



**DATE:** July 7, 2015

**CATEGORY:** Public Hearing

**DEPT.:** Community Development

**TITLE:** **Regional Renewable Energy Procurement Solar Photovoltaic Contract with SolarCity**

### **RECOMMENDATION**

1. Adopt a Resolution Making Findings Necessary to Authorize an Energy Service Contract with SolarCity Corporation for the Installation of Solar Panels at the Municipal Operations Center, Shoreline Maintenance Facility, and Shoreline Golf Pro Shop, to be read in title only, further reading waived (Attachment 1 to the Council report).
2. Authorize the City Manager to negotiate and execute an Energy Service Contract and related agreements, including bond forms, with SolarCity, for an amount not to exceed \$1,670,283.62 for the design, construction, and installation of three Regional Renewable Energy Procurement project solar photovoltaic systems to be located at the Municipal Operations Center, Shoreline Golf Pro Shop, and Shoreline Maintenance Facility, and authorize a construction contingency of \$251,000.

### **BACKGROUND**

With approval from the City Council at its November 13, 2012 meeting, the City of Mountain View joined the Alameda County Regional Renewable Energy Procurement (R-REP) project, with the goal of implementing solar power generation at City facilities to reduce operational expenses over time, greenhouse gas emissions, and the City's dependence on purchasing electricity from a conventional utility source.

#### **Alameda County R-REP**

The County of Alameda is the Lead Agency for the R-REP, an initiative that used a collaborative procurement process to purchase renewable energy systems for public agencies throughout Alameda, Contra Costa, San Mateo, and Santa Clara counties. In addition to the County of Alameda, 18 other public agencies, including Mountain View,

participated in the project. The R-REP program provided technical, financial, and legal resources to the collaborative as advisors to the procurement process. The R-REP solicitation included 186 sites, totaling over 31 megawatts of renewable energy.

Based on a Request for Proposals (RFP) for 186 sites, the goal of the collaborative project was to obtain competitive proposals for renewable energy electricity-generating systems that create net cost savings for the public agencies. The effort also sought to achieve reductions in the cost to implement the systems by unifying the terms and conditions of the contracts to the greatest extent feasible. Staff submitted the City's preferred contract terms and conditions, technical site surveys, and financing options to Alameda County for inclusion in the RFP.

Through a feasibility analysis prepared for Mountain View by Optony, Inc. (the City's third-party solar consultant), the City studied the feasibility of solar at several facilities, and included five sites in the RFP: 135 Bryant Street parking garage, Fire Station No. 5, Municipal Operations Center (MOC), the Shoreline Maintenance Facility, and the Shoreline Golf Pro Shop. During subsequent analysis, the 135 Bryant Street parking garage was ruled out due to not being economically feasible for solar, and Fire Station No. 5 was eliminated from consideration in the short term due to the potential for a new building on the site, on which solar may be a possibility. The City applied for California Solar Initiative (CSI) rebates for the remaining three sites, and in December 2014, secured a conditional CSI rebate reservation in the amount of \$312,121 for the MOC only. The rebate is paid to the City monthly over five years based on the actual power generated.

### **Request for Proposals**

The RFP was issued by Alameda County on September 18, 2014, for a two-stage process (RFQ/RFP) to first, identify qualified proposers, and second, receive proposals for the 186 sites. The sites were packaged in 11 bid bundles based on type of technology, system size, and geographic location. Vendors were able to bid on one or more of the bundles.

The RFQ/RFP was structured as an indefinite quantity, multiple-award, best-value solicitation. In addition, the solicitation was conducted in accordance with Government Code Section 4217.10, *et seq.*, and specifically, Section 4217.16, which authorizes public agencies to solicit proposals from qualified firms and to award a contract on the basis of the experience of the firm, the type of technology employed by the firm, the cost to the local agency, and any other relevant considerations, provided that the projects deliver net cost savings to the public agency.

