



Exhibit 10

2018-2019
NEEA Plan



2018 NEEA Planned Activities Report

Prepared for Puget Sound Energy

OVERVIEW

NOTE: NEEA is currently undergoing operations planning for its 2018 activities. All planned activities outlined in this report are pending NEEA Board approval at the end of 2017.

The Northwest Energy Efficiency Alliance (NEEA) is an alliance of more than 140 Northwest utilities and energy efficiency organizations working on behalf of Northwest energy consumers. NEEA aggregates and leverages the power of the region to identify and vet emerging technologies and create the market conditions necessary for them to take hold. NEEA also helps the region capture energy savings through progressively effective codes and standards. Puget Sound Energy has been a member of the alliance since NEEA was formed in 1997.

NEEA's 2015-2019 Business Plan outlines two strategic goals: 1) Fill the energy efficiency pipeline with new products, services and practices; and 2) Create market conditions that will accelerate and sustain the market adoption of efficient product, service and practices. This report summarizes NEEA's 2018 planned activities to support these business plan goals. It is based on the draft version of NEEA's 2018 Operations Plan, which will be approved by the NEEA Board in December, 2017.

FILLING THE ENERGY EFFICIENCY PIPELINE

On behalf of the region, NEEA scans the market for emerging energy efficiency opportunities and conducts lab and field testing to verify product performance and energy savings. NEEA also facilitates the Regional Emerging Technology Advisory Committee, which is tasked with coordinating and increasing visibility of emerging technology activities and investments across the region.

In 2018, NEEA will focus its scanning efforts to identify family products for existing programs and exploring new areas for 2020-2024, including: advanced thermostats, occupancy sensors with controls, task/ ambient HVAC, and whole building integrated design. Opportunities that demonstrate energy savings, are commercially available, and have market transformation potential will be selected for further investigation.

CREATING MARKET CONDITIONS FOR ENERGY EFFICIENCY (ELECTRIC)

NEEA works across all four Northwest states to influence entire markets by identifying barriers (or opportunities) to efficiency and removing those barriers through strategic market interventions. This market influence is enabled by the region having a united voice in the market and with national and international organizations.

Residential Sector

In 2018, NEEA's activities in the residential sector will be focused on two strategic markets: consumer products and new construction. Both markets represent long-term, leveraged opportunities for market transformation with significant energy savings and strong links to building codes and appliance standards.

2018 Focus Areas:

- Continuing to leverage the Retail Platform¹ to support NEEA and utility programs and pilots and strengthening relationships with key market partners. 2018 activities include:
 - Enhancing data collection and refine portal functionality
 - Adding new retail partners and product categories and extra-regional program sponsors
 - Implementing contract format that allows easy addition of new product categories and new program designs.
 - Developing alternative data structure that supports participation from multiple analytics companies.
 - Using existing data to identify new opportunities and market insights.
- Increasing Heat Pump Water Heater sales in coordination with Consumer Products regional strategy. Manufacturers indicate they need to significantly ramp sales (by 50%) soon, so 2018 is a critical year for success in the Northwest and nationally.

2018 Planned Activities by Program:

- **Heat Pump Water Heaters:** NEEA's goal for this program is to influence the passage of a federal standard requiring heat pump water heaters for all electric storage tanks greater than 45 gallons by 2025. In 2018, the program will focus on growing supply chain and unit sales, capturing the emergency replacement market, and supporting utility programs. Program goals include sales of 20,000 units and a documented increase in emergency replacement installations.
- **Ductless Heat Pumps** NEEA's Ductless Heat Pump program has three focus areas in 2018: cost-containment; reaching the target market (single-family zonal homes), and advancing market acceptance of a new test procedure and displacement best practices. 2018 program goals include a drop in the average system price to below \$3,800, 15% year-over-year growth in sales, and an increase in general consumer awareness to above 50%.
- **Super-Efficient Dryers:** The Super-Efficient Dryers program uses regional leverage with manufacturers to influence their adoption of more energy-efficient product designs while minimizing risk for utility partners by conducting pilot tests of new products before wide market distribution. 2018 program goals are: 1) increasing confidence and demand for super-efficient dryers among consumers and manufacturers; 2) expanding the dryer initiative to a laundry initiative (i.e. adding efficient washers to the program); and, 3) completing customer segmentation research to better define the audience. NEEA will also investigate efficient dryer

¹ The Retail Platform is a value transfer mechanism through which NEEA obtains sales data and provides incentives for products sold through retail channels. The goal of the Retail Platform is to support multiple initiatives and utility programs and speed the time to market for new efficiency opportunities.

emerging technologies to gain a better understanding of the technology road-map and products of the future.

