Regional Portfolio Advisory Committee



DATE: Monday, May 13, 2024 **TIME:** 12:30 – 4:00pm Pacific

LOCATION: Hybrid @ Spokane Convention Center (334 W Spokane Falls Blvd, Spokane; room 102 C&D)

VIRTUAL: Click here to join the meeting (Meeting ID: 249 119 302 860 | Passcode: 8YemSm)

(if needed) Call-in audio only: 971-323-0535 | Phone Conference ID: 401 625 283 #

GLIVDA (All I	imes Pacific)	I	Page #
12:30-12:50 (20 min)	Welcome, Introductions and Agenda	AII	1-2
12:50-1:05 (15 min)	Housekeeping and Looking Ahead Updates Stakeholder Satisfaction Survey & Coordinating Committee Assessment Cycle 7 (2025-29) Business Plan Load Flex Announcements & Reminders Residential Building Stock Assessment (RBSA) Release Heat Pump Water Heater (HPWH) Federal Standard Desired Outcome: Committee aware of recent developments and upcoming topics for engagement.	Jonathan Belais Alisyn Maggiora Becky Walker Mark Rehley	
1:05-1:45 (40 min)	RPAC Round Robin • Big changes (programs/personnel) • Current challenges, lessons learned • How utility activities relate to NEEA's • Sharable tools/materials • Equity, hard-to-reach markets • Findings, filings, IRPs	RPAC Members	
10 min	BREAK		
1:55-2:40 (45 min)	 Electric Portfolio Update Portfolio status and energy savings outlook New portfolio opportunities: concepts in development <u>Desired Outcome</u>: Committee informed on portfolio status and priorities. 	Stephanie Rider Eric Olson	3-10
2:40-3:20 (40 min)	Manufactured Homes Transition Market Progress Evaluation Report (T-MPER) • Highlights from recently published T-MPER for Manufactured Homes Desired Outcome: Committee members are aware of the past, present, and future of the manufactured housing market in the Northwest.	Mark Rehley	11
10 min	BREAK, TRANSITION TO RPAC+ PORTION	ALL	
3:30-3:50 (20 min)	 Refresher on Proposed 2024 "HWPH Consumer Campaign" Funder Elections: The RPAC+ process states (see <u>Business Plan</u>, item 1d, page 142): Funders will commit to participating, self-delivery, or exemption We'll refresh on the process and record elections for all electric funders for this activity. 	Britt Cutsforth Dawkins Alisyn Maggiora	12

3:50-4:00 (10 min)	Public Comment, meeting debrief and adjourn	Alisyn Maggiora	
5:00-7:00	No-host EFX Happy Hour @ Davenport Grand Terrace Bar	All	

Informational Updates:

- Page 13: Inform: Heat Pump Water Heater Innovation Prize
- Page 14-15: Q1/Q2 Committee Updates

Additional Reference Materials:

- Programmatic Updates:
 - Q1 2024 Market Progress Report (Gas + Electric Programs)
- Committee Meeting Materials & Charters:

Please review the committee updates summary on pg. 14 for a quick recap on each committee's activities over the past 1-2 quarters.

- o Advisory Committees
 - Q1 2024 RPAC meeting <u>packet</u>, <u>slides</u> and <u>notes</u>
 - Q2 2024 Cost Effectiveness and Evaluation Advisory Committee <u>packet</u>, <u>slides</u> (notes forthcoming)
 - Q1 2024 Regional Emerging Tech Advisory Committee packet, slides and notes
- Coordinating Committees
 - Q1 2024 Products Coordinating Committee packet, slides, and notes
 - Q1 2024 Integrated Systems Coordinating Committee packet, slides, and notes
 - 2024 Annual Workplans: Products (PCC) | Integrated Systems (ISCC)
- Charters: RPAC, ISCC, PCC, CEAC, RETAC
- Latest Functional Newsletters:
 - o Q1 2024 Newsletter Market Research and Evaluation
 - Q1 2024 Newsletter Emerging Technology
 - o Q4 2023 Newsletter Codes, Standards and New Construction

Memorandum



May 6, 2024

TO: Regional Portfolio Advisory Committee

FROM: Stephanie Rider, Director, Data, Planning and Analytics

CC: Susan Hermenet, Vice President, Analytics, Research and Evaluation;

Becky Walker, Vice President, Market Development and Transformation

SUBJECT: 2023/Business Cycle 6 (2020-2024) Portfolio Update

Background

NEEA manages a market transformation portfolio that encompasses market transformation initiatives (MTI), state energy codes and state and federal standards both as independent transformation initiatives as well as incorporated explicitly as part of other MTI strategies, and cross-cutting market infrastructure platforms. NEEA also manages complementary investments in regional data, research and evaluation studies in support of the portfolio development and management.

