

**PERALTA COMMUNITY COLLEGE DISTRICT
Board of Trustees Agenda Report
For the Trustee Meeting Date of May 12, 2009**

ITEM # 23

ITEM TITLE:

Consider Approval of Amendment No. 2 to Agreement with Chevron Energy Solutions Company for Review and Analysis of Various Energy and Sustainability Related Projects District-Wide for Central Chiller Plants

SPECIFIC BOARD ACTION REQUESTED:

Approval is requested for Amendment No. 2 to the agreement for professional services with Chevron Energy Solutions Company for Review and Analysis of Various Energy and Sustainability Related Projects District-Wide for Central Chiller Plants, in the amount of \$162,800.

ITEM SUMMARY:

Under this amendment, Chevron will assist the District in establishing the scope of work, design criteria, and construction costs for central chilled and hot water plants for Laney College, Merritt College and College of Alameda. Central chilled and hot water plants are proposed for the campuses as energy conservation measures. Chevron will provide a cost savings benefits analysis, which is necessary to justify a design-build project. Air conditioning will be provided for all buildings at a lower cost than it would be for individual building units. The central plants will be designed to accommodate existing buildings as well as including provisions for increased loads due to future new facilities. The proposed negotiated costs are as follows:

Laney College	\$51,800
Merritt College	62,900
College of Alameda	<u>48,100</u>
TOTAL:	\$162,800

BACKGROUND/ANALYSIS:

The original agreement with Chevron, in the amount of \$127,000, was approved at the Board meeting of January 13, 2009. Amendment No. 1, in the amount of \$7,250, was approved at the Board meeting of April 7, 2009. Including this amendment, the total agreement will be \$297,050.

ALTERNATIVES/OPTIONS:

Not applicable.

EVALUATION AND RECOMMENDED ACTION:

Approval is recommended for Amendment No. 2 to the agreement for professional services with Chevron Energy Solutions Company for Review and Analysis of Various Energy and Sustainability Related Projects District-Wide for Central Chiller Plants, in the amount of \$162,800.

SOURCE OF FUNDS (AND FISCAL/BUDGETARY IMPACT):

Measure A, as approved by the voters in Peralta's constituency and authorized under Resolution 05/06-45, Exhibit A-1, District-Wide Projects, "Solar energy system installation and the retrofitting of existing energy systems," and Laney College, Merritt College and College of Alameda, "Plumbing, electrical, mechanical system upgrades and improvements."

OTHER DEPARTMENTS IMPACTED BY THIS ACTION (E.G. INFORMATION TECHNOLOGY):

YES _____ No X

COMMENTS:

No additional comments.

WHO WILL BE PRESENTING THIS ITEM AT THE BOARD MEETING?

Vice Chancellor Ikharo

DID A BOARD STANDING COMMITTEE RECOMMEND THE ITEM? YES _____ No X

IF "YES", PLEASE INCLUDE THAT INFORMATION IN YOUR SUMMARY.

PLEASE ACQUIRE SIGNATURES IN THIS ORDER:

DOCUMENT PREPARED BY:
Prepared by: Sadiq B. Ikharo Date: 5/5/09
Dr. Sadiq B. Ikharo
Vice Chancellor of General Services

DOCUMENT PRESENTED BY:
Sadiq B. Ikharo Date: 5/5/09
Dr. Sadiq B. Ikharo
Vice Chancellor of General Services

FINANCE DEPARTMENT REVIEW
 Finance review required Finance review *not* required
If Finance review is required, determination is: Approved Not Approved
If not approved, please give reason: _____
Signature: Thomas Smith Date: 5/5/09
Thomas Smith
Vice Chancellor for Finance and Administration

GENERAL COUNSEL (Legality and Format/adherence to Education Codes):
 Legal review required Legal review *not* required
If Legal review is required, determination is: Approved Not Approved
Signature: _____ Date: _____
Thuy T. Nguyen, General Counsel

CHANCELLOR'S OFFICE APPROVAL
 Approved, and Place on Agenda Not Approved, but Place on Agenda
Signature: Elihu Harris Date: 5/5/09
Elihu Harris, Chancellor



**Peralta Community College District
Laney College, Merritt College, and College of Alameda
Central Plant Chilled Water Evaluation**

The objective of this analysis is to assist the District establishing the scope, design criteria, and construction costs for central chilled and hot water plants for three campuses.

