Exhibit 10

2019 Annual Report

Northwest Energy Efficiency Alliance (NEEA)

Activities and Accomplishments

PSE PUGET SOUND ENERGY

2019 Annual Report for Puget Sound Energy

INTRODUCTION

The Northwest Energy Efficiency Alliance (NEEA or "the alliance") is a nonprofit organization working in collaboration with Puget Sound Energy and more than 140 other Northwest utilities and energy efficiency organizations to accelerate the innovation and adoption of efficient products, services and practices throughout the region. With funding and engagement from Puget Sound Energy and these other entities, the alliance intervenes in the market to create lasting change by removing barriers and leveraging opportunities to accelerate the adoption of cost-effective energy efficiency.

This report summarizes the alliance's 2019 market transformation activities and outcomes on behalf of Puget Sound Energy. As 2019 was the last year in NEEA's 2015-2019 Business Plan, this report is structured consistent with the alliance's 2015-2019 strategic goals:

- **Strategic Goal 1:** Fill the energy efficiency pipeline with new products, services and practices.
- **Strategic Goal 2:** Create market conditions that will accelerate and sustain the market adoption of emerging energy efficiency products, services and practices.

For additional information about alliance programs or to read the 2019 Operations Plan, please visit neea.org.

ELECTRIC MARKET TRANSFORMATION

Goal 1: Fill the energy efficiency pipeline

To ensure the continued availability of energy-efficient products, services and practices to Northwest consumers, the alliance identifies emerging energy efficiency opportunities and works with manufacturers and the market to test and validate product performance and energy savings. These efforts are coordinated through the Regional Emerging Technology Advisory Committee (RETAC), which is facilitated by NEEA staff. Puget Sound Energy is a member of RETAC.

2019 EMERGING TECHNOLOGY HIGHLIGHTS

Filling the Pipeline: In 2019, NEEA staff scanned the market to identify promising new energy-efficient products, services and practices, prioritizing motors, primary windows and window attachments, heat pumps, and thermostats and HVAC controls. Staff conducted research, testing and vetting of several promising opportunities, including:

1. **Advanced Research Projects Agency-Energy (ARPA-e):** Advanced Research Projects Agency–Energy is a United States government agency tasked with promoting and funding research and development of advanced energy technologies. In 2019, NEEA staff were invited to review over 20 open funding proposals, including LED lighting, window attachments and HVAC. Through this review process, staff gained visibility into a range of pre-commercialized technologies that might impact future energy-efficient products for the region.
2. **Combination Water and Space Heat:** This product is an integrated appliance that provides both electric space and water heating. In 2019, the alliance conducted lab and field testing to demonstrate the performance and adaptability of combination systems in existing homes and small commercial applications.
3. **Variable-Capacity Split-System Heat Pumps**: This product is a split-system heat pump based on the successful inverter-driven technology found in ductless heat pumps. In 2019, the alliance, in partnership with a number of collaborators, tested of 15 cold climate heat pumps to develop and validate a test procedure to generate an accurate seasonal Coefficient of Performance (COP) value for heat pumps.
4. **Window Attachments:** These products attach to existing windows to increase their energy performance and include films, blinds, storm windows, secondary glazing systems, awnings, etc. In 2019, the alliance partnered with Pacific Northwest National Lab to conduct testing of Low-e Surface Applied Films and assess the energy savings and product performance of the technology.
5. **Smart Thermostats:** 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 2019, the regional Consumer Products Strategic Market Steering Committee secured funding for thermostat research to support the development of a method to estimate energy savings for smart thermostats. The project is expected to begin in 2020.
6. **Ultra-High Definition TVs:** In 2019, the alliance continued to collaborate on the development of an updated U.S. Department of Energy TV Test Procedure (used to measure the energy consumption of TVs) and International Electrotechnical Commission (IEC) test clip for ultra-high definition and high dynamic range (HDR) televisions. Updates to the IEC test clip will inform the federal test method to address the energy required for new technology features such as HDR and connectivity.
7. **Switch Reluctance Motors**: Switch reluctance motors run by reluctance torque, which is easier to control and has greater efficiency at part load conditions. In 2019, NEEA staff worked to document the efficiency potential of switch reluctance motors by collecting secondary data on energy savings, technical limitations and availability of these efficient motors.

