



RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: NOVEMBER 28, 2016

ITEM NO: 6

SUBJECT: CREATION AND FUNDING OF CUSTOMER ENGAGEMENT PROGRAM FOR ENERGY EFFICIENCY PROCURED THROUGH SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY FOR \$250,000

ISSUE:

Recommend that City Council approve the creation and \$250,000 funding of the Customer Engagement Program for energy efficiency to be offered by Riverside Public Utilities.

RECOMMENDATIONS:

That the Board of Public Utilities recommend that the City Council:

1. Approve the creation of an ongoing Customer Engagement Program for energy efficiency;
2. Approve funding in the amount up to \$250,000 for Fiscal Year 2016-2017 for the Customer Engagement Program for energy efficiency;
3. Authorize City Manager, or his designee, to procure services through Southern California Public Power Authority for the Customer Engagement Program for energy efficiency; and
4. Authorize City Manager, or his designee, to make any minor non-substantive changes to the Customer Engagement Program for energy efficiency.

LEGISLATIVE HISTORY:

In November 2005, the Governor and State Legislature approved Senate Bill (SB) 1037, a comprehensive package that set ambitious energy conservation policies and goals. SB 1037 requires publicly owned utilities (POU's) when procuring energy to serve their customer load, to "first acquire all available energy efficiency and demand reduction resources that are cost effective, reliable, and feasible" and to report kilowatt hour (kWh) savings to the California Energy Commission annually. In September 2006, the Governor and State Legislature also approved Assembly Bill (AB) 2021, which requires POU's to identify, target and achieve all potentially cost-effective electric savings within a 10-year target. Riverside Public Utilities (RPU) has set an ambitious 10-year energy efficiency goal of 1% of annual retail energy sales. Lastly, in October 2015, the Governor and State Legislature approved SB 350, which establishes annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas by January 1, 2030. The bill requires local POU's to establish annual targets for energy efficiency savings and demand reduction consistent with this goal.

BACKGROUND:

Historically, utility-wide conservation programs have relied heavily on financial incentives such as rebates to motivate customers to purchase efficient products. However, non-financial influences such as providing customers with insights on their energy usage trends can be powerful motivators to help guide and encourage reducing consumption. The utility industry has adopted programs to provide customers detailed information about their usage in order for them to make educated changes to their energy use habits within their home or business. Findings from academic research in economics and psychology show that providing customer feedback through normative comparisons, i.e., comparing customers to other similar customers, to be one of the most effective ways to motivate and reinforce efficiency. As a result, there is an opportunity to engage and educate customers about how to best manage their associated consumption and utility costs.

Customer engagement program tools can also significantly enhance RPU's ability for target messaging to specific customers through segmentation and data analytics. As a result, this will help drive customers to applicable utility programs that meet their needs and expectations of the utility.

The purpose of the Customer Engagement Program (CEP) is to enhance the interaction between the utility and its customers by providing them the resources to manage their utility account and therefore drive savings and customer satisfaction.

Energy Efficiency

As energy efficiency targets become harder to achieve due to market saturation, rising program costs and the reduction in program participation for traditional rebate driven incentive programs, staff has identified CEP as a potentially new energy efficiency program to generate additional kWh savings.

A recent study performed by Apex Analytics for Commonwealth Edison Company (ComEd), an investor-owned electric utility in Chicago, estimates that even if energy efficient residential lighting technology is installed, there is still approximately 11 percent waste due to occupant habits in utilizing energy. Additionally, providing energy consumption feedback to customers is recognized by the American Council for an Energy-Efficient Economy as a critical first step in engaging and empowering customers to manage their energy resources thoughtfully.

Energy savings from engagement-based programs are a result of customer groups receiving information on their monthly consumption and motivating them to make changes. Customers are divided into treatment and control groups, much like the pharmaceutical industry drug trial A/B test. By following the scientific method, savings are calculated by analyzing the usage of the test group (those who receive reports) to the usage of the control group (those that do not receive reports). The difference between the two groups results in energy savings.

Utility engagement programs for energy may be offered for both commercial and residential customers. However, the majority of these programs are primarily targeted to residential customers because of the difficulty in identifying similar facilities for equivalent comparison and advanced meter technology typically required for commercial customer data. Therefore, RPU plans to implement CEP for residential customers first and then for commercial customers at a later date after further evaluation, program design, and deployment of Advanced Metering Infrastructure (AMI).

