



BOARD OF SUPERVISORS
AGENDA LETTER

Agenda Number:

Clerk of the Board of Supervisors
105 E. Anapamu Street, Suite 407
Santa Barbara, CA 93101
(805) 568-2240

Department Name: General Services
Department No.: 063
For Agenda Of: May 8, 2018
Placement: Administrative
Estimated Time: N/A
Continued Item: No
If Yes, date from: N/A
Vote Required: Majority

TO: Board of Supervisors
FROM: General Services Janette D. Pell, Director (805) 560-1011
Contact Info: Skip Grey, Assistant Director (805) 568-3083
SUBJECT: Renewable Energy Systems Proposal from Endelos Energy for Santa Barbara
County Betteravia Campus and Fire Station 12; Districts 2 and 5

County Counsel Concurrence

As to form: Yes

Auditor-Controller Concurrence

As to form:

Other Concurrence: Risk Management

As to form:

Recommended Actions:

That the Board of Supervisors:

- a) Receive and file the report regarding a proposal from Endelos Energy for final design, construction and startup of renewable energy systems, energy conservation measures, and equipment upgrades at the Betteravia Campus (Santa Maria) and Fire Station 12 (Calle Real, Goleta);
- b) Direct staff to engage the Debt Advisory Committee (DAC) for possible financing options to fund the project, and return to Board at a future date to consider approving financing, and an agreement for completing the project; and
- c) Determine that the proposed actions do not constitute a "Project" within the meaning of the California Environmental Quality Act pursuant to 14 CCR § 15378(b)(5) (Organizational or administrative activities of governments that will not result in direct or indirect changes in the environment) and direct staff to file a Notice of Exemption on that basis.

Summary Text:

The County is pursuing the installation of the following at the Betteravia Campus (2115-2125 CenterPoint Parkway, Santa Maria, California and 511 E. Lakeside Parkway, Santa Maria, California) and Fire Station 12 (5330 Calle Real, Goleta, California 93110): a renewable system (0.8 Megawatt photovoltaic system), a solar thermal system for hot water heating, a lithium battery energy storage system, and a small wind generation. In addition, HVAC systems and controls, roofing, lighting, boiler, and water saving upgrades

will be included to replace and update the County's outdated equipment. The goal is to bring these facilities closer to achieving Zero-Net Energy (ZNE), reduce dependence on the local utility grid, reduce the County's carbon footprint, and reduce utility and maintenance costs on County facilities. The County will earn credit for every kilowatt of clean energy produced and put on the grid.

If directed to proceed by the Board of Supervisors, the project will be presented to the Debt Advisory Committee (DAC) in the near future to seek authorization to apply for California Energy Efficiency Financing, as well as PG&E's On-Bill Financing (OBF) Program, and seek direction on the possible issuance of Certificates of Participation (C.O.P.s) or other methods of financing the project (see fiscal section below for details).

Background:

On May 2, 2017, the Board of Supervisors directed General Services to return within 90 days with possible future renewable energy and energy efficiency projects. On July 18, 2017, the renewable energy systems project was presented to the Board as a potential project under the Santa Barbara County Future Renewable Energy Report. At that time, the Board directed General Services to solicit proposals on County owned facilities for renewable energy systems that would offset electricity use and thereby reduce costs over time to the County. On September 1, 2017, the County solicited proposals for the installation of renewable energy systems as well as recommendations for energy efficiency measures to help reduce the cost of utilities used by the County. Responses were received, and evaluated and scored by a committee. A vendor, Endelos Energy, was selected. Endelos Energy is a local vendor and intends to utilize 12 additional local subcontractors in the execution of this contract.

The County was able to secure NEM1 (Net metering 1.0) (NEM1) for the Betteravia Campus (per Board direction). Net Energy Metering is a solar incentive that allows the customer to store energy in the electric grid. When the solar panels produce excess power, that energy is sent to the grid and in exchange you can pull from the grid when your system is under-producing. This will typically occur during the evening hours. The solar project, under the NEM1 rules, will earn 1kWh credit for every 1kWh of clean energy put on the grid without paying for non-bypassable charges. (Public Purpose Program, Nuclear Decommissioning, Competition Transition and Department of Water Resources Bond).

The County plans to reduce its carbon footprint and reduce costs paid for electricity, gas, and water, and upgrade outdated maintenance equipment. This renewable energy systems project includes the following:

- Installation of photovoltaic systems on newly constructed carports at the Betteravia Campus
- Replacement of the roof at Fire Station 12
- Installation of photovoltaic systems on the roof of Fire Station 12
- Installation of battery storage systems (Non-toxic and non-hazardous recyclable materials)
 - Warranty is 10 years with 98% efficiency
 - Nontoxic lithium ferrous phosphate cells
 - No acid or Cobalt
 - No Air Conditioning or toxic liquid cooling
 - No risk of thermal runaway or fire
 - UL and CE listed, UN/DOT and RoHS compliant components
 - Made in Ojai California, USA
- Installation of solar thermal water heating

- Installation of small wind generation at the Betteravia Campus
- Installation of “Smart” LED lighting upgrades and controls
- Installation of solar tube lighting
- Implementation of water conservation measures
- Replacement of HVAC components and HVAC control upgrades
- Installation of electrical disconnects for 10 future Electric Vehicle stations on the Betteravia solar carports.