Increasing Pipeline Visibility: In 2019, the alliance continued to maintain the region's first shared emerging technology database. The database, which is housed on ConduitNW.org, increases regional visibility into emerging technology activities across organizations and reduces development costs by avoiding redundancies. In 2019, more than 30 regional emerging technology projects and products were added to the database.

Goal 2: Creating market conditions for energy efficiency

The alliance identifies and removes market barriers to energy efficiency across the region for the benefit of Northwest customers. NEEA's 2015-2019 Business Plan focuses its market transformation efforts on four strategic markets: Consumer Products, Residential New Construction, Commercial New Construction, and Commercial and Industrial Lighting.

CONSUMER PRODUCTS

Consumer Products Regional Strategic Market Plan – The Consumer Products Regional Strategic Market Plan was created by regional energy efficiency experts in a process that was co-led by Puget Sound Energy and facilitated by NEEA staff. This strategic market plan is intended as a resource for the entire region to align on longer-term goals in specific markets and maximize cost-effective, long-term energy efficiency opportunities to benefit utility customers. In 2019, the Steering Committee which consists of NEEA staff and regional stakeholders, including Puget Sound Energy, successfully influenced the Regional Technical Forum (RTF) to extend the Connected Thermostat measure, set to expire in November of 2019. Steering Committee members awarded an RFP for the implementation of the RTF-approved smart thermostat research plan that explores barriers, opportunities, energy-savings potential and next steps for Smart Thermostats. Funding for the research was secured in 2019 from interested utilities across the region in a process that was co-led by Puget Sound Energy staff. The Steering Committee meets quarterly.

Heat Pump Water Heaters – In 2019, the Heat Pump Water Heater (HPWH) program continued to influence the market adoption of HPWHs in the Northwest by focusing on installers. Through a key accounts approach, the program provided marketing, training and financial support to selected installer companies to influence them to recommend HPWHs to their customers. The program enrolled a total of 17 key installer accounts, three of which are in Puget Sound Energy territory. To promote the value of HWPHs to Northwest consumers, the alliance completed a regional consumer awareness campaign with targeted YouTube, HGTV and DIY Network advertisements, resulting in more than 600,000 views in Washington State. Finally, in 2019, regional HPWH sales exceeded 15,000 units.

Ductless Heat Pumps – The Ductless Heat Pump (DHP) program works to accelerate the adoption of inverter-driven DHPs in electrically heated homes by building product distribution channels, market capacity and consumer demand. In 2019, the DHP program delivered new resources and tools for utilities, consumers and the supply chain through GoingDuctless.com. These include customer testimonial videos, which can be customized by individual utilities. Additionally, the program delivered five installer trainings in Washington in coordination with distributors, manufacturers and utilities. Finally, in Q3 of 2019, NEEA published the 8th Ductless Heat Pump Market Progress Evaluation Report, which suggested readiness for NEEA to reduce active market development and begin transition to long-term monitoring and tracking. To inform the transition strategy, including timeline, NEEA will complete additional research on DHP adoption in cold climates and continue to collaborate with funders on utility program cost-effectiveness challenges.

Retail Product Portfolio – The alliance's Retail Product Portfolio (RPP) program coordinates with the ENERGY STAR® Retail Products Platform (ESRPP) program to provide mid-stream incentives on a

portfolio of qualified energy-efficient products. These incentives influence retail buying and stocking practices and send a signal to manufacturers to develop more energy-efficient products. For example, in 2019 Home Depot worked with GE to develop an ENERGY STAR certified room Air Conditioning unit that qualifies for RPP program incentives. This unit is exclusive at Home Depot and was a direct result of the program. Participating ESRPP retailers provide full-category sales data, which the program leverages to influence new product standards and specifications. Also in 2019, ENERGY STAR released the final criteria for version 2.0 of its air cleaner specification, which was heavily influenced and informed by alliance data and comments. ESRPP partners included four national retailers, Home Depot, Lowe's, Best Buy and Nationwide Marketing Group, collectively representing over 300 store locations in the Northwest, approximately 140 of which are located in Washington. In total, approximately 115,000 products received RPP incentives in 2019.

