



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Simpson, Brown, Helgeson, Manning and Mital
FROM: Mark Freeman, Energy Management & Customer Services Manager
Erin Erben, Power Resources & Strategic Planning Manager
DATE: September 6, 2013
SUBJECT: Energy Management Services Program Re-launch
OBJECTIVE: Information Only

Issue

Most Energy Management Services (EMS) programs were temporarily suspended last March after EWEB met its reduced savings target. This action was consistent with both (i) Board-approved IERP plans to meet load growth with energy efficiency and (ii) budget targets. This unprecedented action, taken to avoid negative impacts to customer rates, is indicative of the current business climate facing the utility. Soon after the suspension was announced, management established a cross-functional team charged with redesigning program offerings and incentive levels to reflect to new economic realities. This memo summarizes the team's recommendations, emphasizing policy issues and programmatic changes.

Background

As wholesale power markets change and customer tolerance for rate increases is challenged, EWEB must look at the most cost effective ways to deliver its products and services, including energy management programs. While traditional conservation/ energy efficiency measures remain the most cost effective strategy when there is a need for new energy resources, presently there is no such need. Other factors must now be considered in order to continue EWEB's long-standing commitment to customer service and energy management innovation, such as:

- Providing continuity and stability in program availability for customers, staff and contractors
- Meeting legal/regulatory minimum requirements
- Helping residential and small business customers who rely on financial assistance invest in efficiency improvements to help them manage their bills as rates increase over time
- Comporting with IERP objective to off-set load growth through conservation and demand response strategies
- Reflecting current economic realities and load growth projections
- Addressing community expectations and aligning with regional partners.

Additionally, without competitive incentive programs, EWEB risks losing base load as customers upgrading heating and other systems select other cost-effective alternatives (e.g., natural gas).

Discussion

The redesign team met over a number of months to conduct a comprehensive re-evaluation of EWEB's conservation programs. The resulting proposal accomplishes several core objectives:

- Protects residential and small commercial customers from future 'over-subscription' by enabling more flexible targets and establishing minimum program funding levels for these two customer classes. This minimum level follows natural demand¹ and is independent from the IERP methodology which sets program funding and acquisition targets solely on load growth projections;
- Values programs with greater peak-time energy reduction potential over those that attain energy efficiency alone to benefit both customers and EWEB financials;
- Streamlines program administration and delivery to reflect fewer staff resources.

See Attachment 1 for more detailed information about key features associated with the redesign.

While there are a number of tasks yet remaining to finalize redesign work, management plans to introduce a limited suite of programs to residential and small business customers in time for this heating season. The exact timing is largely dependent on completion of the Energy Insight tracking and reporting system, which will allow EMS to deliver programs at reduced staffing levels. There is a dedicated multi-department effort in process to complete the Energy Insight work in time for the intended Q4 2013 launch date.

For residential customers, these programs include both ducted and ductless heat pumps (DHPs), specific weatherization measures and new construction. Customers whose homes have forced air systems, including manufactured homes, are now eligible for DHP incentives. Commercial programs will be limited to lighting efficiency incentives for small business customers only. Another key change is how incentive levels and loan amounts were calculated. For example, incentives for DHPs, which have greater coincident peak² reduction value, were increased while weatherization measures now have lower incentives.

While staff is anxious to let customers know about the program re-start, we believe it is important to 'get it right' or risk further loss of public confidence. A 'soft-launch' approach is planned to introduce this limited suite of programs to the public, focusing outreach to just those customers who have expressed interest in program participation since suspension (over 600 customers). Broader communication and marketing efforts to other customer classes will commence in 2014, when program offerings will be expanded and adjusted based on customer demand. A communication plan detailing the key messages, tactics, timing and audiences for future outreach has been drafted as part of the redesign effort. For example, contractors meetings are scheduled for mid-September to communicate program changes and answer contractors' questions.

Utilizing a soft-launch approach does not fully mitigate implementation risks given that EMS staff has been dramatically reduced due to shrinking budgets and acquisition targets. Specifically, 2014 funding for EMS incentives has been reduced by another \$1 million. On-going monitoring to carefully balance participation levels with available funding is imperative to maintain program continuity and meet other customer service objectives. Mitigation measures in place and/or under consideration include:

- Streamlining administration and program delivery
 - Modify program requirements and inspections to reduce required staff time
 - Complete Energy Insight and its customer facing web presence for EMS programs
 - Promote customer use of on-line capabilities

- Resource sharing and cross-training
 - Shared administrative assistant position between EMS and customer service
 - Administrative support cross-training between sections
 - Utilize customer service to trouble shoot high bill complaints
 - Cross-functional training to better utilize existing EMS staff

