



CONTINUING INNOVATIONS in BPA Energy Efficiency programs

The numbers are impressive. BPA and its utility customers have captured more than 1,000 average megawatts (aMW) of energy savings over the last 25 years. In FY 2008 alone, we worked together to acquire 75 aMW of energy efficiency savings. That savings exceeded the Northwest Power and Conservation Council's goal for the BPA share of public power targets by more than 40 percent.

The numbers alone can't tell one of the most important stories – how BPA and public utilities work together to constantly improve regional energy efficiency efforts. The numbers could not have been reached had the programs not been effective. And their effectiveness is based on improvement that comes from reciprocal feedback between the utilities and BPA.

Newest enhancements

On April 1, 2009, BPA Energy Efficiency released its semiannual Implementation Manual that included new approaches and new options to further the regional energy efficiency partnership. The changes focused on streamlining administrative processes, increasing incentives and expanding successful programs.

For example, the administrative allowance was replaced by a performance payment that reduces utility administrative requirements; and reimbursement levels for commercial, industrial and agricultural lighting projects increased an average of 48 percent. Increased incentives for residential window replacements and expanding eligibility for heat pump conversion incentives were other positive changes.

Earlier enhancements

The changes included in the April 2009 Implementation Manual complement numerous prior enhancements made during the current rate period that began in FY 2007. Many of the earlier enhancements were also designed to make the cost and implementation of the programs more attractive and simpler for utilities to implement. On the expense side, BPA increased the administrative cost allowance from 15 percent to 20 percent for most utilities. Small utilities retained their 30 percent allowance. Reporting was made easier with user-focused updates to the Planning, Tracking and Reporting system.

The BPA Change a Light Northwest compact fluorescent light (CFL) program, a hugely successful residential offering, was improved with new opportunities that allow utilities to purchase CFLs in bulk and to have them delivered to their customers through direct mail. BPA also recognized the growing importance of specialty CFLs and increased reimbursements for them.

The improvements were not limited to residential programs. BPA, in response to utility requests, designed and implemented turnkey offerings, including the EnergySmart Grocer and the Green Motors Initiative programs.

Looking forward

BPA isn't resting on its laurels. In partnership with regional stakeholders, BPA is working with retailers and manufacturers to increase production of high-efficiency consumer and office electronics. The





CONTINUING INNOVATIONS in BPA Energy Efficiency programs

agency is working with utilities to develop innovative approaches to delivering industrial energy efficiency programs within the region, and is continually monitoring and optimizing program tools and program delivery mechanisms in the residential, commercial and agricultural sectors as well. New

Demand Response pilot programs look at ways to help utility customers mitigate impacts of increased demand charges, and the proposed Pacific Northwest Smart Grid Test Bed Project will lay the foundation for Smart Grid to enhance the safety, reliability and efficiency of regional energy delivery.

Newest BPA Energy Efficiency Enhancements

Beginning April 1, 2009

GENERAL and CROSS-SECTOR

| ENHANCEMENT | DESCRIPTION |
|--|--|
| Custom Projects Expanded eligibility | Custom project cost/annual energy cost savings is reduced from one year or greater to six months or greater, and the expected annual energy savings threshold triggering between the Standard and Light Measurement and Verification (M&V) Plans was increased from 75,000 kWh per year or greater to 200,000 kWh per year or greater. |
| Commercial and Industrial (C&I) Lighting Increased incentives, streamlined tools and processes | Reimbursement levels for existing building lighting projects with completion dates Jan. 1, 2009, or later increased an average of 48% in the Commercial, Industrial and Agricultural sectors. Additionally, the C&I Lighting Calculator spreadsheet is enhanced for increased usability and custom project processes and reporting is clarified and streamlined. |
| Direct Acquisition Streamlined process | Customers may participate in Direct Acquisition programs through a process that eliminates Consent and Consent Plus Agreements. Additionally, customers have the option to use their Conservation Rate Credit (CRC) funds to buy back energy savings from Direct Acquisition programs. |
| Energy Trust of Oregon Added as a qualifying organization | The Energy Trust of Oregon (ETO) is added as a qualifying organization for CRC contributions. This allows BPA customer utilities in Oregon to participate in the BPA/ETO Hospitality Initiative and potential future ETO programs. |
| Performance Payment Reduced reporting requirements | The Administrative Allowance is replaced with a Performance Payment, eliminating the need for the Agreed Upon Procedures reporting and adjusts requirements. |
| CRC Early Start | Customers who have satisfied their FY 2007-2009 CRC are offered an early start option for FY 2010-2011 CRC. |

AGRICULTURAL

| | |
|---|---|
| Green Motors Initiative Expanded eligibility | The Green Motors Initiative, previously available under the Industrial sector, is available for incentives for Agricultural applications. |
| Irrigation fixtures Increased incentives | Reimbursements increased \$1 per unit for several fixture types. |
| Scientific Irrigation Scheduling (SIS) Light Program expanded to include smaller acreages | The SIS measures expanded to include farms with 1,000 or less qualified acres. Savings of 220 kWh over three years (75 kWh/acre/year) receive an incentive of \$6 per qualified acre/year. |
| Variable Frequency Drives (VFD) Extended to include spud and onion sheds | Customers with VFD needs in spud and onion sheds can now receive a deemed savings/reimbursement for installations. Incentive levels are 1,000 kWh/hp savings with a reimbursement of \$200/hp/VFD installation. |

