



OPERATIONS PLANNING 2018

**Supplemental
Information**

ELECTRIC MARKET TRANSFORMATION PROGRAMS

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Introduction

NEEA is seeking feedback from its funders on its 2018 planned activities. On October 10, 2017, NEEA will hold a webinar for all advisory committee members to present the contents of the draft 2018 Operations Plan (electric only). The webinar will be an opportunity for NEEA staff to present planned 2018 activities and estimated budgets, and for advisory committee members to ask questions and provide feedback. Due to time constraints, the webinar will focus on high-level program content and need-to-know information. This Appendix contains supplemental 2018 program and budget detail, and is intended as a reference document for the webinar.

Advisory Committee members are asked to provide feedback on NEEA’s 2018 planned activities by **October 17, 2017**. Questions and comments should be sent to BJ Moghadam, senior manager of stakeholder relations, bmoghadam@neea.org. NEEA’s draft 2018 Operations Plan will be presented to the NEEA Board for approval in December, 2017.

Please note:

- All aMW savings forecasts are for NEEA’s current portfolio of funded initiatives
- All aMW savings targets were established in NEEA’s 2015-2019 Business Plan
- Program and 2018 budget information for NEEA’s Natural Gas portfolio are available separately by contacting Alexis Allan, NEEA’s senior manager of Natural Gas, aallan@neea.org.
- ‘Program Status’ references NEEA’s stage-gate process for advancing Market Transformation programs. NEEA’s Regional Portfolio Advisory Committee (RPAC) decides (through a consensus voting process) when a program is ready to move into program development and market development (see graphic below.)



2018 Electric Market Transformation Programs

Reduced Wattage Lamp Replacement

<p>Program Description</p>	<p>The Reduced Wattage Lamp Replacement program works to transform the fluorescent lamp replacement market so that low wattage (LW) T8 lamps displace 32W as the market standard. <i>It will succeed when LW T8 lamps are the standard fluorescent product choice in the market.</i></p> <p>The program also established the Distributor Platform, which provides access to key supply chain relationships, branch level sales data, and knowledge of distributor practices that can be leveraged for other NEEA and funder programs.</p>
<p>Program Status (Market Development)</p>	<p>Program delivery mechanisms and distributor/manufacturer relationships are in a mature state. Significant success in 2017 with changes in distributor stocking and sales practices around fluorescent lamps, which still comprise well over 50% of linear lamp sales.</p> <p>This success occurs alongside growing competition from Tubular Light Emitting Diodes (TLEDs). TLEDs are increasingly taking share of the lamp replacement market from fluorescent products supported by aggressive utility incentives and rapidly declining prices.</p> <p>2018 is a key year for the Distributor Platform. NEEA must find additional value for these partners to maintain and expand collaboration as the fluorescent market contracts.</p>
<p>Estimated Time to Transition Complete</p>	<p>The program is in year three of Scale Up, and will transition to Long-Term Monitoring and Tracking (LTMT) in late 2018 because:</p> <ul style="list-style-type: none"> • Success driving changes to distributor sales and stocking practices will increasingly lock-in market transformation, including repeat low watt T8 orders from converted purchasers. • The fluorescent linear lamp market is quickly eroding due to LED growth and, specifically, rapid price declines of TLEDs. • The program seeks new opportunities beyond the low wattage fluorescent lamp market by the end of 2018. This could involve bundling with other technologies and partnerships with stakeholders and other NEEA Programs.
<p>Accomplishments to date</p>	<ul style="list-style-type: none"> • 14 distributors enrolled comprising 250+ branches for an estimated 44% of Northwest annual T8 linear lamps sales. • LW market share is at 26% through Q2 2017, up by 9% from 2016. Largest partners are changing corporate practices so NEEA expects this number to rise in remaining 2017 and into 2018. • Continued development of Distributor Platform with data and leverage strategies across NEEA programs (i.e Luminaire Level Lighting Controls, Extended Motor Products) and utility programs.

2018 Goals	<ul style="list-style-type: none"> • Largest participating distributors adopt organization-wide low watt stock only strategies • Participant low watt T8 market share exceeds 50% 	Market Progress Indicators: <ul style="list-style-type: none"> • Distributor low watt stocking levels • Low watt T8 market share • Distributors’ continued engagement on sales and market data for Long Term Monitoring and Tracking
Key 2018 Activities	Ongoing: <ul style="list-style-type: none"> • Negotiate distributor contracts to include aggressive restock efforts to majority low watt lamps to overcome market inertia • Leverage January 2018 Federal Standard with distributors and their manufacturers to push aggressive low watt restock and reduced 32W shipments to the Northwest • Develop distributor-informed market intelligence reports on trends and pricing to continue relationship for long term monitoring and tracking 	Measuring Success/KPIs: <p>Distributor low watt stocking levels get to 80%+</p> <ul style="list-style-type: none"> • Cumulative low watt T8 market share gets above 50% • Greater Northwest low watt T8 market share, as compared to rest of U.S. • 6-8 of NEEA direct funders request Commercial and Industrial lighting data and analysis for program development and Reduced Wattage Lamp Replacement data set is increasingly valued

Levelized Cost (¢ per kWh)	1.28
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	Total Regional Savings (aMW)		Co-Created Savings¹ (aMW)	
	BP Target	Actual	BP Target	Actual
Savings to Date (2015 – 2017)	N/A	2.4	N/A	1.0

¹ Savings above NEEA’s market baseline. This includes local utility programs and any net market effects.

	Total Regional Savings (aMW)		Co-Created Savings (aMW)		Comments
	BP Target	Forecast	BP Target	Forecast	
2018 Savings	N/A	1.3 - 2.1	N/A	0.5 - 1.3	While T8 market size continues to decrease, market share is on the rise for program participants. Forecast assumes 20-45% from 2017 level.
2015-2019 Savings	27	5 - 7	24	2 - 4	Assumes the T8 market decreases by 22% annually. Slowed the adoption rate for non-program participants. The market may shift to reduced wattage lamps when the federal standard is effective in 2018.
2015-2024 Savings	56	8 - 11	50	3 - 7	

** Savings assumptions were updated in July 2017 with the lighting Hours of Use from BPA's 2015 metering study. This update reduced the per-lamp savings by 12% from previous assumption.*

Additional Value Delivery	Strong relationships with distributors and lamp manufacturers provide an established and effective channel for additional NEEA and local utility program implementation . This includes both information (access to current pricing, sales data, and evolving business practices) and program delivery processes that can be easily expanded to other offerings.
	Granular (branch level) and timely (monthly) sales data works to build a data set for the Region's Commercial and Industrial lighting programs.
	The program is already supporting several other initiatives and regional efforts , including NEEA's Luminaire Level Lighting Controls program, BPA's commercial lighting market research, Pacific Power's Lighting Instant Rebate program, NEEA's market intelligence, and program strategy and design for Puget Sound utility programs.

	2017 Forecast	2018 Budget
Annual Budget	\$1,719,000	\$1,402,000
Variance	<ul style="list-style-type: none"> • Linear fluorescent lamp market is on the decline. • Continued opportunity to streamline implementation costs. • Late 2018/early 2019 is time for Transition Complete and we continue to engage distributors for Luminaire Level Lighting Controls, Extended Motor Products and utility programs as well as acquire data. 2019 only includes budget for Long-term Monitoring and Tracking. 	

Risk(s)	Mitigation(s)
Largest partners fail to continue upward low watt market penetration.	Conduct ongoing engagement and presentation on continued lost opportunity.
Aggressive TLED incentives in utility programs could cause distributors (and their salespeople) to ignore all fluorescent lamps (despite ongoing significant sales).	Support utilities in understanding the TLED market and informing incentive strategies. Pursue stocking conversions and other systematic interventions to drive low watt T8 sales independent of competition from other programs.
Continued contraction of the fluorescent T8 market lessens the appeal of the Reduced Wattage Lamp Replacement program, causing distributors to lose interest. Access to distributor partners is undermined as the value perceived in Reduced Watt Lamp Replacement decreases.	Aggressively pursue integration of other offerings alongside Reduced Wattage Lamp Replacement program, including potentially different products and program approaches.
The fluorescent T8 market is flooded with inefficient 32W lamps prior to the effective date of the Federal Standard. This erodes program market share gains.	Frequently engage with distributors and manufacturers to encourage and reward strategies around the Federal Standard that are consistent with market transformation goals.
For the Distributor Platform, fail to launch another technology/value stream with market partners who then decide to end their engagement, jeopardizing the Reduced Wattage Lamp Replacement ability to engage for Long-term Monitoring and Tracking.	Aggressively engage both internally with other NEEA programs and stakeholders to launch pilots on other technologies.

Distributor Platform

<p>Platform Description</p>	<p>The Distributor Platform fosters mutually beneficial relationships between distributors (sellers of commercial products) and NEEA that:</p> <ol style="list-style-type: none"> 1) Motivate distributors to stock and sell targeted energy-efficient products; and 2) Incentivize and facilitate secure delivery of branch-level sales data from distributors to NEEA for targeted product categories. <p>Currently, NEEA and Northwest lighting and electrical distributors are participating in the platform. In the future, the platform could expand to additional distributors, other midstream market actors, and beyond the borders of the Northwest.</p>
<p>Status</p>	<p>NEEA is more formally defining the platform as distinct from the Reduced Wattage Replacement Lamp Initiative so that the platform can be readily utilized by other NEEA initiatives and funder programs.</p>
<p>Accomplishments to date</p>	<ul style="list-style-type: none"> • Relationships, service agreements and data transfer with 16 distributor partners. • Proven toolkit of interventions that may be employed via the platform. • Secure data transfer and storage capabilities.

<p>2018 Goals</p>	<ul style="list-style-type: none"> • Identify opportunities to leverage the platform beyond Reduced Wattage Lamp Replacement • Find way to maintain low-effort ongoing relationship and data transfer regardless of program engagement • Deliver valuable market insights •
<p>Key 2018 Activities</p>	<p>Ongoing:</p> <ul style="list-style-type: none"> • Some funders are exploring ways that the platform could support their program goals. NEEA will continue to collaborate with interested funders, providing information and participating in market tests as requested. • Build market insights capabilities in order to amplify market transformation work by influencing additional market actors, informing program strategy and delivering value to funders.

