

BPA's Commercial Lighting Program: Managing for Change

Presented by:

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January 13, 2010

CEE Winter Program Meeting

San Francisco, California



Overview

- BPA and its role in Energy Efficiency
- Commercial Lighting Program Overview
- Managing for Change



BPA Energy Efficiency

- Energy Efficiency at the Wholesale Level
 - BPA sets specs, provides tools and infrastructure, and reimburses its public utility customers for qualified efficient lighting installations
 - Public utilities administer their own lighting programs at the retail level to meet their needs and goals
- BPA Energy Efficiency's main goal is to empower NW public utilities to collectively meet their share of the Northwest Power and Conservation Council's 6th Power Plan efficiency targets



BPA Energy Efficiency

- Wholesale approach – a different environment
 - Limited ability to control on-the-ground implementation of efficiency programs
 - Central position means that decisions can have pronounced effects over the entire region
 - These dynamics shape the wholesale program strategy
- Northwest context
 - Columbia River hydropower system provides low cost power (sub \$0.05/kWh is common)
 - Aggressive conservation targets key to keeping costs low as load grows



Commercial Lighting Program

- Comprehensive set of measures
- Deemed calculated approach
- Strong rebate levels – increased 48% in early 2009
 - \$40 for multi-lamp HP T8 retrofit
 - \$120-\$180 for new high bay fixtures (T5, T8 HO fixture)
 - \$35 - \$60 for occupancy sensors
- Regional Trade Ally Network supports contractors and utilities



Commercial Lighting Program

- 2009 regional public power deliveries of:
 - 8.79 aMW Commercial, exclusive targeted Grocery acquisitions
 - 3.67 aMW Industrial
- 2010 emphasis on continuing to grow program
 - 6th Power Plan doubles conservation targets – lighting is over 40% of potential
 - BPA strategy is to push established programs in the near term as we build capacity in other measure areas



A Changing Environment

- Higher targets – need as much lighting as we can get
- New technologies (chiefly LED)
- Code and Standard changes
 - Incandescent “phase out”, T-12 uncertainty
 - Implications unclear as manufacturers react to changes
 - Baselines may change, but top end efficiency is also changing
 - Stranded ballast a concern
 - Aggressive new construction building codes
 - Future of a programmatic approach in new construction in doubt, at least in OR and WA



Challenges

- Managing new technology
 - Variable quality of LEDs
- Capturing potential from design and controls
 - Contractor capability and interest



Managing Change: Long-Term Strategic Efforts

- Overhaul of lighting calculator tool to increase flexibility and ease of use for program managers and contractors
 - Enable more utilities to run programs
 - Capture more controls savings
 - Integrate sales tools and other features to make the calculator a resource rather than a burden
- Adding new measures, including LEDs where appropriate, to seize new opportunities
 - Incremental approach to manage risk
 - Small incentives can facilitate learning
- Increasing infrastructure support, chiefly through the Trade Ally Network, to help capture more projects
 - Recruiting contractors and building capacity
 - Technology and design training
 - Utility support

Emphasis on giving public utility customers the tools to succeed going forward



Managing Change: Near-Term Approaches

BPA public utility customers are taking many different approaches to meeting goals going forward:

- Concentrated geographic promotions
- T-12 direct install blitz
- Aggressive promotion of approved and cost-effective LEDs



Assessing Results

- aMW energy savings
- Numbers of public utilities operating programs and their satisfaction level
- Numbers of contractors investing in program participation
- Quantity of new measures offered



Questions?



About BPA

BPA is a not-for-profit federal electric utility that operates a high-voltage transmission grid comprising more than 15,000 miles of lines and associated substations in Washington, Oregon, Idaho and Montana. It also markets more than a third of the electricity consumed in the Pacific Northwest. The power is produced at 31 federal dams operated by the U.S. Corps of Engineers and Bureau of Reclamation and one nuclear plant in the Northwest and is sold to more than 140 Northwest utilities. BPA purchases power from seven wind projects and has more than 2,500 megawatts of wind interconnected to its transmission system. To learn more, visit www.bpa.gov.

BPA Energy Efficiency:

The Northwest has been a leader in treating energy efficiency and conservation as a power resource. The region learned fast that a megawatt saved is the equivalent of a megawatt produced. As of 2007, energy efficiency accounted for only one percent of all electricity production in the United States. But in the Northwest, it accounted for 10 percent thanks to collaboration among the Bonneville Power Administration, Northwest Power and Conservation Council, regional utilities, state agencies and environmental interests.

In fact, energy efficiency has been BPA's biggest resource addition for more than 25 years. The agency has acquired more than 1,100 average megawatts (aMW) of savings - more energy than either The Dalles Dam or Bonneville Dam could produce in an entire year. In fiscal year 2008 alone, BPA secured 76 aMW of energy efficiency for the Northwest - the equivalent energy to power 65,000 homes for an entire year.



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