

**COUNTY OF SAN LUIS OBISPO BOARD OF SUPERVISORS
AGENDA ITEM TRANSMITTAL**

(1) DEPARTMENT General Services	(2) MEETING DATE 11/3/2015	(3) CONTACT/PHONE Marvin Rose, 781-5200	
(4) SUBJECT Request to create two Energy Efficiency projects to implement eight energy conservation measures at multiple County facilities; authorize budget adjustments in the amount of \$1,715,332 to FC 200 - Maintenance Projects and \$3,049,446 to FC 230 - Capital Projects to fund the two new energy conservation projects; accept a loan agreement with the California Energy Commission for \$2,200,000 to assist in funding the project; and approve the Work Order with Pacific Gas & Electric (PG&E) to commence the Design-Build implementation of the projects. All Districts.			
(5) RECOMMENDED ACTION It is recommended that the Board: <ol style="list-style-type: none"> 1. Approve the creation of two energy efficiency projects, WBS 350123- Energy Efficiency Maintenance Projects, and WBS 320070- Energy Efficiency Capital Projects; and 2. Approve the loan agreement with the California Energy Commission to assist in funding the project; and 3. Approve the use of PG&E's Energy Efficiency Retrofit Loan Program, also known as On-Bill Financing (OBF) to help fund the project; and 4. Authorize budget adjustments, by 4/5 vote, in the amount of \$1,715,332 to FC 200 - Maintenance Projects and \$3,049,446 to FC 230 - Capital Projects to fund the two new energy conservation projects consisting of: <ol style="list-style-type: none"> a. \$2,200,000 California Energy Commission loan b. \$767,495 in On-Bill Financing from PG&E c. \$1,199,787 by appropriating existing funds from the County Solar & Energy Designation d. \$315,001 in Countywide Maintenance and Countywide Energy & Water Funds; and e. \$282,495 from a cancelled planned project budgeted in FC 230 – Capital Projects 5. Approve the Work Order with PG&E, to enter into agreement to proceed with the Design-Build implementation of the Energy Conservation measures. 			
(6) FUNDING SOURCE(S) PG&E On-Bill Financing; California Energy Commission Loan; County Solar & Energy Designation; FC 200 Maintenance Projects; FC 230 Capital Projects	(7) CURRENT YEAR FINANCIAL IMPACT \$4,764,778	(8) ANNUAL FINANCIAL IMPACT \$0.00	(9) BUDGETED? Yes
(10) AGENDA PLACEMENT { } Consent { } Presentation { } Hearing (Time Est. ___) { X } Board Business (Time Est. <u>30</u>)			
(11) EXECUTED DOCUMENTS { } Resolutions { X } Contracts { } Ordinances { } N/A			
(12) OUTLINE AGREEMENT REQUISITION NUMBER (OAR) 19001599		(13) BUDGET ADJUSTMENT REQUIRED? BAR ID Number: 1516043, 1516033 { X } 4/5 Vote Required { } N/A	
(14) LOCATION MAP	(15) BUSINESS IMPACT STATEMENT? No	(16) AGENDA ITEM HISTORY { } N/A Date: <u>11/25/14, 04/07/15</u>	
(17) ADMINISTRATIVE OFFICE REVIEW David E. Grim			
(18) SUPERVISOR DISTRICT(S) All Districts.			

County of San Luis Obispo



TO: Board of Supervisors

FROM: General Services / Marvin Rose, 781-5200

DATE: 11/3/2015

SUBJECT: Request to create two Energy Efficiency projects to implement eight energy conservation measures at multiple County facilities; authorize budget adjustments in the amount of \$1,715,332 to FC 200 - Maintenance Projects and \$3,049,446 to FC 230 - Capital Projects to fund the two new energy conservation projects; accept a loan agreement with the California Energy Commission for \$2,200,000 to assist in funding the project; and approve the Work Order with Pacific Gas & Electric (PG&E) to commence the Design-Build implementation of the projects. All Districts.

RECOMMENDATION

It is recommended that the Board:

1. Approve the creation of two energy efficiency projects, WBS 350123- Energy Efficiency Maintenance Projects, and WBS 320070- Energy Efficiency Capital Projects; and
2. Approve the loan agreement with the California Energy Commission to assist in funding the project; and
3. Approve the use of PG&E's Energy Efficiency Retrofit Loan Program, also known as On-Bill Financing (OBF) to help fund the project; and
4. Authorize budget adjustments, by 4/5 vote, in the amount of \$1,715,332 to FC 200 - Maintenance Projects and \$3,049,446 to FC 230 - Capital Projects to fund the two new energy conservation projects consisting of:
 - a. \$2,200,000 California Energy Commission loan
 - b. \$767,495 in On-Bill Financing from PG&E
 - c. \$1,199,787 by appropriating existing funds from the County Solar & Energy Designation
 - d. \$315,001 in Countywide Maintenance and Countywide Energy & Water Funds; and
 - e. \$282,495 from a cancelled planned project budgeted in FC 230 – Capital Projects
5. Approve the Work Order with PG&E, to enter into agreement to proceed with the Design-Build implementation of the Energy Conservation measures.

