



March 3, 2016

REPORT #E16-327

Retail Products Portfolio Pilot Evaluation Final Report

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Acknowledgements

The authors would like to thank the many people who contributed to this report. They include: Northwest Energy Efficiency Alliance (NEEA) evaluation, planning, and program staff; staff at Navitas Partners, Energy Solutions, and ICF International; EPA ENERGY STAR staff; staff of Pacific Gas & Electric, Southern California Edison, Baltimore Gas & Electric, Wisconsin Focus on Energy, and National Grid; and retailers' staff.

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Executive Summary

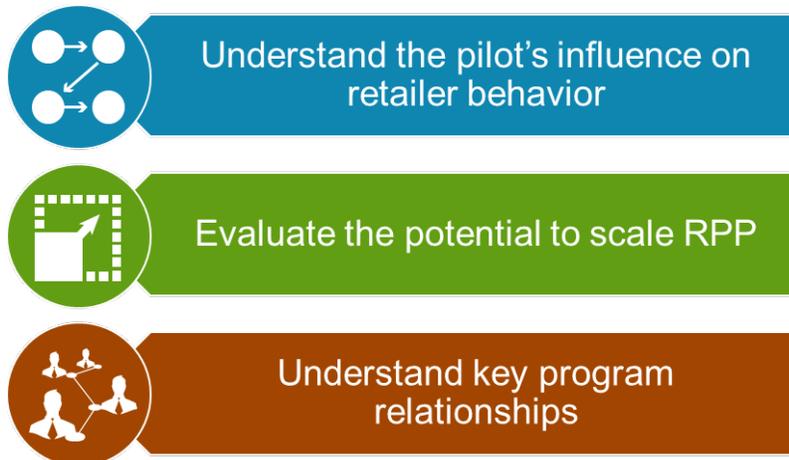
The Northwest Energy Efficiency Alliance (NEEA) is an alliance of more than 140 Northwest utilities and energy efficiency organizations working to accelerate the innovation and adoption of energy-efficient products, services, and practices in the Northwest.

In 2014, NEEA began implementing a Retail Products Portfolio (RPP) pilot to increase the energy efficiency of select consumer electronics and appliance products. The pilot offers incentives to large, chain retailers for each unit sold in the Northwest within the targeted product categories that meets a pilot-defined energy efficiency threshold. Through these incentives, the pilot hopes to influence retailers' corporate-level decision-making around product assortment and promotion in ways that will increase sales of energy efficient products.

While NEEA's RPP pilot operated on a relatively small scale in 2014 and 2015, the US Environmental Protection Agency (EPA) is leading an effort through the ENERGY STAR® program to coordinate participation of efficiency program administrators across the country to expand the scale of the program, beginning in 2016.

Evaluation Objectives

This evaluation assesses the early outcomes of the RPP pilot's activities to confirm the validity of the pilot's market transformation theory and identify early influence the pilot has had on retailer behavior and the markets for targeted products. This evaluation also explores the potential for RPP to influence the market as the intervention grows and the conditions necessary to reach that potential. This evaluation pursues three broad categories of research objectives:



Evaluation Activities

Two evaluation activities informed the findings presented in this report:

- › **In-depth interviews:** Research Into Action, ILLUME Advising, and Apex Analytics (the research team) conducted semi-structured phone interviews with five groups that play key roles in the success of RPP.
 - *Participating and non-participating retailers:* The research team interviewed corporate-level staff at all six of the national chain retailers participating in the pilot and one non-participating national chain retailer.
 - *Participating and non-participating program administrators:* The research team interviewed staff members of efficiency program administrators planning to participate in RPP, as well as those who had considered RPP but decided not to participate.
 - *EPA ENERGY STAR Staff:* The research team interviewed EPA staff members involved in the development of RPP coordination efforts on a national level.
 - *NEEA and implementation contractor staff:* The research team interviewed NEEA staff involved in managing the Initiative as well as staff of the Initiative's implementation contractor.
 - *Data management contractor staff:* The research team interviewed staff members of the existing data management contractor as well as the incoming data management contractor, who was selected through an RFP process during the course of the evaluation.
- › **Initiative document review:** To support and provide further depth to findings from in-depth interviews and quantitative analyses, the research team reviewed Initiative documents including the Initiative logic model, and publicly available ENERGY STAR and market research documents.

