS AT THE POLICE HEADQUARTERS

RECOMMENDED ACTION
Council adopt the resolution.

SUMMARY
The Chula Vista Police Department Headquarters (PDHQ) was constructed in 2003, and the Heating, Ventilation and Air Conditioning (HVAC) system has been operating continuously (7/24) there. The HVAC system provides thermal comfort acceptable indoor air quality for the entire facility. Over the last 12 years it is estimated that the plant, air-handlers and associated control systems are nearing over 100,000 hours of operation. Many components of the HVAC system are reaching the end of their life cycle and are in need of comprehensive maintenance and /or replacement.

ENVIRONMENTAL REVIEW
The Environmental Review Coordinator has reviewed the proposed activity for compliance with the California Environmental Quality Act (CEQA) and has determined that there is no possibility that the activity may have a significant effect on the environment because it involves only retrofit of an existing chiller plant that is enclosed entirely within the existing Police Department facility roof top and equipment room; therefore, pursuant to Section 15061(b)(3) of the State CEQA Guidelines the activity is not subject to CEQA. Thus, no environmental review is necessary.

BOARD/COMMISSION RECOMMENDATION
Not Applicable

DISCUSSION

In 2008, the City implemented an energy conservation measure (ECM) to lower the electrical usage and consumption of energy by the HVAC system (chilled water plant and air-handlers) at PDHQ. The project encompassed modifying one of the original TRANE chillers from a constant single speed compressor to a multi (2) compressor variable speed system, which could modulate and adapt to changes in the building load. The project required a complex proprietary control program and required the services of a third party energy monitoring service provided by Optimum Energy (OE) at an annual reoccurring cost to the City.

While the ECM project did reduce energy consumption, it also affected the overall performance of the HVAC system components (i.e. chilled water plant, air handlers and associated controls). The integration of new programs and/ or lack of communication between the existing Circon Building Automation System (BAS) and the proprietary TRAV and LOOP programs made it impossible to make changes that are essential for maintenance. Basic set-point and equipment changes, such as changing the sequence operation, are essential for a shutdown to perform routine maintenance.

This upgrade is considered Phase I and should be considered as a starting point to several other phases that are needed to address other failing BAS controllers and HVAC components throughout the facility. Phase I includes the replacement of the (BAS) controllers, failed and failing variable speed pump drives and extensive maintenance and service to both chillers. Upon completion, the OE equipment will be removed, and all optimization processes will reside in the new supervisory controller, which will function independently without any outside third party involvement. The new controller will broaden staff's ability to remotely monitor and control the Police HVAC system and will create the foundation for a building-wide energy management system in the future. These types of building controls and systems also contribute to Chula Vista's transition to a "Smart City" framework, in which real-time data collection and processing is used to inform municipal operations decision-making

In January 2014 three qualified firms that have done work for the City provided proposals for the chiller plant control and maintenance project. Staff has spent the last year providing access to the PDHQ facility and reviewing proposals. Staff has determined that San Diego Mechanical Energy's proposal for $62,128 represents the best value for the first phase of this project.

DECISION-MAKER CONFLICT

Staff has reviewed the property holdings of the City Council and has found no property holdings within 500 feet of the boundaries of the property that is the subject of this action. Staff is not independently aware, and has not been informed by any City Council member, of any other fact that may constitute a basis for a decision maker conflict of interest in this matter.

LINK TO STRATEGIC GOALS

The City's Strategic Plan has five major goals: Operational Excellence, Economic Vitality, Healthy Community, Strong and Secure Neighborhoods and a Connected Community. The project supports Strong and Secure Neighborhoods by upgrading and extending the life of the central plant at the PDHQ and jail facility through the asset management program.

CURRENT YEAR FISCAL IMPACT

Funding for this project will be from the General Fund. No appropriations are needed at this time; sufficient funds for this project are included in the Fiscal Year 2014/2015 budget of the Police Department.

ONGOING FISCAL IMPACT

Costs for future upgrades and repairs in Phase II will be considered by the City Council as part of the normal budget process by adding it to the Critical Needs list.

ATTACHMENTS

Agreement
Disclosure Statement
Project Scope

Staff Contact: Gordon Day, Building Project Manager, Public Works Division, Engineering Section