



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Helgeson, Brown, Mital, Simpson and Carlson
FROM: Erin Erben, Chief Customer Officer; Kathy Grey, Customer Solutions Supervisor;
Dan Morehouse, Customer Solutions Supervisor
DATE: April 28, 2017
SUBJECT: Customer Solutions Strategic Priorities
OBJECTIVE: Information Only

Issue

EWEB is undergoing an affordability assessment. Customer Solutions Department has been asked to provide a summary of programs for strategic priorities discussion.

Background

The enactment of federal legislation in 1978, and subsequent State legislation, established that energy conservation is considered part of utility service provided by publically owned utilities. The adoption of the Bonneville Power Administration (BPA) Energy Conservation Agreement allows EWEB to comply with these statutes without having to submit plans and report annual accomplishments to the State. Regardless, a minimum level of service is required by Oregon law¹.

EWEB's rates from BPA includes conservation. EWEB historically has offered a suite of programs that makes energy conservation/efficiency available to all customer sectors. BPA returns a portion of these rates, Energy Efficiency Incentives (EEI), based on EWEB's investment in conservation. EEI funding is based on EWEB's Tier One Cost Allocation (TOCA) and includes \$0.04 administrative reimbursement per reported kWh saving up to 20% of our TOCA.

EWEB sets conservation targets annually based on the IERP target of meeting 100% of new load growth with conservation (except new large single loads). In 2013, the calculation for this target was changed from a 20-year average forecast to a 5-year average forecast.

In 2012, EWEB cut energy conservation staff by over 50%. In 2013, staff was reduced even further when EWEB suspended its energy conservation programs. At this time, EWEB redesigned its program offerings based on a newly revised set of principles:

- Meet legal and regulatory requirements
- Per IERP, meet load growth with conservation
- Get all EEI dollars back from BPA
- Meet a minimum "customer service" level of conservation for residential sector
- Offer something for all sectors and types of customers
- Offer limited-income programs and services

- Incentivize savings according to their value to EWEB (value savings according to when they occur, e.g. peak, off-peak)

EWEB outsourced its limited-income weatherization services to the Housing and Community Services Agency of Lane County (HACSA). In early 2014, EWEB restarted reduced program offerings to business and residential customers.

EWEB restarted its in-house limited-income program after HACSA temporarily closed its sign-up lists in 2014 to address long wait times experienced by EWEB limited-income customers. Organizational restructuring in late 2016 consolidated energy and water conservation, limited-income bill assistance, and loans into two purposeful sections, including one dedicated to limited-income programs and the other committed to business growth and retention efficiency programs.

Discussion

2017 Customer Solutions Programs

Customer Solutions currently offers programs that reflect the direction set in motion in 2012 during the redesign of programs. Programs that set a premium for savings that occur during utility peak usage times were retained and enhanced. A portion of funding is dedicated for limited-income efficiency improvements. In addition, we currently offer business growth and retention rebates and incentives. Staff continues to do analysis of high bills for customers and sees an increase in customer high bill analysis work from December through early spring that accounts for ~30% of their time.

Customer incentives are based on the value to EWEB and what historically has been needed to encourage customers to participate. The 2017 incentive budget is \$1,400,000 for standard programs and \$820,000 for limited-income efficiency programs. Projects are submitted to BPA for Energy Efficiency Incentives (EEI). The 2017 EEI is \$2,580,943. The 2017 savings targets based on the IERP are 1.6 aMW energy and 1.8 MW peak demand.

Residential Non Limited-Income

Residential programs offer customers several efficiency improvement rebates. In addition to the rebates below, staff provide zero interest loans, energy audits, high bill analysis, home energy performance scores and more.

- LED Lighting Retail Buy-Down (Simple Steps) – Discontinued in February
- Ductless Heat Pump - \$650 Rebate or 0% loan; averaging 48 installations per month
- Heat Pump - \$1,000 Rebate or 0% loan; averaging 10 installations per month
- New Construction – Varies; averaging 1 per month
- Heat Pump Water Heater - \$300-\$400 or 0% loan; averaging 8 installations per month
- Insulation Upgrades – \$0.40/sf or 0% loan; averaging 4 installations per month
- Window Upgrades - \$4/sf or 0% loan; averaging 15 installations per month

Commercial & Industrial

Commercial and industrial customers have two options for participations, deemed rebates and custom incentives.

- Deemed rebates are similar to residential rebates and are offered for ductless heat pumps, efficient heat pumps, HVAC controls, heat pump water heaters, numerous food service and refrigeration measures, and small lighting projects. Rebate amounts range from \$0.04 to \$0.15 per kWh saved. Project completions vary with an average of 4 businesses per month.
- Custom programs are designed for larger projects (incentives over \$2,500) where custom

analysis work is completed for customers. Projects are vetted based on energy savings potential, time of day the savings occur, type of project, etc. These projects typically take a long time to complete, often over a year. Participation in 2017 has increased with expected customer savings of over 7,000,000 kWh.

- New construction programs are offered for new businesses that are installing more energy efficient equipment than Oregon Energy code requires. These programs are custom tailored for each project.

Business Growth

New in 2016, Customer Solutions has been offering programs for customers to convert from non-electric heating source to an efficient electric option. Rebates are based on the current wholesale to retail margin cost of power. Investment payback criteria target is three years. The 2017 goal is an additional \$55,000 in annual revenue due to these programs. Efficiency programs work hand in hand with business growth opportunities.