Key Findings

This evaluation identified four key findings:

- › ***The mechanisms are in place for RPP to influence retailer decisions in the areas of assortment and promotion.*** Retailers have the information they need to incorporate RPP incentives in their assortment and promotion decisions at the time that they make those decisions, and retailers allocate the incentives in a way that provides a direct benefit to the individuals making the decisions RPP seeks to influence. Retailers reported the incentives are most likely to motivate them to select efficient models over less efficient options that are similar in other ways in their assortment decisions. Retailers also noted the incentives might motivate them to feature efficient models in their promotions.
- › ***Two important factors limit RPP's potential to influence retailers:***
 - ***Need for scale:*** Retailers largely make the decisions RPP seeks to influence on a national scale. As a result, the incentives available from any single efficiency program are small relative to the overall costs and benefits merchants weigh as they make assortment and promotion decisions. Collaboration between program administrators can increase the overall incentive pool available to retailers, and in turn increase the incentives' influence on their decisions.
 - ***Diversity of retailers:*** Retailers differ in a variety of ways that impact their response to RPP. Retailers that weigh the profit margins of individual products more heavily in their assortment decisions, allow for a greater degree of regional customization in their assortment and promotion, and depend on RPP-targeted products for a larger proportion of their overall sales are likely to be most responsive to incentives. Further, retailers whose corporate sustainability staff members coordinate efficiency program participation across the organization may be better suited to participate in RPP than retailers with a less centralized decision-making structure regarding program participation.
- › ***Due to its small scale, NEEA's RPP pilot had limited influence.*** Some retailers reported that the pilot had influenced their assortment and promotion decisions around some of the targeted products, but most stated that, given the pilot's small scale, its influence had been limited. The interviewed retailers noted, however, that RPP would have a greater influence as its scale grew.
- › ***RPP faces two key challenges in achieving the scale necessary for influence:***
 - ***Recruiting program sponsors:*** Uncertainty around the level of energy savings RPP would generate, and the attribution of savings specifically, was the primary factor preventing the interviewed non-participating program administrators from adopting RPP. These program administrators reported they did not have sufficient information about RPP's costs and benefits to determine whether participation would be a prudent use of their ratepayers' funds.
 - ***Data management:*** An increase in RPP's scale may amplify some of the data management challenges NEEA faced in the pilot, and in RPP's predecessor TV

Initiative. As the targeted product mix expands and evolves, the model matching process will become more complex. Meeting the data needs of a wider range of program administrators may also pose challenges, as may obtaining and managing the data from a larger number of retailers.

Conclusions and Recommendations

This evaluation generated three conclusions, and associated recommendations:

- › **Conclusion 1: Scale is critical to the success of RPP, and, to achieve scale, NEEA and its partners must overcome concerns about the savings attributable to RPP.** Retailers consistently reported that RPP’s influence on their decision-making would increase as the scale of the program grew. To achieve notable increases in the scale of RPP, NEEA and its partners will need to help potential program sponsors overcome uncertainty over the costs and benefits of RPP.
 - **Recommendation: Continue to work with its initial partners and EPA coordination efforts to increase the scale of RPP.**
 - **Recommendation: Work to develop an effective approach to estimating baseline sales.** An intuitive and transparent approach to estimating baseline sales is necessary to satisfy program administrators and regulators that RPP is influencing the market.

- › **Conclusion 2: Because each takes a unique approach to the market, participating retailers differ in the ways they engage with RPP and respond to incentives.** The most important differences influencing retailers’ response to RPP may relate to organizational decision-making structures, including the degree to which they allow regional customization of assortment and promotion and the level at which they make decisions about efficiency program participation.
 - **Recommendation: Ensure that RPP is prepared to work with retailers that do not have a single point of contact to engage with efficiency programs.** RPP may need to work with multiple individuals within these organizations, and those individuals may have a wide range of competing priorities.

