



PASADENA WATER AND POWER

## MEMORANDUM

July 15, 2013

**To:** Honorable Mayor and City Council

**Through:** Municipal Services Committee (June 11, 2013)

**From:** Phyllis E. Currie  
General Manager

**Subject:** AUTHORIZATION TO AMEND CONTRACT NO. 20,023 WITH OPOWER, INC. AND THE SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY FOR AN ADDITIONAL AMOUNT OF \$309,000 FOR SERVICES TO PROVIDE HOME ENERGY USE REPORTS THROUGH JUNE 30, 2014

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### **REVISED RECOMMENDATION – ITEM #3:**

For item number 3, it is recommended that the City Council Authorize the City Manager to amend Contract No. 20,023 with OPower (formerly Positive Energy, Inc.) to provide home energy use reports and related services for one additional year through June 30, 2014 for an additional amount of \$309,000, or total amount not to exceed \$927,000.

### **BACKGROUND:**

At the June 11, 2013 Municipal Services Committee (“MSC”) meeting, staff presented a recommendation that the City Council authorize the City Manager to enter into a contract with OPower, Inc. (“OPower”) for a total amount not to exceed \$822,000, for services to provide home energy use reports to Pasadena Water and Power (“PWP”) residential customers for three years.

The MSC did not take action on this recommendation, and requested that staff return with additional information about the ongoing effectiveness of the OPower Home Energy Reports as well as alternatives to this energy conservation program.

The MSC reviewed additional information from staff and a representative from OPower at their July 9, 2013 meeting, and recommended that the City Council authorize the City Manager to extend the contract with OPower for only one additional year. The MSC further recommended that staff evaluate options to provide all residential customers with Home Energy Reports or comparable “actionable” information, and recommend appropriate action well in advance of the extended contract expiration.

07/15/2013

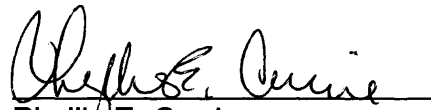
Item 9

PWP initially engaged the services of OPower through participation in an agreement with the Southern California Public Power Authority ("SCPPA") and other local utilities. Pasadena Contract No. 20,023 with OPower incorporates the master services agreement between SCPPA and OPower, which is effective through June 30, 2014. Whereas the original agenda report to City Council dated June 17, 2013 recommended a new three-year contract with OPower, it would be most efficient and expedient to extend the current arrangement to incorporate the MSC recommendation to extend OPower services for only one additional year.

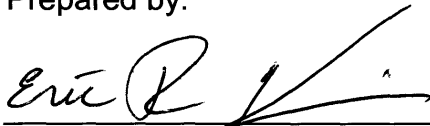
**REVISED FISCAL IMPACT:**

As a result of the revised recommendation, there will be no fiscal impact in fiscal years 2015 and 2016 as a result of this action, and the fiscal impact for FY2014 will remain unchanged from that described in the agenda report dated June 17, 2013.

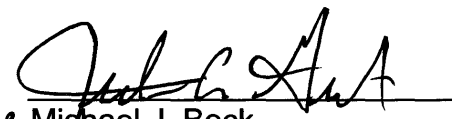
Respectfully submitted,

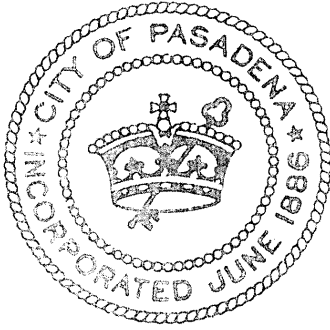
  
Phyllis E. Currie  
General Manager

Prepared by:

  
Eric R. Klinkner  
Deputy General Manager

Approved by:

  
Michael J. Beck  
City Manager



# Agenda Report

June 17, 2013

**TO:** Honorable Mayor and City Council

**THROUGH:** Municipal Services Committee (June 11, 2013)

**FROM:** Water and Power Department

**SUBJECT: AUTHORIZATION TO ENTER INTO A CONTRACT WITH OPOWER, INC. FOR A TOTAL AMOUNT NOT TO EXCEED \$822,000, FOR SERVICES TO PROVIDE HOME ENERGY USE REPORTS**