| COMMERCIAL | |
|--|---|
| ENHANCEMENT | DESCRIPTION |
| Hospitality Initiative New program | BPA customer utilities in Oregon may participate in the BPA/ETO Hospitality Initiative to support the installation of lodging and food service measures. |
| Rooftop Unit Service New program | The 2009 Rooftop Unit Service pilot program is designed to test approaches to improve the operating efficiency of existing packaged rooftop HVAC units. |
| EnergySmart Grocer Increased incentives | Incentives increased on 21 measures, including doors, case lighting, condensers, compressors, door sealing, motors, night covers and anti-sweat heat controls. |
| INDUSTRIAL | |
| Technical Service Provider Additional assistance available | BPA offers assistance options during the Technical Service Provider (TSP) process. |
| Green Motors Initiative Decrement waived | Energy savings acquired under the Green Motors Initiative are not subject to decrement; |
| Variable Frequency Drives Streamlined process | VFDs applied to a single air compressor of less than 75 hp may use the small compressed air calculator spreadsheet (approved by the Regional Technical Forum) for measurement and valuation of custom projects. |
| RESIDENTIAL | |
| Window Replacement Increased incentive | Reimbursement for Prime Window replacement increased to \$6 per square foot of glazing area of qualified windows replaced. |
| Heat Pump Conversions Expanded eligibility | HVAC conversions from electric forced air furnace to an air source heat pump are added. |
| Heat Pump Upgrades Expanded eligibility | Manufactured homes are eligible for all heat pump upgrades in all heating zones. |
| ENERGY STAR® Appliances and Fixtures Streamlined process | To reduce burdensome documentation requirements, additional options are now available for documentation of ENERGY STAR appliances and fixtures. |
| Attic Insulation Increased incentives | Reimbursement is available for attic insulation up to R-49 in all three heating zones. |
| Montana House New construction eligibility | Reimbursement are added for new residential construction meeting the Montana house specifications (available only in Montana). |

Other BPA Energy Efficiency Enhancements

FY 2007-2009 Rate Period (prior to April 1, 2009)

| GENERAL | |
|--|---|
| Benefit/Cost Ratio Expanded eligibility | Total Resource Cost Benefit Cost Ratio (TRC B/C) is applied to custom projects. Avoided cost may be used for this calculation. |
| Administrative Cost Increased allowance | Administrative cost allowance increased (from 15% to 20%; small utilities remains 30%). |
| Procedures Reduced requirements | Reduced requirements for the "agreed upon procedures" reporting. |
| Planning, Tracking and Reporting (PTR) System Usability enhancements | Numerous enhancements completed in 2007 and 2008. In 2009, a consultant has been engaged to provide strategic and technical support to develop a long-term plan for planning, tracking and reporting energy efficiency accomplishments. |



CONTINUING INNOVATIONS in BPA Energy Efficiency programs

RESIDENTIAL

| ENHANCEMENT | DESCRIPTION |
|--|---|
| BPA Change a Light Northwest New opportunities | A new option allows utilities to purchase high-quality CFLs (Compact Fluorescent Lights) in bulk quantities. A direct-shipment program allows utilities to purchase CFLs and have them shipped directly to their residential customers. |
| Specialty CFL and Hard-to-reach CFL Increased incentives | Increased reimbursement for specialty CFL bulbs, added two new CFL specialty measures, and provided an opportunity for increased reimbursement for special distribution opportunities. |
| Direct Install ENERGY STAR CFLs New incentive | Increased reimbursement for documented, direct-installed ENERGY STAR CFL bulbs. |
| Ductless Heat Pump New program | Sponsored NEEA's Ductless Heat Pump pilot program to determine costs and energy saving potential of ductless heat pumps. Provided reimbursement for qualified Ductless Heat Pump applications. |
| ENERGY STAR Freezers and Light Fixtures Increased incentives | Increased reimbursement for eligible ENERGY STAR freezers from \$12 to \$25 and from \$2.50 to \$10 for eligible ENERGY STAR light fixtures. |
| Refrigerator and Freezers Recycling Increased incentives | Increased reimbursement for refrigerator and freezer decommissioning and recycling from \$85 to \$125. |
| Low Income Window Replacements Increased incentives | Increased reimbursement for window replacement in low income households to cover expenses up to \$20 per square foot of glazing replaced. |
| PTCS Heat Pump Measures unbundled Expanded eligibility | Unbundled the Performance Tested Comfort System (PTCS) measures (commissioning and controls, duct sealing) and offered credits/reimbursements for both as stand alone measures. |

COMMERCIAL • INDUSTRIAL • AGRICULTURAL

| | |
|--|--|
| Building Insulation Expanded eligibility | Expanded eligibility for insulation of whole buildings with individual spaces. |
| Turnkey Programs New programs | Implemented the EnergySmart (Grocery) and Green Motors Rewind programs. |
| C&I Lighting Increased reimbursements | Increased C&I Lighting reimbursements for standard T-8 commercial lighting. |
| Energy Smart Design® Office Increased incentives | Increased incentives for commercial lighting, HVAC, windows, thermostat instruments and enhanced economizers in the Energy Smart Design program. |
| Custom Projects Increased incentives | Increased incentives for custom projects: <ul style="list-style-type: none">• Commercial and agricultural retrofit: 20 cents/kWh• Industrial retrofit: 17 cents to 20 cents/kWh• Commercial, agricultural, industrial new construction: 27 cents/kWh |