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Behavior Based Energy Efficiency Programs

What are behavior based energy efficiency Programs?

Unlike traditional energy efficiency measures that focus on the adoption of energy efficient technologies such as efficient washing machines, refrigerators, and lighting, energy savings from behavior-based energy efficiency programs are achieved through changes in individual or organizational behavior and decision-making. Examples of behavior based energy efficiency programs include

- Providing residential end-users with information on their energy use, comparisons with usage by others, goal setting, rewards and additional tactics that encourage efficient energy use.
- Assisting commercial end-users to benchmark their building(s) energy use and improve operating performance through building or equipment tune-ups and changes to O&M routines.

Background

Behavior based energy efficiency programs are growing in prominence around the country and represent a source of energy savings beyond traditional utility programs focused on encouraging adoption of EE technology. There is a substantial body of knowledge and experience associated with behavior change that is rooted in the social sciences. Waste management, healthcare and transportation industries have been applying behavior based approaches for some time. Utilities and others in the energy industry are now using it as a means for encouraging energy savings. While the promise of behavior based energy efficiency programs (in terms of energy savings) is significant, there is much to be learned about effective strategies and tactics to motivate consumers, energy savings persistence, and effective methods to evaluate the energy savings.

BPA is initiating a behavior change strategy which aims to enable, validate and increase the amount and persistence of energy savings achieved through behavior based energy efficiency programs in the Northwest. BPA has initiated a regular meeting for customers to share information about behavior based programs. BPA is examining best practices, using its evaluated custom program offering to encourage regional behavior based energy efficiency program activities and providing funding for innovative behavior based energy efficiency pilot programs.

BPA's Objectives

- Monitor and assess national and regional behavior based energy efficiency programs and activities, identify and promote use of best practices.
- Create policies that help build program infrastructure that all Northwest public utilities can use to operate behavior based energy efficiency programs and achieve related energy savings.
- Collaborate with Northwest public utilities and market partners to implement and evaluate innovative behavior based energy efficiency pilot programs.

To learn more about behavior based energy efficiency programs visit www.bpa.gov/energy/n/behavior

Innovative Behavior Based Pilots

In 2011, BPA selected proposals from three public utility customers to test innovative behavior based energy efficiency approaches with promising, yet uncertain, benefits in terms of energy savings. BPA is providing financial assistance to Snohomish County Public Utility District, Cowlitz Public Utility District and Clark Public Utilities (continued)

to implement and evaluate innovative behavior-based pilot programs in the Northwest.

Snohomish County Public Utility District's pilot tests behavior change in the commercial sector. A solution for this sector would be highly attractive to utilities with small commercial facility end-users, which represent a significant untapped energy savings resource with unique barriers to participation behavior change programs. The pilot project is a joint venture between Snohomish County Public Utility District, PECI, Lucid, and Starbucks. The pilot will be implemented at several Puget Sound area Starbucks stores. If successful, the approach could be scaled to similar facilities across the region. Starbucks has over 700 stores in Washington, Oregon, Idaho and Montana.

Clark Public utilities and Cowlitz Public Utility District are both partnering with OPower, an energy information software company that uses behavioral science, such as comparing end-user energy usage to neighbors or regional averages, to achieve energy efficiency.

Clark Public Utilities' innovative behavior-based pilot centers around providing frequent energy use feedback to residential end users and the popular social media tool, Facebook.

Cowlitz Public Utility District's pilot uses digital media, such as email and text messaging, in addition to frequent energy reports, to encourage energy efficiency and by residential end users.

Results of these pilots and lessons learned will be shared with the region. Follow the progress on these pilots at on the behavior based energy efficiency webpage at www.bpa.gov/energy/n/behavior.