- › **Conclusion 3: Model matching remains a potential challenge for RPP.** Matching models between retailer-reported sales data and the ENERGY STAR qualified product list was the greatest challenge the data management contractor faced during the TV Initiative, and it will not be practical to invest the amount of resources that went into accurate TV model matching for each targeted category as RPP incorporates new products.
 - **Recommendation: Monitor the accuracy of model matching for RPP products.**

1. Introduction

NEEA's Retail Products Portfolio (RPP) pilot seeks to increase the energy efficiency of targeted consumer electronics and other plug load products that might not individually provide sufficient energy savings to make an intervention cost effective. To this end, Northwest Energy Efficiency Alliance (NEEA) offers incentives to participating retailers for each product sold that meets a pilot-defined energy efficiency threshold (Table 1). In order to cover the largest possible proportion of the market for the products it targets in the Northwest, the pilot sought to partner with large, chain retailers.

In response to its incentives, the pilot anticipates that retailers will alter their decision-making practices at the corporate level, favoring efficient products in decisions about product assortment, stocking, and promotion to ultimately increase sales of those products. By influencing these decisions, the pilot seeks to both increase the likelihood that any given consumer will select an efficient option when purchasing a targeted product and motivate manufacturers to increase the efficiency of their product designs in response to retailer demand.

Table 1: 2014-2015 RPP Product Specifications and Incentive Amounts

Product Category	Specification	Incentive Amount
Televisions	ENERGY STAR® Most Efficient	≥50": \$20 <50": \$8
Home Theaters in a Box and Soundbars	Q1 2014-Q1 2015: ENERGY STAR Q2 2015-Q4 2015: ENERGY STAR + 15%	\$10
Air Purifiers	ENERGY STAR	\$18
Dishwashers	2014: ENERGY STAR V6 2015: ENERGY STAR Most Efficient	\$20

The RPP pilot builds on the retailer relationships and experience NEEA developed through the TV Initiative. RPP expands beyond the scope of the TV Initiative to increase the range of targeted products and work with additional retailer participants. As Table 1 suggests, through the RPP pilot, NEEA offered incentives for sales of efficient TVs, room air purifiers, sound bars, and dishwashers. NEEA's retail partners in the RPP pilot were Best Buy, Costco, Home Depot, Sears/Kmart, Target, and Walmart/Sam's Club. While the TV Initiative included in-store promotional efforts to increase consumer demand for efficient products, including placing point-of-purchase promotional materials and educating sales staff about efficient products, the RPP pilot focused exclusively on influencing retailer behavior at the corporate level.

In addition to NEEA, two organizations played key roles in the implementation of the RPP pilot: Navitas Partners, and Energy Solutions. Navitas managed the pilot's relationships with retailers and manufacturers and served as the pilot's point of contact for these industry actors. Energy Solutions served as the pilot's data management contractor, receiving retailers' monthly

submissions of sales data, determining which models qualified for incentives, and reporting the quantity of qualified sales at each retailer to NEEA. During the evaluation period, NEEA, in coordination with its program administrator partners, selected ICF International to take over the data management role for RPP in 2016.

This evaluation examines the RPP pilot as it operated during 2014 and 2015. During this period, NEEA's RPP pilot operated on a relatively small scale. While NEEA collaborated with program administrators in California and Nevada to offer the TV Initiative, program administrators outside the Northwest did not offer programs similar to NEEA's RPP pilot in 2014 and 2015.¹ Consistent with the relatively small scale of the pilot, NEEA's goals for RPP were limited and focused on testing the feasibility of the approach. These goals included:

- › Maintaining the participation of retailers who had participated in the TV Initiative;
- › Building a business case to motivate additional retailers to participate;
- › Expanding the targeted product mix to support product categories beyond consumer electronics;
- › Continuing partnerships with program administrators in California; and
- › Evaluating opportunities to scale up RPP by gathering information on product category buying seasons, retailer data availability, retailer interest, and in-store merchandising.