NEEA integrates these efforts together into market transformation strategies designed to advance new technologies and affect market structures in order to create acceptance and sustained market change for energy efficiency products in our region.

NEEA manages this portfolio and the respective investment resourcing decisions to optimize the outcomes for the region. Through regular evaluations, NEEA is able to track market progress of each MTI and because of our relationships, NEEA is also able to access valuable manufacturer and distributor sales data to track market adoption in order to calculate energy savings, which is one benefit derived from our work transforming markets.

The purpose of this memo is to provide a status update to this current business cycle portfolio strategy, business plan metrics and market indicators as of year-end 2023.

Portfolio Overview

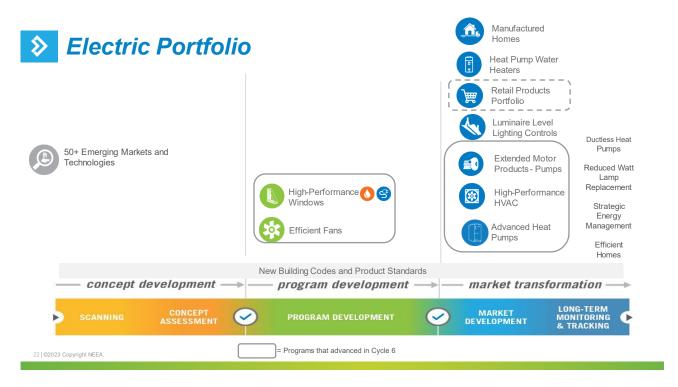
NEEA's current electric portfolio is comprised of 13 initiatives across the stages of maturity in the initiative lifecycle. These initiatives span early maturity phase of *Program Development*, through *Market Development*, and the late-stage maturity phase of *Long Term Monitoring*.

Northwest Energy Efficiency Alliance
700 NE Multnomah Street, Suite 1300, Portland, OR 97232
503.688.5400 | Fax 503.688.5447
neea.org | info@neea.org

The portfolio also encompasses independent, opportunistic efforts to influence state building codes and Federal and state product standards (these are referred to as other codes and standards), as well as a number of market transformation programs that incorporate building code and/or product standards strategies into their designs.

Additionally, NEEA continually scans and evaluates emerging technologies and MT opportunities for future advancement into the formalized development process of a market transformation program. See Figure 1 below for the current composition of the portfolio across the initiative lifecycle.

Figure 1: Electric Portfolio by Initiative Lifecycle Phase



NOTE: NEEA MANAGES 3 INFRASTRUCTURE INVESTMENTS THAT ARE NOT DEPICTED IN THE INITIATIVE LIFECYCLE CHART ABOVE:

- BETTER BRICKS
- INTEGRATED DESIGN LAB
- STRATEGIC ENERGY MANAGEMENT (SEM) COLLABORATIVE

Status to Portfolio Strategic Goals

While the strategies and activities to achieve a transformed market transcend the five-year business cycle delineation, NEEA establishes an estimate of the energy savings and related benefits expected to be realized over the course of that business cycle. These cycle estimates are one component to creating and maintaining a healthy portfolio for the region.

Portfolio management efforts direct the alliance resources to balance value delivery across a set of portfolio criteria, including short term (current cycle) savings, long term savings, risk factors and regional distribution of potential, hence creating a well-balanced portfolio.

For a given cycle, the portfolio strategy is developed and continually refined in order to ensure NEEA is optimizing regional resources to maintain a well-balanced portfolio, meet the near-term needs of the region and continue to build out the pipeline of future opportunities.

NEEA's portfolio management strategy during Cycle 6 has been focused on diversification of the portfolio composition. Throughout this current cycle, NEEA has focused on adding programs that balance out the need for nearer term energy savings potential, lower measurability and cost effectiveness risk and balance across market types. As NEEA completes the final year in the current Cycle 6 (2020-2024) the portfolio is broader and more balanced across these factors. See Figure 2 below.