	<p>New:</p> <ul style="list-style-type: none"> • Reduced Wattage Lamp Replacement: Secure data transfer and relationships with distributors to ensure data availability for long-term monitoring and tracking. • Luminaire Level Lighting Controls: Establish data reporting and engage with distributors on marketing and sales practices. • Extended Motor Products and other energy-efficient products: Use platform with other distributor types to influence stocking and/or sales and gather data.
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<p>Value of the Platform</p>	<p>Distributors benefit from increased profit through:</p> <ul style="list-style-type: none"> • Resources, such as marketing support, to drive greater sales, often of higher margin items. • Incentive payments. • Market insights that allow them to be more informed and competitive. • Single point of contact across region and streamlined processes. <p>NEEA transforms shelves to predominantly efficient technology with:</p> <ul style="list-style-type: none"> • Influence over stock and sales. • Market data that allow us to track impact, be responsive to market changes, and influence other market actors (e.g. inform codes and standards, make the case for increased prevalence or more competitive energy-efficient product pricing with manufacturers and manufacturer representatives). • Greater speed to market. <p>NEEA funders see increased cost-effective savings through:</p> <ul style="list-style-type: none"> • Savings that are too small or costly to be captured through traditional incentive programs. • Market data to help a program understand its reach and identify new opportunities. • Increase in current program impact through complementary engagement with customers by engaging distributors via the platform to enhance results of downstream programs.
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Risk(s)	Mitigation(s)
<p>Lack of support from funders to introduce new products to platform: Many funders are hesitant to move products out of utility programs and introduce uncertainty.</p>	<p>Partner with funders who are interested in utilizing platform without requiring 100% funder participation.</p> <p>Secure data transfer and relationships with Reduced Wattage Lamp Replacement distributors to ensure data availability for long-term monitoring and tracking. Allow platform to be idle beyond this minimal effort in the hopes of re-engaging in the future.</p>
<p>Unable to maintain sufficient value to keep distributors interested. Distributor relationships lapse.</p> <ul style="list-style-type: none"> • Need more high-volume products that offer meaningful profit opportunity (or other competitive advantage) to distributors. • Pumps, motors, ductless heat pumps and other products sold through distribution with promising energy efficiency opportunities are not sold through distributors with which we have relationships today. 	<p>Utilize platform with other distributor types to influence stocking and/or sales, and gather data.</p> <p>Secure data transfer and relationships with Reduced Wattage Lamp Replacement distributors.</p>
<p>Data is not leveraged in a valuable way: While NEEA has data storage and analysis capabilities, there is an opportunity to realize much greater value by expanding the ability to regularly develop and share meaningful insights from the data.</p>	<p>Secure data transfer and relationships with Reduced Wattage Lamp Replacement distributors.</p>
<p>Unable to continue collecting market data:</p> <ul style="list-style-type: none"> • Unable to inform the Reduced Wattage Lamp Replacement program’s long-term monitoring and tracking and the Luminaire Level Lighting Control program’s data needs. • Unable to identify future opportunities, understand program performance relative to larger market. 	<p>Pay outright for data, reduce data requirements to absolute minimum required for tracking.</p>
<p>Lose out on low-cost savings:</p> <ul style="list-style-type: none"> • Estimate that half or more of lamp sales are not influenced by programs. The platform could allow the region to influence a significant portion of these missed opportunities. • If small savers or LEDs were to move to a platform-based offering, funder program budgets could focus on tougher-to-move products that require greater customer engagement. 	<p>Partner with funders who are interested in utilizing platform without requiring 100% funder participation.</p> <p>Secure data transfer and relationships with Reduced Wattage Lamp Replacement distributors.</p>

Luminaire Level Lighting Controls

<p>Program Description</p>	<p>Implementation of Luminaire Level Lighting Controls becomes standard practice for commercial buildings, as the majority of lighting products come with embedded sensors and controls as the default option.</p> <p>The program has and/or will address product readiness, first cost, value proposition, awareness and code.</p>
<p>Program Status (Program Development)</p>	<p>Luminaire Level Lighting Controls passed through Product Readiness Approval in June 2017. Scale-up Approval is targeted for mid- to late-2018.</p> <p>The program has focused on manufacturer influence, national specifications, utility program coordination, research and development of training.</p>
<p>Estimated Time to Transition Complete</p>	<p>2027</p>
<p>Accomplishments to date – 2017</p>	<ul style="list-style-type: none"> • Strong availability of qualified Luminaire Level Lighting Control product. • Growing utility interest in offering incentives, with Bonneville Power Administration, Seattle City Light, and Puget Sound Energy having plans in place to update their lighting calculators. • Initial instance of training well received by trade allies and Idaho Power. • Inclusion of Luminaire Level Lighting Controls in 2018 new construction code base.

<p>2018 Goals</p>	<ul style="list-style-type: none"> • Support utility programs in offering downstream incentives to bring down first cost, bolster value proposition and drive customer awareness • Bring trade ally training to the region to strengthen installation capabilities and to aid in driving down cost and increasing awareness among trade allies and customers • Engage distributors and other supply chain actors to aid in fostering 	<p>Market Progress Indicators:</p> <ul style="list-style-type: none"> • By the end of 2018, at least five utilities offer specific incentives for Luminaire Level Lighting Controls • By the end of 2018, 100% of the top five Northwest regional distributors offer more than one linear Luminaire Level Lighting Controls product • By the end of 2018, rollout of at least seven training events to educate at least 100 regional trade allies
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	customer awareness and to provide market data	<ul style="list-style-type: none"> • Agreements in place with at least four distributors to collect sales data for Luminaire Level Lighting Controls
Key 2018 Activities	Ongoing: <ul style="list-style-type: none"> • Roll-out existing installer training developed in conjunction with Design Lights Consortium • Leverage lighting distributor platform to engage distributors in marketing and data collection • Develop marketing and case studies to support utilities in driving awareness of Luminaire Level Lighting Controls with their customers • Work with Design Lights Consortium, manufacturers and utilities to influence annual specification revisions • Conduct research in collaboration with funders and manufacturers at up to ten new building sites and four retrofit sites to inform savings ranges, program strategies and value proposition 	Measuring Success/KPIs: <ul style="list-style-type: none"> • At least seven Design Lights Consortium installer trainings are implemented in partnership with utilities • Confirmation by NEEA’s planning team that granular information can be collected from distributors and program energy savings can be successfully reported • Marketing awareness metrics are developed as part of the marketing plan • Product qualified under V2 specification • Availability of preliminary findings from research
	New: <ul style="list-style-type: none"> • Develop additional training in collaboration with manufacturers to familiarize installers and designers with Luminaire Level Lighting Control product specifics • Engage manufacturer representatives, specifiers and designers as key influencers • Leverage Integrated Design Labs to build awareness – small effort to test 	Measuring Success/KPIs: <ul style="list-style-type: none"> • Rollout Luminaire Level Lighting Control product training in collaboration with manufacturers and utilities in at least three locations • Have plan in place and implemented to leverage market actors • Report out from Integrated Design Labs on program-related activities

Levelized Cost (cents per kWh)	<p style="text-align: center;"><i>TBD</i></p> <p style="text-align: center;"><i>(This program is in early stage of product/program development. Final cost data and calculations will be available prior to full scale market entry)</i></p>
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Savings to Date (2015-2017)	N/A – This program is not yet in Market Development
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	Total Regional Savings (aMW)		Co-Created Savings (aMW)		Comments
	BP Target	Forecast	BP Target	Forecast	
2018 Savings	N/A	0.1-0.2	N/A	0.1-0.2	Forecast updated in Q3 2017. Assumes more Luminaire Level Lighting Control offerings to be available by local programs in 2018-2019.
2015-2019 Savings	7	0.3-0.7	4	0.2-0.6	NEEA is expecting first Luminaire Level Lighting Control project from customer site research to occur in Q4 2017.
2015-2024 Savings	19	6-14	10	5-11	

Additional Value Delivery	Providing training to build controls installation capabilities and support utility trade ally engagement
	Increased opportunities for utility customer engagement
	Additional data and research on lighting controls for the region

	2017 Forecast	2018 Budget
Annual Budget	\$470,000	\$829,000
Variance	<ul style="list-style-type: none"> Budget increase corresponds to planned program advancement into Market Development phase of NEEA’s Initiative Lifecycle (program to reach Scale-Up Approval stage gate in 2018). Work with key market influencers on data collection, installer training, customer site research and marketing activities will ramp up. 2017 expenses delayed for research and marketing due to site recruitment challenges. 	

Risk	Mitigation
If market does not accept technology in near-term, lost opportunity as LED adoption increases.	Implement multiple program strategies simultaneously such as training, distributor collaboration, market actor leverage, case studies.
If product installation and commissioning do not continue its rapid pace of improvement, Luminaire Level Lighting Control sales will be impacted.	Rollout of Luminaire Level Lighting Control trainings planned. Work with manufacturers to encourage additional hands on support for early adopters.
If utilities are unable to aggressively promote Luminaire Level Lighting Controls, market adoption will be slowed.	Continue engagement with utilities to provide support to enable programs. Collaborate with midstream market actors in parallel with engaging with utilities.
If market data cannot be collected at a granular level, reporting of savings will be negatively impacted.	Test key elements of data plan before Scale-up.
If lighting Distributor Platform loses traction, data collection may be more difficult or expensive.	Increase budget for data collection if existing relationships and processes are not able to be leveraged

Top Tier Trade Ally

Program Description	<p>Top Tier Trade Ally's NXT Level Training builds lighting contractor skills and provides a designation that enables utility programs to effectively leverage this base of trade allies to deliver deep energy savings through quality, advanced commercial and industrial lighting retrofit projects.</p>
Program Status (Infrastructure program in Market Development)	<p>After being rolled out in mid-2016, NXT Level continues to educate trade allies and has published a designation list. The program is collaborating with utilities to drive awareness of NXT Level training and explore how utilities can promote designated trade allies.</p>
Estimated Time to Transition Complete	<p>2025</p>
Accomplishments to date - 2017	<ul style="list-style-type: none"> • Strong initial uptake of NXT Level 1, with 87 individuals and 34 companies earning the designation to date, meeting target set for mid 2017. • Close collaboration with Energy Trust and Pacific Power to incorporate NXT Level in to their programs • Good partnership with utilities to promote NXT Level in communications and events targeting trade allies • Per recent Progress Report by Ilume, both trade allies and stakeholders think NXT Level 1 training is "useful in terms of the knowledge it instills" • Level 2 curriculum designed and in development

2018 Goals	<ul style="list-style-type: none"> • Increase market embrace of NXT Level so that an effective base of trained trade allies exists in the Northwest • Roll out NXT Level 2 to deepen skillset of designees sufficient to support specification, sale and installation of advanced retrofit projects for utility Candi lighting programs 	Market Progress Indicators: <ul style="list-style-type: none"> • At least 140 Level 1 designations by end of 2018 • At least 5 utilities in region offering added value to NXT Level designees
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Key 2018 Activities	Ongoing: <ul style="list-style-type: none"> Promotional activities to drive participation Collaboration with utilities on NXT Level support 	Measuring Success/KPIs: <ul style="list-style-type: none"> Marketing metrics per marketing plan Tracking of utility activities and program changes related to NXT Level
	New: <ul style="list-style-type: none"> Improve measurability of program progress and impact Develop plan in partnership with utilities to bolster value proposition of training for trade allies beyond inherent knowledge and provide sufficient market differentiation for NXT Level 2 training Develop rollout plan for Level 2 training, which may include launch of one-to-two trainings in 2018 	Measuring Success/KPIs: <ul style="list-style-type: none"> Revised plan and metrics established for measuring program progress and impact Plans in place with utilities to bolster value proposition of training for trade allies Launch plan in place for Level 2