Because retailers make decisions about assortment, stocking, and promotion at a national level, partnerships with other program administrators are important to RPP. NEEA and its current partners are early leaders in piloting RPP programs. Building on their experience, the U.S. Environmental Protection Agency (EPA) is piloting a national ENERGY STAR Retail Products Platform, which it plans to expand into a full-scale program in 2016. EPA will play a role in coordinating program offerings between program administrators across the country, and NEEA would like to take part in this national effort.

1.1. Research Objectives

This evaluation assessed the early outcomes of the RPP pilot's activities to confirm the validity of the pilot's market transformation theory and identify early influence the pilot has had on retailer behavior and the markets for targeted products. Recognizing that NEEA is part of a small group of pioneering adopters of the RPP approach, and that the pilot remained at a relatively small scale in 2014 and 2015, this evaluation also explored the potential for RPP to influence the market as the intervention grows and the conditions necessary to reach that potential. This evaluation pursued research objectives that fall under three broad categories:

¹ Pacific Gas & Electric (PG&E) ran its own RPP pilot from November 2013 through December 2014, but this pilot differed significantly from NEEA's pilot in that PG&E worked with only one retailer.

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- › Understand the pilot’s influence on retailer behavior
 - Retailers’ motivations for, and barriers to, participation in RPP
 - The incentives’ influence on assortment and marketing decisions
 - The potential to influence retailers as the scale of RPP expands
 - › Evaluate the potential to scale RPP
 - The feasibility of adding additional products to RPP
 - Data collection capacity needed to scale
 - › Understand key program relationships
 - Relationships between program staff and market actors
 - Relationships between NEEA and its stakeholders

2. Evaluation Activities

Two data collection activities informed the evaluation: in-depth interviews, and a review of Initiative documents. A summary of the activities appears below. The appendices contain additional details, including the interview guides.

- › **In-depth Interviews.** Semi-structured phone interviews with electronics industry market actors, including retail merchants, retail sustainability executives, EPA ENERGY STAR® staff, Initiative staff, and staff of program administrators participating and not participating in RPP.
- › **Initiative Document Review.** Review of Initiative documents including Initiative logic model, and planning documents. Review of publicly available ENERGY STAR and market research documents.

2.1. In-depth Interviews

To assess the outcomes of NEEA’s critical success factors, we conducted in-depth interviews with a variety of market actors. These interviews provided a primary source of data on RPP pilot influence on retailer behavior. In order to ensure that these interviews provided the most complete sense of the market possible, Research Into Action, ILLUME Advising, and Apex Analytics (the research team) interviewed a diverse population with varying perspectives on the pilot, including individuals in different positions within retail organizations and staff from all six participating retail chains and one non-participating retailer. The research team also interviewed staff from energy efficiency program administrators around the country who had considered participating in RPP, including both those who had decided to move forward with the program and those who did not. Table 2 identifies key populations the evaluation team interviewed for this evaluation, and number of completed interviews for each population.

Table 2: In-depth Interview Populations and Number of Completes Anticipated and Achieved

Population	Anticipated # of Completes	Interviews Completed
Participating retailers	8	7
Nonparticipating retailers	2	1
EPA ENERGY STAR staff	2	2
NEEA RPP staff and implementers	4	2
RPP staff at participating program administrators	3	3
Staff of program administrators not participating in RPP	3	3
Data management firms	3	2

The evaluation team conducted the in-depth interviews by telephone. With respondents' permission, interviewers recorded the interviews and used the recordings to supplement notes taken during the interview. The evaluation team used *Nvivo*, qualitative analysis software, to organize and analyze data from all interviews. Due to the similarity in program design, and the TV Initiative's well cataloged influence on retailers' behaviors, the evaluation team also included interview data from TV Initiative Market Progress Evaluation Reports (MPERs) #2, 3, and 4 to provide an historical perspective to the RPP pilot's influence on the energy efficient consumer electronics and white goods market.

2.2. Program Data Review

The evaluation team conducted a thorough review of pilot data to address the research objectives. These activities included: an examination of the documents posted to the RPP workgroup on Conduit; and a comparison of findings from previous MPERs (1-4) with data collected for the current RPP pilot evaluation.