This includes a number of new regional Market Transformation opportunities that NEEA has added to the portfolio recently, including Extended Motor Products – Pumps, Advanced Heat Pumps (residential HVAC), and Televisions to the Retail Products Portfolio. NEEA is also developing new programs in Efficient Fans, High Performance Windows and an extension of the current Luminaire Level Lighting Controls program into exterior lighting. As a result, NEEA has a strong foundation with broad regional value that will carry forward into the next funding cycle, Cycle 7 (2025-2029).

Figure 2: Diversification contributions of new programs introduced in Cycle 6

	Increases Near Term Savings Potential	Balances Risk Profile	Balances Long Term Sector Profile
XMP Pumps	$\overline{\checkmark}$	$\overline{\checkmark}$	tbd
TVs	\checkmark	\checkmark	\checkmark
HP Windows			\checkmark
Advanced HP	✓	tbd	✓
Efficient Fans	tbd	tbd	

Status to Business Plan Metrics

NEEA staff has now finalized the analysis of 2023 data for this portfolio of work. Trends are strong across all programs, and the current forecast for the cycle is within range of what was originally forecast for this business cycle.

Figure 3 – Cycle 6 (2020-2024) Estimated Co-Created Energy Savings, Avoided Emissions and Peak Savings

	Electric Portfolio	
	Current Estimate	Business Plan Forecast
Co-Created Energy Savings to compare to Business Plan	130-150 aMW	115-152 aMW
Co-Created Energy Savings including SEM*	175-200	N/A
Avoided Carbon (Tons CO₂e)	775,000-900,000	N/A
Peak Savings (MW)	350-400	N/A

NOTE:

*SEM WAS NOT INCLUDED IN THE CYCLE 6 PLAN, HOWEVER NEEA HAS CONTINUED INVESTING IN REGIONAL INFRASTRUCTURE TO SUPPORT THE ONGOING DEVELOPMENTS IN SEM ACROSS THE REGION. NEEA DEVELOPED THE SEM FRAMEWORK THROUGH EARLIER INVESTMENT IN THE FOOD PROCESSING INDUSTRY (CYCLES 3-4). SINCE THEN, SEM HAS BECOME WIDELY DEPLOYED THROUGH LOCAL PROGRAM EFFORTS AND HAS EXPANDED ACROSS MANY APPLICATIONS IN COMMERICAL AND INDUSTRIAL SECTORS. NEEA HAS INVESTED IN RESOURCES FOR THE REGION THROUGH CYCLE 6 TO SUPPORT STAKEHOLDERS AND WORK COLLABORATIVELY TO ENABLE COMMERCIAL AND INDUSTRIAL ORGANIZATIONS TO ADOPT SEM. AVOIDED CARBON AND PEAK SAVINGS INCLUDE BENEFITS FROM THE SEM ACTIVITIES NEEA HAS TRACKED IN THE REGION.

There are a number of advancements, risks and upsides that NEEA will closely monitor in order to inform the final year of this cycle forecast as well as provide a reforecast for the Cycle 7 period. See the following section for more information.

Market Indicators

One component of assessing the success of market transformation programs is through independent evaluation of a program's market progress indicators associated with each program's logic model and objectives. Setting and tracking progress to shorter-term program goals is another. These are considered leading indicators of success. Tracking the evolution of technology efficiency and the market's long-term uptake of new technologies over an estimated baseline is another method to assess success. These are considered lagging indicators derived from achieving the strategic objectives in the markets. Together these provide a comprehensive view of market transformation progress and results. Annual data collected over many years helps to see the consistent and compounding effects over the multi-year and many times multi-cycle investment period.

This section provides current updates based on intel and status as of year-end 2023, including highlights from data collection and trend assessment of our key programs, as well as some supplementary context of market transformation activity within each initiative.

Key market updates include the following:

- Delay in Television ENERGY STAR v9. Long term potential remains high
- Reduction in data for Emerging Technology Awards for efficient refrigerators
- Consistent increases in annual market adoption of Heat Pump Water Heater and Ductless Heat Pump products

- Lighting industry incorporating Luminaire Level Lighting Control into its lighting practice standards
- Emerging opportunities in Heat Pump Water Heaters in Multifamily market and Heat Pump Dryers brought to market

Details are provided below.

Consumer Products - Televisions

NEEA drove the opening of the ENERGY STAR specification revision, developed the new ENERGY STAR v9 specification based on a new test procedure, and secured manufacturer commitment. NEEA was involved in the entire specification revision process, including research and development of the test method, collaboration with industry, and direct collaboration with EPA, and other efficiency organizations to help make adjustments and overcome any roadblocks.

