

Agenda Report

To: CITY COUNCIL

Date: July 14, 2008

From : CITY MANAGER

Subject: AUTHORIZE EXECUTION OF POWER PURCHASE AGREEMENT AND LEASE AGREEMENT WITH SOLARMAX TECHNOLOGY, INC. FOR THE USE OF TWO BUILDING ROOFS LOCATED IN PASADENA WATER AND POWER DEPARTMENT POWER PLANT SITE FOR SOLAR POWER GENERATING SYSTEMS INSTALLATION AND OPERATION.

RECOMMENDATION:

It is recommended that the City Council authorize the City Manager to execute:

1. A lease agreement with Solarmax Technologies, Inc. (Solarmax), that provides for Solarmax to install and operate photovoltaic solar electric generators on the roofs of two facilities at the Pasadena Water and Power Department (PWP) local power generation site for a term of fifteen years with an option to renew for additional term of five years; and,
2. A power purchase agreement with Solarmax for electrical energy produced by the solar system for a term of fifteen years with an option to renew for additional term of five years. In addition, Pasadena has option to buyout the solar system at end of every five years during the term of the power purchase agreement.

These agreements are exempt from competitive bidding pursuant to City Charter Section 1002 (f), contracts for professional or unique services.

BACKGROUND:

The recommended two Agreements will allow Solarmax Technologies, Inc. to install and operate two solar systems on the roofs of the Gas Compressor Building and the Pump Shop located at PWP's the Broadway and Glenarm Power Plants respectively. The

renewable power output from these systems will be sold to PWP on a monthly basis.

Last year, the Council approved a goal for PWP to install 14 Megawatts of customer-owned photovoltaic systems by December 31, 2017, as its share of meeting the state goal of 3,000 MW of solar adopted under California's Senate Bill 1 in 2006. In addition, Pasadena has committed to increasing its energy resources from renewal resources, including solar. The proposed agreements allow the utility to set an example for its customers by installing solar systems on its own buildings. The energy produced may be counted towards meeting a portion of PWP's renewable portfolio goal and/or as a part of the energy resources used to supply PWP's Green Rate customers. The estimated 72 MWh per year energy output is equivalent to approximately 0.5% of PWP's Green Rate sales, and a negligible portion of PWP's total retail sales.

The contract energy price, which will be treated as purchased power expense and recovered from the Energy Charge retail rate component, is below forecast market price for similar energy products.

The proposed power purchase agreement energy 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 \$252,000 solar system incentive payment, which is calculated on the same basis as incentives to those available to PWP customers under the Pasadena Solar Initiative. The incentive payment will be funded from the Public Benefits Fund pursuant to Public Utility Code 385.(a).2. "New investment in renewable energy resources and technologies."

Because these solar systems facilities will be connected to and serve the utility's power needs, they do not qualify for incentives under the Pasadena Solar Initiative and will not count towards Pasadena's goal to install 14 MW of customer-owned solar generation by 2017.

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

A Request for Proposal (RFP) was issued on March 13, 2008 seeking the budgetary pricing information for potential installations of photovoltaic electric systems on City-owned facilities. 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 on presently available specific sites on the Gas Compressor Building Roof and the Pump Shop Roof at the Broadway and Glenarm Power Plants respectively.

The two vendors submitted power purchase agreement rates for Solar Systems Installation on these two sites are as follows:

Bidder	Contract Energy Price	Annual Escalation
Solarmax Technology, Inc.	\$0.079/kWh	3.5%
EI Solutions, Inc	\$0.104/kWh	3.25%

Solarmax Technology, Inc. met all the requirements of the Request for Proposal and proposed the lowest power purchase agreement Rate. Therefore it is recommended that the City enters into Power Purchase and Lease Agreements with this firm.

The term of proposed power purchase agreement and lease agreement 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 free and clear title to the solar system at the end of first five years at 30% of the original purchase price or at its fair market value and at the end of every subsequent five years at its fair market value. Should Pasadena choose not to renew the agreements or purchase the equipment, then Solarmax must remove equipment and restore the facilities to its pre-installation condition at its own cost.