Super-Efficient Dryers – The Super-Efficient Dryers program supports manufacturer development and U.S. market entry of super-efficient dryers while working to influence awareness and adoption of heat pump dryers among Northwest consumers. In 2019, the alliance developed the "Energy-Efficient Dryers Buyer's Guide" to address the lack of product awareness by consumers. The Guide provides consumers with an overview of all ENERGY STAR and ENERGY STAR Most Efficient dryers, including hybrid and heat pump models. Working with partners at ENERGY STAR, NEEA staff posted the buyer's guide on the ENERGY STAR website and developed a consumer campaign to drive traffic to the guide. Also in 2019, the program conducted a regional in-store promotion on Beko dryers, targeting customers through a Beko branded media campaign in areas where retailers carry the product, including the Puget Sound area. Finally, in Q3 Whirlpool released its new heat pump hybrid model which qualified as Tier 2 product. The addition of new qualified products shows continued manufacturer commitment to heat pump technology and helps to address the lack of product availability in the region.

RESIDENTIAL NEW CONSTRUCTION

Next Step Homes – The Next Step Homes program works to increase the market adoption of above-code energy-efficient residential new construction and influence future residential energy codes. In 2019, the program provided tools and training to support above-code new construction in the Puget Sound area, including 10 all-day homebuilder trainings and a new HVAC sizing tool for technicians, designers and homebuilders. The sizing tool is designed to increase the efficiency of residential HVAC systems by optimizing sizing and system configuration, resulting in improved energy efficiency in new and existing buildings. To increase market support for utility Performance Path programs, the program provided training to raters and verifiers, including four working in the Puget Sound area.

Manufactured Homes – The Manufactured Homes program works in the supply chain to increase the availability and demand for NEEM+ certified energy-efficient manufactured homes. In 2019, the program launched a retail sales challenge to increase consumer awareness of the NEEM+ certification, offering sales staff incentives for each NEEM+ certified home sold. The program also launched an online digital campaign targeting potential homebuyers, which generated over 3.5 million impressions. To address the manufacturer cost barrier of building to the NEEM+ specification, the alliance supported manufacturers with upstream incentives for each NEEM+ home built. As of 2019, two manufacturers and two retailers have committed to building and selling NEEM+ manufactured homes. In total 56 NEEM+ homes were completed in 2019, with eight sold in Washington. Forty-eight utilities throughout the region now offer a NEEM+ incentive, including Puget Sound Energy.

COMMERCIAL NEW CONSTRUCTION

Commercial Code Enhancement – The Commercial Code Enhancement program works to identify, assess and demonstrate the feasibility and affordability of next-generation technologies and practices in commercial buildings with the goal of bridging the gap between market practice and policy. In 2019, the program recruited four design firms in the Seattle area to participate in a Total System Performance Ratio (TSPR) pilot project. TSPR provides a methodology to model whole system efficiency for commercial HVAC systems rather than individual components. This methodology is one of the major changes to the 2018 Washington State Energy Code (WSEC) that addresses HVAC system efficiency. Participating firms modeled a total of 12 existing projects with TSPR and provided feedback on their experience with the tool. NEEA will continue to work closely with Puget Sound area utilities and the University of Washington Integrated Design Lab to ensure alignment with potential TSPR utility programs and incentive options. Finally, in Q4 2019 the program kicked-off development of the Washington State Commercial Code Technical Roadmap (Roadmap). The Roadmap will forecast the technical potential of emerging technologies and strategies in meeting Washington State's 70 percent energy reduction goal over a 2006 baseline by 2030.

COMMERCIAL LIGHTING

Commercial and Industrial Lighting Regional Strategic Market Planning – In 2019, the Commercial and Industrial Lighting Regional Strategic Market Plan continued to focus on two key goals: 1) increasing adoption of advanced lighting control systems, with a regional focus on luminaire level lighting controls; and 2) informing program planning for commodity lamps. A regionwide committee of program managers, led by staff from Puget Sound Energy, completed a new Good-Better-Best Customer Guide for LED replacements for High Intensity Discharge Lamps and updated the previous guide for general LED replacements, including linear lamps. All guides are available via BetterBricks.com and a customizable version is available for Northwest utilities. Additionally, workgroup members collected feedback from trade allies to understand how utilities can better support their adoption of Networked Lighting Controls. And, expanding on the development of the Pricing Data Dashboard developed in 2018, the Steering Committee released the integrated Lamp Sales & Pricing Dashboard that combines sales and pricing data to inform program decision making throughout the region.