NEEA's efforts began several years ago, now resulting in a NEEA-developed test procedure to better estimate energy usage. The test procedure was adopted by ENERGY STAR and the Consumer Technology Association (CTA-2045-C and D).

NEEA is just beginning to collect data to track market acceptance and uptake of the new ENERGY STAR level for televisions. NEEA initially expected a larger portion of the market adoption of ENERGY STAR and resulting energy savings to occur in 2023/4. While the total potential for this program remains solid (anticipating a total of 20 aMW above baseline), delays in manufacturer product updates to meet the specification and in the availability of associated product test data has pushed out the timing of when larger energy savings would begin to be realized.

Additionally, as part of NEEA's work on TVs, seven major manufacturers are actively collaborating in 2024 to establish minimum efficiency levels for both standby and on-mode power that they will voluntarily agree to meet for at least 90% of their products sold. Once the voluntary agreement is finalized, NEEA intends to conduct market analysis and influence evaluation to enable the tracking of these additional savings.

Consumer Products - Retail Products Portfolio (RPP)

During 2023, three new utility sponsors joined the ENERGY STAR RPP program, bringing the share of US households represented by program sponsors up to 24.2%. Achieving greater scale is one way NEEA and the ESRPP program increases the collective influence that the program can have on retailer assortment decisions and ultimately manufacturer product roadmaps and new ENERGY STAR specifications.

The most recent Market Progress Evaluation Report showed that NEEA influenced an ENERGY STAR Emerging Technology Award (ETA) for efficient refrigerators with advanced adaptive compressors, which have accounted for over 15% of the refrigerators with bottom-mounted freezer category sales since 2018 inception. The ETA allowed for the usage of an alternative test procedure that more accurately values the energy performance of this technology. In 2022, the ETA was discontinued which has reduced NEEA's ability to track these highly efficient refrigerator products. NEEA is working to influence specification updates and other pathways to allow for this alternative test procedure and regain visibility to track and influence these important advancements in technology.

New Construction - Manufactured Homes

NEEA completed a Transition Market Progress Evaluation Report assessing the market progress of the Northwest Energy Efficient Manufactured Housing (NEEM)+ specification—a certification NEEA supports that is more stringent than ENERGY STAR. The study verified that NEEM+ market share has been steady

over the past two years and that NEEA should continue to monitor the market to ensure that the homes remain a viable alternative on an ongoing basis.

For 2023, NEEM+ home sales in the Northwest held steady despite an approximately 30% decline in the regional manufactured housing market from 2022. ENERGY STAR and NEEM+ manufactured home shipments in 2023 combined for a 51% regional market share, supported by robust local utility program participation.

HVAC – Ductless Heat Pumps (DHP)

NEEA is monitoring the progress in the ductless heat pump market. NEEA formally began its DHP program in 2008 with a goal to displace inefficient electric heating (such as baseboard heaters and inefficient electric forced-air furnaces) from single-family homes. NEEA's Long-term Monitoring and Tracking Report showed that the total number of counties with access to DHP installers has continued to increase to a total of 135, incented installations for DHPs continues to increase, and the total proportion of HVAC contractors installing DHPs in the Northwest has maintained a steady level.

Ductless Heat Pump sales into target markets have been trending positively over the past several years even as local programs participation begins to decline. Installations of units not receiving utility incentives continue to increase, signaling reduced reliance on market interventions. In addition, new applications have emerged for mini-split systems that have had a positive impact on the diffusion of the technology within our region. To date, NEEA has tracked a total market penetration of 24% into our target markets with market penetration increasing at a relatively steady rate of 2% YOY.

Lighting – Luminaire Level Lighting Controls (LLLC)

NEEA, in partnership with local LLLC manufacturer representatives, engaged and educated lighting specifiers to increase awareness and understanding of LLLC's value proposition. NEEA and the manufacturer representatives supported utility-hosted trainings throughout 2023 by providing demonstration of LLLC to trade allies. While the regional sales data shows there was little change in LLLC adoption rates in 2023, LLLC is gaining more attention. In December 2023, General Services Administration (GSA)'s published LED Lighting and Controls Guidance, which includes LLLC in its the decision flowchart for selecting appropriate lighting controls. Also, NEEA has been participating in the updating of Illuminating Engineering Society (IES)'s Recommended Practice (RP) and Lighting Practice (LP) standards, and the RPs for office space and library to be published sometime in 2024 will include LLLC as recommended lighting controls.

