



Exhibit 10

2019 Updated
NEEA Plan



2019 Planned Activities Report

Prepared for Puget Sound Energy

OVERVIEW

NOTE: NEEA is currently undergoing 2019 Operations Planning and 2020-2024 Business Planning. NEEA staff will present final plans to the NEEA Board of Directors for approval in December 2018. If the final draft of either plan necessitates changes to NEEA's 2019 planned activities, NEEA staff will update this report accordingly. Where possible, areas of uncertainty related to the business planning process have been identified.

The Northwest Energy Efficiency Alliance (NEEA or the alliance) is an alliance of more than 140 Northwest utilities and energy efficiency organizations working on behalf of Northwest energy consumers. The alliance aggregates and leverages the power of the region to identify and vet emerging technologies and creates the market conditions necessary for them to take hold. The alliance also helps the region capture energy savings through progressively more efficient codes and standards. Puget Sound Energy has been a member of the alliance since 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 products, services and practices. This report summarizes NEEA's 2019 planned activities to support these business plan goals. It is based on the draft version of NEEA's 2019 Operations Plan, which will be approved by the NEEA Board in December 2018.

FILLING THE ENERGY EFFICIENCY PIPELINE

On behalf of the region, NEEA staff scan the market for emerging energy efficiency opportunities and conduct lab and field testing to verify product performance and energy savings. The following is a list of promising emerging technologies, services or practices, which staff identified through NEEA's scanning process and will continue to investigate in 2019:

- **Combination Electric Hot Water Heater and Space Heater (residential):** An integrated appliance providing space and water heating with CO₂ as a refrigerant. In 2019, the alliance will continue conducting field tests to demonstrate the performance and adaptability of heat pump-based space and domestic water heating systems in existing homes.
- **Smart Thermostats (residential):** Smart thermostats control various heating and cooling equipment, use weather and occupancy data to better manage the systems, and engage homeowners to more closely manage energy use and comfort. In 2018, a regional task force formed by the Consumer Products Strategic Market subcommittee of the Regional Portfolio Advisory Committee developed a set of research questions and priorities to help the region better understand the opportunity for smart thermostats. Once they are approved by the subcommittee, the taskforce will work with the region in 2019 to address the recommendations put forth.

- **Ductless Heat Pump (DHP) Product Innovations and Channel Developments (residential):** Lab testing of HVAC split systems that use variable speed (inverter-driven) compressors and fans is underway, including a multi-zone building simulation to estimate performance. Field testing is planned for 2019.
- **Ultra-High Definition (UHD) TVs (residential):** The alliance is supporting a new revision of the ENERGY STAR specification and federal test procedure for standard dynamic range TVs and collaborating on the development of a new test clip for ultra-high definition and high dynamic range televisions.
- **V/ HAC – Ventilation Separated from Heating and Cooling (commercial):** This is a systems approach to HVAC wherein ventilation control and delivery is separated from building heating and cooling via a dedicated outdoor air system with a high efficiency heat recovery ventilation system. Nine pilot projects have been installed across the region. Data collection, analysis and reporting will continue into 2019.
- **Motor Products (cross-sector):** The alliance is working to advance integrated motor systems with optimized performance leveraging a test method and labeling system. This includes motor, controller and fan/ pump compressor systems. In 2019, NEEA staff will continue working with ACEEE to develop a test method, specification and label for fans. Pumps research is underway.
- **Switch Reluctance Motors (cross-sector):** Switch reluctant motors are a type of electric motor that runs by reluctance torque, which is easier to control and has greater efficiency at part load conditions. In 2019, NEEA staff will collect secondary data on energy savings, technical limitations and availability of these efficient motors.
- **Inverter Driven Packaged Terminal Heat Pumps (cross-sector):** This is an all-in-one packaged heat pump that uses inverter-driven variable refrigerant compressors found in mini-split systems. There are currently three products on the market. Working in coordination with the national labs and other emerging technology efforts, NEEA staff are evaluating which products to test in 2019.
- **Lightweight Triple Pane Windows (cross-sector):** These are primary windows that have three panes of glass: two of standard thickness and a third thin center pane. In 2019, NEEA staff will finalize efforts to document product costs and manufacturer status for commercialization.
- **Compressed Air Saving Unit (Industrial/ Agricultural):** This is a variable control air nozzle for compressed air open blowing applications. In 2019, NEEA staff will move forward with 10 test sites to validate product energy savings.