## **RECOMMENDATION:**

It is recommended that the City Council:

1. Find that the proposed action is exempt from the California Environmental Quality Act ("CEQA") pursuant to State CEQA Guidelines Section 15061(b)(3) (General Rule);
2. Find that the proposed contract is exempt from the competitive bidding process pursuant to the City Charter Section 1002 (f), contracts for professional or unique services; and,
3. Authorize the City Manager to enter into a contract with OPower, Inc. ("OPower") for a total amount not to exceed \$822,000, for services to provide home energy use reports to Pasadena Water and Power ("PWP") residential customers for three years.

## **EXECUTIVE SUMMARY:**

In August of 2009, the City Council authorized a contract with Positive Energy (now OPower) for a two-year Home Energy Reporting System ("HERS") pilot program designed to achieve residential energy efficiency through behavioral science. The reporting system helps utilities better engage their residential customers to become more energy efficient, provide specific and relevant efficiency recommendations to each of their residential customers, and makes it easier for each customer to follow these recommendations. After overcoming a number of implementation challenges, approximately 25,000 PWP residential customers began receiving HERS reports in the mail starting in June 2011, thus the initial HERS contracts for the pilot program will expire in June 2013.

In FY2012, energy savings from the HERS program provided about two-thirds of the total savings from all of PWP's residential energy efficiency programs. Based on current trends, PWP anticipates HERS energy savings will provide a higher contribution in FY2013, with annual savings in excess of 3,700 MWh. Although these annual savings are less than those projected in 2009, the HERS program is quite cost-effective compared to the balance of PWP's residential energy efficiency programs. PWP considers the HERS program a success thus far.

PWP has negotiated a lower-cost contract directly with OPower to continue providing HERS reports to PWP customers for three more years, with additional services including web portal access for all residential customers and additional customer engagement services. The key changes from the pilot program include:

- Home energy use reports will be printed and mailed to participating customers four times per year, instead of six. Customers may still choose electronic delivery;
- All PWP residential customers will now be provided access to the OPower web portal, which provides energy use comparison graphs, analysis, conservation tips, and enables customers to set energy budgets and goals; and,
- OPower will provide additional program assessment tools to PWP, including a Customer Engagement Tracker and survey analytics in the first year.

Even with the additional services, the average annual cost of the proposed base contract will be about \$60,000 (19%) less than the pilot phase contract cost. The base contract cost would total \$747,000, plus \$75,000 for optional services and postage contingencies, for a total not to exceed \$822,000. One-time fees for "refilling" the participant and control groups, recalibration, initial set up of additional features, and the customer engagement survey and analytics will total \$90,000. Annual costs for software, services, and producing and mailing reports to PWP's customers will total \$219,000. In addition, staff is proposing change order authority to include up to \$50,000 for optional future services, such as customer engagement surveys, additional analytic analysis, or new related services that may be offered, plus a \$25,000 contingency to cover potential increases in mailing rates.

