

Agenda Report

To:

CITY COUNCIL

Date: August 11, 2008

From:

CITY MANAGER

Subject:

AUTHORIZE EXECUTION OF POWER PURCHASE AGREEMENT AND LEASE AGREEMENT WITH SOLARMAX TECHNOLOGIES, INC FOR THE USE OF BUILDING ROOFS LOCATED AT THE DELACEY, LOS ROBLES. AND SCHOOLHOUSE PARKING GARAGES FOR SOLAR

POWER GENERATING SYSTEMS INSTALLATION AND OPERATION.

RECOMMENDATION:

It is recommended that the City Council authorize the City Manager to execute the following two contracts ("Proposed Contracts") with SolarMax Technologies, Inc. ("SolarMax"):

- 1. A lease agreement that allows SolarMax to install, own, and operate photovoltaic solar electric generators on the roofs of Delacey, Los Robles, and Schoolhouse Parking Garages. The lease agreement is exempt from competitive bidding pursuant to City Charter Section 1002 (E).; and,
- 2. A power purchase agreement whereby the City will purchase the electrical energy produced by the solar systems from SolarMax to offset a portion of the electrical energy consumption of the three proposed parking garages at a rate of \$0.09 per kilowatt-hour ("kWh") for the first year, escalating at 3.5% annually thereafter for up to 20 years. The power purchase agreement is exempt from competitive bidding pursuant to City Charter Section 1002 (f), contracts for professional or unique services.

It is further recommend that the City Council find that the project is categorically exempt from the California Environmental Quality Act (CEQA) under §15303 (New Construction or Conversion of Small Structures) and §15311 (Accessory Structures).

MEETING OF	08/11/2008
MEETING OF	00/11/2000

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BACKGROUND:

Under the Proposed Contracts, Pasadena will lease space to SolarMax and SolarMax will install, own, maintain, and operate solar systems on the roofs of up to three city-owned parking garages. The renewable electric energy produced from these systems will be purchased by the City on a monthly basis at the contract price of $0.09 \, \phi/kWh$ for the first year, escalating at 3.5% annually thereafter for up to 20 years. The solar arrays will be mounted on canopies to minimize or eliminate loss of any parking spaces.

Initially, the contract price paid to SolarMax for energy produced by the solar system will be about 10% less than the variable portion of the electric rates being paid to the Water and Power Department ("PWP") for electric energy. Over time the electric rate savings as a result of purchasing this solar energy will change, as the contract price escalation may be higher or lower than PWP's average retail electric rate increases during the contract period. It is possible that the contract price will be higher than PWP's electric rates at some point in the future. Regardless, the contract price provides certainty in electric expenses for the amount of energy provided by the solar system.

The contract price for solar energy will be paid directly to SolarMax by the City in lieu of paying PWP for the energy. These expenses will be treated as an electric utility service expense. The City will continue to pay PWP for applicable monthly service charges and any electric energy consumption in excess of the amount produced by the solar system. In the event the solar system produces more energy than is consumed by this facility over the course of each 12 months, the City will receive no credit for the excess energy under the terms of PWP's net energy metering agreement.

The energy produced by these solar systems may be counted towards meeting the City's Urban Environmental Accords goals to increase use of renewable energy for City facilities and reduce greenhouse gas emissions. The estimated 1,195 MWh per year energy output is equivalent to approximately 91% of the 3 parking garages annual electric loads and will reduce the City's carbon footprint by approximately 900 tons per year. Furthermore, the 690 kW capacity of the system qualifies for incentives under the Pasadena Solar Initiative and will count towards nearly 5% of PWP's goal to install 14 MW of customer-owned solar generation by 2017. Due to unforeseen circumstances, the actual size of the systems may be smaller than the estimated amounts herein.

