



# Energy Efficiency

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## Exhibit 10 2012 Q1 & Q2 NEEA Report

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*August 15, 2012*



**PUGET SOUND ENERGY**  
*The Energy To Do Great Things*



## FIRST AND SECOND QUARTER 2012 REPORT FOR PUGET SOUND ENERGY

The Northwest Energy Efficiency Alliance (NEEA) is a non-profit organization working to accelerate energy efficiency to meet the future energy needs of the Northwest. NEEA is supported by, and works in collaboration with, the Bonneville Power Administration, Puget Sound Energy and more than 100 Northwest utilities on behalf of 12 million energy consumers. NEEA uses the market power of the region to accelerate the innovation and adoption of energy-efficient products, services and practices.

Puget Sound Energy benefits from NEEA's market transformation work to accelerate the market adoption of energy-efficient products, services and practices, and to fill the energy efficiency "pipeline" with emerging technologies. NEEA works "upstream" to expand the market for energy efficiency and complements utility programs without duplicating efforts. NEEA's regional advantage allows Puget Sound Energy and other Northwest utilities to leverage the market power of the entire region to realize economies of scale.

As a key funder, Puget Sound Energy expects to invest \$26.3 million in NEEA from 2010-2014. In 2012, Puget Sound Energy has committed \$5.2 million in NEEA, approximately 14% of its total funding. This report summarizes NEEA's value delivery to Puget Sound Energy for the first and second quarters of 2012. For additional information about NEEA's unique value to the region, history, structure and recent initiatives, please visit [www.neea.org](http://www.neea.org).

## FILLING THE ENERGY EFFICIENCY 'PIPELINE' FOR PUGET SOUND ENERGY

NEEA's top focus, as prioritized by stakeholders, is to scan the market for energy efficiency opportunities and drive the acceptance and availability of promising new technologies and practices. In partnership with its funders, including Puget Sound Energy, NEEA is now actively engaged in more than 17 projects investigating technologies and practices that will have broad benefits for Puget Sound Energy and the region.

### *First and Second Quarter Highlights:*

- Scanned the market for emerging technologies, identifying and advancing a number of opportunities with significant savings potential (i.e. super-efficient clothes dryers utilize heat pump technology have the potential to save the region 300 kWh/unit/year).
- Collaborated with Puget Sound Energy to field-test real world applications of heat pump water heaters - 7 of 30 test units installed in PSE territory; Led process to have provisional unit energy savings for Tier 2 HPWHs approved by the Regional Technical Forum, an important step in bringing Tier 2 HPWHs to the market.
- Held Heat Pump Water Heater Collaboration workshop with nearly 50 participants from around the region, including representatives from Puget Sound Energy. The objective of the workshop was to gain alignment on a unified, regional strategy for heat pump water heaters, and to identify key market barriers and opportunities.
- Trained and oriented more than 300 installation contractors to heat pump water heaters to further the availability of proficient technicians across the region, including Puget Sound Energy territory.
- Provided five \$1,000 consumer rebates on Tier 2 heat pump water heaters in Puget Sound Energy territory. Rebates serve to engage the supply chain, overcome cost barriers, and influence manufacturer product development.
- Organized successful regional symposium, and completed important visual performance study, of LED streetlights with controls with the City of Seattle. Early results of the study, which will inform the municipal application of solid-state streetlights across Puget Sound Territory and the region, indicate that contrast

is more important than light level in ensuring good object detection on arterial roadways; final report expected in fall of 2012.

- Engaged Puget Sound Energy and other Northwest utilities in proof-of-concept study of luminaire-level lighting controls. Lighting controls have the potential to deliver large energy savings to Puget Sound Energy consumers. Puget Sound Energy is sponsoring a test site at the REI headquarters in Kent, WA. NEEA's final report expected at the end of 2012. Early results indicate 50% savings over baseline.

## ACCELERATING MARKET ADOPTION

NEEA intervenes to remove barriers to market adoption of energy-efficient products, services and practices. In partnership with Puget Sound Energy and our other funders, NEEA designs and executes strategic market interventions to create lasting change and deliver long-term savings to the region.

### Residential

The Northwest Power and Conservation Council's 6th Power Plan projects that energy efficiency in the residential sector could save the region more than 3,000 aMW by 2030 - enough to power over 2 million Northwest homes each year. NEEA accelerates the delivery and adoption of energy-efficient products and services through its residential sector initiatives: Efficient Homes, Televisions, and Ductless Heat Pumps.