Heat Pump Water Heaters (HPWH)

NEEA observed continuing growth in the HPWH market for 2023 in contrast to expectations after a slow start to sales early in the year. HPWHs are currently estimated to comprise approximately 18% of the electric water heater sales for single family homes. The majority of units in our region are being installed in new construction, and sales through retrofit market channels continue to increase. Currently, NEEA estimates that approximately 150,000 heat pump water heaters have been installed in our region since program inception.

NEEA's seventh Market Progress Evaluation Report, published in 2023, found that both awareness of HPWHs and confidence in the product is increasing amongst installers. Installer confidence in the product is a leading indicator of consumer adoption. Nearly half of the region's installers (representing installers that had received NEEA's HPWH training and those that had not) considered themselves very familiar with HPWHs and reported working with them regularly. This is up from 30% of just trained installers four years

earlier. The recent evaluation also reported that installers estimate nearly 30% of homes could readily accommodate a HPWH, compared to trained installers' estimates that more than half of homes are a good fit for HPWHs. NEEA's plans to focus training curriculum on guiding installers to these more straightforward installation scenarios could signal growth in the retrofit market in the near to medium term.

This year will see a new DOE ruling on a federal standard for water heaters, which was in part influenced by NEEA and the successes of HPWH programs in the Northwest Region. NEEA also has early observations of market penetration into the multifamily sector and has planned research activities to characterize the potential impact of this new market segment.

Codes and Standards

Standards and Test Procedures

NEEA has additional opportunities to influence and transform markets toward higher efficiency beyond the technology-specific initiatives in the portfolio. NEEA utilizes the data, technical expertise and industry relationships cultivated through our market transformation work across the portfolio to advance other appliance and equipment standards at a state and federal level. NEEA also works with industry partners on joint recommendations to the Department of Energy to increase the speed of adoption of new efficiency standards as well as improve test procedures utilized by our industry.

To speed up the rule-making process, NEEA and energy efficiency advocates entered into a multi-product agreement with the Association of Home Appliance Manufacturers (AHAM) to negotiate several appliance standards. AHAM agreed to more stringent efficiency levels in most cases. Meanwhile NEEA and the advocates conceded more time for manufacturers to comply. The agreement helped avoid lawsuits that could have delayed the standards process for many products, including clothes washers, clothes dryers, and refrigerators.

Overall, NEEA responded to more than 27 requests for comment from the Department of Energy regarding Federal standards and test methods. These comment letters covered more than 25 products including consumer furnaces, water heaters, circulating pumps, and clothes dryers. NEEA's comments provided regional data and recommendations to help the DOE set appropriate rules that provide Northwest benefits and are supportable by the market.

Notably, the DOE adopted a new Electric Motors standard. NEEA influenced the development of this standard through working with the National Electrical Manufacturers Association (NEMA) to find common ground and through providing comments throughout the rule-making process based on its experience with motor market transformation programs in the Northwest. NEEA now is planning for savings modeling and influence evaluation work to quantify the value of this achievement.

Building Energy Codes

To affect permanent market change as part of Market Transformation, NEEA provides market intelligence, product and performance data and technical expertise to influence and accelerate the adoption of new and more stringent building energy codes. NEEA also provides training and information to builders, trades and code officials once a new code has passed to increase awareness and understanding on how to implement code changes.

Draft results of a third-party review of NEEA's work show that NEEA is influencing code development both nationally and in the region by bringing proposals to decision makers in Oregon, Washington and to the Internal Energy Conservation Code (IECC), which is the basis for Montana and Idaho codes. NEEA is also

filling gaps in the energy code process in each state. Additionally, more than half of commercial and residential market actors report that NEEA-supported training is positively influencing their knowledge, behaviors, or attitudes. NEEA expects to publish the report in Q2 2024.

Housing starts have been trending high over the last few years, averaging around 70,000 new single and multifamily starts each year. In 2023, the volume of new starts declined by 21%. This is reflected in the current forecast and is a trend to continue to monitor in upcoming years.

Emerging Technology – ENERGY STAR

Six ENERGY STAR product categories went into effect, for which NEEA provided input. Most significantly, Residential HVAC products, including central and ductless AC and heat pumps, went into effect in January 2023, and ENERGY STAR integrated several key pieces of feedback from NEEA. ENERGY STAR Version 5.0 for water heaters went into effect in April 2023, encompassing heat pump water heaters, whole home tankless, and high efficiency gas storage units. Work on updating the water heater specification began in 2021, and ENERGY STAR incorporated NEEA feedback on performance and connectivity in the final specification. The updated residential Windows, Doors, and Skylights specification went into effect in October 2023. NEEA played a significant role in advancing the specification through our leadership in the Partnership for Advanced Window Solutions. Residential Dishwashers and Light Commercial HVAC also went into effect in 2023, and ENERGY STAR added Residential Cooking products as a category in 2023. Lastly, a Clothes Dryers revision and a new Micro Heat Pump specification opened in late 2023.

