

RESIDENTIAL ADVISORY COMMITTEE MEETING



DATE: January 30, 2018
 TIME: 10:00 am – 4:00 pm
 LOCATION: NEEA Offices: 421 SW 6th, Portland, OR
 DIAL-IN: 1-877-890-9502
 Enter the participant code: 826-779-0855
 WEBINAR: <http://neea.adobeconnect.com/racjan2018/>

DESIRED OUTCOMES:

- Robust discussion, feedback and advice on agenda items
- Impart relevant, pertinent information to each other

AGENDA

Time	Topic	Lead	Packet Page
10:00 – 10:15	WELCOME AND INTRODUCTIONS	Eugene Rosolie	
10:15 – 10:45	HOUSEKEEPING <ul style="list-style-type: none"> • Follow up on action items from October 12, 2017 notes • RAC 2018 work plan • RAC Charter Review • Packet/Informational Updates (not agenda topics) <ul style="list-style-type: none"> ○ Cover Memo <ul style="list-style-type: none"> ▪ Residential Initiative Memos ▪ Portfolio Overview – Milestone Progress ▪ Emerging Technology Newsletter ▪ Market Research & Evaluation Newsletter 	Eugene Rosolie/Jeff Mitchell	<p>p. 3-5</p> <p>Tier 2: p. 9-17</p>
10:45 – 11:15	2017 Funder Satisfaction Survey Results and Discussion <i>Desired Outcome: Inform AC members of Results and collaborate on addressing highlighted issues.</i>	Jeff Mitchell	
11:15 – 11:30	Smart Thermostat Workshop Highlights <i>Desired Outcome: Inform.</i>	TBD	
11:30-12:00	SDG&E Smart Thermostat Rebate Program: Case Study <i>Desired Outcome: AC members gain additional insight into options for program design.</i>	Shoshana Pena/Nathan Bauer-Spector	
12:00 – 12:30	<i>Lunch (provided)</i>		
12:30 – 2:00	Panel Discussion: Online Sales Trends, Strategies, and Program Designs	Chrissy/Dave/Hillary	

2:00 – 2:15	<i>Break</i>		
2:15-3:15	Utility Roundtable	All	
3:15-3:25	RPP Updates: Review of 1/29 Workshop <i>Desired Outcome: AC members are up to date on RPP and have the opportunity to provide feedback and advice.</i>	Beth Littlehales	p. 6-7
3:25 – 3:45	2018 Residential Evaluation Workplan <i>Desired Outcome: AC members are up to date on Workplan and have the opportunity to provide feedback and advice.</i>	Dulane	p. 8
3:45 – 3:50	OPPORTUNITY FOR PUBLIC COMMENT		
3:50 – 4:00	WRAP UP/ADJOURN <ul style="list-style-type: none"> • Meeting feedback • Next meeting/location 	All	

Memorandum



January 30, 2018

TO: Residential Advisory Committee (RAC)
FROM: Eugene Rosolie, Stakeholder Relations Manager
SUBJECT: RAC Packet Appendices – Q1 2018

PACKET APPROACH

This packet continues the “tiered” approach:

- Tier-1 memo for items on the agenda;
- Tier-2 memos for informational updates on items not requiring agenda time
- Tier-3 materials provided as additional detail for those interested.

INFORMATIONAL UPDATES

Enclosed please find **Tier-2** informational updates on the following:

- Page 9-10: Ductless Heat Pump (DHP) memo
- Page 11-12: Dryers memo
- Page 13: Next Step Homes memo
- Page 14: Manufactured Homes memo
- Page 15-16: Heat Pump Water Heater (HWPW) memo
- Page 17: NEEA Portfolio Overview: 20 Year View

ADDITIONAL DETAILS (Tier 3)

Tier-3 materials related to the agenda items and informational updates listed above will be accessible through links in those memos. Additional Tier-3 details are available here:

- Q1 2018 [Market Research & Evaluation Newsletter](#) (includes RBSA update)
- Q1 2018 [Emerging Technology Report](#)
- Q4 2017 RPAC meeting was canceled
- October 12, 2017 [RAC](#) meeting notes
- Q4 2017 Residential Workgroup meetings
 - New Homes/Manufactured Homes Workgroup met on November 16, 2017 ([Presentation](#))
 - Retail Product Portfolio (RPP) Workgroup met on December 7, 2017 ([Meeting Notes](#)).
 - DHP Workgroup met on September 6, 2017 ([Meeting Notes](#))
 - HPWH Workgroup met on December 13, 2017 ([Meeting Notes](#)).
 - Dryers Workgroup met on December 4, 2017 ([Meeting Notes](#)).

