

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 2, 2017

Placement: Departmental
Estimated Time: 10 minutes

TO: Board of Supervisors

FROM: General Services Janette D. Pell, Director (805) 560-1011

Contact Info: Skip Grey, Assistant Director (805) 568-3083

SUBJECT: Santa Barbara County Calle Real Solar Array Five-year Update; Second District

County Counsel Concurrence Auditor-Controller Concurrence

As to form: Yes As to form: N/A

Recommended Actions:

That the Board of Supervisors:

- a) Receive and file the Santa Barbara County Calle Real Solar Array Five-year Update, Second District; and
- b) Determine that the proposed actions are not a "project" as defined by the California Environmental Quality Act (CEQA) Guidelines Section 15378(b) (5), as it is an administrative activity that will not result in direct or indirect changes in the environment.

Summary Text:

This item is on the agenda to allow the Board of Supervisors to receive and file the five-year update on the Santa Barbara County Calle Real Solar Photovoltaic (PV) Array. The solar array's production to date is better than expected with one megawatt of power produced as of April 16, 2012, just four months after completion of construction. When installed, the system was projected to produce 8.9 million kWh for the first five years. To date, the solar array has produced 10% power in excess of this number, producing 9.7 million kWh in the first five years, for a total utility savings of just over \$1.2 million.

The project was financed by Qualified Energy Conservation Bonds (QECB) in the amount of \$5.5 million with a 15-year term and an effective rate of 1.2%. A \$1.7 million rebate from Southern California Edison Electric (SCE) was also secured at the onset of the project. This California Solar Initiative rebate gave the project a net capital cost of \$3.8 million and resulted in a payback period of approximately 13 years, and a return on investment of 39% after the first five years of operation. Due to power produced over the anticipated production, the County received the entire rebate in February, 2017, four months earlier than anticipated.

The solar array generates almost enough power from 11 a.m. to 3 p.m. to completely offset the Calle Real Campus's electrical needs on sunny days. The solar array continues to work well and is expected

to last at least 20 more years. Total utility savings after 25 years of operation is estimated to be \$9.2 million.

The solar array production can be viewed live at:

https://solrenview.com/cgi-bin/cgihandler.cgi?&sort=pvi IDs&cond=site ID=1368&min.

Background:

The solar array project was first presented to the Board of Supervisors on July 13, 2010 as a potential project in the Sustainability Action Plan with the goal of reducing electricity costs as well as the County's carbon footprint. The project involved the construction and operation of a one megawatt photovoltaic system to be located on a hillside site adjacent to the County Jail located at 4434 Calle Real in Santa Barbara.

On June 7, 2011, the Board of Supervisors awarded an Energy Service Agreement to Endelos Energy Incorporated (a local vendor) for final design, construction, and startup of the project. Installation began in late December 2011, and the array began producing power on April 16, 2012.

The solar array project has exceeded its expected production of 1.78 million kWh electricity generation per year, equivalent of enough energy to power over 100 homes. The system provides electricity to the County Jail and nearby County facilities, including the Sheriff Administration building, 911 Call Center, Public Health Hospital, Public Health Administration, Mental Health Hospital, Mental Health Administration, Agricultural Commission, Environmental Health, Veterans Hospital, Elections Office, and Clerk Recorder Assessor. These facilities at the Calle Real Campus are the largest energy users for the County. The solar array offsets up to one-third of the required energy at the Calle Real Campus.

The County is expected to save an estimated \$9.2 million in utility savings over the life of the system and avoid emitting nearly 1.6 million pounds of CO_2 per year, equivalent to taking over 150 cars off the road, or planting over 20,000 trees each year.

The following local vendors provided materials or services on the project:

Santa Barbara County Local Vendors:

California Electrical Supply Home Depot (Goleta) Smith Engineering Associates

Coast Valley Testing

Dudek

MarBorg

Endelos Energy

Corchard Supply

Eucario Guzaman Landscaping

Enviroscaping

Don Keller Survey

MarBorg

S&S Seeds

United Rental

Valley Oaks Printers

Enviroscaping

Ray's Welding

White Cap Supply

Garcia's Mobile Grill Rivera & Sons Excavation

Growing Solutions Smith Electric

Ventura County Vendors:

Medina Camera Systems

SolarWorld

Performance Measure:

N/A

Fiscal and Facilities Impacts:

Average utility savings of approximately \$370,000 annually for 25 years.

Fiscal Analysis:

Funding Sources	Current FY Cost:		-	Annualized On-going Cost:		<u>Total One-Time</u> <u>Project Cost</u>	
General Fund							
State					\$	5,500,000.00	
Federal							
Fees							
Other:	\$	381,953.68	\$	17,000.00			
Total	\$	381,953.68	\$	17,000.00	\$	5,500,000.00	

Narrative: The cost for this fiscal year is \$381,953.68. This repayment of the bond will continue for nine additional years as repayment of the \$5.5 million. The \$1.7 million SCE rebate will be used for bond payments. The annual maintenance cost for the solar array will range from \$17,000 to 35,000 over its life (25 years).

Key Contract Risks:

N/A

Staffing Impacts:

None

Special Instructions:

None

Attachments:

Presentation - Santa Barbara County Calle Real Solar Five-year Update

Authored by:

Roy Hapeman, County Energy Manager