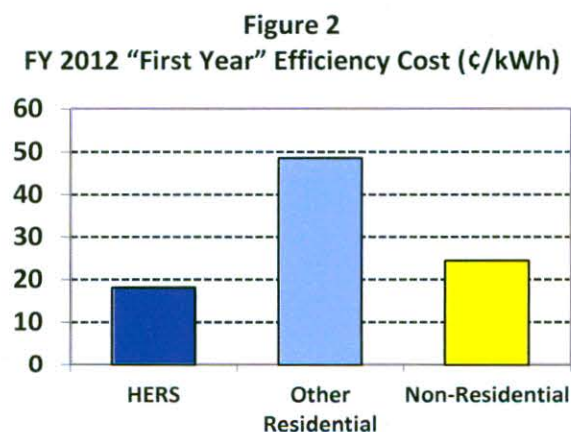
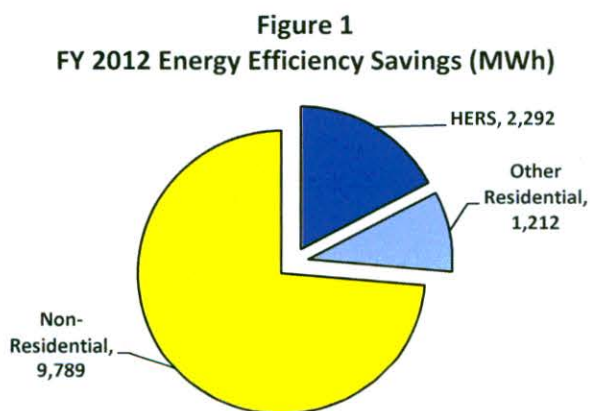
Based on estimates provided by the vendor, the annual savings are projected to average about 3,300 MWh over the next three years at a first-year cost of under \$0.10/kWh, including administration, marketing, and other overhead costs. This would represent about three-quarters of the residential energy efficiency savings and meet about one-quarter of PWP's total annual energy efficiency target of 12,750 MWh/year in a cost-effective manner. The energy savings would reduce PWP's greenhouse gas emissions by approximately 1,800 tons per year.

**BACKGROUND:**

PWP initially engaged the services of OPower through participation in an agreement with the Southern California Public Power Authority (“SCPPA”) and other local utilities. This arrangement provided PWP with discount pricing for services and reports offered by OPower due to the higher volume created by combining efforts with other local utilities through SCPPA.

The two-year HERS pilot program commenced in June 2011, when an initial group of 25,000 PWP residential customers began receiving HERS reports in the mail on a bi-monthly basis. The monthly energy consumption of this group of recipients was tracked against a control group of nearly 15,000 PWP customers that did not receive the reports in order to measure and verify the behaviorally-induced energy savings of those receiving the reports. Initially, HERS energy savings were projected to hit between 5,000 and 7,500 MWh per year.

Figures 1 and 2 summarize key metrics for the results of PWP’s FY2012 energy efficiency programs, including those from the first year of the pilot HERS program, all other residential programs combined, and all non-residential programs combined. PWP reported energy savings of 2,292 MWh in FY2012 from the HERS program, which represents about two-thirds of the total savings from all of PWP’s residential energy efficiency programs in FY2012.



As with most utilities that participate in the HERS program, the monthly savings have trended upward in the second year of the pilot program. PWP projects FY2013 annual savings will exceed 3,700 MWh at an average “first year” cost (annual program cost, including overheads divided by one year of energy savings) of less than \$0.10/kWh, which is cost-effective compared to the balance of PWP’s residential energy efficiency portfolio, which has a first year cost of about \$0.50 per kWh and lifecycle average cost of about \$0.075/kWh.

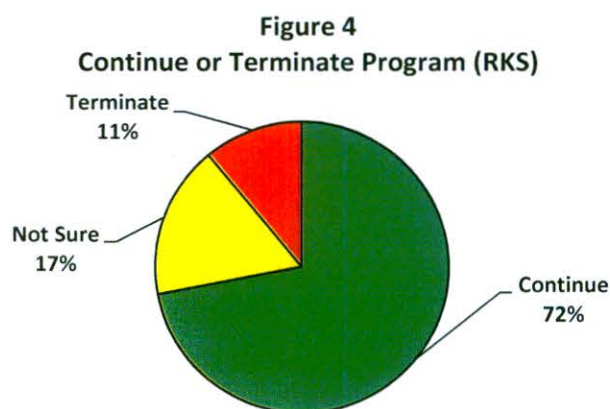
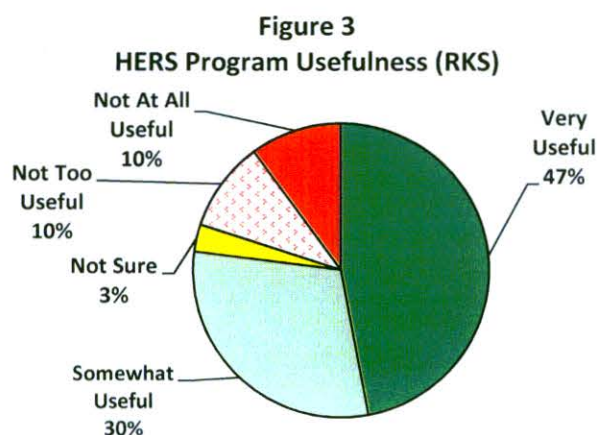
The HERS reports do make an impression on the recipients: Some react favorably, some are skeptical of the validity, and some are incensed – perceiving the reports as a meaningless waste of paper and public resources. This latter group can be vocal, and consume a significant amount of staff time (particularly with each fresh bulk mailing of the reports). OPower has reported that only 127 PWP customers “opted-out” of the