Reminder: NEEA Monthly Residential Sector Report is emailed to you each month (vs posted to Conduit).

Memorandum – *Agenda Item (Tier 1)*



January 23, 2018

TO: Residential Advisory Committee (RAC)
FROM: Eugene Rosolie, Stakeholder Relations Manager, NEEA
SUBJECT: RAC Charter Review and RAC Workplan for 2018

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This memo covers two Housekeeping items on the Advisory Committee’s agenda for January 30th.

Residential Advisory Committee Charter Review

The RAC charter is reviewed by the advisory committee once a year to assure it remains consistent with the operation of the committee. There is only one minor revision to the Charter that reflects a change NEEA made over the year to the composition of sector advisory committee membership. Following is the section of the Charter with the change in bold:

Membership

The Executive Director will delegate the option to appoint a member to any Advisory Committee to each direct funder. In addition, the Executive Director may appoint member(s), such as **Indirect Funder**, Northwest Power and Conservation Council staff, public utility commission staff, and state energy office staff.

The complete Charter can be view on Conduit [here](#).

Residential Advisory Committee Workplan for 2018

The Workplan for 2018 is attached for your review and we look forward to your comments etc. at the meeting on January 30th.

RESIDENTIAL ADVISORY COMMITTEE WORKPLAN

Red text indicates updates since last quarter

Q2 2018 April 17	Q3 2018 August 02	Q4 2018 October 11	Q1 2019
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PORTFOLIO REVIEW

ILC/Portfolio Review	ILC/Portfolio Review	ILC/Portfolio Review	ILC/Portfolio Review
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RESIDENTIAL/MASS MARKET PROGRAM REVIEWS/UPDATES, etc

RPP Workgroup Report	Res/Com Ligthing	RPP Workgroup Report	
Dryers savings	Next Step Homes Scale-up Milestone		
RTF 101	RPP Workgroup Report		
HPWH update			

MARKET STRATEGIES

Consumer Products Regional Market Strategy Collaborative - update Smart Thermostats	Consumer Products Regional Market Strategy Collaborative - update	Consumer Products Regional Market Strategy Collaborative - update	Consumer Products Regional Market Strategy Collaborative - update
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ANNUAL OPERATIONS PLANNING

	2019 Ops Plan - RAC input/direction for 2018	2019 Ops Plan update on process. Review/input for RPAC/Board.	
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EMERGING TECH

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CODES & STANDARDS

What's new in 2018	What's new in 2018		
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GOVERNANCE/OTHER

2018 Workplan Update	2018 Workplan Update	2018 Workplan Update	2018 Workplan Update
RAC Utility Round Robin	RAC Utility Round Robin	RAC Utility Round Robin	RAC Utility Round Robin
			Annual RAC Charter Review
Annual Program Work Group membership review			