Additional Value Delivery	Providing training to build market capability for installation of energy-efficient lighting projects
	Supporting utility trade ally engagement

	2017 Forecast	2018 Budget
Annual Budget	\$468,000	\$469,000
Variance	None	

Risk	Mitigation
<p>If there is insufficient trade ally enrollment in NXT Level 2, skills that enable advanced projects will not be sufficiently prevalent in the market.</p>	<ul style="list-style-type: none"> • Launch focused Level 1 recruitment effort in Q4 2017; designees to provide a base to draw upon for Level 2. • Develop plan to more effectively to differentiate Level 1 and Level 2 value to trade allies.
<p>If program does not sufficiently coordinate with utility programs, the business case for trade ally investment of time/effort in NXT Level training may be undermined, affecting demand for training.</p>	<ul style="list-style-type: none"> • Continue collaboration with utilities to create multiple sources of value for designated trade allies. • Develop plan in collaboration with utilities to bolster value proposition and more effectively differentiate Level 1 and Level 2 value to trade allies. • Seek advice and support from Commercial Advisory Committee in 2018 if trajectory of progress does not appear to be sufficient.
<p>If confusion in market is created by other actors in training landscape, NXT Level traction with trade allies and/or utilities may be slowed.</p>	<ul style="list-style-type: none"> • Invest in better understanding and articulation of current ecosystem of lighting training.

Commercial Lighting Resources

Program Description	Enhance lighting contractor skillsets and leverage resources for the region that support NEEA funders' efficiency efforts in the commercial and industrial lighting markets.
Program Status (Infrastructure program in Market Development)	Lighting Resources is comprised of Northwest Lighting Network (NWLN), Design Lights Consortium (DLC) regional membership and Online Lighting Basics training.
Estimated Time to Transition Complete	TBD
Accomplishments to date - 2017	<ul style="list-style-type: none"> Website update, which included Homepage redesign; Tools and News pages redesign in process (in partnership with Bonneville Power Administration), website tracking improvements underway Promotion of NEEA programs, Reduced Wattage Lamp Replacement, Top Tier Trade Ally and Luminaire Level Lighting Controls through new website and Light Source newsletter content

2018 Goals	<ul style="list-style-type: none"> Increase site performance of Northwest Lighting Network to bolster website value to trade allies Drive more traffic to utility, trade ally and lighting program websites to support stakeholder programs Promote NEEA and funder lighting programs to increase awareness with lighting professionals 	Market Progress Indicators: <ul style="list-style-type: none"> More lighting professionals visit Northwest Lighting Network/Sign up for Light Source Number of clicks to utility pages Lighting professionals visit and download resources on the site/ in the newsletter
Key 2018 Activities	Ongoing: <ul style="list-style-type: none"> Website optimization Renewal of Design Lights Consortium northwest membership 	Measuring Success/KPIs: <ul style="list-style-type: none"> Per marketing plan metrics, increased traffic and engagement, decreased bounce rate, increased clicks to utility pages Shared regional content posted

	<ul style="list-style-type: none"> Support Commercial + Industrial Lighting Regional Strategy by incorporating regional resources 	
	<p>New:</p> <ul style="list-style-type: none"> Implement content strategy to provide new resources and information related to NEEA lighting programs and to keep website relevant and valuable for lighting professionals 	<p>Measuring Success/KPIs:</p> <ul style="list-style-type: none"> Content posted in alignment with content strategy Online engagement Trade ally engagement as evidenced by downloaded resources

Additional Value Delivery	Providing training to build market capabilities. Post and promote content and success stories from funders
	Working with Lighting Resources subgroup of Commercial + Industrial Lighting Regional Strategy to promote “Good, Better, Best” and other regional resources to support utility program efficiency efforts.

	2017 Forecast	2018 Budget
Annual Budget	\$126,000	\$135,000
Variance	None	

Risk	Mitigation
If website technology and expectations change more rapidly than anticipated, current Northwest Lighting Network website design may not attract and serve lighting professionals	Stay on top of website, search and consumer usage trends to determine when site needs revamp

Window Attachments

Program Description	The program works with the Attachment Energy Ratings Council (AERC) to increase the market adoption of high-performance window attachments in existing buildings and establish these products as standard practice. 2018 Program success is outlined by NEEA's support of AERC and ENERGY STAR product certification and labeling efforts.
Program Status (Program Development)	In May, 2017 the Commercial Window Attachments Program combined with Residential Window Attachments, encompassing Secondary Glazing Systems, Low-e Storm Windows, and other window products as a single 'product family.' This provides economies of scale for program delivery and optimizes a single AERC intervention.
Estimated Time to Transition Complete	2025
Accomplishments to date	<ul style="list-style-type: none"> • Secondary Glazing Systems market characterization and baseline complete • Secondary Glazing Systems calculator delivered to Regional Technical Forum • ENERGY STAR Specification for Low-e Storm windows Version 1.0 released • Logic Model updated for Window Attachments "Family of Products"

2018 Goals	<ul style="list-style-type: none"> • Attachment Energy Ratings Council is a financially stable organization, certifying and promoting high-performance window attachments. • Low-e storm window qualified products are labeled ENERGY STAR. 	<p>Market Progress Indicators:</p> <ul style="list-style-type: none"> • Attachment Energy Ratings Council increases revenue by 33% from testing, certification, and membership and has a viable multi-year business plan with funding (absent Department of Energy). • ENERGY STAR labeling of low-e storm window products begins.
Key 2018 Activities	<p>Ongoing:</p> <ul style="list-style-type: none"> • Work with Attachment Energy Ratings Council to publish test procedures and ratings protocols 	<p>Measuring Success/KPIs:</p> <ul style="list-style-type: none"> • Sustainable model for third-party certification is in place • Attachment Energy Ratings Council increases revenue from testing, certification, and membership and fills

	<ul style="list-style-type: none"> • Work with Attachment Energy Ratings Council to increase manufacturer engagement and funding • Support the process to achieve ENERGY STAR labeling for low-e storm windows 	<p>budget gaps (33% revenue increase by October 2018)</p> <ul style="list-style-type: none"> • ENERGY STAR labeling begins
	<p>New Activities:</p> <ul style="list-style-type: none"> • Develop case studies to support Attachment Energy Ratings Council and utility marketing • Work with interested utilities to develop downstream programs and incentives 	<p>Measuring Success/KPIs:</p> <ul style="list-style-type: none"> • Case studies created and distributed to Attachment Energy Ratings Council and utilities. • At least three utilities planning or offering programs to support certified products.

Levelized Cost (cents per kWh)	TBD <i>(This program is in early stage of product/program development. Final cost data and calculations will be available prior to full scale market entry)</i>
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Savings to Date (2015-2017)	N/A – This program is not yet in Market Development
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Additional Value Delivery	<p>Customer Engagement Opportunities – relationship building opportunities with manufacturers, Attachment Energy Ratings Council, retailer and distributors; customer decision-making research opportunities.</p>
	<p>Energy Efficiency Resources – technical market research in utility service territories; the Window Attachments team has established a strong relationship with ENERGY STAR and the Environmental Protection Agency that can be leveraged across the region.</p>
	<p>aMW Savings – Low-e storm windows and secondary glazing systems can significantly reduce energy costs as well as increase occupant comfort (thermally, visually, and acoustically) in residential, multifamily, federal, and commercial buildings.</p>

	2017 Forecast	2018 Budget ²
Annual Budget	\$368,000	\$260,000

² Budget is shared between Residential and Commercial/ Industrial cost centers.

Variance	The program is limiting activities in 2018 to focus on ensuring, first and foremost, Attachment Energy Ratings Council becomes a stable organization for certifying and vehicle for promoting high performance window attachments.
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Risk(s)	Mitigation(s)
Decrease in Lawrence Berkeley National Labs funding limits or prohibits its participation in Attachment Energy Ratings Council certifications and ENERGY STAR labeling.	Lawrence Berkeley National Labs trains regional labs to conduct certification. Montana State University and University of Oregon Integrated Design Labs are currently positioned to absorb certifications.
Low manufacturer membership in Attachment Energy Ratings Council.	<ul style="list-style-type: none"> • Work with Attachment Energy Ratings Council Board to recruit and sign more manufacturers, retailers, and distributors. • Window Attachments Supply Chain database planning underway. This is a service Attachment Energy Ratings Council will provide to attract and recruit manufacturers. • Provide upstream incentives on certified products to manufacturers to join Attachment Energy Ratings Council. • Offer marketing assistance to non-member manufacturers as a manner of recruiting. • Increase membership dues of participating organizations until more manufacturers can join Attachment Energy Ratings Council. This is a temporary proposal meant only to buy time for AERC. • Expand Wisconsin’s Focus on Energy Pilot to a full-scale program to drive manufacturers to join Attachments Energy Ratings Council.
<ul style="list-style-type: none"> • Low number of window attachment products seeking Attachment Energy Rating Council certification. 	<ul style="list-style-type: none"> • Work with Attachment Energy Ratings Council and manufacturers to ensure additional products are viable for certification. • Work with retailers to require only certified products are available in stores.
<ul style="list-style-type: none"> • Low number of low-e storm window manufacturers involved with Attachment Energy Ratings Council (Larson and Quanta). 	<ul style="list-style-type: none"> • Work with Attachment Energy Ratings Council Board to recruit Allied, InnerGlass, ProVia, Harvey Building Products and Thermolite.
<ul style="list-style-type: none"> • Loss of National ENERGY STAR program. 	<ul style="list-style-type: none"> • Direct marketing effort to only support Attachment Energy Ratings Council label.