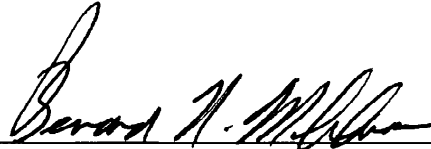
The proposed agreements will support PWP's Renewable Portfolio Standard and the City's commitment to the environment.

PWP staff are currently working with City staff to identify potential sites for the installation of additional solar generation facilities and working with short-listed vendors to obtain site-specific bids. Different vendors may be short listed for different sites depending on various factors, including size and type of installation needed, and will be selected based on pricing and terms of specific bids for each site.

FISCAL IMPACT:

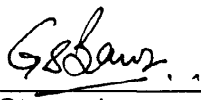
Funds are available from the Light and Power Fund and the Public Benefits Fund, respectively, for the respective monthly payments for energy produced and the up-front solar incentive. PWP will purchase the approximate 72,000kWh per year of energy produced by Solarmax Technology at \$0.079/kWh, totaling approximately to \$5,688 per year with 3.5% escalation per year, for up to twenty years. This cost is competitive with current market forecasts for similar power and will be recovered in the Energy Charge component of PWP's electric energy rates. The estimated \$252,000 incentive payment charged to the Public Benefits Fund represents a premium being paid for renewable energy. To the extent this energy is used to meet the needs of PWP's Green Rate customers, the PBC fund may be reimbursed at the applicable Green Rate premium (currently \$0.025/kWh, or about \$1,800 per year for the expected 72,000 kWh).

Respectfully Submitted,



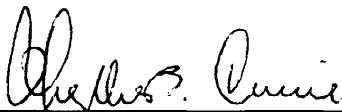
BERNARD K. MELEKIAN
City Manager

Prepared by:

for 

Wes Stengel
Acting Engineer
Power Supply Business Unit

Approved by:



Phyllis E. Currie
General Manager
Pasadena Water and Power

**Disclosure Pursuant to the
City of Pasadena Taxpayer Protection Act
Pasadena City Charter, Article XVII**

- I. Does the value of this application/project *have the potential* to exceed \$25,000? Yes No (Applicant *must* mark one)
- II. Is the application being made on behalf of a government entity? Yes No
- III. Is the application being made on behalf of a non-profit 501(c) organization? Yes No
 If yes, please indicate the type of 501(c) organization: 501(c)(3) 501(c)(4) 501(c)(6)

Applicant's name: Solarmax Technology, Inc. Date of Application: 05/30/08

Owner's name: David Hsu Contact phone number: 626-641-2727
(for questions regarding this form)

Project Address: Broadway Power Plant, 85 East State Street, Pasadena, CA 91105

Project Description: Photovoltaic System Installation

- IV. Applicant and Property Owner must disclose all joint owners, trustees, directors, partners, officers and those with more than a 10% equity, participation or revenue interest in owner and/or project. If any of these are an organization entity, include the name of the organization entity **and** the first and last names of all parties of interest of that organization entity. *(List all parties below and use additional sheets as necessary, or provide all parties on an attachment). Please print legibly.*
 Have any additional sheets or an attachment been provided? Yes No

Names of Owner(s), Trustees, Directors, Partners, Officers of Owner Project	Names of Owner(s), Trustees, Directors, Partners, Officers of Owner Project (continued)	Those with more than a 10% equity, participation or revenue interest in Owner and/or project
David Hsu		
Chia Lin		
Simon Yuan		

I hereby certify that I am the owner or designated agent and that the statements and answers contained herein, and the information attached, are in all respects true, accurate and complete to the best of my knowledge and belief.

Signature of Owner or Designated Agent:  Date: 6/2/08

For Office Use Only

Type of Application: Variance (all types) Adjustment Permit Sign Exception Temporary Use Permit Expressive Use Permit
 Conditional Use Permit (excluding Master Plan) Master Plan Amendment Planned Development Other

Assigned Planner: _____ PI N#:

Attached Address: _____ No Attached Address

Appealed: Yes No Appeal PI N# _____ Application Withdrawn

Final Decision: Approved Denied Decision Date: _____ Decision Maker: _____
 (Name and Title or Name of Commission Committee)

Notes in favor (please print): _____