MISC TOPICS

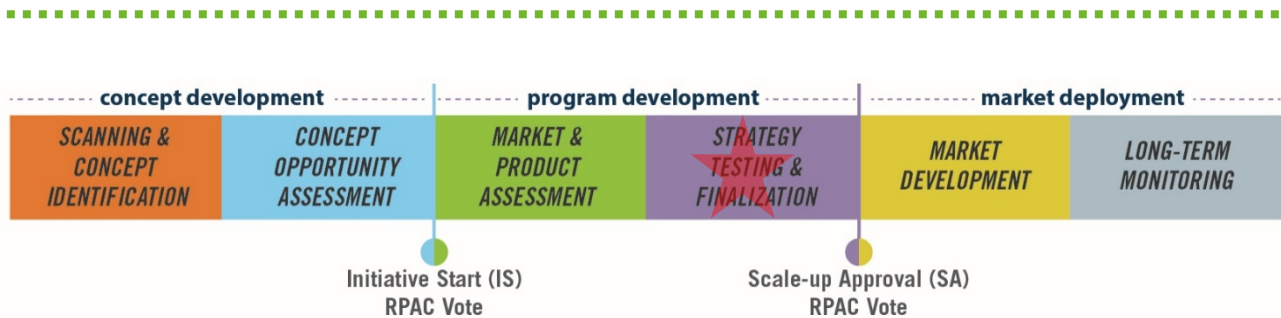
Residential Building Stock Assessment Report			

Memorandum



January 22, 2018

TO: Residential Advisory Committee (RAC)
FROM: Beth Littlehales, Senior Program Manager
SUBJECT: Retail Product Portfolio (RPP) Program – Q1 Update



Below are recent updates for the RPP Program, including an update on workgroup activity.

Our Ask of You: Please review the memo and bring any questions, recommendations, feedback, or concerns to the RAC meeting.

2017 Program Updates

- With the support of the RPP Workgroup, NEEA staff added clothes washers and refrigerators to the portfolio as of April 1, 2017.
- The RPP initiative was originally expected to move into the Market Development stage of the NEEA lifecycle by the end of 2017; however, the NEEA team has determined that the next milestone will be delayed by at least a year. This will allow NEEA staff to conduct a research study in 2018 to validate the data being collected through the data platform, and to begin to identify whether the program intervention is having the intended impact on product sales.
- Nationwide Marketing Group (aggregator/distributor for independent stores) joined the ESRPP offering in April 2017. Lowe’s is planning to join as of April 2018.
- NEEA and other ESRPP Program Sponsors have decided to not offer incentives on TVs in 2018, due to uncertainty around the true efficiency level of both the current and pending ENERGY STAR TV specifications. NEEA Staff is working with PG&E, Focus on Energy, and other Program Sponsors to plan market and technology research as well as codes and standards work that will support a more informed incentive offering in 2019. This co-funded work will support an improved test procedure, product testing, and other activities that will continue to influence the market and reduce barriers, while also preparing to reengage with incentives in 2019.
- Current products and retailers are as follows:

Category	Best Buy	Home Depot	Sears / Kmart	Nationwide	Costco
Soundbar	x		x	x	x
Air Cleaner	x	x	x		x
Freezer	x	x	x	x	
Electric Dryer	x	x	x	x	
Room AC	x	x	x	x	
Clothes Washer	x	x	x	x	
Refrigerator	x	x	x	x	

Workgroup Activity

Workgroup met December 7 to review program updates for 2018 and discuss the planned research and evaluation framework. Workgroup meeting notes and slides are available on [Conduit](#).

2018 Evaluation Activities

With the [Market Test Assessment](#) complete, NEEA Staff are preparing for research and evaluation activities in 2018. The goal is to provide more certainty around program efficacy before we seek Scale-up Approval in early 2019. The research and evaluation approach were discussed with the Workgroup in the December meeting, and a SOW and RFP are underway. These documents will be shared with the Workgroup before the RFP is released in Q1 2018, and Workgroup members will have an opportunity to review proposals before a contractor is selected.

Note: The Workgroup page on Conduit is marked “private” due to the sensitive nature of some retailer and incentive information. If you do not have access to the files linked above, please contact [Beth Littlehales](#).

Memorandum – *Agenda item (Tier 1)*



January 23, 2018

TO: Residential Advisory Committee (RAC)

FROM: Dulane Moran, NEEA Staff

SUBJECT: Market Research & Evaluation 2018 Residential Workplan

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This memo provides a summary of expected market research and evaluation activities in support of NEEA’s residential initiatives. Changes in scope and timing may occur if appropriate as the research objectives and data gaps are firmed up during the procurement process.