Commercial Code Enhancement

<p>Program Description</p>	<p>The Commercial Code Enhancement (CCE) initiative applies market transformation principles to the code change process to create better alignment between the market, utility programs, and code. CCE enables more coordinated strategic activity before the code development process, leading to a more formalized code process and market practice leading and informing code.</p>
<p>Program Status (Market Development)</p>	<p>The Commercial Code Enhancement team built utility stakeholder interest and support of the initiative plan, roles, and expectations through a collaborative design process and achieved Scale-up approval May 2017.</p>
<p>Estimated Time to Transition Complete</p>	<p>Commercial Code Enhancement is a long-term initiative working through consecutive three to six-year commercial code cycles across the four northwest states. NEEA anticipates 3-4 code cycles to transform the code process and achieve transition complete by 12/2027.</p>
<p>Accomplishments to date</p>	<ul style="list-style-type: none"> • Implemented an effective collaborative initiative design process with utility funders and regional code stakeholders. • Utility funders indicated that the design process was a valuable exercise and supported Regional Portfolio Advisory Committee approval for Scale-up in May 2017. Funders also committed to participation in bi-annual meetings to check in on program progress and lessons learned. • The program team collaborated with the Washington commercial code collaborative to identify five technologies/practices to assess for program efforts

<p>2018 Goals</p>	<ul style="list-style-type: none"> • Assess and rank 3-5 technologies/practices for WA state 2018 code proposals • Implement market intervention strategies (education and training, business case development, case studies, develop tools and resources, demonstrations/pilots) • Convene utility design group for information exchange and to share lessons learned • Complete State Coordination Plans 	<p>Market Progress Indicators:</p> <ul style="list-style-type: none"> • Increased market awareness, interest, demand • Code officials support program-promoted code proposals • AEC (Architects, Engineers, Construction) community supports program-supported proposals <p>Outcome: Improved alignment between utility programs, market practice and code process</p>
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Key 2018 Activities	Ongoing:	Measuring Success/KPIs:
	<ul style="list-style-type: none"> • Assess and support technologies for other states and IECC code proposals • Complete additional State Coordination Plans • Convene utility design group for information exchange, to share lessons learned and update State Coordination Plans 	<ul style="list-style-type: none"> • Effectiveness of program strategies as measured by NEEA evaluation • Technology briefs completed • Market intervention strategies determined • Evidence provided to code proposals • Case studies developed • Education and training content delivered • Utility funder participation and engagement in biannual meetings

	Total Regional Savings (aMW)		Co-Created Savings (aMW)	
	Target	Actual	Target	Actual
Savings to Date (2015-2017)	N/A	0	N/A	0

	Total Regional Savings (aMW)		Co-Created Savings (aMW)		Assumptions
	Target	Forecast	Target	Forecast	
2018 Savings	N/A	0	N/A	0	
2015-2019 Savings	N/A	0	N/A	0	Possibility of some small savings from Montana 2018 code in late 2019
2015-2024 Savings	N/A	17	N/A	15	Savings start in 2021 (providing no earlier savings from Montana code)

Additional Value Delivery	Greater ability to proactively design programs with future code changes in mind
	Increased ability to capture energy savings and influence code
	Potential for greater compliance with a better prepared market

	2017 Forecast	2018 Budget
Annual Budget	\$485,000	\$499,000
Variance	None	

Risk(s)	Mitigation(s)
If construction pace speeds up due to high demand, then developers will resist anything that is perceived to slow them down or increase their costs.	Accelerate plans to demonstrate technical viability, affordability and business case.
Builder backlash could result if newly required measures are perceived as costly or complicated.	Implement demonstration of real projects and costs (case studies), education and technical assistance.
Staff turnover at NEEA could delay program as new staff come up to speed on initiative.	Create transition plan to support new staff.

Commercial Real Estate Infrastructure

Program Description	<p>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.</p>
Program Status (Infrastructure program in Market Development)	<p>In 2018, the program will continue to support key market activities and resources, while also re-evaluating non-critical activities and assessing future program needs and options.</p>
Estimated Time to Transition Complete	<p>N/A</p>
Accomplishments to date	<ul style="list-style-type: none"> • Recruited 53 new Spark users with 72 new Spark projects in 2017. Unico Properties, a major property owner and manager in the Northwest, successfully input 30 properties into Spark. • Navigator is on-track to launch Q4 2017, which will provide easier access to commercial energy efficiency best practices for the built environment. • Conducted a joint training in Seattle between utility partners, NEEA's Luminaire Level Lighting Controls Program and the Seattle 2030 District. • The City of Seattle Building Tune-Up Accelerator Program is using Spark as part of its 2-Day, mandatory training.

2018 Goals	<ul style="list-style-type: none"> • Leverage existing market channels to accelerate the success of NEEA's commercial building programs • Continue to support existing Commercial Real Estate tools and resources • Assess needs and options for a future Commercial Real Estate program design 	Market Progress Indicators: <ul style="list-style-type: none"> • Increased engagement opportunities by Commercial Real Estate portfolio managers and investment influencers (engineers, architects) with NEEA commercial programs, resources and tools
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Key 2018 Activities	Ongoing: <ul style="list-style-type: none"> Support marketing and technical assistance for the City of Portland disclosure ordinance Support all NEEA commercial programs by leveraging existing resources and market relationships 	Measuring Success/KPIs: <ul style="list-style-type: none"> Number of first-year reporters with low Energy Use Intensity scores seeking assistance Increased engagement opportunities for NEEA commercial programs with market channel partners
	New: <ul style="list-style-type: none"> Promote and increase usage of existing resources, including Navigator and Spark Engage with funders and market actors to redesign the vision, value proposition and business case for CRE and commercial buildings 	Measuring Success/KPIs: <ul style="list-style-type: none"> 5700 CRE Hub visitors and 250 downloads/collections 20 unique, hand-selected CRE firms engaged on a one-on-one basis with CRE Hub 30 unique buildings entered into Spark through the Seattle 2030 Accelerator program. Funder and market actor engagement in program design and strategy.

Additional Value Delivery	Customer Engagement Opportunities – Relationship building opportunities between NEEA programs, utility partners and trade organizations, architects, engineering firms, developers and building owners; Early identification of building owners who are positioned to leverage NEEA commercial programs (e.g. Dedicated Outdoor Air Systems, Luminaire Level Lighting Controls, Window Attachments).
	Energy Efficiency Resources – Technical market partner training and support in utility service areas.

	2017 Forecast	2018 Budget
Annual Budget	\$473,000	\$321,000
Variance	2018 will be a scale-down year to re-evaluate future needs and options for the Commercial Real Estate program while continuing to support and leverage existing market channels and resources.	

Risk(s)	Mitigation(s)
Funders don't realize enough direct benefit from the program's resources to be supportive and engaged in its success.	Engage with funders to redesign the program direction, vision, value proposition and business.

Commercial and Industrial Strategic Energy Management Infrastructure

Program Description	Grow adoption of Strategic Energy Management (SEM) in the Northwest by facilitating active collaboration on SEM delivery, and by delivering valuable SEM tools that meet stakeholders’ needs in support of 368 aMW of 20-year savings potential in Commercial and Industrial SEM.
Program Status (Infrastructure program in Market Development)	Market Development: SEM Hub website complete; Northwest Strategic Energy Management Collaborative active and now encompasses commercial and industrial SEM; effort to develop a North American SEM Collaborative underway.
Estimated Time to Transition Complete	2021
Accomplishments to date	<ul style="list-style-type: none"> • Organized and held the first ever North American SEM Summit attended by 75 paying guests at ACEEE Summer Study • Exceeding targets for user engagement and tool downloads from SEMHub.com • U.S. Department of Energy funded upgrades to 15 SEM Online Learning Modules as well as SEM Hub and Docebo integration • Increased interest in Northwest Energy Management Assessment (EMA)

2018 Goals	<ul style="list-style-type: none"> • Northwest utilities use SEM as key platform to engage large commercial and industrial customers • SEM practitioners actively collaborate with one another on shared challenges via NEEA sponsored structure • Manage SEM Hub to provide centralized knowledge center to house high-value SEM tools and resources 	Market Progress Indicators: <ul style="list-style-type: none"> • Funders use SEM as a fundamental customer engagement tool • Number of SEM programs/customers • Participation in SEM collaboration forums • SEM Hub continues to grow in user engagement and downloads
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Key 2018 Activities	<p>Ongoing:</p> <ul style="list-style-type: none"> Continue to convene, facilitate and provide leadership to the Northwest SEM Collaborative Actively promote use of SEM Hub to support funder use of SEM as a fundamental customer engagement tool Grow the resource collection on the SEM Hub and build it into the primary place for SEM implementation resources 	<p>Measuring Success/KPIs:</p> <ul style="list-style-type: none"> SEM program participation or management at 50% or more of NEEA’s direct funders participate in 75 or more participants in 2018 SEM Collaboration events 4000+ page views and 800+ resource downloads via www.semhub.com in 2018
	<p>New:</p> <ul style="list-style-type: none"> Build Northwest EMA onto SEM Hub Facilitate North American-wide SEM Collaboration by supporting growth of nascent bi-national collaborative Investigate future and potentially expanded roles for NEEA in regional SEM success 	<p>Measuring Success/KPIs</p> <ul style="list-style-type: none"> Fully functional EMA up and running on a NEEA-owned platform to reduce on-going costs and broader reach of this foundational SEM tool North American SEM Collaborative finds a sponsoring organization and hosts at least 1 event in 2018 to create a broader forum for peer to peer learning/networking for SEM practitioners Stakeholder outreach/survey results based on Cycle 5 activities to assess funders interest in an expanded role on SEM for NEEA in Cycle 6 Stakeholder outreach/survey results based on Cycle 5 (2015-2019) activities to assess funder interest in an expanded role on SEM for NEEA in Cycle 6 (2020-2024)

Additional Value Delivery	<p>Energy Efficiency Resources: Knowledge and use of high-value SEM tools and resources by regional stakeholders to develop, grow and sustain regional SEM programs</p>
	<p>aMW savings: Support growing regional savings achievements in SEM and help improve program cost effectiveness through enhanced tools and resources, agreement on common SEM terms and measurement and verification approaches, eventually measure and capture SEM diffusion savings</p>
	<p>Customer Engagement Opportunities for the region/funders: SEM is increasingly understood as a pathway to both increased capital project velocity within utility deemed measure programs, and as the foundation for deeper and more enduring customer relationships than occurs with more ad hoc approaches to energy efficiency</p>
	<p>Build regional and bi-national consensus on SEM as a best practice or de facto standard</p>

	2017 Forecast	2018 Budget
Annual Budget	\$137,000	\$105,000
Variance	In 2018 the program is reducing Northwest Food Processors Association budget; Industrial Energy Efficiency Summit sponsorship; ongoing EMA costs; Toolbox Talk Cards expenses	

Risk(s)	Mitigation(s)
If NEEA is unable to grow SEM Hub traffic, awareness, and uploads/downloads, then SEM Hub may fail to become a valued/trusted SEM resource	Encourage SEM resource sharing activity via the SEM Hub by demonstrating/describing how to use the site at events/webinars/conferences, and by recognizing positive SEM resource-sharing behaviors
If the North American SEM Collaborative does not meet the needs of regional SEM practitioners, then underfunding is a risk.	Remain dynamic and flexible in how the program meets funder needs without exceeding NEEA's budget and staff resources,
The program is unable to build a consensus for a NEEA role in market measurement and data management	Use data captured from Northwest EMA (in the current and future formats) to continue building consensus on SEM savings diffusion measurement as a core NEEA role and value stream