- Outside resources and contingencies
 - Consider LCC Energy Management interns to help field customer inquiries and manage basic work flow
 - Establish waiting lists or other mechanisms to moderate participation (dependent on Q4 demand)
 - Consider utilizing contractors for program delivery
 - Continue partnership with the Housing and Community Services Agency of Lane County (HACSA) to deliver limited income programs

Looking ahead to 2014, the redesign team will continue adapting program offerings to include new technologies, integrate demand response capabilities, and tap underserved markets. Load building and retention program to attract new efficient loads are being considered for commercial and industrial sectors. Heat pump water heaters, demand response-ready water heaters and thermostats, and Light Emitting Diodes (LEDs) are also good candidates for expanded 2014 programs. On-going work to penetrate rental markets and assist low-income customers with efficiency projects, perhaps using performance based or incentive bundling techniques, will continue to be explored and tested.

Triple Bottom Line Assessment

A triple bottom line (TBL) decision framework permeated multiple facets of the redesign work starting with developing guidelines to define overall success. A modified TBL tool was then developed to assess potential program measures against these criteria and weigh the value of each measure relevant to environmental, social and economic benefit. Measures that cumulatively had the highest weighted values were prioritized for inclusion.

Recommendation/Requested Board Action

None at this time. However, Management wants to make it clear to the Board that the proposed soft relaunch could result in acquisition of energy efficiency above the IERP target. However, the planned relaunch will not have any adverse budget or rate impact. There is existing budget set aside for the modest Q4 program demand anticipated, and EMS budget development for 2014, now underway, will follow normal protocols. The Q4 2013 launch will allow staff to evaluate customer participation levels and feedback and adjust accordingly, as well as prioritize additional programs for 2014. Findings will be shared with the Board concurrent with the next scheduled IERP update. Board action on continued set-aside funding for limited income conservation programs will offer another opportunity to discuss redesign efforts and outcomes.

New Program Features and Policy Issue Areas

Program Funding: The source of funding for EMS programs has changed over time, from EWEB bond issuance in the 1980s to budgeting on a fixed percentage of electric revenues. Since 2005, the IERP was used to set conservation targets based on 20-year load forecasts. However, current load and economic conditions create a need to re-think this methodology. Regulatory, contractual and customer service minimums need to be part of the funding equation.

The overall EMS budget will continue to be set based upon annually updated, five-year rolling average load forecast targets. However, separate budget, target goals, and cost recovery mechanisms would be set for each customer class. Residential and small business customers would be essentially funded at the level of natural demand (historically far less than the current IERP target) with marketing activity, incentive and loan levels to be used as participation levers up or down. This customer service floor would be funded by the benefiting classes, which together account for about 98% of EWEB meters.

In addition, EWEB has a special contract with its largest customer, International Paper, whereby the customer commits to implement efficiency programs in exchange for a rate credit. Natural demand and contract-required conservation will likely account for nearly 0.90 aMW of the 1.4 aMW target. Participation from other commercial and industrial customers would then be solicited to gain remaining savings, maintaining a cost-effective approach to meeting energy resource needs as well as promoting program access among all contributing customer classes.

Target Flexibility: Unlike the ‘steady state’ nature of residential conservation savings, medium and large customer projects hit budgets and impact acquisition targets more erratically. To help manage this variability, staff propose using an annually adjusted-target based on the five-year rolling average load forecast, and implement a 10% band, up or down, around the target. Staff would then have the flexibility to manage acquisition variability across multiple years. This mechanism would be self-adjusting since the following year’s load forecast would account and adjust for actual acquisition rates.

Lost Opportunity: Lost opportunities are efficiency measures that can only be economically made at the time of a facility’s opening or large equipment installation. Put another way, if not done at the front end, opportunities to gain efficiencies from these loads are lost. In addition to cost-effectiveness, economic development and load retention factors, among other considerations, can make lost opportunity projects even more attractive. In most situations, lost opportunities are known far in advance and can be budgeted/planned for, with ‘savings’ banked for later. However, to account for the occasional project that delivers very large savings, a mechanism for approval to exceed the 10% flexibility band should be established. A reserve transfer, or balancing account, should be established to smooth budget variances associated with large lost opportunity projects over time.

Portfolio Development & Valuing Measures: A primary component of energy conservation or a demand reduction measure is its monetary value to the utility; measures with a higher monetary value to the utility typically offer higher incentives. As part of the redesign effort, individual

customer programs were valued and ranked using an internally constructed evaluation tool that incorporated both avoided cost information and TBL criteria. To set incentives for individual programs that ranked highest in the evaluation, staff valued both total energy savings and potential peak load reductions for each measure. Time-differentiating this value and including a capacity value are new changes to the program incentive structure.

