



Exhibit 10

Northwest Energy Efficiency Alliance (NEEA) Report of 2014 Activity





NEEA 2014 REPORT FOR PUGET SOUND ENERGY

The Northwest Energy Efficiency Alliance (NEEA) is a non-profit organization working in collaboration with Puget Sound Energy, the Bonneville Power Administration, Energy Trust of Oregon and more than 140 public and private Northwest utilities to accelerate the innovation and adoption of energy-efficient products, services and practices in the Northwest.

NEEA's unique role in the region is to achieve Market Transformation. On behalf of its funders, NEEA intervenes in the market to create lasting change, by removing identified barriers or exploiting opportunities to accelerate the adoption of cost-effective energy efficiency. As a regional collaborative, NEEA provides value and mitigates risk to individual funders by leveraging the power of 13 million Northwest energy consumers, identifying economies of scale, aggregating resources and sharing and synthesizing knowledge.

In 2014, Puget Sound Energy invested \$4.45 million in NEEA, approximately 13.5 percent of NEEA's total annual budget. This report summarizes NEEA's 2014 regional energy efficiency activities on behalf of Puget Sound Energy. For additional information about NEEA's unique role in the region, NEEA's history and recent initiatives, please visit <u>www.neea.org</u>.

2015-2019 BUSINESS AND STRATEGIC PLANNING

In 2014, NEEA's Board of Directors, including representation from Puget Sound Energy, approved NEEA's 2015-2019 Strategic and Business Plans. The plans, which were developed in collaboration with the region, will guide the direction of NEEA's market transformation activities over the next five years.

NEEA's vision is that energy efficiency is a cornerstone of a vibrant sustainable Northwest. NEEA will guide its efforts to achieve this vision by two interdependent strategic goals:

1. Fill the Energy Efficiency Pipeline with new Products, Services and Practices

2. Create market conditions that will accelerate and sustain the market adoption of emerging energy efficiency products, services, and practices.

The 2015-2019 Business Plan identifies four strategic markets in which NEEA will focus its market transformation efforts over the next five years: Consumer Products, Commercial New Construction, Residential New Construction, and Commercial Lighting. The plan also calls for NEEA to continue to deliver data services, regional studies, and other resources to the region such as the annual Efficiency Exchange conference and Conduit, an online collaboration tool and resource dedicated to Northwest energy efficiency professionals.

Between 2015 and 2019, the region's investment in NEEA will result in significant energy savings in both the near and long-term. NEEA forecasts that the region will benefit from at least 145 aMW of total regional energy savings by 2019, and 365 aMW by 2024, from an investment of \$168.6 million over five years.

NEEA's Business and Strategic Plans are available for download at <u>neea.org</u>.

FILLING THE REGION'S ENERGY EFFICIENCY PIPELINE

NEEA's first strategic goal is to fill the region's energy efficiency pipeline with new products, services, practices and approaches. To deliver on this goal, NEEA scans the market for new, untested technologies, accepts unsolicited proposals, and manages a portfolio of projects with the highest potential for market transformation success. New ideas are evaluated against three main criteria: 1) does the idea save energy; 2) is it commercially available in the Northwest; and, 3) is there a large market potential. If the idea meets these three criteria, it is subjected to a secondary screen – is there potential for market transformation. Ideas that meet all of these criteria are advanced in NEEA's market transformation portfolio for further testing and investigation.

NEEA works in collaboration with Puget Sound Energy through the Regional Emerging Technology Advisory Committee, and NEEA's sector Advisory Committees, to facilitate regional coordination of emerging technology planning and activities. In 2014, NEEA investigated emerging energy efficiency opportunities representing technical savings potential¹ for the region of more than 1,700 average megawatts (aMW).