Industrial Technical Training

Program Description	NEEA's Industrial Technical Training program (ITT) provides technical trainings on key industrial energy efficiency concepts. Utility co-sponsors help NEEA select, plan and promote all trainings in a coordinated regional approach.
Program Status (Infrastructure program in Market Development)	ITT is a long-standing NEEA program educating people directly affecting the largest energy loads in the Northwest – operators, engineers, consultants, and utility staff.
Estimated Time to Transition Complete	N/A
Accomplishments to date	<ul style="list-style-type: none"> • Coordinated bi-annual training plan with NEEA funders • Delivered 9 Industrial Technical Trainings to-date • 2017 YTD: Trained 105 individuals; average class size of 18; 37 total CEU credits earned

2018 Goals	<ul style="list-style-type: none"> • Deliver 10 training courses per regionally coordinated training plan (nine live and one webinar) to increase energy efficiency knowledge and skills of industrial staff, and support funders' key customer relationships 	Market Progress Indicators: <ul style="list-style-type: none"> • Training plan completed • 180+ people participating in industrial Technical Trainings
Key 2018 Activities	Ongoing: <ul style="list-style-type: none"> • Coordinate annual planning with all sponsors for 2018 and 2019 • Provide regional equity and funder satisfaction by executing on the 2018 regional training plan. • Finalize dates for 2018 courses six to eight weeks in advance to provide sufficient time for promotions 	Measuring Success/KPIs: <ul style="list-style-type: none"> • Funder satisfaction rate of 95%+ • Trainee satisfaction rate of 95%+ • Average class size of 17+ • Enable CEU 40+ credits for regional industrial staff

Additional Value Delivery	Regional Advantage: Coordinated efforts across utility service territories ensure end-users have a variety of course options and schedule free of overlap or duplication
	Economies of Scale: Participating utilities doesn't need to dedicate staff and resources to plan and coordinate their own trainings.
	Customer Engagement Opportunities: Trainings give host sponsor utilities a way to connect with and provide value to their customers. Trained individuals often leave class ready to complete energy efficiency projects in partnership with their local programs.

	2017 Forecast	2018 Budget
Annual Budget	\$131,000	\$149,000
Variance	None	

Risk(s)	Mitigation(s)
If funding is reduced or more funders opt out, then the program may be too small to achieve regional advantage or economies of scale	Continue to demonstrate value delivery and resource stewardship for the funders in the program
If the value of regionally-coordinated training is not sufficient for funders to continue with the program, then they may opt to provide their own industrial trainings	Demonstrate that Industrial Technical Training and utility programs can coexist by coordinating ITT offerings with other existing programs (e.g. Portland General Electric's Energy Education Center)

Retail Product Portfolio

<p>Program Description</p>	<p>Mid-stream incentives encourage retailers to assort more qualified models of each product in the portfolio. Leverage points include ENERGY STAR collaboration and specifications process, Department of Energy efficiency standards, and extra-regional scale of program participants. Primary diffusion point is through the influence of retailer buying decisions with manufacturers.</p>
<p>Program Status (Program Development)</p>	<p>Entered Strategy Testing stage in January 2016. Planning to delay Scale-Up until completion of a (modified) Market Progress Evaluation Report, planned for 2018.</p>
<p>Estimated Time to Transition Complete</p>	<p>N/A. Program is expected to <i>evolve</i> rather than <i>transition</i>. One or more measures may transition out if a federal standard is enacted or the market becomes saturated, but the program itself is expected to continue.</p>
<p>2017 Accomplishments</p>	<ul style="list-style-type: none"> • Successfully supported national retail product portfolio to adopt NEEA’s product selection process, developed in collaboration with NEEA funders. • Added Nationwide (aggregator for independent stores), which builds scale and also helps with rural reach. • Coordinating closely with ENERGY STAR, including being involved with four spec revisions throughout the year. • Improved product selection process to provide increased transparency and build stakeholder support. • Market Test Assessment completed, with a clean bill of health.

<p>2018 Goals</p>	<ul style="list-style-type: none"> • Expand ENERGY STAR engagement • Continue to refine product management process, build support from stakeholders • Continue to improve data management and analysis • Refine/advance evaluation approach 	<p>Market Progress Indicators:</p> <ul style="list-style-type: none"> • NEEA develops effective process to formally engage with and influence ENERGY STAR activities and specifications • ENERGY STAR Retail Product Portfolio influences specification for at least one product category using program data
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		<ul style="list-style-type: none"> • NEEA develops additional process regarding how to evaluate products at different stages of maturity (in portfolio for 1, 2, 3, years, etc.). • Portfolio management (including product mix and incentive allocation) supports greatest savings potential for NEEA's investment. • Data meets relevant quality metrics and requires a minimal QC/adjustment for savings calculations • Program demonstrates progress sufficient for stakeholders to support move to Market Development • Existing program sponsors have support for their evaluation approach
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Key 2018 Activities	<p>Ongoing:</p> <ul style="list-style-type: none"> • Create more structure for ENERGY STAR Retail Product Portfolio collaboration • Optimize/balance portfolio. Reshuffle portfolio to address individual product performance issues • Enhance program data analysis – i.e., analyze trends in product category sales (top load washers, compact freezers) including whether there are even qualified models in each category. Use data to provide value to funders. (Better data allows for more informed decisions) 	<p>Measuring Success/KPIs:</p> <ul style="list-style-type: none"> • ENERGY STAR Retail Product Portfolio sponsors create improved governance structure, which leads to better decision-making, long-term direction setting, more focused effort around taskforces, etc. • NEEA develops additional process regarding how to evaluate products at different stages of maturity (in portfolio for 1, 2, 3, years, etc.). • Portfolio management (including product mix and incentive allocation) supports greatest savings potential for NEEA's investment. • NEEA develops RPP data dashboard to provide data access to funders. • NEEA staff mine RPP data to add value to other NEEA initiatives.
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	New Activities: <ul style="list-style-type: none"> Start coordinating on federal and state standards. Identify which ones are ready to be considered, understand process, plan how to have the greatest influence. 	Measuring Success/KPIs: <ul style="list-style-type: none"> Develop solid game plan for engaging on federal or state standard process for one or more product categories
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Levelized Cost (¢/ kWh)	TBD. This program is in early stage of product/program development. Final cost data and calculations will be available prior to full scale market entry.
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	Total Regional Savings (aMW)		Co-Created Savings (aMW)	
	BP Target	Actual	BP Target	Actual
Savings to Date (2015-2017)	N/A	0.6-1.1	N/A	0.5-1.0

	Total Regional Savings (aMW)		Co-Created Savings (aMW)		Comments
	BP Target	Forecast	BP Target	Forecast	
2018 Savings	N/A	0.6-1.6	N/A	0.5-1.3	<ul style="list-style-type: none"> High range assumes ENERGY STAR specifications and federal standards processes continue as scheduled. Clothes washer savings rate (which accounts for a bulk of the savings) is under review with Regional Technical Forum. Products include: Clothes Washers, UHD TVs, Refrigerators, Freezers, Room Air Conditioners, Sound Bars and Air Cleaners.
2015-2019 Savings	6	2-5	5	2-4	
2015-2024 Savings	19	13-34	17	9-25	

Additional Value Delivery	Data. This could be a significant value stream to the region – providing insights on market, product, and retailer trends that would be helpful to local utility programs. To date we have provided the data to the Council and to the Regional Technical Forum, who are using it for dryers and clothes washers.
	Marketing support to rural utilities. The addition of Nationwide (aggregator for independent retailers) may create in-store marketing opportunities for NEEA funders without big box stores in their territories.
	Natural gas dryer measure. May be opportunity to support gas funders by adding gas dryers to portfolio (after finalizing gas dryer specification and testing).

	2017 Forecast	2018 Budget
Annual Budget	\$2,078,000	\$2,057,000
Notes	<ul style="list-style-type: none"> • 2020-2024 estimate assumes program stays at consistent funding level (~\$1.95 m per year) for full 5-year cycle. At this time, Retail Product Portfolio is expected to <i>evolve</i> rather than <i>transition</i>. One or more measures may transition out if a federal standard is enacted or the market becomes saturated, but the initiative itself is expected to continue. • Budget is expected to stay flat in coming years even as new retailers and/or products are added. • Currently platform costs are paid through NEEA’s Regional Market Strategy (approx. \$100k/year). As other initiatives are added to the platform, Retail Product Portfolio may start to bear a portion of these costs. 	

Risk(s)	Mitigation(s)
Evaluation: <ul style="list-style-type: none"> • The level of uncertainty in evaluation is a continued risk. • Concerns about evaluation results in other jurisdictions could affect the ability of the ENERGY STAR Retail Product Portfolio effort to grow. 	<ul style="list-style-type: none"> • Transparency in assumptions, analysis, and conclusions. Ensure that the level of uncertainty is understood and that stakeholders are okay with it. • NEEA Staff will continue to engage national evaluation consultants, regulators, and stakeholders to provide technical assistance as needed on evaluation approaches.

Risk(s)	Mitigation(s)
<p>Federal support for energy efficiency:</p> <ul style="list-style-type: none"> • If ENERGY STAR is defunded or unable to enact new specifications, we may not be able to build toward increases in federal standards. • If DOE is cut back or eliminated, we may not be able to move forward on expected revisions to standards. Delays or disruptions in standards proceedings could affect savings flow in future. 	<ul style="list-style-type: none"> • NEEA may need to engage contractors and/or engage with other market partners to perform the role currently managed by ENERGY STAR. • If increased federal standards are not a viable goal in the next 3-7 years, NEEA would instead focus on state and local standards.
<p>Inability to build scale / Loss of existing scale:</p> <ul style="list-style-type: none"> • If new retailers or program sponsors are unable or unwilling to join ENERGY STAR Retail Product Portfolio, we may not have enough scale to have the desired impact in the market. 	<ul style="list-style-type: none"> • Support changes to program that would make it more appealing to a range of potential program sponsors; i.e. portfolio flexibility. • Develop additional support for evaluation approach so current sponsors have successful regulator engagement.

