Board Decision
Authorizing a Contract with OPOWER

December 16, 2011

Summary

Authorize the executive director to sign a contract up to $748,000 with OPOWER to extend the current pilot for up to an additional year and allow more in-depth evaluation of energy savings derived from the current pilot group.

Background

- The 2009 Strategic Plan calls for Energy Trust to "explore opportunities to accelerate behavioral research and technology through field testing, refining or reinventing program systems." See http://energytrust.org/library/plans/2010-14_Strategic_Plan_Approved.pdf, pp. 15-16.

- In February, 2010, the board approved a $977,000 contract with OPOWER for an 18-month effort to demonstrate energy savings from a behavioral measure that has been tested in other parts of the US and Canada by providing reports to homeowners detailing their home energy consumption compared to other similar homes. Staff analysis indicated that even under conservative assumptions, the project would make a significant contribution to achieving Energy Trust savings goals.

- The activity was organized as a pilot to allow evaluation of costs, persistence of savings, customer reactions, and other variables.

- Contracts were signed between Energy Trust, NW Natural, and Portland General Electric contracted with OPOWER in June, 2011, to deliver six Personal Energy Reports over the course of one year to 60,000 customers of both utilities.

- Planning activities commenced in June 2011, including program design, data integration, development of materials and other start up activities. The first Personal Energy Reports were sent in January of 2011. To date, six reports have been sent with one more slated for January 2012 which will conclude the services under the original contract.

- Billing data analysis to date indicates 2011 savings are on track to meet the pilot's goals of 162 kWh and 7 therms per household. Similar savings are anticipated in 2012.

- Opt-out rates for the effort remain low at less than 1%.

Discussion

- Due to the extended length of time required to negotiate contracts between the utilities and OPOWER, the effort was unable to launch in time to completely capture savings in the 2010/2011 heating season.

- Staff proposes to continue the OPOWER pilot for an additional year, and distribute six more reports to the same group of 60,000 customers.

- Billing data analysis thus far indicates savings are on track with projections, which has two potential outcomes: First, extending the pilot one year is likely to be justified by savings acquired while still providing insights to inform other learning objectives; and (2) Should these savings persist for another year, we may be in a position to recommend expansion of the activity.

- Results from the pilot remain preliminary, especially for gas. Data for the remainder of this current heating season is needed to inform judgments regarding benefits and savings, especially for gas customers.

- Full billing data analysis and process evaluation results for the complete first year are expected to be available in June or July of 2012. These results, in addition to customer service reports and stakeholder input, will be taken into account to determine whether to continue the pilot in 2013.

- An independent third-party process evaluation conducted by Opinion Dynamics Corporation found in their three-month report that the majority of participants surveyed find the collaboration valuable, and report having a better understanding of their household's energy usage after receiving reports.

- Under conservative assumptions (1.4% electric reduction, 1% gas, one-year measure life), the project would be cost-effective. The levelized cost per unit saved would be in the neighborhood of $0.059 per kWh and $0.50 per therm. While the electric cost would be above the current OPUC levelized cost performance measure for electric efficiency ($0.035 per kilowatt-hour), OPUC performance measures apply to efficiency programs overall, not to individual measures. Once the demonstration is completed, actual costs can be evaluated in relation to the performance measure.

- The parties have encountered some challenges during implementation. NW Natural has identified questions regarding fuel-neutrality and co-branding of information for both gas and electric customers. Improvements have been made during the pilot in response to utility comments and customer feedback and concerns. By extending the pilot period, additional changes can be made and tested to further address such comments.

- In addition, another year of pilot activity and data will allow time to respond to evaluation recommendations, provide better data regarding customer behavior, additional time to continue work with utilities regarding the OPOWER approach, and another year of savings acquired.

- It is also worth noting that costs for year two have gone down substantially from year one, as the first year included start-up costs. OPOWER has also offered a discounted rate for year two, resulting in a total reduction in cost of $229,000.

- The budget for the continuation of the existing pilot for an additional year is included in the 2012 proposed final budget and action plan. No budget is included for expanding the pilot in 2012 beyond the current set of customers.

- Initial 2012 budgets included placeholder dollars for expanding the effort to additional customers; however NW Natural voiced discomfort with this, and these dollars were removed. PGE had similar concerns.

- NW Natural and PGE agreed to continue with the current pilot group for an additional year in order to gain a firmer understanding of results.

Recommendation

Authorize the executive director to sign a contract with OPOWER to expend up to $748,000 to continue the OPower pilot program, derive additional savings and evaluate results.

RESOLUTION 616

AUTHORIZING THE EXECUTIVE DIRECTOR TO SIGN A CONTRACT WITH OPOWER

WHEREAS:

1. **OPOWER provides Personal Energy Reports to consumers comparing their home's energy consumption to that of similar homes.**
2. **Experience to date suggests that the activity is saving energy at about the rate initially projected: 1.4% reduction in electric energy use, 1% reduction in gas.**
3. **At this savings rate, the project would be cost-effective, and would make a significant contribution to achieving Energy Trust's energy savings goals.**

It is therefore RESOLVED that the Board of Directors of Energy Trust of Oregon, Inc., hereby authorizes the executive director to sign a twelve-month contract up to $748,000 with OPOWER to continue to determine savings from providing 60,000 homeowners with reports comparing their home energy use to other homes.

Moved by: Seconded by:

Vote: In favor: Abstained:

Opposed: [list name(s) and, if requested, reason for "no" vote]