Initiative	Research planned	Timeframe
Retail Products Portfolio	Address specific product-level market characterization gaps Confirm baseline setting process Review key inputs to support planning and savings calculations	Q2-Q3 2018
Ductless Heat Pumps	MPER 7 Update market sizing estimates General population survey Cost structure and supply chain research Better understanding of installer/consumer interaction	Q1-Q3 2018
Heat Pump Water Heaters	MPER 4 Detailed market update (tier, size, state, supply channel) Customer satisfaction survey Continue efforts to understand influence of code and pricing	Q1-Q3 2018
Super-Efficient Dryers	On-line research designed to obtain insight into the multifamily market, including decision-making around appliances, maintenance, and features	Recruit Feb 2018 On-going
Manufactured Homes	Research to support marketing and communication efforts	Q1-Q2 2018
Low-E Storm Windows	Preliminary market characterization research—supply chain and market sizing	Q2-Q3 2018

At the January 30 RAC meeting, we will review and discuss this information. Bring your questions, or contact Dulane Moran at dmoran@neea.org for more information.

Memorandum – Informational (Tier 2)



January 21, 2018

TO: Residential Advisory Committee (RAC)
FROM: Suzi Asmus, Program Manager
SUBJECT: Ductless Heat Pump - Q1 RAC Update

PROGRAM LIFECYCLE STATUS



Below are recent updates for the DHP Program, including an update on workgroup activity.

Our Ask of You

Please review the memo and bring any questions, recommendations, feedback, or concerns to the Q1 RAC meeting.

NWDHPP Installer Orientation and Master Installer Webinar are Now On Demand!

As of January 17, 2018, installers can now access the Installer Orientation and the Master Installer requirements through NEEA’s new on-line learning managements system. This system is accessible at any time, and installers no longer have to wait for the next live webinar. Most of the process is automated, with the exception of verifying the contractor license and approving the full application to add the installer to GoingDuctless.com listings. This may take one or two business days. Three installers registered in the first 24 hours after launch! Installers can find out more about the trainings through GoingDuctless.com on our [Trainings](#) page, or register directly through Docebo [here](#).

Program Workgroup

The DHP Program Workgroup met in December of 2017. Workgroup meeting notes and presentation slides can be found on the [DHP Workgroup Conduit page](#). Topics included the Quick Connect study to-date results provided to the RAC in Q4, recommendations to use the RTF DHP tiers to calculate 2017 savings, Haier low-cost pilot update, and other program updates.

What’s Ahead in Q1

A utility webinar will be scheduled at RAC’s request to dive more in-depth into the Quick Connect study results, and will include the most recent report, (draft delivered in January), from the quick-connect fittings research performed by Cascade Engineering Services.

Market Progress Evaluation Report #7 will be kicking off in Q1 with general population and installer surveys taking place over Q1 and Q2.

Many manufacturers and distributors hold training events during the slow HVAC industry months of January through March. The NWDHPP is often invited to present to these groups about utility program benefits, value to the homeowner, and requirements. We invite utilities to the events in their area and can introduce the utility manager, provide information on behalf of utilities, or make time for the utility to present their programs.

Note: The Workgroup page on Conduit is marked "private" due to the sensitive nature of some manufacturer development plans. If you do not have access to the files linked above, or would like to discuss any of the topics, please contact [Suzi Asmus](#) or at 503-688-5407.

Memorandum – Informational (Tier 2)



January 23, 2018

TO: Residential Advisory Committee (RAC)
FROM: Stephanie Baker, Program Manager
SUBJECT: Super-Efficient Dryers Program – Q1 Update



Below are recent updates for the Dryers Program, including an update on workgroup activity.

Our Ask of You: Please review the memo and bring any questions, recommendations, feedback, or concerns to the Q1 RAC meeting.

ENERGY STAR Savings – Lab Research Update

Lab research to validate savings for ENERGY STAR clothes dryers completed in December. Raw data from this testing has been shared with NEEA Staff, and analysis is in process. NEEA Staff has already reached out to the RTF to discuss next steps and how to share and review the data together. Details will be shared with the Dryers Workgroup as these conversations progress, and as analysis is completed.