BACKGROUND

To improve energy efficiency and reduce greenhouse gas (GHG) emissions, San Luis Obispo County engaged PG&E to analyze the feasibility of implementing a turnkey, design-build energy efficiency, retrofit project utilizing PG&E's Sustainable Solutions Turnkey (SST) program. The SST program offers a unique public/private partnership approach that allows for a streamlined solution to implementing energy efficiency projects. **Table 1** below outlines the phases of the SST program's project development and current status:

TABLE 1

	PROJECT PHASES	STATUS	COST TO COUNTY
1	Feasibility Assessment	Completed August 2013	None
2	Preliminary Energy Assessment (PEA)	Completed July 2014	None
3	Investment Grade Assessment (IGA)	Completed September 2015	\$160,000 (appropriated in FY 2014-15 budget)
4	Design-Build Implementation	Current Board Action Item	\$4,764,778
5	Acceptance, Commissioning, Training, Measurement & Verification	To be completed after implementation	Included in firm fixed price work order for implementation.

In 2013, PG&E performed a Feasibility Assessment on County facilities to begin initial data collection for potential energy saving opportunities. Through utility bill analysis, interviews, and benchmarking, the study found that twelve of the County's facilities consumed 80% of energy usage. From the findings in the Feasibility Assessment, a Preliminary Energy Assessment (PEA) conducted in 2014 focused on the County's top twelve energy consuming facilities to identify equipment, systems, and projects for potential energy conservation measures (ECM). During the PEA, a team of engineers, technicians, and analysts performed on-site energy audits of the twelve facilities and recommended numerous ECMs.

After staff review of the potential savings, estimated project costs, available rebates and incentives, savings to investment ratios, and simple payback, the PEA recommended several ECMs for a more detailed analysis through an Investment Grade Assessment (IGA). On November 25, 2014 your Board approved the Work Order with PG&E to proceed with the IGA to identify the most cost-effective ECMs. During the IGA, PG&E collected additional data to refine cost savings and scope of work, conducted a financial analysis and developed a proposed implementation schedule. The final IGA report is now complete and includes a list of recommended ECMs determined to offer the County the greatest benefit for their investment. **Table 2** below summarizes the ECMs proposed to be implemented and their locations.

TABLE 2

Facility	Address	Recommended Energy Conservation Measure (ECM)
Courthouse Annex	1035 Palm Street	LED Lighting Upgrades
Courthouse	1050 Monterey Street	
Old Courthouse	976 Osos St	
New Govt Center (Bd Chamber)	1055 Monterey Street	
Main Jail	1585 Kansas Avenue	
	1065 Kansas Ave.	

Juvenile Hall Honor Farm Health Campus Health Lab	885 Oklahoma Avenue 2180 Johnson Avenue 2191 Johnson Avenue	
Government Center Complex	Downtown SLO	Central Plant Upgrades
Government Center Complex	Downtown SLO	Variable Flow CHW & HHW
Health Campus	2180 Johnson Avenue	Central Plant Upgrades
New Government Center	1055 Monterey Street	Underfloor Air Distribution Upgrades
Honor Farm	885 Oklahoma Avenue	Kitchen Hood Controls
Public Works Department Planning Department	Various	Personal Computer Energy Management System
North and South County Facilities	Various	Delta Energy Management Control System Expansion

DISCUSSION

The implementation of the proposed ECM projects will support the County’s commitment to energy efficiency and GHG reduction as required by the General Plan. The Conservation and Open Space Element’s stated goals include reducing energy consumption at County facilities by 20% from 2006 levels by 2020 and reducing GHG emissions from County operations and community-wide sources by 15% by 2020. Project implementation will help the County meet their energy conservation goals and provide other key benefits, such as substantial annual savings in energy and operational costs.

Key project facts:

- \$258,246 in annual energy cost savings, plus \$76,227 in annual operational savings
- Total project simple payback of 13.3 years
- An annual carbon offset exceeding 686.8 metric tons, equivalent to removing 151 passenger vehicles from the road per year, or 31,545 trees planted per year.
- Single largest energy efficiency retrofit project in history of the County

The eight different Energy Conservation Measures incorporate numerous energy saving strategies, including: replacing fluorescent and incandescent light fixtures with LED light fixtures, replacing outdated and inefficient HVAC systems with new, high efficiency HVAC systems, installing new Energy Management Control Systems at multiple facilities, installing intelligent kitchen equipment controls, and enabling an Energy Management System on hundreds of personal computers in multiple County departments.