Laney College

The proposed central chilled and hot water plants would be sized based on the existing occupied spaces requiring air conditioning with provision for future loads such as the new library being considered by the district. The chilled and hot water would be distributed to all building using the existing water loops, which may require modifications in some areas. Although this analysis includes air conditioning for the gymnasium, Chevron ES suggest leaving this area unconditioned. The list below includes the building included in this analysis.

Building	Cooling Load Ton
A Bldg	96
Art Center	29
B Bldg	65
C Bldg	10
D Bldg	11
E Bldg	49
F Bldg	31
G Bldg	97
Library	56
Student Center	51
Theater	32
Gym	0
Forum	9
Administration Bldg	61
Planned Future Library (50,000 sq.ft.)	83
Estimated Total	681

Chevron ES proposed scope includes the tasks listed below:

New Central Plant Conceptual Design

- Identify the best alternative to increase the current chilled water plant capacity.
- Identify the best location for additional central plant if needed.
- Provide demolition scope and drawings for new building housing new chillers



- Identify architectural modifications for new chiller room and sound attenuation
- Identify electrical requirement/availability for new equipment
- Provide electrical single line diagrams
- Identify structural scope/requirement
- Identify mechanical scope/requirement
- Provide mechanical equipment schedule
- Provide mechanical and electrical drawings and construction documents
- Provide the campus chilled water flow analysis
- Provide construction cost

Total Proposed Cost.....\$51,800.

Merritt College

The new central chilled water plant would be sized based on the existing occupied spaces requiring air conditioning with provision for future loads such as the new science facility being considered by the district. Hot water for new buildings will be provided by the existing hot water plant. A new underground chilled water loop will provide chilled water for new and existing facilities. Buildings included in this analysis are listed below.

Building	Cooling Load Ton
A Bldg	58
D Bldg	86
E Bldg	22
F Bldg	0
L Bldg	44
P Bldg	60
Q Bldg	16
R Bldg	51
New S Bldg (80,000 sq.ft.)	167
Estimated Total	504

New Central Plant Conceptual Design Scope

- Determine best location for new central plant and electrical equipment
- Identify site grading and required utilities for the Central Plant
- Provide schematic architectural building design
- Identify architectural and campus planning requirements
- Identify electrical requirement/availability for new equipments
- Provide electrical single line diagram
- Identify structural scope/requirement



- Provide schematic structural design
- Identify mechanical scope/requirement
- Provide equipment schedule
- Provide mechanical and electrical drawings and construction documents
- Provide schematic campus chilled water flow design
- Provide construction cost

Total Proposed Cost.....\$62,900.

College of Alameda

The buildings considered for air conditioning are illustrated below.

Building	Cooling Load Ton
A Bldg	38
B Bldg	42
C Bldg	33
D Bldg	75
E Bldg	13
F Bldg	37
L Bldg	69
G Bldg	22
Gym	0
Future Building (30,000 sq.ft.)	50
Estimated Total	381

New Central Plant Conceptual Design Scope

- Provide architectural modifications in Building C as required for the proposed central plant
- Identify electrical requirement/availability for new equipments
- Provide electrical single line diagram
- Identify structural scope/requirement
- Provide schematic structural design
- Identify mechanical scope/requirement
- Provide equipment schedule
- Provide mechanical and electrical drawings and construction documents
- Provide schematic campus chilled water flow design
- Provide construction cost

Total Proposed Cost.....\$48,100.