#### *Residential Highlights:*

- NEEA partners upstream with major retailers to sell and promote the "most-efficient" TVs through retailer incentives, trainings, and marketing and field service support. During the first half of 2012, NEEA visited 133 participating retail locations in Puget Sound Energy territory, distributing over 532 pieces of point-of-purchase material, and delivering 181 training sessions with sales associates. As a result of NEEA's activities, 2011 market share of most-efficient televisions is 45%.
- NEEA works in collaboration with Puget Sound Energy to provide training and other resources to builders and appraisers to expand market capacity for energy-efficient homes. During the first half of 2012, NEEA responded to request to provide Advanced Framing training to builders and verifiers in PSE territory to help them meet the framing requirements of the new Northwest ENERGY STAR Homes specification. As a result of these and other program efforts, state providers certified 129 homes in PSE territory as Northwest ENERGY STAR Homes from January to June. Year to date, market share of Northwest ENERGY STAR Homes in Washington is 5.3%.
- NEEA, in collaboration with Puget Sound Energy, is accelerating the market adoption of ductless heat pumps (DHPs) in electrically heated homes. During the first half of 2012, NEEA partnered with Mitsubishi to expand regional promotion of ductless heat pumps and ensure quality installations. In PSE territory, NEEA performed four site inspections to ensure quality installation and obtain customer feedback to gauge consumer satisfaction. NEEA promoted DHP retail sales by facilitating the placement of ductless technology in six The Home Depot locations in PSE territory. As a result of these and other program activities, contractors installed 469 DHPs in PSE territory during the first half of 2012.

### Commercial

NEEA works with commercial real estate firms, healthcare facilities, building owners and operators, trade allies and other key market actors to accelerate the adoption of energy-efficient products, services and practices within the commercial sector. The following are highlights from NEEA's 2011 commercial initiatives:

#### *Commercial Highlights:*

- In Q2, NEEA, BOMA King County and Puget Sound Energy announced the winners of the Kilowatt Crackdown building efficiency competition. The awards recognized 15 buildings and 10 real estate firms for leadership in energy management. Participating companies, including many of the Puget Sound's leading real estate firms, collectively delivered more than 2.75 aMW in Total Regional Savings.
- NEEA works with commercial real estate leaders to track, manage and enhance portfolio-wide building energy performance, and supports firms to build the organizational vision, goals and expertise to sustain these changes. In the first half of 2012, NEEA provided energy management training for 15 building operations staff at Kidder Mathews, one of the largest commercial real estate firms in Puget Sound Energy territory. NEEA facilitated a meeting between Puget Sound Energy and Kidder Mathews resulting in a

decision to implement two incentive programs on 1.5 million square feet and a potential pilot to pay 100% of incremental cost on 25 rooftop units across approximately three million square feet.

- NEEA-supported Seattle Integrated Design Lab conducted energy audits of four-block area within the Seattle 2030 District. Co-founded by NEEA, the Seattle 2030 District is a high-performance building district in downtown Seattle that aims to dramatically reduce building energy consumption 50% below national average by 2030.
- NEEA's Building Operator Certification (BOC) Expansion provides skill enhancement training to improve building energy performance through operation and maintenance best practices for HVAC, lighting, and controls systems. From January to June 2012, NEEA conducted four BOC Expansion technical webinars for building operators served by Puget Sound Energy.

### Industrial/ Agricultural

Within the industrial and agricultural sectors, NEEA increases demand for strategic energy management systems by targeting industry cluster groups to set industry-wide energy intensity reduction goals. NEEA increases the market's capability to meet this increased demand by working with its regional utility partners to provide tools and training.

#### *Industrial Highlights:*

- During the first half of 2012, NEEA provided in-class and webinar-based training to 16 Puget Sound Energy customers from five different facilities to promote best-practices for industrial energy efficiency. Trainings offered were: Industrial Refrigeration Systems, Adjustable Speed Drives, Advances in Lamps and Ballasts, Energy Efficiency Financial Analysis, and Energy Management Opportunities for Industrial Customers.
- NEEA launched a research effort in 2012 to identify all industrial facilities in the Northwest and model estimated energy use at each facility. Results of the study will help inform the direction of the Small Medium Industrial initiative, which is creating approaches to embed strategic energy management into small to medium sized industrial businesses.

### Codes & Standards

NEEA supports energy codes development, training, and education in Washington State in partnership with the Department of Commerce, the Washington State University Energy Extension Program and the Northwest Energy Efficiency Council. More stringent codes and standards play an important role in helping the Northwest secure long-term energy savings. The Northwest Power and Conservation Council's 6th Power Plan estimates that over 40 percent of Northwest energy efficiency savings between now and 2030 will come from increased codes and standards.