Emerging Technology - Dryers

NEEA was a founding member in a national coalition of efficiency advocates (the Super-Efficient Dryer Initiative) that helped introduce heat pump clothes dryers in North America through early test procedure and specification development that began in 2011. NEEA followed this with incentives and other engagement with manufacturers to help spur adoption and reduce the first cost barrier for early generations of heat pump dryers. In 2023, two manufacturers introduced new combination washer/dryer units that utilize heat pump drying technology, showing continued evolution of the technology for this end use.

Memorandum – Agenda item

May 6, 2024

TO: Regional Portfolio Advisory Committee (RPAC)

FROM: Mark Rehley, Director Codes, Standards, New Construction, and Emerging Technology

SUBJECT: Manufactured Homes Update

.....

Our Ask of You:

Bring your questions about the Transition Market Progress Evaluation Report (TMPER) that was recently posted to NEEA.org, here: https://neea.org/resources/manufactured-homes-transition-market-progress-evaluation-report

Overview:

Since 2016, NEEA's portfolio has included a Manufactured Homes Market Transformation program. The program was built on the foundation of the Northwest Energy Efficient Manufactured (NEEM) Housing Program. NEEA focused on proving the viability of the NEEM+ specification by training manufacturers and retailers. Data collected from the program proved impactful for the U.S. Department of Energy (DOE) when they updated the Federal standard / HUD code in 2019. The standard was delayed until 2023 and then delayed again until 2025. There remains uncertainty about the final effective date for the Federal Standards / HUD code, but the Northwest manufactured homes market is at a steady state. Because of this, NEEA is considering transitioning the Manufactured Homes program to the Long Term Monitoring and Tracking (LTMT) phase of NEEA's Initiative Lifecycle Framework (see below). While in LTMT, the manufactured homes industry will continue to be tracked to make sure NEEM+ remains viable and the DOE standard takes effect. If the market degrades from what is expected or if new opportunities emerge, NEEA will consider resuming market intervention activities for the Manufactured Homes program.

At the May 13, 2024 RPAC meeting, NEEA staff will share an overview of the TMPER and an update on the status of the market and the Federal standard.

Please contact <u>Mark Rehley</u> if you have questions about NEEA's Manufactured Homes program or the status of the Federal standard.

PROGRAM LIFECYCLE STATUS — concept development — program development — market transformation — SCANNING CONCEPT ASSESSMENT PROGRAM DEVELOPMENT — MARKET DEVELOPMENT — MONITORING & TRACKING Advisory Committee Vote: Concept Advancement Program Advancement

Memorandum – Agenda Item (Tier 1)

May 6, 2024

TO: Regional Portfolio Advisory Committee

FROM: Britt Cutsforth Dawkins – Manager, Program Marketing Strategy

SUBJECT: Proposed Level Up HPWH consumer marketing campaign



Our Ask of You:

Come prepared to cast an "election" on how your utility will engage with the *Level Up* HPWH marketing campaign. Per the <u>RPAC+ process</u>, NEEA staff will seek utility (including Energy Trust and BPA) elections at the Q2 RPAC/RPAC+ meeting on May 13; election options include "participate", "self-deliver", or "exempt" for the 2024 *Level Up* campaign.

Context:

The Level Up HPWH marketing campaign was discussed in the Q3 2023 RPAC meeting and an overview was presented at the Q1 2024 RPAC meeting in February. Since then, NEEA staff met with individual direct alliance funders to discuss the campaign and address any questions. NEEA occasionally engages in consumer marketing when strategic opportunities to drive market change are identified. For HPWHs, NEEA marketing primarily supports upstream and midstream efforts to ensure supply actors are increasing their comfort with and preference for HPWHs; however, to ensure Market Transformation happens, downstream demand from consumers must also be increasing.