Luminaire Level Lighting Controls – Luminaire Level Lighting Controls (LLLCs) combine LEDs with integrated controls and sensors to offer improved building performance and occupant comfort while increasing energy savings. In 2019, the program continued to work with manufacturers to increase the availability of qualified products, adding six new systems to the qualified products list (QPL). The QPL now includes 20 systems from 14 manufacturers. To build market capability for LLLCs, the program partnered with the Lighting Design Lab (LDL) to offer a one-day Networked Lighting Controls training targeted to trade allies in the Northwest, including a training held in Washington. Additionally, through the regional membership to Design Lights Consortium that NEEA administers, no-cost licenses to an online Advanced Lighting Controls training were made available to Washington utilities to roll out to trade allies. And, to further trade ally education and awareness on LLLCs, the alliance developed videos about the technology in collaboration with the LDL. These videos are now available on the BetterBricks YouTube channel for utility use. Finally, the alliance worked to increase awareness of the

value proposition of LLLCs by developing case studies in partnership with funders, including a school district case study that is currently in development in partnership with PSE. The case study is expected to be complete in Q1 2020.

Distributor Platform – The Distributor Platform is comprised of key market relationships, ongoing data collection activities, and repeatable program processes. Originally developed through the alliance's Reduced Wattage Lamp Replacement program, which ended in 2018, the Platform supports multiple alliance programs across different Product Groups, including Lighting, Water Heating and Motor-Driven Systems. Over 25 distributors, representing over 275 branches, are enrolled in the Distributor Platform as of the end of 2019.

OTHER MARKETS

Window Attachments – The Window Attachments program seeks to accelerate the adoption of high-performance window attachment products in existing residential, commercial and multifamily buildings. In 2019, the program focused on developing relationships with manufacturers, establishing data-collection processes, building a business case for early adopters, and supporting product differentiation. The program worked closely with the Attachments Energy Rating Council to create the first commercial products certification program by developing test procedures and technical specifications. The ability to test, rate and certify higher-performing products is critical for enabling product differentiation in the market. The certification program is expected to launch in Q1 2020. And, to inform program design and identify market opportunities, the program signed data-sharing agreements with three large window manufacturers to provide at least two years of national, full category, residential sales data. Finally, to increase engagement and help build a business case for high-performance window products to potential early adopters, NEEA staff presented at the Energy Facility Connections conference in Washington.

Extended Motor Products – The Extended Motor Products (XMP) program works to accelerate the adoption of more efficient motor-driven products, such as pumps, fans and compressors, focusing initially on packaged pump systems in applications of 50 horsepower and below. In 2019, the XMP program conducted research and gathered data to better understand the market for efficient motor-driven products and inform program design. To test and refine market intervention strategies and gain access to sales data, the program engaged with five Northwest pump distributors. To increase the region's understanding of the barriers to wider adoption of other energy-efficient motor-driven products, the program completed research to characterize the market for pumps and circulators. And, to support deemed measure development for efficient-motor driven products by the Regional Technical Forum, the alliance completed research to validate energy savings estimates on over 400 pumps and circulators operating in the Northwest. This research will help to identify the most promising ways to deepen market engagement with smart pump distributors.

High-Performance HVAC – The High-Performance HVAC program aims to transform the commercial HVAC market in the Northwest by accelerating the adoption of high-efficiency HVAC systems and components, focusing initially on Very High Efficiency Dedicated Outside Air Systems (VHE DOAS). In 2019, the program worked to better understand the market and its target audiences by conducting outreach to early adopters in the supply chain and engaging in conferences and trainings throughout the region, including in Washington, to build awareness of the technology. And, in December, the

program held a day-long work session with five HVAC innovators in the region to refine VHE DOAS system requirements. The updated requirements will be released in mid-2020.

INFRASTRUCTURE PROGRAMS

In addition to its market transformation programs, the alliance develops and delivers trainings, tools and resources that do not directly deliver energy savings but support Puget Sound Energy's local programs and market transformation as a whole.

Commercial Real Estate – The Commercial Real Estate (CRE) program creates market demand for energy efficiency among commercial building professionals and supports Puget Sound Energy in delivering customer efficiency solutions. In 2019, the CRE program focused on transitioning all resources, tools and relationships to BetterBricks.com, which will be the alliance's main CRE resource for the region in 2020 and beyond. Also in 2019, the program launched an online campaign through the BetterBricks platform that provided resources to the market to convey the business case for incorporating energy efficiency into their capital planning and operations plans. The intent of the campaign was to drive traffic from BetterBricks to utility websites, increase awareness and engagement with BetterBricks owned channels such as the website and YouTube channel, and strengthen the platform as a trusted resource for commercial building professionals. The campaign resulted in a 200 percent increase in traffic to the BetterBricks website, over 220,000 views on a new YouTube video series that explored how to identify and tackle energy efficiency opportunities in commercial buildings, and a 230 percent increase in referrals from BetterBricks to utility websites.