- **Retail Product Portfolio:** NEEA's Retail Products Portfolio (RPP) program uses mid-stream incentives to influence retail stocking practices – and ultimately drive manufacturing and standards – for a portfolio of energy-efficient products sold through the retail channel. In 2018, NEEA will focus on expanding ENERGY STAR engagement, refining the product management process, continuing to improve data management and analysis, and refining NEEA's evaluation approach for this program (specifically how to evaluate products at different stages of maturity in the portfolio).
- **Next Step Homes:** Next Step Homes works in the market to develop and increase adoption of energy-efficient advanced building practices for single-family homes. In 2018, the program will focus on: 1) identifying long-term, state-specific energy code targets; 2) working with utilities to off-set the cost to builders of improved efficiency; and, 3) increasing coordination and consistency between home certification programs in the Northwest. Program goals include 4-6 Northwest utilities adopting performance path programs.
- **Manufactured Homes:** NEEA's Manufactured Homes program works in the market to increase voluntary adoption of a new above code specification (NEEM 2.0) prior to the next HUD code change. In 2018, the program will continue to offer incentives and technical support to manufacturers to build to the NEEM 2.0 specification. It will also provide sales tools and resources to retailers and work with utilities to plan NEEM 2.0 incentive programs. Program goals for 2018 are: 2-3 manufacturers building to the NEEM specification, 5-10 utilities offering incentives and 5-10% NEEM 2.0 market share.

Commercial Sector

2018 Focus Areas:

- **Leveraging the Distributor Platform:** NEEA will leverage the assets of the Distributor Platform (i.e. sales data and distributor relationships) built through the Reduced Wattage Lamp Replacement program to support other NEEA and utility programs. In 2018 NEEA's goals are to:
 - Secure data transfer to ensure data access for Reduced Wattage long term monitoring and tracking
 - Establish data reporting and engage distributors on marketing and sales practices for Luminaire Level Lighting Controls
 - Use the platform components (e.g. contracts, data infrastructure, interventions) to bring new distributors on board for non-lighting efficiency opportunities, such as motor products
 - In response to funder requests, collaborate on market tests that leverage the platform
- **Launching new initiatives:** In 2018, NEEA will launch two new commercial/ industrial initiatives Extended Motor Products Labelling and Very High Efficiency Dedicated Outdoor Air Systems (VHE DOAS).
 - **Extended Motor Products** aims to shift the Northwest pump market toward the top energy performance tiers for pumps and circulators to help customers make choose more efficient pumps. To do this, NEEA will work in close coordination with its funders and leverage the Distributor Platform.

- **VHE DOAS** focuses on separating heating and cooling from ventilation using a very high efficiency heating/cooling system coupled with a very high efficiency heat recovery ventilator (HRV). These highly efficient systems offer whole building energy savings of up to 50-70% over conventional rooftop units, better indoor air quality and greater occupant comfort, reduced maintenance costs and requirements and simplified controls. NEEA currently has 8 pilot projects in progress across the region.
- Supporting the continued implementation of the Commercial and Industrial Lighting Regional Strategic Market Plan