3. Findings

This chapter presents findings from the research activities conducted for this evaluation. It begins with a review of the pilot's logic model, followed by a discussion of four key findings drawn from a synthesis of the information collected from the various interview populations and the document review.

3.1. Logic Model Review

The RPP pilot's key activities, designed to change retailer decision-making and behavior around assorting and promoting efficient products involve setting product specification criteria, engaging with retailers to inform them of those criteria, and providing retailers with incentives. The pilot engages in a range of additional activities to support and enhance these efforts, including participation in coordination efforts with other program administrators and industry discussions around specifications and standards. Finally, the pilot engages in activities to monitor its progress and ensure it is effectively pushing the energy efficiency of the targeted products. These activities include developing systematic criteria to identify products for inclusion in RPP, collecting and managing comprehensive sales data, and conducting regular evaluations.

The research team reviewed NEEA's existing RPP logic model to ensure it clearly articulated these activities and linked them to the anticipated outcomes, including an increase in the market share of energy efficient products in the targeted categories, which in turn could lead to the development of more stringent ENERGY STAR specifications and motivate manufacturers to prioritize efficiency in product design. Figure 1, below, presents NEEA's existing logic model for RPP. Figure 2 presents a revised version, incorporating suggested revisions to clarify key pilot activities and the outputs and outcomes expected to flow from them. Appendix A provides a detailed description of the suggested changes and their rationale.