## **Relevant Codes and Initiatives**

*Government Code 4217:* Section 4217.10, *et seq.*, of this code authorizes a public agency to enter into an energy service contract and any related facility ground leases on terms that its governing body determines are in the best interests of the public agency, and that the anticipated cost to the public agency for energy generation or conservation services will be less than the anticipated cost of energy that would have been consumed by the public agency in the absence of those purchases. This code is intended to provide the greatest possible flexibility to public agencies when structuring agreements so that economic benefits may be maximized and financing and other costs associated with the design and construction of alternate energy projects may be minimized.

*California Public Utilities Code Section 388:* This code allows governmental entities to conduct a prequalification process such as was conducted in the R-REP RFQ phase to establish a list of qualified vendors.

*California Solar Initiative (CSI) Rebate:* This rebate program is for customers in the Pacific Gas and Electric (PG&E), Southern California Edison, and San Diego Gas and Electric territories. This program funds solar photovoltaic (PV) and solar thermal generation facilities on existing homes and existing or new commercial, agricultural, government, and nonprofit buildings. Upon successful application, the applicant has two major milestones to meet to obtain the rebate. The first, the Proof of Project milestone, requires the City to submit a signed vendor agreement to PG&E by August 8, 2015. The second milestone, Project Completion, is a date by which the system must be installed and operational, which for Mountain View is June 11, 2016.

## **ANALYSIS**

### **Bid Results**

Sixteen (16) respondents were prequalified in December 2013 to submit proposals. Proposals from 12 prequalified firms were received by Alameda County on or before January 14, 2014. Mountain View's projects were placed in two different bundles, M4 and S1. Two vendors submitted proposals for the M4 bundle, while no vendors submitted for the S1 bundle (135 Bryant Street Parking Garage and Fire Station No. 5.). A selection committee comprised of participating agency members evaluated each firm's proposal on the basis of experience, financial stability, technical proposals, cost, financing plan, and other elements. Six vendors were invited to participate in vendor interviews.

Upon final selection of vendors, which was completed on April 7, 2014, participating agencies were provided with the bid submittals for the selected, top-ranked vendor for each bundle. The agencies were also provided with the financial analysis for each of their sites, including pricing for both direct purchase and Power Purchase Agreement (PPA) scenarios such that they could make the findings consistent with Code Section 4217.10.

The top-ranked proposer for the M4 bundle was SolarCity Corporation. SolarCity proposed the following:

- Municipal Operations Center: a roof-mounted solar system on the reservoir. The Division of Drinking Water will need to approve the plan for the reservoir.
- Shoreline Maintenance Facility: a carport structure at the back of the building to support the solar panels and shield the golf course maintenance equipment from the sun.
- Shoreline Golf Pro Shop: a solar carport structure in the parking lot.

An Alameda County staff report to their Board of Supervisors summarizing the R-REP process and results is shown in Attachment 2.

As part of its due diligence, the City considered two options for financing the three solar systems. Under direct purchase, the City purchases the design and installation of the systems from the vendor, and the City owns and maintains the systems. Under PPA, the vendor designs, installs, owns, and maintains the systems, and the City purchases the generated electricity from the vendor. For all three of the City's sites, direct purchase was more financially advantageous than PPA over 20 years, as shown in Attachment 3. A summary of the direct purchase financial analysis is provided in Table 1, showing a 20-year savings of \$1,974,182 as compared to not installing the three solar systems.

**Table 1: Summary of Direct Purchase Solar Photovoltaic System Financial Analysis**

	MOC	Shoreline Maintenance Facility	Shoreline Golf Pro Shop
System Size (kW)	434	40	109
System Type	Roof-Mounted	Carport	Carport
System Cost (Design/ Build)	\$1,001,450	\$196,228	\$472,605
20-Year Savings vs. No Solar	\$1,911,888	\$35,316	\$26,978
Payback Year	8	18	20

A plan showing the location of the proposed solar systems at the City’s three facilities is shown in Attachment 4.