In 2024, to ensure the Program is continuing to move consumers along their journey and ultimately drive long-term downstream demand for HPWHs, we have proposed running a small-scale consumer campaign to continue increasing awareness and educating consumers about the value proposition a HPWH may offer them. These marketing campaigns play an important role in helping shift consumers from their current understanding of HPWHs (the awareness phase) to the next step (the consideration phase). This is necessary to ensure these consumers are aware of the HPWH value proposition and proactively ask for a HPWH when they need to replace their existing water heater (the conversion phase).

Overview:

The Level Up campaign will be similar to previous awareness campaigns in that it will run for approximately three months, target Northwest consumers with high levels of electric water heat and/or electric space heat, and have estimated media spend of \$150,000. It will be branded "Hot Water Solutions" to benefit all market actors. The campaign will utilize new "Level Up" 8-bit game-style creative. Messaging was leveraged from the past, RPAC-reviewed, Boring But Efficient campaign copy.

The campaign's ad placements will direct consumers to a landing page on HotWaterSolutionsNW.org where visitors will learn about HPWHs, then can click to access information such as their local utility, identify an installer, visit a retailer, or get details from manufacturers.

The final proposed ad and landing page copy will be sent to RPAC/RPAC+ members by May 8. Between now and the meeting, NEEA staff are dedicated to ensuring RPAC members and associated utility marketing staff have a clear understanding of the campaign to best inform their May 13 elections decision.

Please contact Britt Cutsforth Dawkins (bdawkins@neea.org) if you have questions about this memo.

Memorandum – Informational (Tier 2)

May 6, 2024

TO: Regional Portfolio Advisory Committee (RPAC)

FROM: Emily Rosenbloom, Sr. Program Manager, Heat Pump Water Heaters (HPWH)

SUBJECT: Inform Re: HPWH Innovation Prize

.....

Our Ask of You:

Please review the update below and reach out with any questions or concerns. This is an inform only and will not have dedicated time on the Q2 RPAC agenda.

Overview

The Hot Water Innovation Prize focuses on optimizing split system heat pump water heater (HPWH) design for space-constrained locations, helping drive market innovation and future energy savings.

Installing HPWHs in low rise multifamily and other space-constrained dwellings pose challenges to unitary HPWH installation. The opportunity is significant, given the estimated market size of 1 million units per year with tremendous growth opportunity into other split system applications—and a U.S. savings opportunity of approximately 8 quads over 30 years.

Additionally, heat pump technology improves equity by bringing heat pumps and savings to multifamily dwellings, disproportionately occupied by families of color.

Details about the contest:

- Multi-staged with funding at each level
- While design criteria and potential prize awards are under development, we anticipate a threestage process:
 - Stage 1: Concept design papers
 - Stage 2: Prototype builds
 - Stage 3: Winner announced and market launch
- NEEA is actively seeking manufacturers interested in entering product(s) as well as competition funders to support funding at each stage.

About Hot Water Solutions

<u>Hot Water Solutions</u> is an initiative (public-facing brand) of NEEA working to accelerate the adoption of heat pump water heaters in the Northwest by providing resources, tools and support to increase sales and installations of heat pump water heaters. Please note that this website is getting a face lift next month and will also serve as a landing page for the upcoming HPWH consumer consideration campaign (expected to run July to October).

Please contact Emily Rosenbloom (ERosenbloom@neea.org) if you have questions about this memo or the HPWH program in general.

Memorandum – Informational Update

May 6, 2024

TO: Regional Portfolio Advisory Committee (RPAC)



FROM: Anouksha Gardner, Stakeholder Relations Manager (Coordinating Committees)

Eric Olson, Sr. Manager, Product Management (RETAC)

Jonathan Belais, Policy Manager (CEAC)

SUBJECT: Update on recent committee meetings (Q1/Q2 2024)

Our Ask of You:

Please review the memo and bring any questions, recommendations, feedback, or concerns to the Q2 RPAC meeting, or contact NEEA staff listed below.

Reminder: Based on the feedback received from the Coordinating Committee members and NEEA program managers, to better align with committee members' sector-based composition (for the most part), we have reassigned our residential focused programs (Advanced Heat Pumps and High-Performance Windows) to the Products Coordinating Committee, and our commercial/industrial focused programs [Extended Motor Products Pumps and Circulators (XMP), and Efficient Fans] programs to Integrated Systems Coordinating Committee.

Integrated Systems Coordinating Committee (ISCC):

The Integrated Systems Coordinating Committee uses an annual planning process to co-create high-priority regional topics for the following NEEA programs (commercial & industrial focus): Luminaire Level Lighting Controls (LLLC), High-Performance HVAC, Extended Motor Products (XMP) Pumps & Circulators, Efficient Fans, and Better Bricks. This year's co-created regional priority topics are listed in the ISCC 2024 Workplan.