2014 Emerging Technology Highlights

Combination Heat Pump Water Heaters/ Ductless Heat Pumps – On behalf of its funders, NEEA leveraged its successful ductless heat pump (DHP) initiative to negotiate with a large manufacturer to develop a combination heat pump water heater (HPWH) and ductless heat pump. NEEA estimates that combined space and water heaters could be up to twice as efficient as traditional water heaters. Moreover, because they take up less room than a heat pump water heater, they are well-suited for smaller multi-family residences. In 2014, NEEA initiated field testing of the first combination HPWH/ DHP prototype and is providing test data and customer feedback directly to the manufacturer. The product is expected to enter the market sometime in 2015. NEEA estimates that the regional technical savings potential for this product is 194 aMW.

Super-Efficient Clothes Dryers – Clothes dryers use more energy than any other appliance in the home – more than washers, refrigerators, stoves and dishwashers combined. In 2014, NEEA worked with manufactures to bring super-efficient heat pump dryers, common in Europe and Asia, to the Northwest. NEEA conducted lab and field testing of the first two heat pump clothes dryers developed for the U.S. market. NEEA also supported manufacturers in developing Northwest-specific market-launch strategies for their products, and conducted testing on traditional dryers to establish a performance baseline. As a result, the first super-efficient dryers entered the Northwest market in late 2014. NEEA estimates that the regional technical savings potential for this product is 182 aMW.

¹ Technical savings potential is an estimate of the entire market for a technology, multiplied by the savings rate per unit over 20 years.

High-Performance Manufactured Homes – In 2014, NEEA partnered with the Bonneville Power Administration to fund the construction and monitoring of eight prototype high-performance manufactured homes. These homes incorporate some of the latest energy-saving features and technology, including: ductless heat pumps, heat pump water heaters, efficient lighting, windows and insulation. Data and learnings collected from the prototype homes will be used to develop a highperformance specification for manufactured homes in anticipation of a new federal standard. NEEA estimates that the regional technical savings potential for high performance manufactured homes is 29 aMW.

Commercial Secondary Glazing Systems – In 2014, NEEA completed product testing of Secondary Glazing Systems (SGS) at Lawrence Berkeley National Laboratory. Secondary Glazing Systems (SGS) are commercial grade high-performance windows that can be installed on the inside of buildings without replacing the existing windows. As a next step, NEEA will work with national partners to adopt a new standardized test methodology and develop a specification to become an industry standard. NEEA estimates that the regional technical savings potential for this product is 112 aMW.

Commercial New Construction - In partnership with NEEA, the New Buildings Institute (NBI) developed and released the Advanced Buildings New Construction Guide in 2014. The guide is a building efficiency specification representing the next step toward net-zero energy buildings. A NEEA-supported study confirmed the Guide will help building owners/designers achieve new construction project efficiencies with up to 40% energy savings over code-compliant buildings. NEEA estimates that the regional technical savings potential for energy efficiency advancements in new construction is 57 aMW.

ACCELERATING MARKET ADOPTION WITH PUGET SOUND ENERGY

NEEA's second strategic goal is to create market conditions that will accelerate and sustain the market adoption of emerging energy efficiency products, services, and practices. In partnership with Puget Sound Energy and other funders, NEEA designs and executes strategic market interventions to create lasting change and deliver long-term savings to the region. In 2014, NEEA is forecasting that total regional savings² associated with its initiatives will be 118 aMW³. Of these savings, 46% are from previously funded initiatives – those that NEEA no longer actively manages but continue to deliver savings to the region.

2014 Residential Highlights

HEAT PUMP WATER HEATERS (HPWH) – On behalf of its funders, including Puget Sound Energy, NEEA works upstream with manufacturers, retailers and distributors to accelerate the market adoption of high-efficiency heat pump water heaters (HPWHs) across the region and in the Puget Sound Area. Puget Sound Energy is a member of NEEA's Heat Pump Water Heater working group. In 2014, NEEA:

• Provided 271 Smart Water Heat consumer rebates to Puget Sound Energy customers on Tier 2 heat pump water heaters. Rebates serve to engage the supply chain, overcome cost barriers to consumers, and influence manufacturer product development.

² Total regional savings are the energy savings associated with all market changes and include savings from NEEA's programs, local utility programs, and naturally occurring market changes.

³ Final validated savings for 2014 will be available in May, 2015.