In addition to significant reductions in energy usage and costs, and a reduction in the County's carbon footprint, **other key benefits** provided by this project include:

- **Reduced Operation & Maintenance costs**

By upgrading aging and inefficient systems and equipment to improve energy efficiency, the County will benefit from reduced operating and maintenance costs and improvement in overall facility operations. Maintenance staff can spend less time on corrective maintenance, and more time on preventive maintenance, saving time and money and extending equipment life.

- **Improved workplace environment**

Upgrades in HVAC and lighting systems and controls will improve occupant comfort and the quality of the workplace environment, resulting in increased worker satisfaction.

The PG&E SST program utilizes a design-build project delivery method to achieve a streamlined solution to implementing energy efficiency projects. PG&E and their sub-consultants will provide all professional services, labor, materials, equipment, tools and other services necessary for the proper performance and implementation of the Work for a firm fixed price. The design-build construction process provides the County with the following benefits:

- **Fixed Price Contract (with no Change Orders)** – PG&E and the County have worked together over the past year through the IGA process to define the project's scope of work, develop engineering documentation and specifications, and engage subcontractors and equipment vendors to verify project constructability and pricing.
- **Collaborative Project Development Process** – The IGA process enabled the County to define project goals, participate in the project's design process, and provide input on subcontractors and equipment vendors that provide the best value solution.
- **Faster Project Delivery** – Since the design build procurement method integrates the project design and pricing/bidding process, this enables the County to significantly reduce the time it takes to move from design to construction.
- **Fewer Construction Issues & Cost Impact** – Since the project team (County, PG&E, and Subcontractors) has worked together for over a year to develop this project, they have identified many of the probable construction issues and potential project pitfalls. This collaborative approach would not be possible as part of a normal design, bid, and build project.

OTHER AGENCY INVOLVEMENT/IMPACT

The project was guided by a steering committee made up of members of General Services, the Building & Planning/Energy Watch Program, and the County Administrative Office. County Counsel has reviewed and approved the work order with PGE for form and legal effect. The Auditor's Office has reviewed and approved the funding sources, California Energy Commission (CEC) loan agreement, and PG&E On-Bill Financing (OBF) agreement.

FINANCIAL CONSIDERATIONS

The cost of proceeding with the implementation phase of the Energy Conservation projects is \$4,764,778. The funding for the proposed project has several sources, as identified in **Table 3** below.

The CEC low interest loan of \$2.2 million is for the implementation of four of the eight proposed energy efficiency projects. The loan application for \$2.2 million was approved by the CEC at their October 14, 2015 business meeting. The loan will provide reimbursement during construction, with a 16 year term starting at the beginning of the project, consisting of 26 payments, at 1% interest.

The PG&E’s Energy Efficiency Retrofit Loan Program, also known as On-Bill Financing (OBF) will help fund the project. This program helps eligible customers pay for energy efficient retrofit projects with zero interest, zero penalty loans. The program works in conjunction with PG&E’s energy efficiency rebate and incentive programs by eliminating upfront costs. After project completion, PG&E will reimburse the County for the retrofit and the County will repay the loan through their monthly utility bills. The term of the loan will be ten years at project completion, consisting of 120 payments, at 0% interest.

The balance of the project funding comes from the County Solar & Energy Designation, a Capital Project approved in FY 2012-13 to upgrade and add new Building Automation Controls, and the Countywide Maintenance and Countywide Energy and Water funds as itemized in Table 3.

TABLE 3

PROJECT EXPENDITURES			
	Total Budget	Estimated Project Costs	Variance
County Administration	\$95,000	\$95,000	\$0
Professional Services/Construction:			
a. PG&E Fixed Price Design-Build Work Order	\$4,527,159	\$4,527,159	\$0
Miscellaneous	\$142,620	\$142,620	\$0
Total Expenditures	\$4,764,778	\$4,764,778	\$0
FUNDING SOURCE			
PG&E On-Bill Financing	\$767,496	\$767,496	\$0
California Energy Commission Financing	\$2,200,000	\$2,200,000	\$0
County Solar & Energy Designation	\$1,199,787	\$1,199,787	\$0
CIP Building Automation	\$282,495	\$282,495	\$0
CIP Health Agency Cooler	\$65,003	\$65,003	\$0
Countywide Energy & Water Fund	\$249,998	\$249,998	\$0
Total Funding	\$4,764,778	\$4,764,778	\$0

RESULTS

The approval of the Work Order with PG&E and the creation of the Energy Efficiency projects will help the County realize savings in energy costs and usage, and reduce environmental impacts. This initiative will contribute to the County's commitment towards energy efficiency and conservation goals, and contribute to a healthy, livable and well-governed community.

ATTACHMENTS

1. Work Order with PG&E
2. CEC loan agreement
3. Final IGA Report