



TO: HONORABLE CITY COUNCIL

FROM: CITY MANAGER

DEPARTMENT: UTILITIES

DATE: DECEMBER 3, 2007

CMR: 441:07

SUBJECT: ADOPTION OF A RESOLUTION TO AUTHORIZE THE CITY MANAGER TO AWARD AND SIGN CONTRACTS FOR SOLAR RENEWABLE ENERGY CREDITS PURCHASED FROM CITY OF PALO ALTO COMMERCIAL AND INDUSTRIAL ELECTRIC CUSTOMER SITES, WHERE THE TERM OF EACH CONTRACT DOES NOT EXCEED TWENTY YEARS AND THE AMOUNT OF EACH CONTRACT DOES NOT EXCEED \$600,000

RECOMMENDATION

Staff requests that the City Council authorize the City Manager to award and execute contracts for solar renewable energy credits purchased from solar electric generation located at City of Palo Alto Utilities electric customer sites, where the contract terms do not exceed 20 years and the contracted amounts do not exceed \$600,000.

BACKGROUND

The City Manager currently has contract authority under Section 2.30.210 of the Municipal Code to award and sign:

1. Contracts for goods where the term does not exceed three years and the contract price does not exceed \$250,000 per year;
2. General Services contracts where the term does not exceed three years and the contract price does not exceed \$85,000 per year;
3. Wholesale commodities contracts where the term does not exceed three years and a contract price does not exceed \$250,000 per year.

Renewable Energy Credits (RECs) are recognized by the State for use in green power programs, and rules for qualifying to meet renewable portfolio targets are still being developed. The main

idea behind RECs is to provide an additional funding mechanism to tip the scale from a project that is otherwise uneconomic, and therefore would not happen without the incremental revenue stream.

The Electric Fund currently purchases Solar Renewable Energy Credits (SRECs) to meet the demand for the solar portion of its retail green power program, PaloAltoGreen, through a third-party contract with 3 Degrees, Inc. One SREC represents one MWh (1000 kWh) of electricity generated by a solar electric generation facility, usually photovoltaics. A SREC is a certificate associated with that generation, and is sold separately from the energy that is generated.

Current demand for the solar portion of PaloAltoGreen is approximately \$60,000 per year, projected to grow to \$120,000 or more per year in the next three to five years as the program continues to grow. Approximately one-fourth of the current PaloAltoGreen solar requirements will be generated by the City-owned 220 kW Photovoltaic (PV) Demonstration projects that are nearing completion at the Baylands Interpretive Center, Municipal Service Center, and Cubberley Community Center. The remaining solar portion of PaloAltoGreen can be met with local solar resources if the City purchases SRECs from CPAU electric customers installing solar energy systems instead of from outside vendors. Doing so is anticipated to encourage deployment of large solar energy systems in town that otherwise will not take place, and would redirect current expenditures currently going elsewhere back into Palo Alto.

Staff is recommending that Council delegate contract authority specifically for SRECs from solar electric generation located at qualifying CPAU electric customer sites. Delegating this authority to the City Manager will substantially shorten the lead time for large electric customers considering on-site solar electric generation, providing a degree of certainty in financial analysis of larger-scale solar alternatives. Longer term agreements of up to twenty years are necessary to adequately finance capital-intensive solar energy projects.

DISCUSSION

In order to minimize the administrative burden, only systems that exceed 100 kW are being considered initially, which is the same minimum size required to qualify for performance-based incentives in the PV Partners program. Performance-based incentives are paid over time based on power generated instead of up-front based on initial system size. The price offered to local customers shall be at or below the cost of outside vendor-supplied SRECs. CPAU currently pays \$50/MWh for SRECs, and SREC prices are projected to vary between \$30/MWh and \$150/MWh in the future.

Purchase of SRECs is straightforward, but does require that the seller meet certain contractual obligations. Key terms and seller responsibilities that are addressed in the form of agreement (Attachment C), or will be negotiated in a substantially similar form, are summarized in table form in Attachment B. Sale of SRECs relinquishes the seller's rights to claim the environmental attributes of the project in published materials or public statements, which would instead be provided to CPAU, and in particular to the PaloAltoGreen program. PaloAltoGreen is "Green-e" certified by an independent non-profit organization, the Center for Resource Solutions, who has established national and regional standards for verifying green power programs and codes of conduct regarding the use of renewable energy credits. Palo Alto and its vendors already adhere

to these standards, and SREC providers will also be required to do so. The Green-e standards are publicly available from the Center for Resource Solutions.

Staff anticipates additional SREC purchases will continue to become available to the City as applications for large PV systems are submitted to the PV Partners program. Staff intends to contract with qualifying CPAU electric customers on a first-come first-served basis with the same terms, up to the amount of SRECs needed for PaloAltoGreen. At the current subscription rate, the demand is sufficient to support a total of approximately 1,000 kW of photovoltaics.

The first application for a system large enough to qualify has been submitted by Roche Palo Alto, with a proposed system size of 400 to 700 kW. The proposed system would be owned and operated by Solar Power Partners, located on Roche property.

RESOURCE IMPACT

Purchasing SRECs from local solar systems will redirect current City purchases of credits back into Palo Alto. The prices offered to local customers are at or below the cost of SRECs currently being supplied by outside vendors. The funding for annual SREC purchases is included in the approved budget. If lump-sum, payments for long-term rights to SRECs will be made from Electric Supply Reserve funds, repaid by PaloAltoGreen revenues over time. Should PaloAltoGreen no longer exist or cease use of SRECs, the agreements are designed to still qualify toward renewable energy supply targets, but could result in an adverse rate impact of up to 0.1 ¢/kWh (approximately \$100,000 per year) if the SRECs were kept rather than sold by the City.

POLICY IMPLICATIONS

The proposed contract authority request supports the Council-approved Utilities Strategic Plan, Long-term Electric Acquisition Plan, and the Comprehensive Plan Goal N-9. The Council-approved Long term Electric Acquisition Plan (“LEAP,” CMR:169:06 and CMR:158:07) directs staff to “promote and facilitate deployment of renewable resource supplies by providing expertise, education, incentives and rates to support customer-owned solar power systems, and demonstrating renewable generation technologies,” and to “evaluate potential strategies to meet the solar portion of PaloAltoGreen with local solar resources.” Solar energy plays an important role in achieving greenhouse gas reduction targets reflected in California Climate Action Team goals and AB32 (California Global Warming Solutions Act of 2006) and identified in the report to Council by the Mayor’s Green Ribbon Task Force, a Council priority for this year.

ENVIRONMENTAL IMPACT

The proposed contract authority request does not meet the definition of a project under the California Environmental Quality Act, pursuant to California Public Resources Code Section 21065, and, therefore, no environmental assessment is required.

ATTACHMENTS

- A. Draft Resolution
- B. Table of Key Solar Renewable Energy Credit Agreement Terms
- C. Form of Agreement

PREPARED BY:

KARL E. KNAPP
Senior Resource Planner

DEPARTMENT APPROVAL:

VALERIE O. FONG
Director, Utilities

CITY MANAGER APPROVAL:

EMILY HARRISON
Assistant City Manager