Top Tier Trade Ally Advanced Training – To support Puget Sound Energy's delivery of energy-efficient lighting solutions for its customers, the alliance provides resources and tools that build awareness, demand and capability for designing and installing energy-efficient lighting. NXT Level training, the market-facing brand for the alliance's Top Tier Trade Ally program, delivers comprehensive online lighting training to trade allies who work on retrofit projects in commercial and industrial facilities. In 2019, the program saw continued uptake of NXT Level 1 and 2 training in the Puget Sound area, with an additional 11 new individuals achieving Level 1 designation for a total of 42 trade allies designated since the training launched in 2016. And, since the launch of NXT Level 2 in 2018, 13 trade allies are now Level 2 designated in the Puget Sound area with an additional 14 currently enrolled and in process to complete the training.

Strategic Energy Management – The alliance develops, maintains and delivers a holistic set of tools that support Northwest utilities, including Puget Sound Energy, in providing strategic energy management (SEM) resources to customers. In 2019, the alliance continued to manage and maintain SEMHub.com, which houses a library of tools and resources in SEM design, implementation and evaluation efforts for program administrators and stakeholders to utilize. Following a content and usability analysis of SEMHub.com conducted in late 2018, the program addressed usability gaps on the website and initiated a quarterly newsletter in 2019. The newsletter is intended to increase awareness among utility program staff, implementers and evaluators of the existing and new resources on SEMHub.com. To align with NEEA's new 2020-2024 Business Plan, in which the SEM program will be specially funded, the program successfully secured funding from those who chose to opt-in to the program, including Puget Sound Energy.

Industrial Technical Training – To support Puget Sound Energy's industrial energy efficiency efforts, the alliance provided coordinated technical training on key industrial energy efficiency concepts. In 2019, the Industrial Technical Training (ITT) program delivered eight training sessions in Washington: Fan Systems Assessment Tool; Industrial Refrigeration Systems Energy Management; Adjustable Speed Drive Applications and Energy Efficiency; Compressed Air Challenge Level 1; Energy Efficiency of Cooling Towers; Pumping System Optimization; and Best Lighting and Controls Retrofits. Across the eight trainings in 2019, there were over 127 attendees in Washington. ITT is an optional program that Puget Sound Energy chose to fund in NEEA's 2015-2019 Business Plan. To align with the 2020-2024 Business Plan, the alliance ended its ITT program in 2019. Tools and resources from the program are available for use by utilities to support trainings in 2020 and beyond.

CODES AND STANDARDS

The long-term goal of NEEA's market transformation programs is often to lock in energy savings through progressively effective energy codes and standards. NEEA supports regional stakeholders in energy code development and adoption, training and implementation. Program staff serve as technical experts during U.S. Department of Energy rulemakings to encourage the adoption of federal appliance and equipment efficiency standards. In 2019, to support codes and standards in Washington, the alliance:

1. Summitted code change proposals for the 2018 Washington State Energy Code (WSEC). The proposals were developed following State Building Code Council's (SBCC) process to meet the cost-effectiveness criteria. SBCC approved both commercial and residential portions of the 2018 WSEC, with an anticipated effective date of July 1, 2020.
2. Developed and launched a new web-based Washington commercial code compliance documentation portal. As of Q4 2019, there were over 1,950 registered users.
3. Collaborated with the ASHRAE Puget Sound Chapter and City of Seattle to provide a training that summarized the most substantive changes in the commercial section of the upcoming 2018 WSEC. More than 130 mechanical engineers, contractors and product representatives attended the event.
4. Hosted commercial mechanical code trainings in Puget Sound Energy's service territory that focused on the new dedicated outside air system (DOAS) provisions. Over 190 design and construction industry professionals attended the event.
5. Provided a full day commercial building envelope training for the Washington Association of Building Officials (WABO). Training content emphasized the importance of a well-performing building envelope from the perspective of durability and long-term energy savings potential. The training was held at WABO's annual training institute in Lynnwood and was attended by more than 45 building officials, plans examiners and field inspectors from around the state.
6. Conducted 12 residential energy code trainings in Puget Sound Energy's service areas with approximately 180 individuals in attendance across the trainings. The classes discussed the requirements of the residential energy code, duct and blower door testing, and issues surrounding indoor air quality and ventilation. Attendees included building department staff, general contractors, designers, and specialty contractors from the insulation and HVAC industries.