Super-Efficient Dryers (SED)

<p>Program Description</p>	<p>Use regional leverage with manufacturers to influence adoption of more stringent energy-efficient product designs. Minimize risk for utility partners by conducting pilot tests of new products before wide market distribution. Once energy-efficient products are in the market, use regional advantage to cost-effectively increase product availability and build a regional infrastructure to help drive product demand.</p>
<p>Program Status (Program Development)</p>	<p>Currently in Strategy Testing and Finalization phase of the Initiative Lifecycle. Since Initiative Start, NEEA has established a regionally-accepted test metric and Qualified Products List which now has 11 Tier 2+ products.</p> <p>Next milestone: Scale-Up Approval, tentatively scheduled for Q2/Q3 2018.</p>
<p>Estimated Time to Transition Complete</p>	<p>Target year: 2023</p> <p>Assumption: ENERGY STAR v1.0 becomes new federal standard in 2023 and heat pump level performance becomes the new ENERGY STAR. This is contingent on the schedule for federal rulemaking, which may delay the work.</p>
<p>Accomplishments to date</p>	<ul style="list-style-type: none"> • Heat pump dryers floored by big box retail throughout the region (Lowe’s – 36 locations). • Regional Technical Forum confirmed Utility Combined Energy Factor metric is superior to Department of Energy metric for measuring energy use of dryers in the field. • Consumer market research work completed. NEEA Staff used these results to influence Whirlpool to reverse long-standing decision not to participate in ENERGY STAR’s Most Efficient certification process.

<p>2018 Goals</p>	<ul style="list-style-type: none"> • Increase confidence and demand • Expand to Laundry Initiative/ Add Washers • Define consumer audience segments • Refine technology roadmap 	<p>Market Progress Indicators:</p> <ul style="list-style-type: none"> • Increased consumer demand, retailers promote benefits, manufacturers continue offering products for reasonable price • Retailers pair more products with washers on the floor, increased consumer satisfaction with performance
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		<ul style="list-style-type: none"> • Completion of consumer segmentation research and resulting, actionable deliverables • Manufacturers continue offering products for a reasonable cost, increased consumer satisfaction with product performance.
Key 2018 Activities	Ongoing: <ul style="list-style-type: none"> • Continue retailer pilots and partnerships • Marketing campaigns using findings from market tests and consumer segmentation • Leverage multifamily market research learnings to target additional installations • Support voluntary and Federal Standards processes • Utility outreach and program support 	Measuring Success/KPIs: <ul style="list-style-type: none"> • Number of models stocked, number of models floored, average shipping time • Campaign-specific KPIs, creation of baseline consumer awareness metric and comparisons • Multifamily quotes and orders increase • Increased performance requirements for ENERGY STAR, ENERGY STAR Most Efficient, and Federal specifications and test procedures (including gas) • Additional utilities offer clothes dryer programs, new extra-regional partnerships with California and Canada
	New: <ul style="list-style-type: none"> • Leverage insights from completed market tests • Develop retailer trainings • Explore paired laundry opportunities • Investigate emerging technology 	Measuring Success/KPIs: <ul style="list-style-type: none"> • Increased consumer demand, retailers promote benefits of products, manufacturers continue offering products for reasonable price • Number of trainings delivered • Data analysis investigating laundry pair market trends (consumer preference, industry attachment rates, potential savings from paired performance, etc.), increased paired purchases, performance pair specification • Achieve confidence/clarity of the technology roadmap, additional products added to Qualified Products List, incremental costs continue to decline, alignment with natural gas team on manufacturer outreach

Levelized Cost (cents per kWh)	TBD <i>(This program is in early stage of product/program development. Final cost data and calculations will be available prior to full scale market entry)</i>
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	Total Regional Savings (aMW)		Co-Created Savings (aMW)	
	BP Target	Actual	BP Target	Actual
Savings to Date (2015-2017)	N/A	2.3	N/A	1.1

	Total Regional Savings (aMW)		Co-Created Savings (aMW)		Comments
	BP Target	Forecast	BP Target	Forecast	
2018 Savings	N/A	0.8-1.0	N/A	0.4-0.6	Based on Q1 2017 forecast of adoption
2015-2019 Savings	N/A	3-5	N/A	2-3	This reflects achieving 40% market share for ENERGY STAR Dryers in 2019 (2017 YTD ~35%)
2015-2024 Savings	N/A	12-15	N/A	7-10	This reflects achieving 50% market share for ENERGY STAR Dryers and 15% market share for Heat Pump dryers in 2024 ³

³ These savings forecasts are based on regionally approved kWh values as of June 2017. In July 2017, the Regional Technical Forum approved a savings decrease of Tier 1, base ENERGY STAR dryers from 93 kWh to 8 kWh. Approximately 56% of the long-term savings for this initiative come from Tier 1 dryers. The initiative team is working during summer and fall 2017 to collect data supporting an increase in savings. However, if data shows that there are minimal savings from ENERGY STAR, the savings forecasts in this table will decrease significantly.

Additional Value Delivery	Energy Efficiency Resources: The Dryers team has forged a strong partnership with ENERGY STAR that can be leveraged across other consumer products initiatives, other codes and standards support, adding and enhancing relationships with manufacturers, findings from multifamily market research, addition of clothes washers brings in potential new partners for utilities (water and wastewater utilities)
	aMW savings: Integration of clothes washer activities (laundry pairs) to help extend the life of utility funders' washer programs, ENERGY STAR specification advancement
	Customer Engagement Opportunities for the region/funders: Integration of clothes washer activities, retailer pilots, partnerships, and trainings, findings from multifamily market research

	2017 Forecast	2018 Budget
Annual Budget	\$852,000	\$1,010,000
Variance	Anticipating 15% increase in spending from 2017 to 2018 to account for scale-up and market development ramp-up activities (more program support from Program Management Contractor, multifamily incentives quoted in 2017 will need to start being paid, additional marketing materials needed for region, potential new technologies coming to market that will need testing, potential testing to support increased ENERGY STAR performance, etc.)	

Risk(s)	Mitigation(s)
If base ENERGY STAR models do not save energy, then regional and utility program savings potential will significantly decrease	<ul style="list-style-type: none"> Obtain test data from ENERGY STAR to verify aggregate category savings Validate ENERGY STAR savings using supplemental test procedure in the lab Revisit Regional Technical Forum to have them review new data and analysis once complete
If consumer demand remains low and manufacturers do not achieve economies of scale that enable cost reduction, then the cost of product remains high to consumers	<ul style="list-style-type: none"> Spur demand by providing incentives that temporarily reduce cost to consumer Demonstrate value proposition to supply chain by illustrating regional commitment and consumer adoption

	<ul style="list-style-type: none"> • Identify beachhead markets where manufacturers can operate profitably so manufacturing scale can be achieved • Work with manufacturers to address pricing and benefits • Leverage findings from consumer value proposition research and consumer segmentation to drive up consumer awareness
If existing manufacturers pull out of U.S. market, there will be no high-efficiency products to promote in the market and the initiative will stall	<ul style="list-style-type: none"> • Ongoing engagement with manufacturers, creating expectations and securing commitments • Motivate continued embracement of business case • Investigate and build relationships with additional manufacturers who are working on new technologies
If retailers do not floor heat pump models, sales will remain low	<ul style="list-style-type: none"> • Leverage existing manufacturer activities at key retailers • Refine value proposition to retailers
If the barriers to heat pump adoption are too high, then there will be no high-efficiency products to promote in the market and the initiative will stall	<ul style="list-style-type: none"> • Investigate energy-efficient clothes dryer emerging technologies • Partner with ENERGY STAR to influence increased performance specifications for base ENERGY STAR machines • Work with Oak Ridge National Labs and manufacturers on emerging technologies (like ultrasonic) to accelerate commercialization
If the Department of Energy does not move forward on expected standards and test procedure revisions, then savings from the initiative will be delayed	<ul style="list-style-type: none"> • Leverage manufacturer relationships to gain support of increased performance requirements • Continue to collaborate with ENERGY STAR to drive voluntary specifications forward • Develop partnerships outside the region (with California and Canada) to align interests in increased specs

Heat Pump Water Heaters

<p>Program Description</p>	<p>Influence the passage of a federal standard requiring HPWHs for all electric storage tanks greater than 45 gallons by 2025.</p>
<p>Program Status (Market Development)</p>	<p>Heat Pump Water Heaters are experiencing strong year-over-year growth and should hit 14,000 sales in 2017. Manufacturers indicate they need to significantly ramp sales (by 50%) soon, so 2018 is a critical year for success in the Northwest and nationally.</p>
<p>Estimated Time to Transition Complete</p>	<p>Target year: 2025</p> <p>Assumption: A 2025 federal standard remains the target goal for the Heat Pump Water Heater program. This is contingent on the schedule for federal rulemaking. We are anticipating delays in this work but have not revised our target date due to lack of information.*</p> <p><i>*Team would like to discuss broadening initiative goal to acknowledge achieving efficiency in electric water heating market regardless of whether there is a standard</i></p>
<p>Accomplishments to date</p>	<ul style="list-style-type: none"> • 4,978 Heat Pump Water Heater sales through Q2, a 48% growth over 2016 sales of the same period • Increased Heat Pump Water Heater availability in the region by supporting the commercialization of A. O. Smith product in Lowe's and launching a Bradford White promotion • Enhanced contractor training materials and delivery to increase product knowledge and reduce perception barriers; delivered 7 heat pump water heater training events with 73 contractor companies in attendance through Q2 • Consumer Products Regional Strategy work identified annual percentage sales targets and quarterly data ask to track progress to targets.

<p>2018 Goals</p>	<ul style="list-style-type: none"> • Increase sales (20,000 units sold in the region) • Increased installer acceptance/adoption • National engagement 	<p>Market Progress Indicators:</p> <ul style="list-style-type: none"> • Unit goal: Increased sales through consumer demand, installers promote and offer product to customers, manufacturers continue support • Installer adoption goal: Emergency replacement installations increase: wholesale channel sales/installations
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		<p>are increasing (approximately +25% in 2017) but there are still indicators installers do not accept the technology, widespread product misconceptions and unwillingness to offer product as first option to customers. Installers committed to product, understand benefits and present Heat Pump Water Heaters as the first choice replacement for electric water heat customers</p> <ul style="list-style-type: none"> • National: more national utilities offering programs; sustainable communities promoting technology; manufacturer sales goals met; adoption of NEEA Advanced Water Heater Specification; low income programs promoting and installing technology; builders standardize Heat Pump Water Heater for homes slated with electrically heated water
<p>Key 2018 Activities</p>	<p>Ongoing:</p> <ul style="list-style-type: none"> • Emergency replacement penetration through targeted installer training and per unit sales bonus • Midstream utility program adoption support • In-person, targeted trainings and recorded training modules on NEEA learning management system 	<p>Measuring Success/KPIs:</p> <ul style="list-style-type: none"> • Emergency replacement: Increased wholesale sales and integrate product into standard water heater supply channels • Midstream: Bonneville Power Administration data requirements allow for midstream programs to start • Training modules: Number of installers trained; number of units sold through wholesale channel
	<p>New:</p> <ul style="list-style-type: none"> • Leverage other opportunities such as low income, sustainable communities, Ductless Heat Pump program, etc. • Deeper analysis of potential audience (e.g. low-income and new construction) • Emergency replacement pilot: identifying where tanks need replacement and creating market interventions 	<p>Measuring Success/KPIs:</p> <ul style="list-style-type: none"> • Other opportunities: Increased sales among different markets (difference income categories, among those with Ductless Heat Pumps, etc.) • Audience research: materials and strategies to better overcome barriers in consumer mindset and into potentially branching out target markets • Develop case studies teaching installers, distribution and OEM's on how they can proactively find water heater replacement opportunities and prevent emergency replacement and turn them into planned. Share case studies nationally.