2018 Planned Activities by Program:

- **Reduced Wattage Replacement Lamps:** The goal of the Reduced Wattage Replacement Lamps program is to influence the stocking and promotion of low-wattage (28W and 25W) T8 lamps in the lighting maintenance market. In 2018, the program will continue to encourage participating distributors to re-stock only low-watt lamps with a goal of 50% market share among those distributors. The program is planning to transition to long-term monitoring and tracking in late 2018/early 2019.
- **Luminaire Level Lighting Controls:** NEEA and its partners are developing best practices for luminaire level lighting controls, with the goal of having the technology installed as a standard industry practice in commercial office lighting. In 2018, the program will focus on strengthening trade ally awareness and capabilities, supporting utilities to drive customer awareness, engaging manufacturer representatives and other key influencers, and leveraging the Distributor Platform to access sales data and collaborate with distributors on marketing activities.
- **Top Tier Trade Ally Advanced Training:** The Top Tier Trade Ally Advanced Training program accelerates the market adoption of advanced lighting retrofit practices by connecting contractors with training resources and utility programs. In 2018, NEEA will work with its funders to increase the number of trade allies participating in NXT Level 1 training, and develop a plan to bolster the value proposition for NXT Level 2 training as well as a roll-out plan.
- **Commercial Lighting Resources:** To influence the market to adopt more efficient lighting technology, NEEA provides and maintains a set of tools and resources to support utility lighting programs, including the NW Lighting Network and Online Basics Lighting Training. NEEA also represents the region in the Design Lights Consortium. In 2018, the program will focus on increasing site performance of the Northwest Lighting Network and driving more traffic to utility, trade ally and lighting program websites to support stakeholder programs.
- **Commercial Code Enhancement:** In 2017, NEEA launched its Commercial Code Enhancement program to support the region's ability to propose, adopt, and implement more efficient commercial building energy codes. In 2018, the program will support the WA code process by assessing and ranking 3-5 technologies/ practices and implement market intervention strategies to support the code proposals. Program staff will also complete State Coordination Plans for all four Northwest states.
- **Integrated Design Labs:** In 2018, NEEA-supported Integrated Design Lab Network will continue innovating and supporting new projects and major building renewal projects. NEEA will also support development of tools needed to advance integrated design, construction and operation of low-energy consumption buildings.

- **Commercial Real Estate:** The Commercial Real Estate (CRE) Infrastructure program leverages strategic relationships to deliver regional market resources to advance energy efficiency best practices and increase utility program participation by the region's commercial real estate market. In 2018, the program will continue to promote the use of existing resources, e.g. Spark (existing building renewal planning tool), and engaging with funders and market actors to redesign the vision, value proposition and business case for the Commercial Real Estate program.
- **Window Attachments (formerly Commercial Window Attachments):** In 2017, NEEA evolved its Window Attachments program from a purely commercial initiative to a multi-sector effort by adding residential low-e Windows to the program. In 2018, the program will focus on 1) working with the Attachment Energy Ratings Council to increase manufacturer engagement and funding, 2) supporting the process to achieve ENERGY STAR labelling for low-e storm windows, and 3) developing a strategy for retailer engagement and supporting interested utilities to develop programs and incentives.
- **Commercial and Industrial Strategic Energy Management (SEM):** NEEA's commercial and industrial Strategic Energy Management infrastructure program provides a holistic and integrated set of tools that support utilities and the market in building market capability, awareness and demand for SEM. In 2018, the program will continue to facilitate regional and North America-side collaboration on SEM challenges and opportunities and provide tools and resources through the online SEM hub.
- **Industrial Technical Training:** NEEA's Industrial Technical Training program delivers coordinated training on key industrial energy efficiency concepts to support industrial energy efficiency programs and build market capacity to facilitate implementation of Strategic Energy Management. In 2018 the program will work with NEEA funders to deliver 10 training courses with a goal of 180 or more participants.

Codes and Standards

In 2018, NEEA will continue to support Northwest states in adopting and implementing increasingly efficient energy codes and work to positively influence the federal standards-setting process.

- **Codes:** In 2018, NEEA's Codes program will continue supporting the adoption and implementation of progressively effective building energy codes in all four Northwest states. In Washington, program staff will support the state's commercial code development process for both electric and gas. The program will also provide support for market transformation programs (i.e. Commercial Code Enhancement, Next Step Homes) and product testing (e.g. rooftop units).
- **Standards:** In 2018, NEEA staff will continue to provide input into the development and rollout of regional standards, and ensure the collective voice of the Northwest is represented in national standards rulemakings.

NATURAL GAS MARKET TRANSFORMATION

In 2015, NEEA's Board of Directors approved its first Natural Gas Market Transformation Business Plan for 2015-2019. The goal of the plan, which was developed collaboratively with Puget Sound Energy and others, is to accelerate the development and market adoption of efficient natural gas

products, services, and practices, resulting in improved consumer choice and increased efficiency of natural gas use in the Northwest.