RPU will administer the CEP for energy efficiency via a third party vendor procured through Southern California Public Power Authority (SCPPA). A Request for Proposal was recently released by SCPPA specifically for customer engagement and resulted in 18 responses from vendors. Of these respondents, nine of them provide insights for customer engagement through data analytics to drive energy savings. These include Apogee, Enervee, First Fuel, Navigant, Opower, Schneider Electric, Simple Energy, Smart Utility Systems and Tendril. Vendors from this list of qualified respondents will be reviewed and selected by RPU at a later date.

Staff determined the program funding amount by researching the price for similar programs already being used by local Public Utilities. As a result of this research, the price range is from \$200,000 - \$300,000 per year for roughly 15,000 – 20,000 residential customers. RPU staff proposes to engage 20% of the

residential customer base to achieve significant energy savings, which equates to 20,000 – 25,000 customers. This program will be funded with Public Benefits Funds, under California Public Utilities Code Section 385. Section 385(a)(1) provides that Public Benefits Funds may be used for “Cost-effective demand-side management services to promote energy efficiency and energy conservation.”

Water Efficiency

In September 2015, RPU executed a no-cost agreement with WaterSmart Software to implement a customer engagement water conservation tool. RPU obtained the use of this tool for one year at zero cost to the utility by being selected to participate in a grant-funded study. This study is conducted by the University of California, Davis and funded by a California Department of Water Resources (DWR) grant. The vendor, WaterSmart, was selected by UC Davis to test their advanced customer engagement water conservation tool. In September 2016, RPU began offering the WaterSmart tool as a pilot project to 15,000 residential water customers within the City. The WaterSmart tool engages customers with a bi-monthly Home Water Report (HWR) by mail as well as an online customer account to view their water consumption. The goal of this customer pilot project is to reduce water use, energy use, and greenhouse gas emissions for RPU residential customers by informing them of their consumption compared to similar households.

Grant funding for the WaterSmart program will expire at the end of Fiscal Year 2016-2017. At the end of the grant period, RPU staff will evaluate the program success based on customer feedback and validated water savings versus the control group that did not participate in the program. RPU will also review the costs of the program for the water savings achieved versus other water efficiency programs to determine if it makes sense to continue offering the program using RPU funding upon expiration of the grant. Sufficient funding is available in the approved Fiscal Year 2017-2018 budget, within the Water Conservation Program Fund.

ENERGY EFFICIENCY PROGRAM DESIGN:

RPU's program will focus on a large-scale sample size, irrespective of customers' technology access, socio-economic status, age, and other demographic factors to drive customer engagement and action. High energy consumption customers will also be targeted for this program in order to maximize energy savings potential.

Reaching customers and driving them to take action requires proactively engaging customers by leveraging multiple communication channels, including direct mail, e-mail, texting or short message service (SMS), interactive voice response (IVR), and the Web, without requiring customers to provide input before successfully engaging them. Strategies and approaches that only use digital media will not suffice for effective customer engagement because digital media alone cannot reach all customers and therefore, RPU will employ a solution that includes direct mail as a key component. The other component will be an electronic interface to allow paperless interaction, lower program administration costs, and further provide customer access. These strategies will motivate customers to take action through 1) contextualized energy and water usage information, 2) normative comparisons with peers, and 3) energy savings recommendations based on customers' specific usage patterns and characteristics.

Direct Mail Component

To effectively run the CEP program, it must regularly deliver customized, direct-mailed Customer Efficiency and Engagement Reports (CEER) that motivate customers to take action. CEER's must work seamlessly with an online customer portal and other engagement channels (e.g., e-mail, SMS) to reinforce messaging and drive customer action.

Digital information Outreach

Additionally, comparable information will be available through an alternative means, such as, an online customer portal that motivates customers to take action. The online customer portal will be available 24 hours a day, seven days a week, and will work seamlessly with other customer engagement tools (e.g., direct-mailed reports, e-mail, SMS) to reinforce messaging and drive customer action.

FISCAL IMPACT:

Proposed funding for the electric portion of the Customer Engagement Program in Fiscal Year 2016-2017 is \$250,000. Sufficient funds are available in the Public Benefits Unprogrammed Funds Account No. 6020100-453001. Staff will work with the Finance Department to transfer funds into the Residential Electric Insight and Engagement Account No. 6020100-456097. Funding for the subsequent fiscal year(s), where applicable, will be included as part of the Public Benefits Program budget process.

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Attachment: Presentation