Figure 1: Original RPP Pilot Logic Model

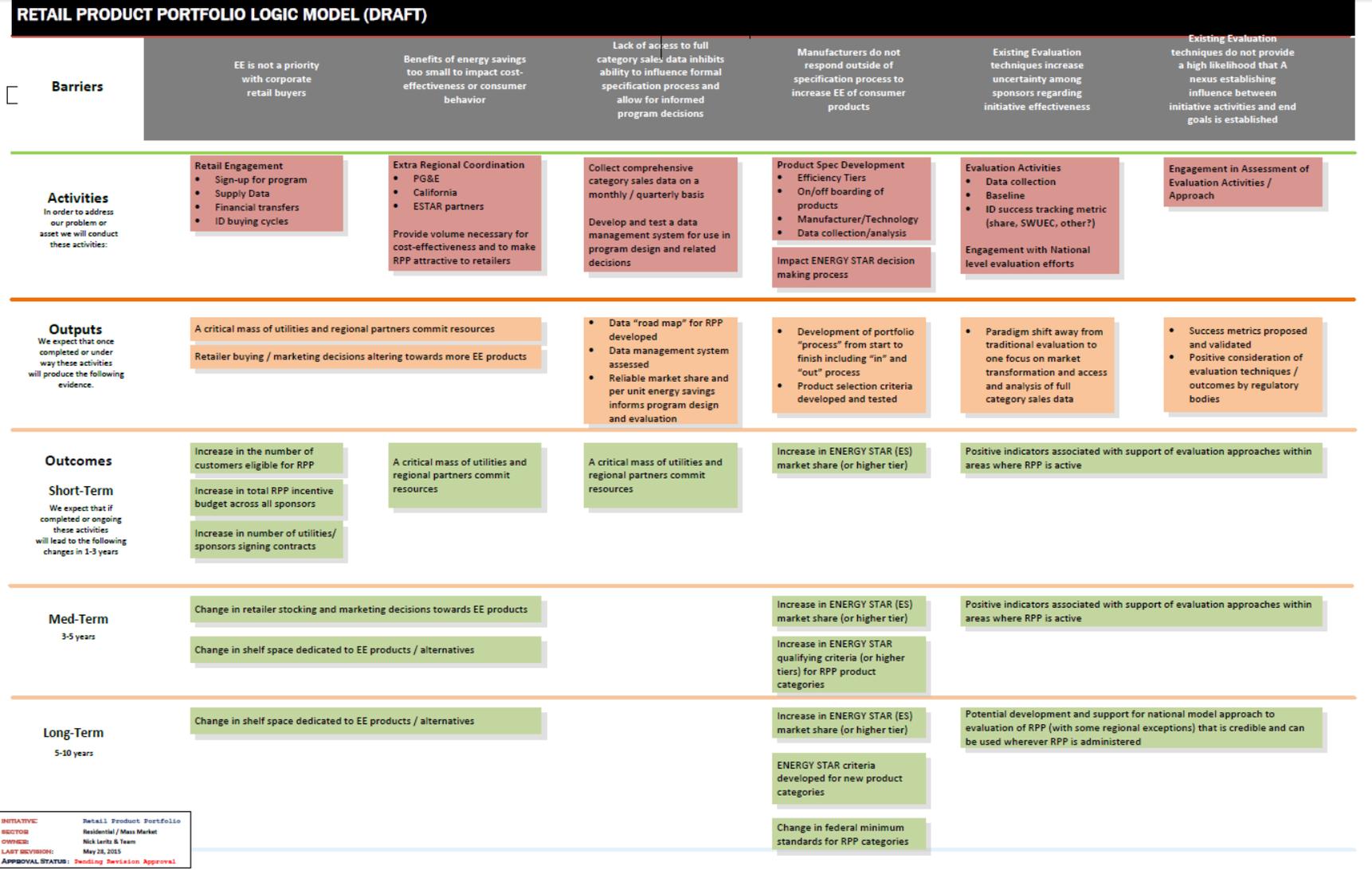
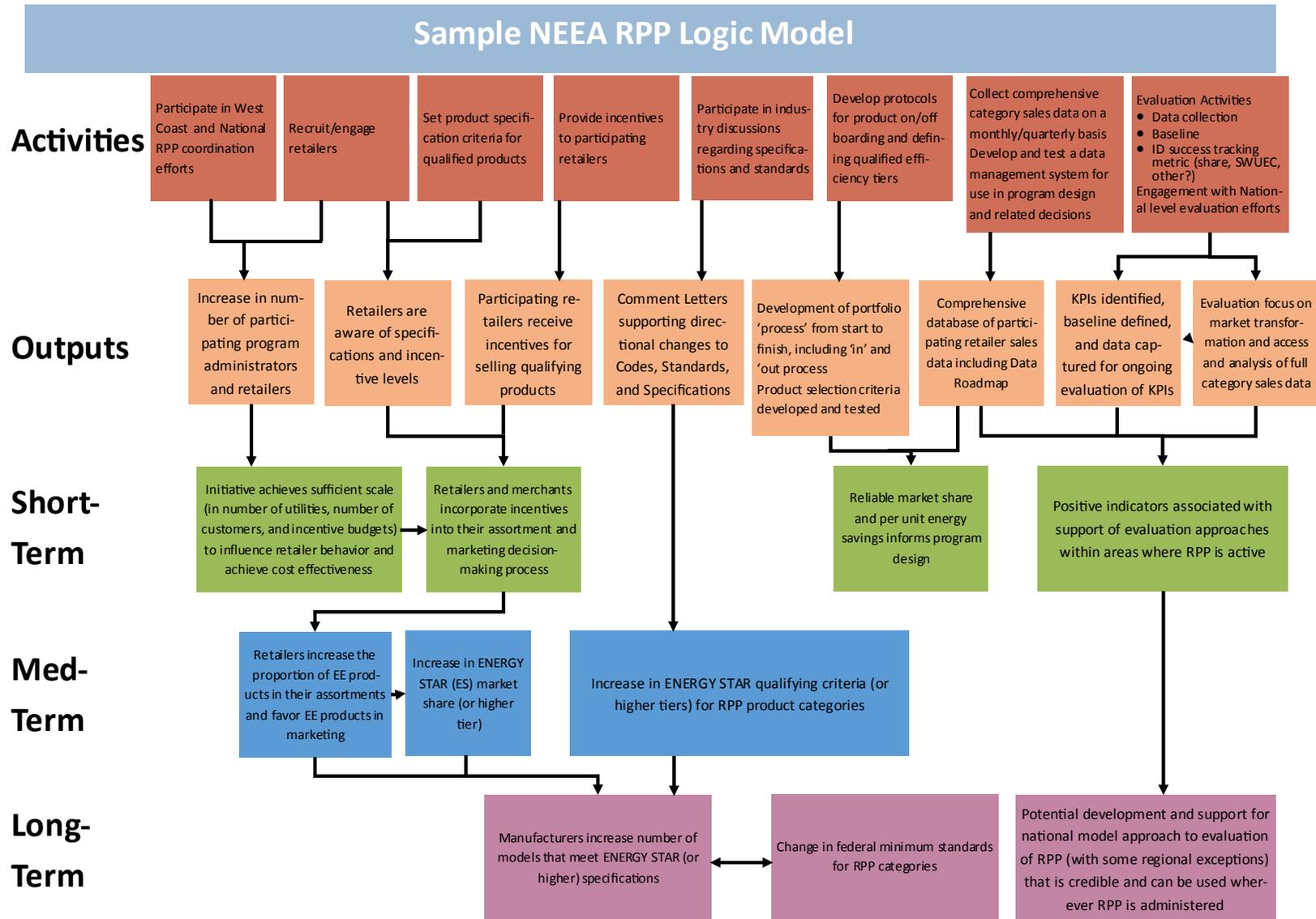