- Designed and implemented retail, manufacturer and wholesale promotions of Tier 1 heat pump water heaters to increase product availability, reduce cost barriers and raise consumer awareness. Deeper manufacturer engagement resulted in 11 manufacturer/retailer promotions scheduled throughout 2014, increasing manufacturer funds toward product mark-downs and promotional activities. NEEA facilitated Puget Sound Energy's participation in General Electric

 (B), The Home Depot (B) - Rheem (B), and A.O. Smith (B) promotions by creating customized pointof-purchase materials, communications and direct mailing pieces.
- Performed over 200 Quality Assurance inspections and conducted 55 Smart Water Heat installer orientations in the Puget Sound Energy territory to train the contractor network, verify installation quality and eligibility, and support contractor engagement.
- Accelerated the development of the first Tier 3 Heat Pump Water Heater by providing an upstream incentive to GE Appliances[®]. As a result, the Tier 3-compliant GE GeoSpring[™] entered the market two years ahead of its original schedule. The GeoSpring is up to 69% more efficient than a standard water heater and was designed with features added specifically for cooler climates.

Northwest ENERGY STAR ® Homes/ Next Step Homes –NEEA is working to transform the residential new construction market by offering builders the tools they need to adopt advanced building practices, and by providing regional marketing, recruitment and training support in Puget Sound Energy's territory. Through its Next Step Homes pilot, NEEA and its funders are identifying the most cost-effective methods for achieving the greatest amount of energy savings, while paving a pathway for future code adoption. In 2014, NEEA obtained commitments from 14 builders across the region (6 in the Puget Sound Energy territory) to build Next Step Pilot Phase II Homes, in addition to the 12 Phase I Homes built previously. Phase II Homes will continue to inform the Next Step Home specification and determine its associated challenges, best practices and energy savings performance.

Puget Sound Energy is a member of NEEA's Next Step Homes working group, and partnered with NEEA in 2014 to launch a paid media campaign that spread awareness for Northwest ENERGY STAR Homes to Puget Sound Energy customers in the greater-Seattle area. NEEA also provided additional marketing support to Puget Sound Energy in the form of a campaign landing page and customized social media content, a media buy targeting PSE customers, and a promotional video communicating the value and benefit of energy efficient homes feature PSE as an industry leader. In 2014, over 140 homes were certified Northwest ENERGY STAR homes in the Puget Sound Energy territory.

Ductless Heat Pumps (DHP) - In 2014, NEEA partnered with Puget Sound Energy, Mitsubishi ® and Sears ® to raise awareness of the utility's ductless heat pump rebate program by placing rebate information on Mitsubishi ductless displays in Puget Sound area Sears stores. In addition, NEEA coordinated with Puget Sound Energy on public service announcements designed to raise awareness and demand for ductless heat pump technology. Radio and Television PSAs directed Puget Sound Energy customers to a specific utility landing page. NEEA also expanded the ductless heat pump installer base in the Puget Sound Energy territory by recruiting 18 Master Installers, and conducting 8 Best Practices Installation webinars. For the first time in 2014, NEEA worked with manufactured homes builders to offer consumers ductless options, and to accelerate the adoption of ductless heat pump sin the manufactured homes market. Puget Sound Energy is a member of NEEA's Ductless Heat Pump working group.

Retail Product Portfolio (RPP) Pilot – In 2014, NEEA launched the Retail Product Portfolio (RPP) initiative, which aims to leverage NEEA's existing retail partnerships to expand energy-efficient retail product availability and drive efficient product manufacturing and standards. NEEA recruited five national retailers to participate in the RPP pilot, including new buying groups outside of consumer electronics. Securing participation from retailers other than those focused on consumer electronics is

critical for the success of the pilot. Puget Sound Energy is a member of the RPP Utility Work Group, which provides NEEA with broad-based advice, experience and feedback. This feedback will be used to influence NEEA's work toward achievement of the RPP initiative goals and utility alignment.