CREATING MARKET CONDITIONS FOR ENERGY EFFICIENCY (ELECTRIC)

NEEA works across all four Northwest states to influence markets by identifying barriers (or opportunities) to efficiency and removing those barriers through strategic interventions. The alliance's ability to influence markets comes from the region having a united voice in the market and with national and international organizations.

Residential Sector

2019 Planned Activities by Program:

- **Ductless Heat Pumps:** In 2019, the Ductless Heat Pump program will make a final push to reach the initiative's target market, while gaining regional consensus on transitioning the program into the long-term monitoring and tracking phase of NEEA's initiative lifecycle. Key activities will include: 1) working with funders and supply chain partners to identify and begin the process transitioning some program activities to the market; 2) preparing supply-chain partners for this transition; and continuing ongoing efforts to reach homes that are suitable for single-head displacement. In 2019, the program will also deliver a final Market Progress Evaluation Report (MPER), the initiative's eighth.
- **Heat Pump Water Heaters:** In 2019, the Heat Pump Water Heater program will focus on deepening supply chain engagement by implementing a targeted "key account" strategy, onboarding more utility midstream programs to lower upfront costs for consumers, finalizing the updated Advanced Water Heater Specification and increasing extra-regional engagement efforts to support the program's goal of driving the adoption of a federal standard for heat pump water heaters.
- **Manufactured Homes:** In 2019, the Manufacture Homes program will focus on accelerating the adoption of the NEEM+ specification and positioning it to become the new ENERGY STAR specification. To support the program's goal of achieving 10 percent market share of NEEM 2.0 homes, in 2019 the alliance will offer upstream incentives, retailer support and funder incentives.
- **Next Step Homes:** In 2019, the Next Step Homes program will focus on growing the number of funders participating in the Performance Path, increasing market support for funder programs, and establishing pathways for data collected in the Axis database to be used for code engagement. Key activities will include: 1) leveraging the alliance's BetterBricks NW platform to promote funder programs and connect regional market actors; 2) supporting funder programs with research, messaging and customer insights; and establishing pathways to gather new above-code building data. New in 2019, Next Step Homes will be co-funded by NEEA's electric and natural gas programs. Participation and support of natural gas funders will enable the program to more comprehensively address regional barriers.
- **Super-Efficient Dryers:** In 2019, the Super-Efficient Dryers (SED) program will focus on building the business case for expanding to a more comprehensive Super-Efficient Laundry initiative and increasing confidence and demand for SEDs. Key activities will include: 1) conducting market research and data collection to characterize the clothes washer and paired laundry market and to investigate the potential for a paired laundry specification; 2) working with regional market actors and manufacturers to influence the adoption of more stringent energy-efficient product designs; and, 3) minimizing risk for funders by conducting pilot tests of new products.
- **Retail Product Portfolio (RPP):** It was initially thought that all products in the Retail Product Portfolio would require the same market interventions. However, an analysis of full-category sales data received from participating retailers has revealed that each product in the portfolio requires its own mix of intervention strategies. NEEA staff are finalizing these product-specific strategies and sharing them with the funders and stakeholders in advance of seeking the Scale-

Up Approval milestone in 2019. Other key 2019 activities include implementing improvements to the data portal to ensure it continues to provide clean and reliable data to support planning and savings calculations, and leveraging data to add value to other alliance programs and the regional technical forum.

- **Retail Platform:** 2019 activities include continuing to support alliance programs to leverage the retail platform and the consumer products retailer/ distributor channel, refining the data portal's reporting functionality, and supporting NEEA long-term monitoring and tracking efforts. The Retail Platform will also support planning and measure development activities for funders and the Regional Technical Forum.