Multifamily Market Research

Work on the Multifamily Market Research Online Community (MROC) begins in earnest this month. Recruiting efforts are already underway and will continue throughout Q1. Initial research will focus on the landscape and structure of the multifamily market in the Northwest. During Q2, research questions will pivot to appliance decision-making, with a particular focus on clothes dryers.

As a reminder, the MROC will use a qualitative approach to bring together market actors in the development, design, and management of multifamily buildings to identify their needs, constraints, and motivations regarding the selection of appliances (particularly, dryers) for their buildings. The timeframe for this work will be approximately one year.

Program Workgroup

The Dryers Program Workgroup met in December of 2017. Workgroup meeting notes and presentation slides can be found on the [Dryers Workgroup Conduit page](#).

December

- NEEA Staff shared details of the Multifamily Market Research Online Community (MROC) including:
 - Background on MROCs
 - Pilot goals & objectives
 - Recruiting Plan

- How the MROC will help the Dryer Initiative
- NEEA Staff facilitated a roundtable discussion of utility program changes for 2018
- NEEA Staff shared highlights from the ENERGY STAR Partner Meeting in Chicago

Note: The Workgroup page on Conduit is marked “private” due to the sensitive nature of some manufacturer development plans. If you do not have access to the files linked above, please contact [Stephanie Baker](#).

Memorandum – Informational (Tier 2)



January 19, 2018

TO: Residential Advisory Committee
FROM: Jonathon Belmont, Sr. Program Manager
SUBJECT: Next Step Home Q1 RAC update

PROGRAM LIFECYCLE STATUS



Objective

Inform RAC on Next Step Home utility outreach to support the program planning and launch of the single family new construction performance path program.

Ask

Please review the memo and bring any questions, recommendations, feedback, or concerns to the Q1 RAC meeting.

Single Family New Construction Performance Path (Performance Path) Adoption

The Next Step Home program remained active in supporting utilities planning a Performance Path new construction program in 2017. Currently, three utilities, Snohomish PUD (May 2017), Clark County PUD (October 2017) and Central Electric Co-Op (October 2017) have launched programs. Over 60 homes from these programs have already been entered in the Axis database.

Two additional utilities, Idaho Power and Puget Sound Energy are finalizing program details and are moving toward a Q1 launch (most likely February).

NEEA is supporting utilities throughout the planning process by providing overviews of the [standard modeling protocol](#), [Axis database](#), savings and incentive estimates, and kick-off meetings with local market partners.

The Next Step Home program is planning a Work Group meeting in February (date TBD) to share current utility program details and talk about alignment opportunities. If your utility is interested in exploring a Performance Path Program, please contact [Jon Belmont](#) or [Neil Grigsby](#).

Memorandum – Informational (Tier 2)



January 19, 2018

TO: Residential Advisory Committee
FROM: Neil Grigsby, Portfolio Program Manager
SUBJECT: Manufactured Homes Q1 RAC update

PROGRAM LIFECYCLE STATUS



Below is an update on NEEA’s support for introducing NEEM 2.0 to the market.

Our Ask of You: Please review the memo and bring any questions, recommendations, feedback, or concerns to the Q1 RAC meeting.

NEEA is finalizing contracts with Fleetwood Homes and Marlette to participate the 2018 NEEM 2.0 upstream incentive program. Both manufacturers are working in NEEM 2.0 as a standard product offering. Kit homes and Palm Harbor Homes also completed NEEM 2.0 demonstration homes without any signification challenges. NEEA will re-engage with both manufacturers to explore their potential NEEM 2.0 offering in 2018. NEEA will finalize incentive agreements with Manufacturers in Q1 2018 and launch the NEEM 2.0 program. Final details of the NEEM 2.0 incentive strategy, manufacturer participants and brand positioning will be shared at a February/March Work Group webinar.

NEEM 2.0 Demonstration Participants:

- Fleetwood Homes: 2 homes
- Marlette: 2 homes
- Kit Homes: 1 home
- Palm Harbor Homes: 1 home

For questions or comments please contact [Neil Grigsby](#).