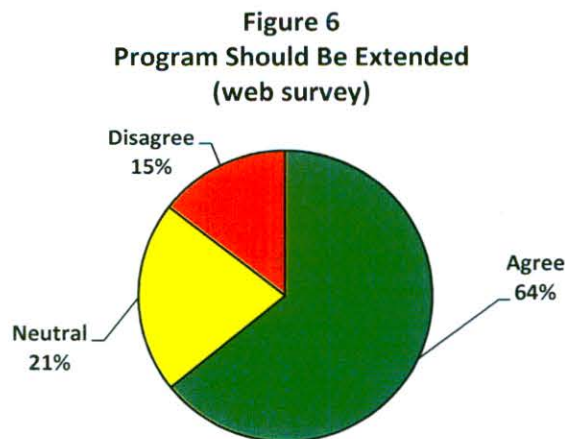
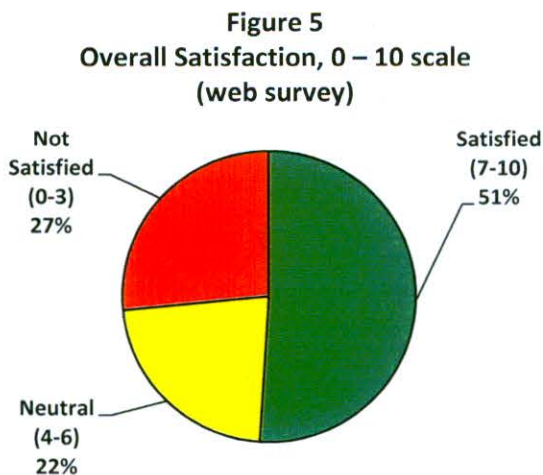
program between June 2011 and December 2012, yielding an opt-out rate of 0.5%. This is substantially lower than OPower client utilities' average 1.05% opt-out rate.

### Survey Results

To help gauge overall customer reaction to the HERS program, PWP has conducted two surveys. Residential customers were asked a few questions about the HERS program as part of a bi-annual residential customer satisfaction survey conducted by RKS research during the month of February 2013. The RKS survey randomly selected 150 residential customers and surveyed them by telephone. Of those surveyed, 47% recalled receiving HERS reports. As shown in Figures 3 and 4, the vast majority of HERS recipients found the reports somewhat or very useful and supported extending the program.



PWP also performed a web-based survey in January through early March 2013. As shown in Figures 5 and 6, a slight majority of PWP customers are satisfied with the program, and many believe it should be extended by a year or more. Survey responses indicate that over 95% of customers read these reports, and 70% "think about their energy use" as a result of receiving them. Surprisingly, even the majority of those that rate the program poorly were not overwhelmingly supportive of "terminating the program immediately."