- Residential programs offered for customers that don't currently have an electric heating system, such as existing gas or oil heated homes. Rebate offers match standard program offerings and are available for ductless heat pumps, ducted heat pumps, and heat pump water heaters. Average 5 projects per month.
- Commercial and industrial programs also offer deemed rebates for ductless heat pumps, ducted heat pumps and water heaters, where electric systems were not currently in place. Custom activity for commercial and industrial work has begun to increase. There are currently commercial customers converting from gas boilers to efficient electric systems, as well as industrial customers considering adding additional electric load. This activity is expected to increase as we participate in an electrification program with EPRI and work directly with our key account customers on a very custom basis to replace non-electric end uses with efficient electric options. Additional programs will include electric forklifts, refrigerated trucks, and electric kitchen equipment, along with some process heating and heat treating measures that we are exploring with EPRI's help.
- New construction programs have also began to ramp up, with projects slated to complete in 2018 and 2019. New construction opportunities involve working with new customers to have efficient electric businesses vs customer choosing non-electric options.
- Electric vehicle rebates \$200 bill credit for vehicle purchase and an option for a 0% loan to install electric charging infrastructure for business customers. To date, we have provided 11 EV rebates.

Retention

Most of the time when customers invest in new heat pumps or water heaters, they have a failure of their existing system. Typically, those customers have a choice of using a different fuel source (e.g. natural gas) or maintaining/replacing with an electric option. The customer load retention work associated with the efficient installations of deemed HVAC programs is substantial. The wholesale to retail margin retention for 2016 efficiency programs was \$125,000. This is an area where more research needs to be completed.

Water Efficiency

Rebates are offered for:

- Efficient toilets - \$35 each for the first unit, \$15 for additional units; averaging 13 per month
- Hand valve on customer-side of revenue meter - \$75 EWEB provided or \$150 contractor provided; averaging 12 per month

- Water wise sprinkler timer - \$25 each; 0 participation

Customer Solutions also offers service line replacement 0% loans to assist customers when they have a broken service line.

Greenpower

Programs are offered for customers to participate by purchasing Greenpower in blocks of 1,000 kWh at \$10 each or 100 kWh blocks for \$1.50 each. Funds are placed in reserve to support renewable energy and local solar energy projects. Current revenue averages \$25,000 per month.

Solar Electric Programs

Customer Solutions offers residential net metering incentives of \$0.40/AC watt and a commercial net metering incentive (available only to non-profits) of \$0.50/AC watt. Incentives average 10% of system installation costs. Incentive budget of \$150,000/yr is funded through Greenpower customer support. For direct generation between 25-200 kW, EWEB offers an annual power purchase rate set at avoided cost, currently \$0.0280/kWh. On average, 9 residential net metered applications received or completed per month and have an average system size of 5.3 KW. A total of 7 commercial net metered applications and 2 commercial direct generation applications were received in 2017.

Residential Limited-Income Assistance

Energy and water efficiency programs were paired with EWEB's Customer Care Bill Pay Assistance Program in Q4 2016, improving viability of targeted assistance to EWEB's limited-income population. Here is a breakdown of 2017 budgeted limited-income household incentives:

- \$990,000 direct bill paying assistance; this figure is supplemented by \$100,000-\$200,000 customer voluntary donations and "Run to Stay Warm"
- \$670,000 for efficiency improvements to residential homes and rentals, affordable housing & multifamily buildings, and limited-income new construction projects
- \$150,000 HACSA weatherization
- \$15,000 water efficiency and leak repair

Annually EWEB aids approximately 5,000 limited-income households through its bill assistance programs and helps reduce the energy-burden of 200-250 limited income households through installation of efficient heating systems, weatherization, and construction of new affordable housing, and water leak detection and repair.

Home Energy Performance Scores (HEPS)

EWEB's Customer Solutions personnel participated in the State of Oregon workgroup that developed the administrative rules for scoring of homes in Oregon. The University of Oregon's Office of Sustainability, with funding and in-kind services from EWEB and the City of Eugene, hired and trained students to deliver HEPS to rental property occupants and owners in EWEB service area. A considerable number of these properties are occupied by customers who are considered income eligible for EWEB limited-income assistance programs. To date, 150 assessments have been completed by students and the goal is to reach 240 by pilot year end June 15, 2017.

Loans

EWEB has been offering efficiency loans to its customers since 1990. Today loans are offered for line extensions, septic improvement, economic development as well as water and energy efficiency

programs. EWEB Customer Solutions Department originates 350-450 customer loans, on the order of \$1.7-\$1.9 million annually for the utility.

TBL Assessment

N/A

Recommendation

Requested Board Action

None; Information only.

¹ **Legislative Obligations:**

The National Energy Conservation Policy Act (NECPA) 1978: Required that all utilities of a certain size, public and private, provide certain services to its [utility] customers which would promote energy conservation. This act made utility companies partially responsible for quality control of installation and required utilities to provide energy analysis to its residential customers by qualified energy analysts.

Northwest Power Planning Act 1980: Required the Bonneville Power Administration to acquire conservation based resources before building or purchasing new conventional energy resources.

ORS Chapter 469.651 – 659: Established the minimum public utility program requirements, defined energy conservation as part of utility service of publicly owned utilities, and defined alternative programs. *“The provision of energy conservation measures to a dwelling shall be considered part of the utility service rendered by the publicly owned utility.”*

ORS Chapter 757.687: Direct Access: Established public purpose charges requirements for utilities. Allowed consumer-owned utilities to credit funds expended on programs for energy conservation, renewable resources or low-income energy services towards the utility’s public purpose funding obligation. **ORS Chapter 757.687:** Also directs that a consumer-owned utility shall have in operation a bill assistance program for low-income and report annually to the State.

OAR 600, 690 - Division 86 Rules: The policy requires major water users and suppliers to prepare water management and conservation plans.