NATURAL GAS MARKET TRANSFORMATION

By pooling resources through the alliance and working in collaboration with the region, Puget Sound Energy is accelerating the development and market adoption of efficient natural gas products, services and practices in the Northwest. The goal of this effort is to deliver more energy efficiency options to Puget Sound Energy customers and increase the efficiency of natural gas use in the region. In 2019, NEEA's Natural Gas efforts focused on increasing the number of manufacturer relationships to support a portfolio of products, expanding partnerships to influence market development, and finding and leveraging synergies between gas and electric programs.

FILLING THE ENERGY EFFICIENCY PIPELINE

Scanning: NEEA staff scan the market to identify promising new energy-efficient natural gas products, services and practices. In 2019, NEEA staff reviewed more than 15 natural gas projects or products, including: combination systems for space and water heating; a gas absorption heat pump for heating and domestic hot water; gas heat pumps; and a commercial tankless water heating system. Additional information about each of these products is available through the Regional Emerging Technology Advisory Committee database, which is housed on Conduit: https://conduitnw.org/Pages/Community.aspx?rid=29

Conducting Product Research: In 2019, the alliance commissioned and published two reports examining emerging natural gas technologies, which are available on neea.org:

- Lab Testing of Tankless Water Systems
- Condensing Rooftop Unit Field Study: Baseline and Final Report – 2018/2019 Heating Season

NATURAL GAS MARKET TRANSFORMATION PROGRAMS

Efficient Gas Water Heaters – The Efficient Gas Water Heater program is working to develop the market for efficient gas water heating products, bring a gas heat pump water heater (GHPWH) to market and ultimately influence the passage of a federal standard by 2030. In 2019, the program worked closely with major manufacturers and technology providers to encourage them to bring a viable, highly efficient product to market more quickly. The program initiated a co-funded North American gas heat pump water heater field demonstration in coordination with energy efficiency organizations, a major manufacturer and multiple utilities, including Puget Sound Energy. The goals of this forthcoming demonstration project are to verify cold climate product performance of GHPWHs, inform utility program development and prepare for market entry of the first commercialized product (anticipated in 2022). The program also engaged with water heater installers to gain a better understanding of sale and purchase motivations, consumer perspectives and supply chain infrastructure. Finally, in 2019 the alliance posted the first version of the Natural Gas Advanced Water Heating Specification on neea.org. The specification provides guidance to manufacturers and market actors to: ensure cold climate performance; provide manufacturer product development direction; and inform utility programs.

Combination Water and Space Heating Systems – The Combination Water and Space Heating (Combi) Systems program seeks to encourage continued innovation and development of Combi units. Program efforts centered around demonstrating the performance and adaptability of Combi systems to provide space conditioning and water. In 2019, the program provided co-funding, technical support and strategy recommendations to incentivize technology innovation and development of high-efficiency Combi units. Additionally, the program initiated field testing throughout the region to identify and understand installation issues, gauge customer satisfaction and validate energy savings.

Condensing Rooftop Units – The Condensing Rooftop Unit (C-RTU) program aims to transform the commercial HVAC market by establishing a minimum efficiency level of 90 percent for commercial warm air furnaces found in rooftop units. In 2019, the C-RTU program completed a pilot project that began in 2018 and published the C-RTU field study report. This report will be used to inform manufacturer engagement and provide C-RTU installation guidance for market actors. Also in 2019, the program team was a key member of an international technical subcommittee dedicated to revising the CSA Group test procedure (CSA P.8) for commercial gas-fired package furnaces. Currently, the test procedure rates RTUs solely by the performance of their gas burner (operating thermal efficiency). While this methodology is representative of the efficiency of one component of a commercial gas-fired RTU, it is not representative of the efficiency of the unit as a whole. The revised version will account for efficiency gains inherent in increased insulation, condensing furnaces, damper controls and heat recovery measures incorporated within an RTU. With the interest of keeping the test reasonable, the committee has done this without adding to the manufacturer test burden. This revised version will allow utilities and other supply chain partners to easily differentiate gas-fired RTUs based on the installed energy efficiency of the entire packaged unit.