Most Efficient Televisions – In 2014, NEEA transitioned its Most-Efficient Televisions initiative out of its active market transformation portfolio. By pooling resources, coordinating market interventions and negotiating as a region, NEEA and its partners had a measurable and lasting impact on the television market. Total regional savings associated with this initiative were 139 aMW between 2010 and 2014. NEEA will no longer invest in market transformation activities, but will continue to monitor market progress and report the resulting energy savings.

2014 Commercial Highlights

Commercial Real Estate – NEEA's Commercial Real Estate initiative promotes and fosters energyefficient practices among building owners by supporting them to manage and enhance building energy performance as a measurable asset. By engaging leading commercial real estate firms to adopt Strategic Energy Management (SEM) practices, NEEA and Puget Sound Energy are helping make energy efficiency competitive and quantifiable for commercial properties in Puget Sound Energy's territory. In 2014, NEEA provided guidance and support to Puget Sound-based firms Kidder Mathews ®, JSH Properties ®, and Stephen C. Grey & Associates ® to adopt Strategic Energy Management practices. Additionally, scoping training for JSH Properties engineers, which Puget Sound Energy staff attended, resulted in the firm extending these best practices from Seattle to Bellevue and Renton portfolios. Note: In NEEA's 2015-2019 Business Plan, Commercial Real Estate will be an optional program for funders.

EXISTING BUILDING RENEWAL (EBR) – In 2014, NEEA launched the development of the Existing Building Renewal (EBR) online integrated technical and financial analysis tool, which will quantify the benefits of implementing deep energy retrofits. This innovative tool, which will debut in early 2015, will allow commercial building owners in the Puget Sound Energy territory to estimate retrofit cost and resulting energy savings, as well as evaluate real estate market value improvements. Note: In NEEA's 2015-2019 Business Plan, Existing Building Renewal is no longer an independent initiative, but part of NEEA's Commercial Real Estate infrastructure program and optional for funders.

Building Operator Certification (BOC) Expansion – Through the Building Operator Certification Expansion initiative NEEA provides training to improve building energy performance in the Puget Sound Energy territory through operation and maintenance best practices for HVAC, lighting, and controls systems. In 2014, NEEA trained over 100 operators in BOC courses in Puget Sound Energy's service area and conducted one BOC Technical Webinar serving more than 200 Northwest operators with continuing education in energy efficiency. In 2014, BOC training achieved designation as a General Services Administration (GSA)-aligned training for building operators to earn the BOC credential, leading to increased market penetration across the region.

Luminaire-Level Lighting Controls (LLLC) – The goal of the Luminaire-Level Lighting Controls (LLLC) initiative is to bring clarity to the controls market by developing best practice specifications for LLLC, aiming to have the technology adopted as standard industry practice by the commercial office lighting market. In 2014, NEEA conducted product testing to confirm reliability of the Enlighted ® lighting control solution, the first product to meet NEEA's Luminaire Level Lighting Controls (LLLC) specification. This research will boost market confidence in this new product and allow NEEA to develop a strategy to increase market adoption of LLLC systems paving the way for utility energy efficiency programs. Puget Sound Energy is a member of NEEA's technical advisory committee for this initiative.

Commercial Lighting Upstream Platform/ Reduced Wattage Lamp Replacement -

NEEA's commercial lighting initiative works upstream with lighting distributors and manufacturers to influence the stocking and sales practices of reduced wattage fluorescent lamps and drive consumer awareness and demand. In 2014, NEEA partnered with five leading commercial lighting distributors to test strategies for shifting the market to more efficient lighting products. Results from the market test will inform NEEA's market transformation strategy for this initiative.

2014 Industrial/Agriculture Highlights

Energy Management Information Systems – In 2014, NEEA released inventory of industrial energy management information systems (EMIS) - software tools that store, analyze, and display energy consumption data. Used in industrial applications, EMIS are powerful tools for supporting utility programs and energy management practices through streamlined measurement and verification. A lack of public information limits broader EMIS adoption. NEEA's report addresses this market barrier. Staff from Puget Sound Energy acted as technical advisors for this study, providing input and commentary on the inventory design, EMIS selection, and usability of the results.