Other factors such as environmental benefits, job creation, limited income assistance, customer service, cost effectiveness and equity with nearby utilities may also affect incentive levels. Taking into account a TBL perspective allows for additional value adders beyond avoided cost, such as capturing lost opportunity, reaching challenging market segments, and/or helping commercialize Demand Response initiatives. There is also an emerging concern that without competitive incentive programs, more customers will choose natural gas technologies as more cost-effective. The value of load retention should be considered in setting targets, choosing programs, and defining associated incentive levels. Staff recognizes that rate design is another factor relative to these concerns and should also be addressed.

Limited –Income: Programs specific for limited income customers is another area where TBL consideration may warrant a higher incentive or program funding level than that based strictly on avoided cost levels. Staff proposes continuing to set aside funding out of the total EMS budget for specific income-eligible programs, with savings excluded from the customer service minimum designation (about 0.1 aMW of savings).

Outsourcing low income program administration, a change EWEB made in the past couple of years, helps to streamline program delivery for remaining programs given current, reduced EMS staffing levels. Staff believes it will also lower EWEB's administrative costs for low-income program delivery. EMS staff will monitor how this program delivery method works out and could consider other approaches post-2014.

¹ Natural demand is defined as the walk-in service requests from residential and small commercial customers with no advertising (estimated at 0.65 aMW of annual conservation savings).

² Measures with coincident peak value provide both total energy savings as well as help manage peak demand on the utility system over a specified period of time.



MEMORANDUM

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Rely on us.

TO: Commissioners Simpson, Brown, Helgeson, Manning and Mital
FROM: Roger Kline, Generation and Fleet Services Manager
Gary Lentsch, Fleet Supervisor
DATE: September, 6, 2013
SUBJECT: EWEB receives two national fleet awards
OBJECTIVE: Information only.

Issue

In June 2013 EWEB Fleet Services received two national honors. The Coalition for Green Fleet Management (CGFM) awarded EWEB the highest CLEANFleet Certification (Tier 5), only the second fleet in the nation to achieve this level of certification. We also received national recognition when our fleet was ranked number 16 as part of the 100 Best Fleets in North America program run by Government Fleet magazine.

Background

EWEB has a fleet of approximately 230 vehicles, ranging from bucket trucks, digger derricks, dump trucks, and cranes to vacuum trucks and hybrid passenger cars. We also have 140 auxiliary pieces of equipment including backhoes, excavators, forklifts and trailers used to provide services to our customers. Fleet Services have long been aware of the potential environmental and community impacts from the purchase, operation, maintenance and disposal of vehicles, equipment and materials so have worked over many years to manage the fleet efficiently.

Gaining CLEANFleet certification was a challenge we set ourselves to see how we measured-up at a national level and to help ensure we provide maximum benefit to our customer-owners. The certification program was developed by CGFM to certify both private and public fleet operations as energy efficient and environmentally responsible so was considered the best way to assess our fleet operations. To obtain Tier 5 Certification EWEB's environmental, purchasing, safety, facilities and fleet staff worked together to assess and improve fleet operations and information management through a variety of means, including development of a green fleet sustainability database, sustainable purchasing policy, fleet sustainability business plan and annual block training curriculum. CLEANFleet certification required detailed and specific action in 13 broad topic areas including: hazardous waste; general waste management and storage; used and recycled oil products; vehicle and equipment washing facilities; facility air quality; Freon management; contract repair work; product storage; facility management; administration including purchasing policies; vehicle replacement and carbon footprint; facilities utilities; and climate change.

Having Fleet Services located at the ROC LEED Gold facilities provided a helping-hand to gaining Tier 5 Certification as much of the energy efficiency, oil and fluids management and air quality requirements were incorporated into the design of the fleet shop.

Being recognized in the 100 Best Fleets in North America marks the third time that Fleet Services has reached the top 100 public fleets nation-wide. With more than 28,000 public fleets in North America the 100 Best Fleets program is highly competitive. Fleets are ranked on use of technology and information, evidence of high-trust culture, performance recognition, collaboration, creativity, staff development, quick and efficient turnaround, and competitive pricing. Breaking into the exclusive top 20 this year reflected the continuous improvements in sustainable operations achieved through the CLEANFleet certification.

Discussion including triple bottom line (TBL) assessment

Fleet services and the supporting team embarked on CLEANFleet certification as there were clear TBL benefits from increased vehicle and operational efficiency, decreased risk through improved staff and community safety as well as opportunities to lower environmental and community impact of fleet operations. Working towards and ultimately gaining the certification builds on EWEB's legacy of meeting customers' needs while caring for and addressing community and environmental issues and maintaining fiscal responsibility established many years ago.

CLEANFleet certification included taking a more "system's management" approach, where the process of plan/do/check/act was formalized and integrated into Fleet Services activities. This has provided a structure for the development of a culture and cycle of continuous improvement.

Many of the required practices and documents had already been developed, including the EWEB operations greenhouse gas inventory and Climate Action Plan, idle reduction guidelines and chemical use policies. In documenting all the processes necessary for the certification we found that a very useful pilot or model has been developed that we could use for other parts of the utility.