Commercial/ Industrial Sector

2018 Planned Activities by Program:

- **Commercial Code Enhancement (CCE):** The Commercial Code Enhancement program works with funders and key code stakeholders to identify future code proposals and align funder programs and market best practice with future code changes. In 2019, CCE will continue to focus on improvements in building efficiency and work within established state energy code collaboratives to prepare for future code cycles. Planned activities include developing long-term roadmaps for each state, completing assessments of selected technologies/practices, developing materials and trainings to build awareness among industry partners, and supporting utility programs to ensure alignment with existing codes.
- **Commercial Real Estate (CRE):** CRE is an optional program in NEEA's 2015-2019 business plan, which Puget Sound Energy has opted to fund. In the current draft of NEEA's 2020-2024 business plan, the CRE program is not included in the alliance's portfolio. As a result, in 2019 the program will transition its resources to the alliance's BetterBricks platform. Planned activities include analyzing CRE's current sponsorships/relationships and content to determine how best to leverage these assets, as well implementing transition strategies for the Spark tool and other CRE tools to BetterBricks.
- **Luminaire Level Lighting Controls (LLLC):** The Luminaire Level Lighting Controls program accelerates the adoption of LLLC through specifications, manufacturer engagement, supply chain education and building market awareness. In 2019, key activities will include: 1) providing training for installers, designers and specifiers via partnerships with Design Lights Consortium and Lighting Design Lab; and, 2) engaging sales channels (such as manufacturer representative agencies) to create more effective champions for LLLC in the market.
- **Reduced Wattage Lamp Replacement (RWLR):** In 2019, the RWLR program will enter the long-term monitoring and tracking phase of NEEA's initiative lifecycle. Relationships developed with distributors through the program will continue to be leveraged in the Distributor Platform to gather data for long-term monitoring and tracking and to support other alliance programs.
- **Distributor Platform:** The Distributor Platform is a tool that enables streamlined interactions between the alliance and distributors (sellers of commercial products). The platform supports alliance and funder programs to motivate distributors to stock and sell targeted energy efficient products and facilitates secure delivery of branch-level sales data for targeted product categories. In 2019, the alliance will focus on expanding the leverage of the platform and building its value to the region. Key activities will include recruiting new distributors to the

(including LED-focused and online distributors), supporting mid-stream pilots at Seattle City Light and Snohomish PUD, and supporting Bonneville Power Administration (BPA) in developing an option for BPA customer utilities to launch midstream programs.

- **Lighting Resources:** Lighting Resources is an infrastructure program comprised of the Northwest Lighting Network, Design Lights Consortium regional membership, and Online Lighting Basics training. In 2019, the program will continue to support enhance lighting trade ally knowledge and support funder efficiency efforts in the commercial and industrial lighting markets. Key activities in 2019 will include updating content for On-line Lighting Basics and representing the region in the Design Light Consortium process to develop the v5 specification for solid state lighting.
- **Top Tier Trade Ally Advanced Training:** This is an optional program in NEEA's Cycle 5 (2015-2019) Business Plan, which Puget Sound Energy has opted to fund. In 2019, the program will focus on increasing the number of NXT Level 1 designated trade allies by conducting promotional and marketing activities and supporting funders in their promotional efforts. The program will also roll out NXT Level 2 training to deepen trade ally knowledge and skills, including in areas of lower designee concentration to ensure regional equity.
- **Window Attachments:** Now in its second year, the alliance's Window Attachments program supports the Attachments Energy Rating Council (AERC) to deliver product differentiation and certification for Low-e Storm Windows (LES) and Secondary Glazing Systems (SGS) while building product awareness and capability among key target audiences in the region. In 2019, the program will focus on characterizing the market, understanding target audiences, supporting AERC to create a certification program for commercial products and increasing product awareness among key market actors. Key activities will include developing supply- and demand-side business cases, and supporting technology demonstrations at buildings in the initial target market.
- **High-Performance HVACs:** In 2019, the program will focus on removing market barriers for high performance HVAC products by: undertaking research to characterize the market, developing a better understanding of target audiences through target market research, developing collateral to demonstrate system capabilities and the business case, addressing the lack of education and experience specifying and installing this system, and encouraging additional HRV manufacturers to enter the North American market.
- **Extended Motor Products (XMP):** In 2019, the XMP program will continue market and product assessments of pumps that are 50 horsepower or less. Key activities will include research to better understand market barriers and validate energy savings estimates, and working with a limited number of Northwest distributors to develop market intervention strategies.
- **Industrial Technical Training (ITT):** This is an optional program that Puget Sound Energy opted to fund during NEEA's 2015-2019 business cycle. In 2019, the program will deliver ten in-person trainings in partnership with funding utilities. In the current draft 2020-24 business plan, ITT is again included as an optionally-funded program. Planned 2019 activities are contingent on whether the minimum threshold of funding is met by opt-in funders. Should ITT not be funded in the next business cycle, 2019 activities would include transitioning program assets to market partners and/or funders who wish to leverage the resources and curriculum.
- **Commercial and Industrial Strategic Energy Management (C&I SEM):** The alliance'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. The program also supports the Northwest SEM Collaborative and the SEM Hub. In 2019, the program will continue these activities and work with regional stakeholders to identify a path forward on regional SEM market measurement and data management. In NEEA's current draft 2020-24 business plan, C&I SEM is included as an optionally-funded program. Planned 2019 activities are contingent on whether a minimum funding threshold is met by opt-in funders. Should C&I SEM not be funded in the next business cycle, 2019 activities would include transitioning the program's assets to market partners and/or funders who wish to leverage the tools and resources.