Renewable Energy Project	Locations	
	Betteravia	Fire Station 12
Solar Photovoltaic	\$ 2,020,200	\$ 102,330
Solar Thermal	\$ 79,451	\$ 49,950
Interior Lights	\$ 682,853	\$ 14,342
Exterior Lights	\$ 62,876	\$ 3,522
Roof	N/A	\$ 108,000
Faucets / Toilets / Etc.	\$ 78,146	\$ 12,120
Boiler	\$ 24,500	N/A
HVAC Upgrade	N/A	\$ 38,600
HVAC Controls	\$ 53,895	\$ 3,099
Battery Backup	\$ 651,042	\$ 42,500
Small Wind	\$ 38,500	N/A
Solar Tubes	\$ 241,124	\$ 17,159
Cost	\$ 3,932,588	\$ 391,622
Total Costs	\$ 4,324,210	
5% Contingency	\$ 216,210	
Total Project Costs	\$ 4,540,420	

The energy efficiency projects are intended to shrink the energy load of our buildings, allowing the County to maximize the proportion of clean, renewable power generated on-site at the least cost.

History

On March 17, 2009, the Board adopted Resolution 09-059 which committed the County to take immediate, cost effective and coordinated steps to reduce the County’s collective GHG emissions. The goal is to protect the community from the effects of climate change and implement programs to comply with the State of California’s greenhouse gas reduction goals. The County has made great policy strides toward achieving this goal and some notable milestones are below:

- Benchmarking Policy - County Board adopted April 2, 2013
- Energy Action Plan - County Board adopted April 2, 2013
- Utility Manager System - County Board presented April 2, 2013
- Zero Net Energy Resolution - County Board adopted March 4, 2014
- Commissioning Policy - County Board adopted January 20, 2015
- Energy Efficiency Standards Policy-County Board adopted August 30, 2016

Fiscal and Facilities Impacts:

With over 2,200 lights (long life LED) and other equipment being replaced in this project, there will be an estimated facilities maintenance savings of approximately \$14,000 per year.

Fiscal Analysis:

<u>Funding Sources</u>	<u>Current FY Cost:</u>	<u>Annualized On-going Cost:</u>	<u>Total One-Time Equipment Cost</u>
General Fund			
State			\$ 4,540,420.00
Federal			
Fees			
Other:	\$ -	\$ 441,934.00	
Total	\$ -	\$ 441,934.00	\$ 4,540,420.00

Narrative:

It is anticipated that the financing options to be explored with the Debt Advisory Committee will include application for a California Energy Commission (CEC) Energy Conservation Assistance Act, 1% interest rate loan for up to \$3 million. In addition, PG&E’s On-Bill Financing (OBF) Program will be utilized for the LED lighting portion of this project. Funds borrowed through this program are interest free. The remainder of the funds will be secured through C.O.P. or other sources.

<u>Possible Loan Type</u>	<u>Potential Loan Amount</u>	<u>Possible Interest Rate</u>	<u>Interest Cost-Low</u>	<u>Interest Cost-High</u>
CEC	\$3,000,000	1%	1%	5%
On-Bill Financing	\$ 800,000	0%	0%	5%
COP or other	\$ 740,420	5%	5%	5%
Total Financing	\$4,540,420		Overall Rate: 1.48%	5%

The annual cost for the first fiscal year of operation will fall somewhere between \$349,000 and \$442,000 (assuming a possible interest rate of anywhere between 1.5% - 5% depending on the type and blend of financing). This includes the bond financing costs, and maintenance costs on the solar array (\$11,070 annually). This cost will continue for 15 additional years with repayment of the \$4.5 million bond financing. The bond payment will be offset by the reduced utility bills and reduced maintenance costs of new building equipment as well as rebates for the battery system and lighting. The analysis assumes that utility rates will increase at 3% over the life of the project and the solar panels will have a degradation rate of 0.25% each year.

The final interest rate will be contingent on the ultimate terms of the approved debt financing. An interest rate on the low end would have a total financing cost of \$0.5 million while an interest rate on the high end would have a total financing cost of \$1.9 million. These financing costs are in addition to the total project costs of \$4,540,420. This range will have a net positive cash flow result in 13 to 17 years, assuming projected energy savings, as well as financing and capitalization assumptions, are met.

Key Contract Risks:

N/A

Special Instructions:

None.

Attachments:

1. Proposal from Endelos Energy
2. CEQA Notice of Exemption

Authored by:

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