#### *Codes & Standards Highlights:*

- During the first half of 2012, NEEA participated in federal standards rule-makings for pumps, commercial icemakers, LED lighting, High Intensity Discharge lighting, alternative efficiency determination methods, set top boxes, television test method, furnace fan test method, battery chargers, external power supplies and ASHRAE products. NEEA is among a handful of energy efficiency organizations that routinely provide data and analysis to inform U.S. Department of Energy test procedures and influence more stringent national energy efficiency standards.
- NEEA participated heavily in the Washington State code-development process, which will create the 2013 building code and completed energy code trainings in Poulsbo, Olympia, Mercer Island and Bremerton.

## DELIVERING ON REGIONAL ADVANTAGE

NEEA is the only alliance of public and private electric utilities with national and global upstream market partners that represents the entire four-state region in the Northwest. NEEA aggregates resources to take advantage of economies of scale and mitigate risk to individual utilities. .

#### *First and Second Quarter Highlights:*

- From January to June, NEEA continued to facilitate regional collaboration and information-sharing through Conduit (<http://conduinw.org>). Developed in partnership with BPA and launched in 2011, Conduit has over 1,400 energy efficiency stakeholders registered, or 39% of utility energy efficiency staff (50% of 2012 goal).

- Delivered the region's first energy efficiency messaging platform and toolkit. This work was done in partnership with the Regional Marketing Coordinating Council, which includes Puget Sound Energy staff. The toolkit is available to Puget Sound Energy and was designed to accelerate program implementation and support marketing and outreach efforts.
- Organized a Regional Retail Strategy Summit to explore scenarios for a coordinated retail strategy. By implementing a coordinated retail strategy Northwest Utilities will have ability to capture more energy savings, increase leverage and deepen partnerships with retailers, access better data, and improve cost efficiency in program delivery. Participants included representatives from Puget Sound Energy, other Northwest utilities and major retailers.
- Placed two articles in the *New York Times* describing the region's strategy to increase market adoption of ductless heat pumps and Most-Efficient televisions. Supporting the region to increase consumer awareness and adoption of energy-efficient products is a key NEEA market transformation strategy.
- Completed the Northwest Commercial Buildings Market Characterization project to develop a better understanding of the size of the commercial buildings market in the Northwest. The final report is scheduled for release in Q3. Critically, this effort produced a catalogue of commercial buildings in the Northwest, which will serve as part of the sample frame for the Commercial Building Stock Assessment.
- Launched Commercial Building Stock Assessment (CBSA) and selected primary contractor. The CBSA will support Puget Sound Energy's program planning efforts, and will play an important role in informing the development of the 7th Northwest Power Plan. Visit [www.neea.org/cbsa](http://www.neea.org/cbsa) for more information.
- NEEA's Market Research and Evaluation group issued the following third-party reports in 2012:
  - [2011 Water Heater Market Update](#)
  - [Strategic Energy Management Market Assessment Study: Food Processors and Beverage Manufacturers](#)
  - [Strategic Energy Management Assessment Study: Small, Medium, and Metals Manufacturers](#)
  - [Strategic Energy Management Assessment Study: Dairies, Irrigators, and Nurseries](#)
  - [Northwest ENERGY STAR Homes Program: Eighth Market Progress Evaluation Report](#)
  - [Montana Residential Energy Code Compliance](#)
  - [Ductless Heat Pump Impact & Process Evaluation: Field Metering Report](#)
  - [NEEA Market Progress Evaluation Report #4: 80 PLUS](#)

## REGULATORY AND COMPLIANCE PARTICIPATION

NEEA staff, management and Board members interact directly with Commissioners and their staff as well as indirectly, through utilities. During the reporting period, NEEA participated in the following activities with regulatory or legislative bodies:

- NEEA's Executive Director Susan E. Stratton met individually with Washington Utility and Transportation Commissioners Oshie and Jones, as well as key members of their staff. These meetings were planned as an opportunity for Susan to meet the Commissioners, and as such details of NEEA's work were not discussed.
- Key NEEA staff, including Susan Stratton, attended National Association of Regulatory Utility Commissioners in June. Jeff Harris, NEEA's Director of Emerging Technology, made a presentation to the conference on NEEA's emerging technology work however NEEA was not discussed separately in any detail with any regulators.

## ADDITIONAL INFORMATION

For additional information NEEA's [2011 Quarterly Performance Reports](#) and the [2011 Annual Report](#) are available online.

Questions or comments on this report? Please contact:  
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