Industrial Strategic Energy Management – In September 2014, NEEA Hosted the 3rd Annual Northwest Industrial Strategic Energy Management (SEM) Collaborative Workshop. The SEM collaborative is a regional group, including Puget Sound Energy, BPA, Energy Trust, and NEEA among others, that helps energy efficiency program administrators accelerate the adoption of industrial SEM. Building and leveraging strategic partnerships, such as the SEM collaborative, is a cost-effective way for NEEA to support regional industrial efficiency delivery capability.

Certified Refrigeration Energy Specialist (CRES) Certification - Industrial refrigeration represents nearly nine percent of the Northwest's industrial electric load. NEEA is working with utility and industry partners to build awareness and drive demand for Certified Refrigeration Energy Specialist certification, which is estimated to result in 3-12 percent regional refrigeration energy savings. In 2013, NEEA launched a successful CRES training pilot with RETA and Puget Sound Energy. In 2014, NEEA marked the certification of the first CRES operator in the nation, based at National Frozen Foods in WA.

Food Processors (Discontinuing) – In 2014, with input from funders, NEEA transitioned the Food Processors initiative out of its active market transformation portfolio. Total regional savings associated with this initiative were 139 aMW between 2010 and 2014. NEEA will no longer invest in market transformation activities, but will continue to monitor market progress and report the resulting energy savings. Legacy initiative tools and resources will become part of NEEA's Strategic Energy Management infrastructure.

2014 Codes and Standards Highlights

On behalf of the region, NEEA works at state and national levels to influence the adoption of increasingly stringent building energy codes and federal appliance and equipment standards. Working in collaboration with its partners, NEEA gives the Northwest a voice in codes and standards processes and is frequently the only efficiency organization directly representing utilities in these forums. NEEA also conducts and shares critical research in support of codes and standards work.

Energy Codes highlights for 2014 include:

• NEEA provided training to more than 1,200 people across Washington State, to influence higher code compliance rates and energy savings.

- NEEA continued work on developing code change proposals for the Washington 2015 residential and commercial codes.
- NEEA partnered with the New Buildings Institute on the first Community Building Renewal pilot project. Funded in part by the U.S. Department of Energy, the pilot will identify the poorest performing city buildings and develop a suite of tools, including policy mechanisms, to specifically target these buildings. Outcome based codes are an area of focus for NEEA's codes and standards group.

Standards highlights for 2014 include:

- NEEA successfully influenced a new proposed federal standard for electric pumps by
 participating in the Department of Energy's working group. In June, the working group
 recommended a test procedure and standard level that will eliminate the bottom 25% of least
 efficient pumps. Pump systems, which account for the highest share of industrial electricity
 consumption, have never been federally regulated. The new standard will allow NEEA and its
 partners to develop future initiatives and incentive programs.
- NEEA successfully influenced the federal standards proceeding for manufactured homes by
 providing data and analysis in support of the new standard. In October, the Department of
 Energy working group reached a consensus recommendation in favor of a 20-25% increase in
 the efficiency standard for new manufactured homes. More than two decades of Northwest
 support for manufactured home voluntary efficiency measures were vital to establishing the new
 efficiency standard.

PROVIDING ENERGY EFFICIENCY SERVICES AND RESOURES TO PUGET SOUND ENERGY

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 uses its unique role as a regional organization to leverage resources across the Northwest to accelerate energy efficiency. In 2014, NEEA pooled the investment of the region to conduct research and facilitate regional collaboration and information sharing on behalf of the region.

REGIONAL DATA SERVICES

- NEEA released year one of end-use load data from the Residential Test Bed. The study
 provides a great deal of insight into hourly energy use in single-family homes and is the first of
 its kind in the Northwest in 25 years. NEEA's funders, including Puget Sound Energy, will use
 the data to inform energy efficiency planning and program efforts.
- NEEA published the final Commercial Building Stock Assessment (CBSA) report and database. The CBSA is a periodic regional study that provides a database of commercial building information for the Northwest (Idaho, Montana, Oregon, and Washington). Puget Sound Energy staff participated in the CBSA working group, which played a key role in developing the methodologies used in the survey. The CBSA database includes more than 250 variables for each site and includes data and computations to better understand energy consumption in commercial buildings. Both the final report and the database are available to Puget Sound Energy to inform energy efficiency planning and program efforts in the commercial sector.
- NEEA finalized and published the Industrial Facility Assessment (IFSA), the first region-wide study of energy use characteristics of industrial facilities in the Northwest. Regional utilities, including Puget Sound Energy, can use the results to better understand the type, size and

location of energy efficiency opportunities in the industrial sector. The results will also help utilities identify conservation program opportunities and will assist with energy-use planning.