DATA, RESEARCH AND ANALYSIS

The alliance pools regional resources to conduct research and evaluation and provide data and analytical services for the benefit of Puget Sound Energy customers.

EVALUATION AND MARKET RESEARCH

Market Research and Evaluation – The alliance commissions annual independent third-party evaluations of each of its market transformation programs. It also conducts robust market research to inform market transformation program design and provide critical data and analysis. In 2019, NEEA staff published 21 market research and evaluation reports, all of which are publicly available at neea.org.

Regional Building Stock Assessments – In 2019, the alliance completed fieldwork activities for the Commercial Building Stock Assessment (CBSA). The CBSA is a comprehensive study of existing Northwest commercial buildings and the elements within those buildings that impact energy use. Results inform utility energy efficiency programs as well as regional power planning efforts. The final database, a summary report, summary tables and all other deliverables will be completed in Q2 of 2020. Additionally, initial planning for the next Residential Building Stock Assessment (RBSA), a comprehensive study of residential buildings in the region, will begin in late 2020. The RBSA and CBSA are comprehensive inventories of existing Northwest buildings managed by NEEA staff approximately every five years.

End-Use Load Research – In 2019, the End Use Load Research project continued collecting data on selected residential electric end-uses, including ductless heat pumps, ducted heat pumps, heat pump water heaters, central air conditioning, forced air furnaces and baseboard heaters. As the largest end-use load research project in the Northwest since the 1980s, this work will greatly support regional planning and program design. Puget Sound Energy serves as a contributing funder for the research, which is conducted outside of NEEA's business plan. Across the region, over 215 homes are being metered for the residential Home Energy Metering Study, with a goal of 400 by 2022. Data is being collected for each home by circuit on one-minute intervals. Installations for the Commercial Energy Metering Study began in late 2019.

REGIONAL COLLABORATION AND COORDINATION

REGIONAL COLLABORATION

EFFICIENCY EXCHANGE – In May 2019, the alliance co-hosted the annual Efficiency Exchange conference in collaboration with Bonneville Power Administration and the Northwest Power and Conservation Council. The regional conference, which provides a forum for energy efficiency professionals to share knowledge, explore emerging innovations and discuss the direction of utility efficiency programs, drew more than 380 attendees, with 90 session presenters and organizers on topics ranging from energy benchmarking, smart thermostats, emerging technologies, and the time value of energy efficiency.

CONDUITNW.ORG – Developed in partnership with the Bonneville Power Administration, the Conduit website facilitates information-sharing, coordination and collaboration among energy efficiency stakeholders in the Northwest. At the end of 2019, Conduit transitioned from its state as an online community to a file and resource sharing platform. Although Conduit sunset its online community aspects in 2019, it has retained its core functionality and activities that have been identified as critical to regional market transformation efforts. These include the RETAC Database, Efficiency Exchange website, and the file sharing functionality for regional working groups.

REGIONAL COORDINATION

Alliance programs are coordinated through regional working groups and committees, whose membership includes representatives from Puget Sound Energy staff. NEEA staff formally solicits approval from the Regional Portfolio Advisory Committee (RPAC), the body responsible for overseeing the alliance's market transformation portfolio, at critical program decision-points. NEEA staff are grateful for the time and energy Puget Sound Energy staff dedicate to participating in these forums and on NEEA's board of directors, including:

Board of Directors: Bob Stolarski

Regional Portfolio Advisory Committee: Jeff Tripp

Commercial Advisory Committee: Mark Lenssen

Industrial Advisory Committee: Chao Chen

Residential Advisory Committee: Patrick Weaver

Regional Emerging Technology Advisory Committee: Rem Husted

Natural Gas Advisory Committee: Andy Hemstreet, Rem Husted

Cost Effectiveness Advisory Committee: Kasey Curtis, Jim Perich-Anderson

Of special note is Jeff Tripp's participation on an RPAC task force that led a significant effort in 2019 to streamline NEEA's advisory committee structure, per the Board's request.

ADDITIONAL INFORMATION

For additional information, NEEA's 2019 Quarterly Performance Reports, newsletters and the 2018 Annual Report are available online at neea.org.

NEEA staff encourage stakeholder participation and appreciate input at all NEEA board meetings, committee meetings and energy efficiency events around the region. The next NEEA board of directors meeting is March 24, 2020, in Seattle, Washington. Meeting details will be posted on neea.org in advance.

Please direct questions or comments about this report to info@neea.org.