The web-based survey cannot be considered statistically representative of the broad customer base due to the targeted respondent groups, the “opt-in” selection process, and the more technology-oriented nature of a web survey. In addition to general advertising, PWP reached out directly to two different customer groups that could potentially bias results. The first group consisted of “concerned customers” that had previously expressed concerns with the HERS program, and represented over 13% of survey responses. The second group of potentially more environmentally-oriented “engaged customers” that had previously participated in PWP energy efficiency programs represented 50% of survey respondents. Not surprisingly, the “engaged customer” group rated the program more favorably, whereas the “concerned customer” group rated the program more negatively. While these two targeted groups represented a disproportionate number of the total number of responses, the overall survey results were similar whether analyzed with both groups included or with both groups excluded.

OPower’s HERS is the dominant behavioral energy efficiency program in the United States. OPower has expanded to more than 350 employees and works with approximately 80 utilities to increase the energy efficiency of 15 million homes. HERS energy savings results have been independently verified by numerous third-parties for various OPower clients, and qualify for reporting under California’s rigorous standards. PWP has invested substantial resources and contract services to develop secure data exchange protocols and procedures with OPower. It would be in the City’s best interest to continue using OPower to provide HERS services.

The proposed contract is exempt from the competitive bidding process pursuant to the City Charter Section 1002 (f), contracts for professional or unique services.

The proposed FY2014 budget assumes a \$0.00104/kWh Public Benefit Charge rate increase to fund the increasing costs of solar and low income rate programs. Funding for energy efficiency programs is not increasing, and the proposed contract is a cost-effective means to meet the City’s energy efficiency goals without increasing the associated budget.

#### **COUNCIL POLICY CONSIDERATION:**

The proposed contract is consistent with the Ten-Year Energy Efficiency goals adopted by the City Council on January 28, 2013, the City’s Urban Environmental Accords Goals, the General Plan Energy Element, the City Council’s Strategic Planning Goals, and the 2012 Integrated Resource Plan. The proposed contract will contribute to greenhouse gas reduction goals by reducing electric energy use in Pasadena.

#### **ENVIRONMENTAL ANALYSIS:**

The proposed contract has been determined to be exempt from the California Environmental Quality Act (“CEQA”) pursuant to State CEQA Guidelines Section 15061(b)(3), the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

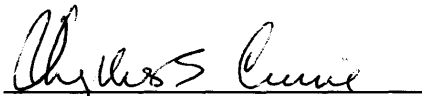
**FISCAL IMPACT:**

Funds are available in the Public Benefits Fund budget (account 8114-410-831700-0914 24228) for the HERS program. The three-year agreement includes one-time fees totaling \$90,000, annual costs of \$219,000 for software, services, and producing and mailing reports to PWP's customers, \$50,000 for optional future services, and a \$25,000 contingency to cover potential increases in mailing rates.

Cost Component	FY2014	FY2015	FY2016	Total
Set up and configuration	\$25,000			\$25,000
Other one-time fees	\$65,000			\$65,000
Recurring services	\$159,000	\$159,000	\$159,000	\$477,000
Printing and mailing	\$60,000	\$60,000	\$60,000	\$180,000
<b>Total Base Contract Amount</b>	<b>\$309,000</b>	<b>\$219,000</b>	<b>\$219,000</b>	<b>\$747,000</b>
Optional services		\$25,000	\$25,000	\$50,000
Postage contingency		\$10,000	\$15,000	\$25,000
<b>Total Not To Exceed Amount</b>	<b>\$309,000</b>	<b>\$254,000</b>	<b>\$259,000</b>	<b>\$822,000</b>

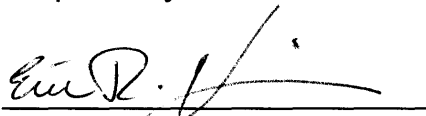
Over time, the costs associated with the proposed contract should be fully offset by reduced energy procurement and transmission costs in the Light and Power Fund, resulting in no net impact on electric bills.

Respectfully submitted,



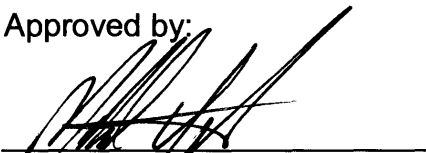
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