EFFICIENCY EXCHANGE – In May, 2014, NEEA co-hosted the annual Efficiency Exchange conference in collaboration with Bonneville Power Administration and the Northwest Power and Conservation Council. The conference provided a forum for energy efficiency professionals, including Puget Sound Energy staff, to share knowledge, explore emerging innovations in technology and program design and discuss the direction of utility efficiency programs.

CONDUITNW.ORG – Developed in partnership with the Bonneville Power Administration, "Conduit" is an online community that facilitates information sharing, coordination and collaboration among energy efficiency stakeholders in the Northwest. Conduit allows Puget Sound Energy staff to share best-practices, learn about new technologies, promote events and leverage the collective knowledge of the region. Conduit currently has over 2,000 members across the Northwest.

EVALUATION AND MARKET RESEARCH

NEEA is committed to having its initiatives assessed by third-party evaluators in order to continuously validate and refine its market transformation work, and ensure NEEA achieves its goals in a cost effective manner.

Market research drives NEEA's programming, defines the challenges within its work, and provides critical market data and analyses about regional energy consumption for NEEA and its stakeholders.

NEEA published over thirty market research and evaluation reports in 2014, all of which are all publicly available at <u>neea.org/reports</u>.

REGULATORY COMPLIANCE AND PARTICPATION/STAFF INTERACTION

NEEA holds quarterly advisory committee meetings throughout the year. The purpose of advisory committees is to provide NEEA with broad based advice, experience and feedback. This guidance is used to influence NEEA's work toward achievement of the organization's strategic goals, priorities and objectives. Advisory Committees provide stakeholders the opportunity to give meaningful input into the design and implementation of NEEA programs.

In 2014, NEEA instituted a new process to formally solicit Regional Portfolio Advisory Committee approval at critical decision-points in the lifecycle of a market transformation initiative. Puget Sound Energy is represented on NEEA's Board of Directors and all of NEEA's advisory committees.

NEEA Board and Advisory Committee Members Representing Puget Sound:

- NEEA Board of Directors: Bob Stolarski, Director, Customer Energy Management
- NEEA Industrial Advisory Committee: Chao Chen, Supervising Industrial Energy Management Engineer
- NEEA Residential Advisory Committee: Dennis Rominger, Market Manager
- NEEA Emerging Technologies Advisory Committee: Rem Husted, Energy Management Engineer
- NEEA Commercial Advisory Committee: Mark Lenssen, Supervising Engineer

- NEEA Regional Portfolio Advisory Committee: Jeff Tripp, Manager, Residential Energy Management
- NEEA Cost Effectiveness Advisory Committee: Rebecca Blanton, Senior Market Analyst; Gurvinder Singh, Senior Energy Resource Planning Acquisition Analyst

NEEA is grateful for the time and energy these individuals have put into their respective committees, and the impact they have had on the region for the benefit of Northwest ratepayers.

ADDITIONAL INFORMATION

For additional information, NEEA's <u>2014 Quarterly Performance Reports</u> and the <u>2013 Annual Report</u> are available online.

NEEA is committed to serving its regional stakeholders across diverse geographic areas and markets. We encourage stakeholder participation and appreciate input at all NEEA Board meetings, Advisory Committee meetings and energy efficiency events around the region. The next NEEA Board of Directors meeting is June, 2015, in Portland, OR and the general public is invited. Meeting details will be posted on neea.org in advance.

Please contact Virginia Mersereau, NEEA Communications Manager, at <u>vmersereau@neea.org</u> for any questions or comments about this report.