Figure 2: Suggested Logic Model



3.2. Key Findings

This section presents four key findings that emerged from the research conducted for this evaluation regarding the accomplishments and potential of RPP. These findings draw on all of the data collection efforts conducted for this evaluation and reference relevant findings from research conducted for the TV Initiative. As detailed below, we find that, while the mechanisms are in place for RPP to influence retailer decisions around assortment and promotion, the need for scale and retailer diversity limited RPP's impact during this pilot phase. As NEEA and its partners seek to grow the scale of RPP in order to increase its impact, they face key challenges related to recruiting program sponsors and data management.

3.2.1. The mechanisms are in place for RPP to influence retailer decisions in the areas of assortment and promotion

Findings from this evaluation suggest that the mechanisms by which RPP seeks to influence retailers are well suited to the context in which retailers make decisions that could affect the availability and promotion of efficient products, and thus make consumers more likely to purchase those products. In response to RPP, retailers are most likely to change their behavior around assortment planning and product promotion in order to increase sales of energy efficient products.

3.2.1.1. Mechanisms of Influence

Incentives for sales of efficient products are the primary tool RPP uses to influence retailers' behavior. If the incentives are to be effective, retail merchants must be aware that the incentives are available and which products qualify, and they must have this knowledge in time to incorporate it into key decisions about their product categories. Further, the incentives must directly benefit those individuals within the retail organization who are in a position to take action to increase sales of qualified products. As detailed in the following sections, interviews with retailers conducted for this evaluation confirm findings from previous evaluations of NEEA's TV Initiative that both of these conditions are in place.

Awareness of Incentives and Timeliness of Information

The interviewed retailers confirmed that they were aware of changes in qualified products and incentives with adequate lead-time to incorporate that information into their assortment decisions. Nonetheless, retailers noted that more lead time would allow them to more fully incorporate program incentives into their planning. According to one retailer, "If [merchants] know nine months in advance that ten of the TVs they are looking at have a greater per-unit incentive, that is a deciding factor in what they will assort." This retailer reported they were aware of proposed RPP specification levels for 2016 with sufficient lead time, although no formal agreements regarding those specifications were in place. Another retailer noted that a

minimum of six months of lead time would be necessary to influence assortment, and stated they had received information about RPP with sufficient lead time.

Other respondents noted that decision-making around some product categories requires more lead time than others; for example, decisions around air purifier assortments occur further in advance of those products reaching stores than decisions around TV assortments. Turnover of merchants is another reason retailers cited that more lead-time would be beneficial. One retailer reported, “There is a lot of turnover in buyers so to find the right person that makes that decision that takes a while. They are making decisions [in late July] for Christmas and beyond. So the sooner the better.”