Memorandum – Informational (Tier 2)



January 23, 2018

TO: Residential Advisory Committee (RAC)
FROM: Jill Reynolds, Program Manager
SUBJECT: Heat Pump Water Heater Program – Q1 Update



Below are recent updates for the Heat Pump Water Heater (HPWH) Program, including an update on workgroup activity.

Our Ask of You: Please review the memo and bring any questions, recommendations, feedback, or concerns to the Q1 RAC meeting.

2017 End of Year Update

The HPWH Program ended 2017 on a high note, nearly besting our 2016 sales by 100%. The numbers are not final but NEEA-incented sales were approximately 12,500. Unit movement was particularly strong in the wholesale channel in 2017 with over 70% of units sold through distributors.

Another 2017 highlight included 13 HPWH events and nine web trainings to 189 attendees through Q4. Through training evaluation efforts, NEEA staff learned 100% of participants surveyed would recommend our training to others.

Finally, we developed and placed custom product signage highlighting local utility rebates in 53 Lowe's locations throughout the region. NEEA field staff also performed 47 in-store HPWH product trainings at Lowe's and Home Depot locations to 133 sales associates and store managers. Retail sales monthly run-rate increased 64% after four months of training and signage.

2018 HPWH Opportunities

Retail Signage

Building on the retail signage and training success in 2017, utilities will have the opportunity to include rebate information on signage in Home Depot and Lowes stores this year. NEEA staff is planning coordination of in-store signage/training throughout the region to drive HPWH retail sales. Opt-in information and requests will be sent to utilities in the next few weeks.

In-Person Installer Trainings

With a continued focus on penetrating the emergency replacement market, in-person installer trainings will be a focus throughout 2018. Trainings will be conducted at specific installation companies. The goal of the

[Northwest Energy Efficiency Alliance](#)

trainings is to target as many company employees as possible – from front desk staff to installers – we want to influence company-wide acceptance of HPWHs.

ProDeal Recruitment

Another activity the HPWH program is employing in 2018 is the ProDeal, an opportunity for an installer to get a free HPWH installed at his/her home. Once the HPWH is installed, NEEA staff will train company staff about the benefits of HPWHs. If your utility has any installer companies/candidates for training or the ProDeal, please let [Jill Reynolds](#) know.

Program Workgroup

The HPWH Program Workgroup met in December of 2017. Workgroup meeting notes and presentation slides can be found on the [HPWH Conduit page](#). Meeting topics included:

- 2017 Review (manufacturer engagement, utility support, training, retail, wholesale, marketing)
- 2018 Planning
- Utility Share Outs

NEEA Portfolio Overview: 20 Year View

Portfolio Status as of January 2018

Red text: recent advancement

concept development		program development		market deployment	
SCANNING & CONCEPT IDENTIFICATION	CONCEPT OPPORTUNITY ASSESSMENT	MARKET & PRODUCT ASSESSMENT	STRATEGY TESTING & FINALIZATION	MARKET DEVELOPMENT	LONG-TERM MONITORING
Consumer Products		Heat Pump Water Heater Split System	Retail Product Portfolio Super Efficient Dryers	Heat Pump Water Heaters Ductless Heat Pumps	TVs Residential CFLs White Goods
New Construction (Commercial & Residential)		Manufactured Homes	Next Step Home	Commercial Codes Enhancement <i>Integrated Design Lab</i>	Efficient Homes
Commercial Lighting			Luminaire Level Lighting Control	Reduced Wattage Lamp Repl. <i>Top Tier Trade Ally</i>	
Other Markets	<i>Air Nozzle</i> <i>Industrial Motor Product Labeling/ XMP</i> <i>Dedicated Outdoor Air System</i>	Window Attachments	.	Codes & Stds <i>Ind. Tech. Training</i> <i>Comm Real Estate</i> <i>Comm & Ind. SEM</i>	RETA CRES Refrigeration Operator Cert Drive Power BldgOp Cert/Exp Commissioning 80Plus