The energy under the Proposed Contracts price is discounted to reflect financial incentives that will be paid by PWP in addition to the contract energy price. SolarMax will be paid an estimated \$756,341 per year performance-based incentive payment for a maximum of 5 years under the Pasadena Solar Initiative program terms available to all of PWP's electric customers. The incentive payment will be funded from the Public Benefits Fund as approved by the City Council on September 24, 2007.

The timing of the installation is critical to obtain the best power purchase agreement energy pricing, which is further discounted to reflect business energy tax credit for solar technologies granted by the Federal Energy Policy Act. For equipment installed and in operation by December 31, 2008, the tax credit is set at 30% of expenditures for solar

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technology. After this date, tax credits will be substantially lower unless federal legislation is enacted to extend the current tax advantages.

PWP issued a Request for Proposal ("RFP") on March 13, 2008 seeking the budgetary pricing information for potential installations of photovoltaic electric systems on Cityowned facilities. The RFP process enables the city to seek vendors that could provide the best combination of proposed system design, financing, and sharing of potential tax benefits in order to provide the lowest cost of renewable energy to the City.

The RFP was distributed to eight prospective bidders. Seven firms that received RFPs provided responses. The received proposals were evaluated by PWP staff based on the criteria stated in the RFP. While all bidders met the criteria of the City's RFP and will be used as a pool of potential vendors for future solar panels installations at city-owned facilities, only two of these bidders met the criteria for installations of this size on the parking garages. The two vendors submitted power purchase agreement rates for solar system installations at the three parking garages as follows:

Bidder	Contract Energy Price	Annual Escalation
SolarMax Technology, Inc.	\$0.090/kVVh	3.5%
El Solutions, Inc	\$0.104/kWh	3.9%

SolarMax met all the requirements of the Request for Proposal and proposed the lowest power purchase agreement rate. In addition, SolarMax will honor the contract energy price if the project is reduced in scope or is not completed on schedule and becomes ineligible for current Federal tax incentives, provided SolarMax is responsible for the delay. Therefore it is recommended that the City enter into the Proposed Contracts with this firm. SolarMax was also awarded a contract to install solar systems at the PWP Broadway and Glenarm power plant site.

The term of the Proposed Contracts will be fifteen (15) years with an option to renew for additional term of five (5) years. In addition, Pasadena has the option to buyout these agreements and take title to the solar system at the end of first five years at 70% of the original purchase price or at its fair market value. The fair market value buyout option may be elected at the end of each subsequent five year period. Should Pasadena choose not to renew the agreements or purchase the equipment, then SolarMax must remove its equipment and restore the facilities to their pre-installation condition at SolarMax's cost.

The power purchase agreement involves the procurement of renewable solar electric energy service, rather than the procurement of equipment and labor, and thus is exempt from competitive bidding. Under Resolution 4181-2, the City Council has already authorized the procurement of electric energy and capacity without competitive bidding.

PWP continues to work on identifying potential sites for the installation of additional solar generation facilities. However, it is unlikely that additional contracts will be in place

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to meet the December 31 deadline for maximum tax advantages. Different vendors may be short listed and selected for future installations depending on various factors, including size and type of installation needed, pricing, and other bid terms for each specific site.

FISCAL IMPACT:

The City will purchase approximately 1,195 MWh per year of solar energy produced by SolarMax at \$0.090/kWh, totaling approximately \$107,550 per year with 3.5% escalation per year, for up to twenty years. Funds are available from the parking garage operating accounts 8142-407-774500 and 8142-409-774600 for payments to SolarMax for energy produced. While the contract cost for solar energy produced in the first year is less than the current electric rates being paid to PWP for non-renewable electric energy, in future years the contract cost may be higher or lower that PWP's otherwise applicable electric rates. An estimated \$756,341 will be requested in PWP's Public Benefits Fund for the five performance-based incentive payments to SolarMax that will occur in fiscal years ending 2010 through 2014.

Respectfully Submitted,

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City Manager

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Concurred by:

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Pasadena Water and Power

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