The plan includes funding for scanning activities, codes and standards, research and evaluation and five market transformation programs:

- Gas-fired heat pump water heaters
- Combination space and water heating systems
- Hearth products
- Super-efficient gas clothes dryers
- Rooftop HVAC

Natural Gas Portfolio

- **Gas-fired heat pump water heaters:** NEEA is working to accelerate product development of gas-fired heat pump water heater technology and influencing a federal manufacturing standard for water heaters greater than 35 gallons. In 2017, NEEA worked with major manufacturers to accelerate gas heat pump water heater development. In 2018, the program will continue to work with manufacturers to influence product development and support utilities to offer rebates for ENERGY STAR gas water heaters.
- **Combination space and water heating systems:** NEEA is working with manufacturers and market partners to develop high-efficiency combination space and water heating systems. In 2017, NEEA conducted successful field tests to demonstrate product performance and partnered with a major manufacturer to explore additional combination-system collaboration. In 2018, NEEA will continue to collaborate with manufacturers to build and test combination units and develop resources and tools to increase product awareness/demand and a trained installer base.
- **Hearth Products:** The goal of this program is to reduce fuel consumption in all hearth products and lock in savings through the development of federal standards. In 2017, the program finalized a market characterization study to improve regional understanding of consumers and the market and evaluated low-capacity burner technology in a residential indoor fireplace. 2018 goals include influencing product development of a low-capacity hearth and submitting a draft Washington State code proposal to support the code change scheduled to take effect in 2021.
- **Super-efficient clothes dryers:** The goal of this program is to increase the market adoption of super-efficient, natural gas-powered clothes dryers to influence the enactment of a more stringent ENERGY STAR specification and ultimately federal efficiency standards. In 2017, NEEA developed a market characterization study, updated the high-efficiency residential gas dryer specification to include two additional tiers of efficiency, and developed a market and partner outreach plan. 2018 planned activities include performing updated product testing and engaging energy efficiency partners outside the region to gain support for the specification and market engagement support.
- **Rooftop HVAC:** The goal of this program is to increase market adoption of rooftop HVAC units containing gas-fired heating units in both new and retrofit markets. In 2017, NEEA completed a four-unit demonstration project and launched market channel development efforts. In 2018, the program will implement additional field tests, continue to educate the market and supply chain,

and identify utility program requirements for launching rooftop unit programs leveraging findings from field tests to support that process.

DELIVERING REGIONAL SERVICES

To support local utility programs and NEEA's market transformation programs, NEEA aggregates regional investment to provide cost-effective resources such as data collection and analysis, program evaluation, regional coordination and more.

Regional Services

- **Market Intelligence:** In 2018, NEEA will continue to provide funders and regional stakeholders with timely data analysis for better, data-driven decision making. Goals for 2018 include creating an interactive 'data dashboard' to support program development and a web-scraping tool to provide funders with more timely pricing data related to quickly changing lighting markets.
- **Market Research and Evaluation:** NEEA's Market Research & Evaluation team will continue to work with third-party evaluators to assess its market transformation programs and deliver market research reports. In 2018, NEEA is piloting a new approach to market research known as the Market Research On-line Community. This new web-based research tool will support both qualitative and quantitative market research in a more timely and cost-effective manner.
- **Regional Research:** NEEA aggregates Northwest investment to conduct large-scale regional research efforts. In 2018, NEEA will launch a 5-year, \$12.5 million End-Use Load Research study. The first effort of this kind and scope since the 1980's, the data gathered will support regional planning, program design, and rate recovery. In addition, NEEA will complete work on a Residential Building Stock Assessment and begin recruiting sites for a Commercial Building Stock Assessment.

Stakeholder Engagement Opportunities and Advisory Committees

- **Efficiency Exchange conference:** Co-hosted by NEEA and BPA, Efficiency Exchange is a networking and learning conference for energy efficiency professionals from across the Northwest. The 2018 Efficiency Exchange Conference will be held in Tacoma, WA, May 15-16.
- **Conduit (conduitnw.org):** A partnership between NEEA and BPA, Conduit is an online community that provides information sharing, coordination and collaboration among energy efficiency professionals in the Northwest.
- **Advisory Committees:** In 2018, NEEA will continue to facilitate regional collaboration and solicit regional input through its advisory committees and work groups. Puget Sound Energy is represented of each of NEEA's advisory committees and most of its work groups.

Additional Information

More information on NEEA's market transformation programs, as well as NEEA's quarterly and annual reports, can be found at neea.org.

Questions or comments about this report? Please contact Virginia Mersereau, Sr. Communications Manager, 503-688-5491, vmersereau@neea.org.