In accordance with Government Code 4217, Section 4217.10, *et seq.*, staff has concluded that, including the CSI rebate for the MOC, the total direct purchase cost for each of the three solar systems will be less than the anticipated cost of electricity that would have been consumed by each of the three systems in the absence of this project, per findings resolution shown in Attachment 1. City staff would be trained on, and responsible for, the operation and maintenance of the solar systems.

Sustainability Impact

In addition to long-term financial savings, it is estimated that the three solar PV systems will provide the following environmental benefits:

- Annual CO<sub>2</sub> Reduction – 609 metric tons
- Annual Vehicle Miles Traveled Reduction Equivalent – 1,399,929 miles
- Annual Carbon Sequestration Equivalent – 500 tree acres

These reductions align with the City’s General Plan sustainability goals and adopted Municipal Operations Climate Action Plan (MOCAP), which targets an 80 percent reduction in greenhouse gas emissions from 2005 levels by 2050. In addition, this project is aligned with the Council’s current major goal of focusing on environmental sustainability, and consistent with the City being a signatory to both the Mayor’s Climate Protection Agreement and the Bay Area Climate Compact.

This project represents another step by the City to “lead by example,” to further encourage residential and commercial solar installations across Mountain View, which was ranked 14th in the Environment California [Solar Cities 2012 Report](#) for installed solar capacity per resident among cities with a population of 50,000 or more.

### Categorical Exemption

This project qualifies as categorically exempt under the California Environmental Quality Act (CEQA), Section 15301 (“Existing Facilities”), because it is characterized as the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency’s determination.

### Project Cost

The estimated project cost is as follows:

Design/Build Contract (including Permit Fees)	\$1,670,000
City Project Management	117,000
Construction Administration and Inspection	134,000
Project Commissioning	32,000
Project Contingency @ 15%	<u>251,000</u>
Subtotal	2,204,000
City Administration @ 6.5%	<u>144,000</u>
<b>TOTAL PROJECT COST</b>	<b><u>\$2,348,000</u></b>

### Schedule

If Council approves the recommended actions, construction is expected to begin in December 2015 and be complete by April 2016.

### FISCAL IMPACT

Installation of Solar Panels at Three City Facilities, Project 16-42, is funded with \$1,045,000 from the Shoreline Regional Park Community Fund; \$660,000 from the CIP

Reserve; \$532,000 from the Water Fund; and \$133,000 from the Wastewater Fund, for a total budget of \$2,370,000. Sufficient funding is available to complete the project based on the current cost estimate. In addition, the City has secured a CSI rebate reservation in the amount of \$312,121, which would be paid to the City monthly over five years based on the actual power generated.

### **CONCLUSION**

Staff is recommending that the City Council authorize the City Manager to negotiate and execute an Energy Service Contract and related agreements with SolarCity for the design, construction, and installation of three R-REP project solar photovoltaic systems to be located at the MOC, Shoreline Golf Pro Shop, and Shoreline Maintenance Facility.

### **ALTERNATIVES**

1. Do not adopt a resolution making findings necessary to authorize an energy service contract with SolarCity for the installation of solar panels at the MOC, Shoreline Maintenance Facility, and Shoreline Golf Pro Shop.
2. Provide other direction.

**PUBLIC NOTICING**

Agenda posting and e-mails sent to community members interested in environmental sustainability.

Prepared by:

Steve Attinger  
Environmental Sustainability  
Coordinator

Terry Blount  
Assistant Community Development  
Director/Planning Manager

Approved by:

Randal Tsuda  
Community Development Director

Michael A. Fuller  
Public Works Director

Daniel H. Rich  
City Manager

SA-TB/7/CAM  
816-07-07-15CR-E-1

Attachments: 1. Resolution  
2. Alameda County Report to Board of Supervisors Summarizing the R-REP Process and Results  
3. Solar Site Financial Analysis  
4. Project Plan Layout

cc: ACDD/PM, APWD – Solomon, APWD – Hosfeldt, PCE – Macaraeg, PCE – Au, USM, RM – Marchant, TBM, SCE – Chang, FFM, ESC, F/c