In Q1 (February, 29), the ISCC focused on the following topics, which were identified by committee members as a regional priority for 2024 Luminaire Level Lighting Controls *Recent LLLC Market Research* and the *LLLC Regional Utility Toolkit share-out*. Committee members and NEEA Program Managers shared out on current program highlights and other organizational updates. The committee also reviewed and confirmed the regional priority topics and collaborators slated for Q2. To see what transpired in Q1 at ISCC, please see <u>agenda packet</u>, <u>slides</u>, and <u>notes</u> for detail. In the Q2 2024 (May 22nd and 23rd) meeting, the ISCC will focus on the following regional-priority topics: *Pumps 101* and *Takeaways from LLLC Projects*.

Please contact Stephanie Quinn or Anouksha Gardner with questions about the ISCC.

Products Coordinating Committee (PCC):

Like the ISCC, the Products Coordinating Committee uses an annual planning process to co-create high-priority regional topics for the following NEEA programs (residential focus): Heat Pump Water Heaters (HPWH), Consumer Products/Retail Product Portfolio (RPP), Advanced Heat Pumps (Advanced HP), and High-Performance Windows. This year's co-created regional priority topics are listed in the PCC 2024 Workplan.

In Q1 (March 21), the PCC focused on the following topic, which was identified by committee members as a regional priority for 2024: HPWH's Customer Messaging to Support Consideration Marketing Campaign.

The committee also reviewed and confirmed the regional priority topics and collaborators slated for Q2. Committee members and NEEA Program Managers shared out on latest program highlights and other organizational updates. To see what transpired in Q1 at PCC, please see <u>agenda packet</u>, <u>slides</u>, and <u>notes</u> for detail. In the Q2 2024 (June 24th and 25th) meeting, the PCC will cover the following two Advanced Heat Pumps regional-priority topics: *Coordination on planned or ongoing field studies/pilot studies/data collection* and *RTF updates on rebate offerings*.

Please contact Stephanie Quinn or Anouksha Gardner with questions about the PCC.

Regional Emerging Technology Advisory Committee (RETAC)

At RETAC's Q1 meeting, Oak Ridge National Labs (ORNL) presented a brief history of the organization, its Building Technologies Research and Integration Center (BTRIC), and their mission to "deliver scientific discoveries and technical breakthroughs to accelerate building energy efficiency solutions." ORNL has efforts across many areas and technologies, including buildings-to-grid, HVAC and appliances, building envelopes, and technology integration. Dr. Kyle Gluesenkamp presented current efforts on thermal energy storage integrated with heat pumps, optimized controls for dual fuel heat pumps, and closed with an overview of mechanisms to collaborate with the lab.

NEEA staff presented key takeaways from the 2024 ACEEE Hot Air and Hot Water Forum and Christopher Dymond presented updates on room heat pumps (also known as micro heat pumps), including the availability of cold climate versions and the possibility of a small-scale regional field test in collaboration with BPA.

Meeting notes are available here. The slide deck is available here.

To view the Product Council schedule and recordings of previous meetings or to submit requests for product councils, visit neea.org.

The Q2 RETAC meeting is scheduled for June 27.

Please contact Eric Olson or Alisyn Maggiora with any questions about RETAC.

<u>Cost-Effectiveness Advisory Committee (CEAC)</u>

During the Q1 CEAC meeting on March 6, 2024, NEEA staff provided highlights from recently published Market Progress Evaluation Reports (MPERs) for NEEA's work on manufactured homes and codes. Staff also reviewed key assumption updates for efficient rooftop units (ERTUs) and avoided carbon emissions for natural gas savings. Following a staff overview of NEEA's work in codes and standards, the committee reviewed NEEA's existing evaluation approaches for codes and standards.

During the Q2 CEAC meeting on April 30, 2024, NEEA reviewed key assumption updates for NEEA's Ductless Heat Pumps, Retail Products Portfolio, and Residential and Commercial New Construction programs. In preparation for annual reporting, NEEA staff provided an overview of market transformation basics, including NEEA's approach to savings, costs, and benefits. The committee reviewed annual portfolio progress and metrics. The meeting concluded with an overview of NEEA's current approach to estimating savings for codes and standards, and a discussion of possible alternative approaches currently being evaluated by a 3rd party.

Please contact Stephanie Rider or Jonathan Belais if you have questions about CEAC.