Some new initiatives to increase efficiency and decrease risk were also undertaken as part of the certification, including:

- Acids no longer used to clean truck parts- increased staff and community safety.
- Contracting with radiator vendors that are third-party Ecobiz certified- greater confidence that they are operating at a high environmental standard.
- Decreased hazardous cleaning and lubricant products over 50% from 2010 levels- creating less waste to dispose of and saving budget through bulk purchase of fewer products.
- Developed database to improve product tracking including fossil fuel, waste oil, antifreeze and other fleet fluids- lead to better management and decreased use of products.
- Enhanced staff training around safety, purchasing and environmental issues- helps avoid staff injury and spills or other environmental pollution, and purchase of unwanted products
- Development of the Fleet Sustainable Business Plan- outlines specific goals and actions to enact the TBL commitments made.
- Aligned with Sustainable Action Team and Purchasing initiatives in the development of an EWEB-wide Sustainable Purchasing Policy that is being implemented throughout the utility.

The CLEANFleet program requires re-certification every two years to ensure practices are integrated into fleet operations. In gaining and maintaining the certification EWEB is leading by example. Other organizations have already asking for copies of our sustainable polices and plans as well as tours of the fleet shop so they can learn and initiate similar practices in their organizations.

Recommendation and Requested Board action: Information only, no action requested.



MEMORANDUM

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TO: Commissioners Simpson, Brown, Helgeson, Manning and Mital
FROM: Roger Kline Generation Manager and Suzanne Adkins, FERC License Manager
DATE: September 6, 2013
SUBJECT: Walterville Pond
OBJECTIVE: Information Only

Issue

Management has been working on a developing a plan to cease filling the Walterville Pond. This memo presents a summary of the current status of the project being led by Generation Engineering with the help of Public affairs.

Background

The Walterville pond was originally intended to supplement inflows to the power plant as a pumped storage pond. Since its creation, the pond has been manually filled by operations staff during off-peak hours with four 75 cfs pumps which siphon water off from the canal. Discharge from the pond into the canal is controlled by two 4-by-20 foot radial gates. The pond has not been used for pump storage power generation for many years due to engineering/operational issues, as well as significant water quality concerns (temperature, turbidity, and nutrients) associated with pumping pond water into the river downstream of the pond. Use of the pond is also limited by restrictive ramping rates included in the FERC license for the project. The potential for future use of the facility for pump storage power generation is considered highly unlikely due to these restrictions.

There are a number of ongoing regulatory requirements set forth in the Leaburg-Walterville License that are related to Walterville Pond:

- Article 429: Vegetation management & habitat enhancement
- Article 430 & 431: Wildlife monitoring and enhancements
- Article 432: Recreation trails, parking and interpretive signage
- Dam Safety Regulations: Dam Safety Surveillance and Monitoring Plan, Potential Failure Mode Analysis and Mitigation, Emergency Action Planning, and Discharge Gate Certification

All of the FERC License obligations can continue to be fulfilled without adding supplemental water to the pond, which is not expressly required by the license.

Dam Safety Concern

During FERCs 2012 inspection, FERC observed that scouring of the Walterville Pond embankment has increased the potential for a catastrophic breach. If such an event were to occur, there is potential for loss of life and/or significant property damage in the community of Walterville. FERC responded to this concern by reclassifying the pond/canal embankment to “high” hazard. Unless the hazard has been removed, FERC will require EWEB to treat the Walterville Pond embankment as a high hazard potential structure with daily, weekly, and monthly inspections and reporting requirements required by the existing dam safety program. In addition, costly repairs would be necessary to shore the strength of the embankment.

Discussion

The decision to cease filling the pond has been internally ongoing a result of several drivers: 1) Dam safety issues associated with the canal/pond embankment; 2) staff time and O&M costs associated with a discretionary activity and 3) public health concerns due to toxic algal blooms. Because the pond is a key recreation feature of the project and is highly regarded by the public, it is important to consider multiple angles associated with no longer adding water.

Generation Engineering has been coordinating with Public Affairs and the Environmental department to consider and mitigate for impacts associated with having less water in the pond. EWEB has already initiated planning for hazard mitigation by lowering the pond elevation by 1.5-feet based the results from the FERC dam safety inspection. The remaining reductions will occur over a longer time period to help mitigate environmental and recreational impacts at the pond.

Additional incremental reductions in the water level beyond the 1.5 feet already achieved will take place at a rate of one foot per year, the drawdown would be completed no later than October 31st, 2019.

Staff from Public Affairs and the Environmental Departments is participating in regular meetings with project engineers to help identify and plan for issues associated with impacts and communication planning for public outreach.

Recommendation/Action

Information only, no action required.