Codes and Standards

In 2019, NEEA will continue to support Northwest states in adopting and implementing progressively effective energy codes and work to positively influence the federal standards-setting process.

- **Codes:** In 2019, the alliance's codes program will focus on supporting regional efforts to enhance energy codes and lock-in market transformational measures in residential and commercial buildings. Planned activities include developing code proposals for the 2021 International Energy Conservation Code, integrating the Commercial Code Enhancement program into the alliance's codes program, continuing to provide technical support for state-level code adoption, and providing training, education and technical support in all four states.
- **Standards:** In 2019, NEEA staff will continue to advance the Northwest's equipment efficiency standards and improve test rating methods and procedures, including development of new test rating methods to truly measure energy savings in the field.

NATURAL GAS MARKET TRANSFORMATION

The alliance's Natural Gas Business Unit works 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. Planned 2019 activities for the alliance's natural gas market transformation programs are listed below.

- **Gas Dryers:** Natural Gas dryers have a very low market share in the Northwest – between 5 and 10 percent. Due to a lack of market interest in this product, program activities will be limited in 2019. The program's primary focus will be supporting the development of new combined washer/ dryer efficiency rating and labeling.
- **Efficient Gas Water Heaters:** Planned activities for 2019 are designed to increase adoption of currently available efficient products, with the goal of paving the way for gas heat pump water heaters (GHPWH) to launch in 2020/2021. Key activities include collaborating with original equipment manufacturers (OEMs) to understand their product road maps and demonstrate the business case for GHPWH, continuing lab and field testing of early prototypes, and coordinating with national partners to pool resources and demonstrate support to the market for GHPWHs.
- **Gas Combination Water and Space Heaters (Combi Systems):** In 2019, the Gas Combi System program will focus on driving progress toward residential product commercialization, evaluating the residential opportunity compared to the commercial, and expanding the pool of major OEMs collaborating with the alliance. In 2019, key activities will include: 1) identifying and refining savings estimates and developing an opportunity assessment; 2) testing and evaluating

up to three additional technologies to diversify product selection and decrease risk; and, 3) developing a product launch strategy and timeline based on initial findings from two residential combination space and water heating system projects.

- **Condensing Rooftop Units (RTUs):** Condensing Rooftop Units are currently available in the market from small manufacturers. However, almost all units are custom-built and more expensive than a typical off-the-shelf gas pack. In 2019, the program will focus on developing tools and resources to help the HVAC supply chain better understand and communicate product pay-back and benefits – addressing the key barrier of condensing RTUs’ higher upfront cost. Key activities will include research to inform the development of value propositions and messaging for market actors and developing market guidance for using condensing RTUs within current codes.

DELIVERING REGIONAL SERVICES

On behalf of the alliance, and to support local utility programs and NEEA’s market transformation programs, NEEA provides regional services such as data collection and analysis, program evaluation, regional coordination and more.

Regional Studies

Commercial Building Stock Assessment: In 2019, NEEA will finalize data collection for the Commercial Building Stock Assessment (CBSA). The CBSA is a regional baseline stock study that informs efficiency planning and market models and provides inputs into regional load forecasts. The final data set and a summary report will be available in Q1 2020.

Stakeholder Engagement Opportunities and Advisory Committees

- **Efficiency Exchange Conference:** Co-hosted by the alliance and Bonneville Power Administration and sponsored by the Northwest Power and Conservation Council, Efficiency Exchange is a networking and learning conference for energy efficiency professionals from across the Northwest. The 2019 Efficiency Exchange Conference will be in Coeur d’Alene, Idaho, May 14 and 15.
- **Conduit (conduitnw.org):** A partnership between NEEA and Bonneville Power Administration, Conduit is an online community that provides information sharing, coordination and collaboration among energy efficiency professionals in the Northwest. NEEA’s current draft 2020-2024 Business Plan does not include funding to maintain Conduit beyond 2019. Should the region elect not to continue funding Conduit, the platform will be decommissioned in 2019.
- **Advisory Committees:** In 2019, 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 online at: neea.org.

Questions or comments about this report? Please contact Virginia Mersereau, Communications Manager at: vmersereau@neea.org.