Levelized Cost (cents per kWh)	2.2 ¢/kWh <i>This is a final figure calculated using the ProCost v3 tool and our most recent savings and cost information</i>
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	Total Regional Savings (aMW)		Co-Created Savings (aMW)	
	BP Target	Actual	BP Target	Actual
Savings to Date (2015-2017)	N/A	4.75	N/A	3.60

	Total Regional Savings (aMW)		Co-Created Savings (aMW)		Comments
	BP Target	Forecast	BP Target	Forecast	
2018 Savings	N/A	2.6-3.4	N/A	2.2-2.9	High end of range represents 19,600 installs in 2018.
2015-2019 Savings	21	10-13	13	8-11	The midpoint of this range reflects 57% CAGR in sales from 2016-2019; Shortfall in TRS comes primarily from large tank standard non-compliance; Corresponding adjustment to baseline allows for greater proportion of large tanks to count as co-created.
2015-2024 Savings	68	55-72	N/A	45-64	Current forecast of 58 aMW for TRS reflects achieving 30% market share by 2024, the year before the prospective small tank standard is effective.

Additional Value Delivery	Market Relationships: Team has forged strong partnerships with water heater manufacturers that are leveraged across other electric and gas NEEA initiatives, utility programs and national-level work.
	Codes and Standards: Codes and Standards work informs ongoing refrigerant work, large tank work around issues, new construction electric water heater requirements and the 2025 Federal Standard goal.
	Emerging Technology: Trust with manufacturer technology teams allow input on shaping future products to address challenging installs; assistance with demand response projects proving Heat Pump Water Heaters for additional grid services the region can leverage; updating the Advanced Water Heater Specification; data to support increased confidence in savings value and cost effectiveness of efficient water heating technologies.

	2017 Forecast	2018 Budget
Annual Budget	\$4,538,000	\$3,476,000
Variance	The 2018 incentive strategy is shifting from a per unit upstream incentive to a partnered awareness strategy approach with our manufacturing partners and small stocking incentives with the distribution channel.	

Risk(s)	Mitigation(s)
Manufacturer commitment wanes due to slower than anticipated uptake of product.	Strongly encourage the region to continue incenting products, work on supply chain education to discourage large tank work-arounds and focus promotional efforts on large tank product.
Emergency replacement market remains difficult to penetrate. Installer reluctance to offer Heat Pump Water Heaters as first replacement option continues.	Collaborate with supply chain to target the replacement market, develop resources that can be used to quickly capture replacement consumers and direct them to a Heat Pump Water Heater.
Viable product not developed for Single Family/Multifamily/Manufactured housing with electric resistance water heater sales (also need solutions for challenging installs such as lows, fat boys, etc.	Research to understand these markets and their potential; work with manufacturers on product development to address these markets.

Ductless Heat Pumps

Program Description	<p>The Ductless Heat Pump initiative works to accelerate the adoption of inverter driven ductless heat pumps in electrically heated homes by building product distribution channels, market capacity and consumer demand.</p>
Program Status (Market Development)	<p>The market continues to grow and year-over-year growth is strong across the market (~20% 2016). However, the identified target markets are currently still in the early stages of the S-Curve (13.8% market saturation for Single Family Zonal) and year-over-year growth is slowing down (8% 2016).</p>
Estimated Time to Transition Complete	<p>December, 2020</p> <p>ASSUMPTION: 2018-2019 target market focus yields strong results. Cost comes down. Utility program cost effectiveness improved. Next Residential HVAC intervention is identified by the region.</p>
Accomplishments to date	<ul style="list-style-type: none"> • Created and delivered new marketing materials and consumer education pieces • Secured three regional manufacturer promotions • Completed and delivered Cost Containment analysis to region

2018 Goals	<ul style="list-style-type: none"> • Cost containment • Reach target market • Advance market and utility understanding and acceptance of new test procedure and displacement best practices 	<p>Market Progress Indicators:</p> <ul style="list-style-type: none"> • Supply Chain Adoption of the 1:1 displacement approach increases. Appropriate application of the technology • Product affordability improves • Consumer has sufficient knowledge to demand quality equipment at a competitive price • Consumer adoption increases overall and in target markets
Key 2018 Activities	<p>Ongoing:</p> <ul style="list-style-type: none"> • Cost Containment Investigations <ul style="list-style-type: none"> ○ Quick Connect and DIY Field Study ○ Bulk Buy Pilot 	<p>Measuring success/KPIs:</p> <ul style="list-style-type: none"> • Average system cost for target market decreases/1:1 systems price drops below \$3,800.

	<ul style="list-style-type: none"> ○ Non-traditional installers ○ Fixed Cost Pilot ● Develop Consumer awareness/confidence/valuation tools 	<ul style="list-style-type: none"> ● Increase general consumer awareness to above 50% ● 15% year-over-year growth in installs in target markets
	<p>New:</p> <ul style="list-style-type: none"> ● Marketing and consumer tools focused on Single Family Zonal homes' hard-to-reach markets ● Pilot projects with utilities to test cost containment methods. ● Recruit non-traditional installers ● Seek and leverage additional market transformation partners such as climate, health, hard-to-reach populations groups. ● Include cooling opportunity in marketing and consumer messaging. ● Prepare for utility and manufacturer use of seasonal coefficient of performance for heating (SCOP_h) 	<p>Measuring Success/KPIs:</p> <ul style="list-style-type: none"> ● Regional average system costs reduced (Goal: \$3,800 average) ● Increase in Consumer awareness to above 50% ● 15% year-over-year growth in installs in target markets ● Increase in cost effectiveness for utilities ● All top NW manufacturers have products tested to the SCOP_h /Funders and efficiency agencies set a SCOP_h requirement. ● Three new partners leveraging program collateral and website to inform their membership about the ductless heat pump opportunity/value/benefit

Levelized Cost (cents per kWh)	<p>3.9 ¢/kWh</p> <p><i>This is a final figure calculated using the ProCost v3 tool and our most recent savings and cost information</i></p>
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	Total Regional Savings (aMW)		Co-Created Savings (aMW)	
	BP Target	Actual	BP Target	Actual
Savings to Date (2015-2017)	N/A	10.6	N/A	7.6

	Total Regional Savings (aMW)		Co-Created (aMW)		Comments
	BP Target	Forecast	BP Target	Forecast	
2018 Savings	N/A	3.8-4.4	N/A	2.5-3.0	Uncertainty around utility program volumes and trends in installer behavior outside of target homes
2015-2019 Savings	22	19-24	17.5	13-16	Adoption in target market has slowed since business plan, stagnating utility incentives a primary factor
2015-2024 Savings	67	50-62	N/A	27-35	To achieve the high end of this range, the program will need to see over 35% saturation in the Single Family Zonal Heated market by 2024. Current forecast is not explicitly related to retail adoption; however, retail is an opportunity to lower costs to consumers. Products will need to be attractive options for consumers to reach high saturation levels in our target markets.

Additional Value Delivery	Research and Data: Regional insights into average install costs and price trends; cost drivers, market share; Full category HVAC data to inform future HVAC program development or expansion in the region.
	Customer engagement opportunities and materials through promotions and marketing materials.
	Installer training for the displacement approach and best practices to meet the region’s priorities and customer satisfaction.
	Convening workgroup and webinars for utilities to share program successes and challenges to learn from each other and receiving support from NEEA Staff.
	NEEA Staff has relationships with manufacturers and distributors to streamline communication between them and utilities.

	2017 Forecast	2018 Budget
Annual Budget	\$1,188,000	\$1,382,000
Variance	The market is transforming but the target markets are slipping behind. NEEA staff propose to invest in a couple years of new tactics to reach the Market Transformation inflection point for the target markets, then move to Long Term Monitoring and Tracking. This structure will be less resource-intensive through Transition Complete.	

Risk(s)	Mitigation(s)
If Oregon's sun-setting of the Residential Energy Tax Credit causes significant decrease in sales/installs in Oregon	Work with installers and distributors to communicate/message price increase impacts to consumer demand.
If retailers do not see value in the opportunity to develop their own installer network, then low-cost pilot may lack a critical market partner for long term success.	Meet with retail partners before launching the pilot to ensure their concerns, needs, barriers are known, understood, and addressed where possible.
If we cannot find willing participants in the supply chain to participate in cost containment strategies, we will not be able to test these in the market <ul style="list-style-type: none"> - Installers - Distributors - Manufacturers 	Offer mid-stream incentive to pilot installers to gain their participation. Develop additional value proposition for supply chain.
If Cost Containment strategies disenchant supply chain partners and it becomes difficult to get market data	Engage manufacturers and installers early and offer opportunities to participate or add value through partnerships and recognition.
If the value proposition is not strong enough for target market homeowners to overcome the upfront cost barrier, then target market will not reach saturation goal and regional savings targets may be missed.	Continue to support development of less expensive technology including Packaged Terminal Heat Pumps (PTHPs).
If the new approach of regional data collection in agreement with BPA does not yield regional sales data due to unwilling distributors, then the program does not have sales data on which to calculate savings.	Shift tactics to go back to product-specific data and rely on utilities for direct data input.
If utilities do not want to/are unable to collaborate on low-cost pilot, then pilots will have less chance of success in the market	Explore alternate structure that would allow pilot program success w/o their direct involvement.
If it takes longer than anticipated to develop and test the low-cost pilots, then results will not be achieved in 2018.	Conduct market message testing independently of pilot program.

If manufacturers refuse to test their equipment with new Variable Capacity Heat Pump (VCHP) test procedure (to get Seasonal COP _h value)	Pay for 100% of testing on a limited number of products.
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Next Step Homes

Program Description	Next Step Homes leverage the infrastructure created by the prior Efficient Homes program to develop and increase market adoption of energy-efficient advanced building practices for single-family homes, aimed at influencing and accelerating code adoption over the next 3-4 code cycles.
Program Status (Market Development)	Targeting Scale-Up milestone on 9/30/2017
Estimated Time to Transition Complete	2026
Accomplishments to date	<ul style="list-style-type: none"> • Launched single-family performance path utility program • Successfully transitioned Northwest ENERGY STAR Homes to the market and introduced BetterBuiltNW as the program’s new upstream-facing brand • Began counting energy savings from all home certification programs in the Northwest

2018 Goals	<ul style="list-style-type: none"> • Identify long term state specific energy code targets. • Utilities support builders to offset cost of adding energy-efficient features. • Increased coordination, alignment and consistency between home certification programs in the Northwest. • Code measures identified, validated and proposed to code bodies. • Raise awareness for energy efficiency in new homes. 	Market Progress Indicators: <ul style="list-style-type: none"> • An energy code state action plan for each state • Utilities adopt Bonneville Power Administration single- family performance path to offer incentives • Participation in home certification programs increased • Consistent modeling protocols and data sharing • Number of code measures proposed • Number of code measures adopted • Increased consumer awareness/demand for energy efficient homes, adoption of energy-efficient measures, increased builder knowledge and expertise
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Key 2018 Activities	Ongoing: <ul style="list-style-type: none"> • Utility outreach and program support • Foster Market Partner support (builder, raters, home certification programs) • Coordination between home certification programs • Technical training development and delivery <ul style="list-style-type: none"> ○ 	Measuring Success/KPIs: <ul style="list-style-type: none"> • 4-6 utilities adopt performance path program in 2018 • Increased program participation in home certification/utility programs • Market Partners (builders, raters) participating in major markets • Home certification programs participate in quarterly roundtables • Home certification programs establish data sharing agreements with NEEA • Quality assurance results show compliance with program requirements • Increased traffic to BetterBuiltNW resources page
	New: <ul style="list-style-type: none"> • Coordination between cities and utilities to achieve Climate Action plans and energy related goals • Learning Management System Training Development • Participation in Washington code development process • Collaborate with Commercial Code Enhancement to develop State Action Plans with each state 	Measuring Success/KPIs: <ul style="list-style-type: none"> • Three case studies of collaboration with cities/utilities • Market using NEEA’s Learning Management System for technical trainings • WA code includes best practice from NEEA’s Next Step Homes findings • Next Step Homes analysis is included to support code proposals • State Action Plans that identify long-term energy code targets

Levelized Cost (cents per kWh)	N/A <i>Cost effectiveness has not been calculated for Homes</i>
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	Total Regional Savings (aMW)		Co-Created Savings (aMW)	
	BP Target	Actual	BP Target	Actual
Savings to Date (2015-2017)	N/A	3.4	N/A	0.9

	Total Regional Savings (aMW)		Co-Created Savings (aMW)		Comments
	BP Target	Forecast	BP Target	Forecast	
2018 Savings	N/A	1.3-2.2	N/A	0.8-1.4	Potential increase in retroactive single family and multifamily starting from 2015
2015-2019 Savings	13	5.2-8.0	7	2.6-4.1	
2015-2024 Savings	31	10.5-22.8	10	5.3-11.5	

Additional Value Delivery	Customer Engagement Opportunities – Relationship building opportunities with residential builders and raters
	Energy Efficiency Resources – Technical market partner trainings support in utility service areas; BetterBuiltNW as regional online resources; regional utility support for Bonneville Power Administration performance path program
	aMW Savings – Regional database collecting utility program participation data; data sharing agreements with home certification programs

	2017 Forecast	2018 Budget
Annual Budget (Includes MRE)	\$1,412,000	\$1,212,000
Variance	None	

Risk(s)	Mitigation(s)
Builders do not participate in utility incentive programs	Provide builder/rater support to increase awareness of utility incentives and overcome challenges to participation
Residential new construction slows	Show builders the value of participating in a home certification program
Code adoption slows	Facilitate code collaborative meetings in each state to create long-term code roadmaps that voluntary programs can support

Manufactured Homes

Program Description	Demonstrate success with a new above code specification (NEEM 2.0) in the market prior to a Federal code change. Transition utility incentive programs to NEEM 2.0 and provide manufacturers/retailers with the tools and resources they need to drive consumer demand.
Program Status (Program Development)	Proposing an upstream incentive strategy to introduce NEEM 2.0 to the market in Q3/Q4 2017.
Estimated Time to Transition Complete	2023
Accomplishments to date	<ul style="list-style-type: none"> Regional Technical Forum approval of NEEM 2.0 Four NEEM 2.0 demonstration homes with manufacturers Market Research completed on homebuyers

2018 Goals	<ul style="list-style-type: none"> Establish NEEM 2.0 in the market Utilities offer NEEM 2.0 incentives Retailers have the resources to sell NEEM 2.0 to homebuyers 	Market Progress Indicators: <ul style="list-style-type: none"> Market Share Number of utilities offering NEEM 2.0 incentives
Key 2018 Activities	Ongoing: <ul style="list-style-type: none"> Offer incentive and technical support to manufacturers to build NEEM 2.0 	Measuring Success/KPIs: <ul style="list-style-type: none"> 2-3 Manufacturers agree to build NEEM 2.0
	New: <ul style="list-style-type: none"> Utility outreach and support to plan NEEM 2.0 incentive programs Provide retailer sales tools and resources they need to sell NEEM 2.0 	Measuring Success/KPIs: <ul style="list-style-type: none"> 5-10 Utilities offer NEEM 2.0 incentives 5-10% NEEM 2.0 Market Share

Levelized Cost	N/A – This program is not yet in Market Development
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Savings to Date	N/A – This program is not yet in Market Development
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	Total Regional Savings (aMW)		Co-Created Savings (aMW)		Assumptions
	Target	Forecast	Target	Forecast	
2018 Savings	N/A	.05	N/A	.05	Draft Savings
2015-2019 Savings	N/A	.16	N/A	.16	Draft Forecast
2015-2024 Savings	N/A	.50	N/A	.50	Draft Forecast

Additional Value Delivery	Customer Engagement Opportunities – Marketing to Manufactured Home buyers to purchase NEEM 2.0; developing relationships with local retailers
	Energy Efficiency Resources – Regional support for NEEM 2.0 incentive program; technical resources for upstream partners; quality assurance on utility incentivized homes
	aMW Savings – Tracking NEEM homes in the Northwest; establishing an upper tier specification; creating resources that communicate the value proposition for the energy efficient option

	2017 Forecast	2018 Budget
Annual Budget	\$273,000	\$424,000
Variance	Increases in 2018 and 2019 are proportionate to increasing market share/incentives.	

Risk(s)	Mitigation(s)
Manufacturers do not participate in NEEM 2.0	Increase upstream incentive
Retailers do not sell NEEM 2.0	<ul style="list-style-type: none"> • Develop marketing materials to help communicate the value proposition of energy efficiency • Consider offering a Retailer bonus for NEEM 2.0 sales
Consumers do not buy NEEM 2.0	<ul style="list-style-type: none"> • Develop marketing materials that communicate the value proposition of energy efficiency • Increase awareness of utility homebuyer incentives

Retail Platform

<p>Platform Description</p>	<p>The Retail Platform is a value transfer mechanism through which NEEA obtains sales data and provides incentives for products sold through retail channels. The platform is NEEA's effort to develop a long-term lasting relationship with a primary channel of consumer product distribution.</p> <p>The purpose of this platform is to support multiple initiatives and utility programs and speed the time to market for new efficiency opportunities.</p>
<p>Status</p>	<p>Best Buy, Home Depot, Sears, and Nationwide Marketing Group currently use the retail platform. NEEA, PG&E, SMUD, Xcel Energy, ConEdison, DTE, Efficiency Vermont, Focus on Energy – Wisconsin, and New Jersey's Clean Energy Program are currently using the platform. Additional support for the platform comes from NEEP, VEIC, and ENERGY STAR.</p>
<p>Accomplishments to date</p>	<ul style="list-style-type: none"> • Added Nationwide Marketing Group (a buying aggregator representing 3,500 small retailers across the nation). • Integrated data portion of the platform with Department of Energy database to streamline data matching process. • Updated payment section of the platform's portal to provide greater detail and visibility for participating retailers.

<p>2018 Goals</p>	<ul style="list-style-type: none"> • Create metrics to quantify the value of platform to NEEA. • Add appropriate NEEA initiatives to the platform. • Test a sub-regional program with a funder to determine the value of the platform to funder programs.
<p>Key 2018 Activities</p>	<p>Ongoing:</p> <ul style="list-style-type: none"> • Enhance data collection and refine portal functionality • Add new retail partners and product categories • Add extra-regional program sponsors <p>New:</p> <ul style="list-style-type: none"> • Implement contract format that allows easy addition of new product categories and new program designs. • Develop alternative data structure that supports participation from multiple analytics companies. • Use existing data to identify new opportunities and market insights.

Platform Value	<p>NEEA and the region benefit through:</p> <ul style="list-style-type: none"> • Access to full category data for supported products. • Access to corporate-level decision makers • Speed to market for energy-efficient products and programs • Influence with ENERGY STAR <p>Retailers benefit through:</p> <ul style="list-style-type: none"> • Easier access to incentive dollars which improves profitability • Lower implementation costs • A single interface and consistent process for engaging with utility programs <p>NEEA funders see increased cost-effective savings through:</p> <ul style="list-style-type: none"> • Capturing savings that are too small or costly to be captured through traditional incentive programs • Market data to help a program understand its reach and identify new opportunities • Increase in current program impact through engagement with retail corporate decision makers
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Additional Value Delivery	<p>NEEA is uniquely qualified to build this platform because as an alliance, we represent the entire region (4.5% of US households). The retail market is comprised of companies that do business on a national and international level. Due to their size, the market typically engages with partners who represent geographic and/or financial scale. The alliance aggregates the collective value that Northwest utilities bring to the energy efficiency efforts including incentives, field services and local customer knowledge. The market values access to this diverse set of capabilities via a single point of contact.</p>
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Risk(s)	Mitigation(s)
<p>Unable to maintain sufficient value to keep national retailers interested. National retailer relationships lapse.</p> <ul style="list-style-type: none"> • Significant time required to re-engage, negating current investments made to-date in developing rapport and trust with the channel actors. • Current contractual benefits of full category data, access to decision makers, and store access may not be able to be re-negotiated. • Loss of influence with ENERGY STAR and the manufacturing community if we are not meaningfully engaged with the retail channel 	<p>Rebuild platform with new set of national and regional retailers who may benefit from a streamlined process.</p> <p>Pay outright for data. Work with funders to leverage local store influence and develop a “bottom’s up” approach to corporate influence.</p> <p>Collaborate with extra-regional utilities and other regional energy efficiency organizations to develop national scale on key products (i.e. Heat Pump Water Heaters) where possible.</p>

<p>Loss of efficiencies in the retail channel:</p> <ul style="list-style-type: none"> • Inability to cost-effectively pursue the savings from smaller more diverse opportunities in the Consumer Products market. • No access to, or increased costs for, access to sales data. • Increased time to market for new energy efficiency opportunities. 	<p>Develop and implement strategy for deeper engagement with the consumer products wholesale channel.</p> <p>Pay outright for data, reduce data requirements to absolute minimum required for tracking.</p>
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