Allocation of Incentives

Interviews for this evaluation confirmed previous findings from TV Initiative MPERs that retailers credit incentives they receive from programs like RPP to the profit and loss statements of both the business unit responsible for the product category and the store where the qualified product was sold. Merchants for each product category work within that category’s business unit, and retailers have emphasized that the business unit’s profitability is an important metric for the merchants. For example, in an interview for TV Initiative MPER #2, one retailer said, “The merchants, as much as we would like them to, don’t care about anything other than their bottom line.” Store-level staff also benefit from the increased profitability that Initiative incentives contribute to their stores. One retailer explained that their company assigns profitability goals to each store at the beginning of each year, and stores that exceed those goals may be eligible for bonuses.

RPP further benefits some retailers by helping them achieve their corporate sustainability goals. One retailer reported, “[General Managers] love the idea that we are doing the right thing for our customers.”

3.2.1.2. Areas of Influence

Retailers make decisions in four areas that are particularly influential in increasing the uptake of energy efficient products:

- › **Assortment:** Retailers determine how many models within each category they will carry in their stores and the specific models that will fill each of those slots. Including a larger proportion of efficient products in a retailer’s assortment increases the likelihood that a consumer will select an efficient model.
- › **Promotion:** Retailers may promote certain models in a variety of ways, including featuring them in print or broadcast advertisements and giving them special displays or favorable placement in stores. Promotions featuring efficient products could increase uptake of those products. Training sales staff on the benefits of efficient products and encouraging them to direct customers to those products is another element of product promotion.

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- › **Price:** Retailers set the prices of the products they sell, and may choose to discount certain products. Reducing the prices of efficient products is likely to increase sales of those products.
 - › **Stocking:** Retailers determine the number of units of each model in their assortment they will keep in each store. Stocking a larger number of units of efficient products could increase the availability of those models, and thus increase their uptake.

Interview findings suggest RPP incentives have the greatest potential to influence assortment decisions, and they could also affect marketing decisions. The incentives are less likely to influence stocking decisions or prices. The following sections provide additional detail on the program’s potential to influence each retailer decision.

Assortment

Assortment decisions are the retailer behavior that RPP is most likely to influence. Four of the six retailers interviewed reported that the incentives have the potential to influence merchants’ decisions around product assortment, especially as the program scales. Consistent with previous evaluations, retailers described the influence of RPP incentives on their assortment decisions as a tie-breaker: the incentives would motivate them to select the more efficient option when deciding between two models that were similar in other ways. For example, one retailer cited an example of an assortment decision several years ago in which TV Initiative incentives motivated them to select a more efficient plasma TV model over a less efficient one. According to this retailer, “At that time, [the incentive] was enough that it made the sway from one brand to another.” This retailer noted that when this assortment decision took place the participating program administrators covered a larger portion of the retailer’s market than NEEA’s RPP pilot.

Promotion

Four retailers noted that incentives also have the potential to influence marketing campaigns and promotional activities. According to one of these retailers, “it could just mean that our guys are fronting the product that is getting the incentive, we’re moving that to a different area [within the store].” Nonetheless, interviewed retailers noted that it may be more challenging for RPP to influence promotion than assortment because retailers typically carry out promotions nationally. Emphasizing both the potential for RPP to influence promotion decisions and the need for a large-scale RPP effort to bring about that influence, one retailer stated, “If [merchants] are getting substantial amounts of funds from a certain energy efficient group of products, they will look to sell more of those, so you may see more of those types of products in a national ad.”

RPP is not the only external actor seeking to influence retailers’ promotional decisions; manufacturers frequently offer trade promotions incentivizing retailers to promote the manufacturer’s products. The involvement of manufacturers’ in retailers’ promotion decisions creates a potential challenge for RPP. According to one retailer, “every square inch of an ad or a web page is paid for by someone [i.e., manufacturers]. And those dollars far exceed anything that utilities will give.”

This retailer noted, however, that manufacturers' dominance in trade promotions may not entirely preclude RPP from influencing promotion. In some cases, manufacturers may provide funding for a certain number of models to appear in an ad, but allow the retailer to select which of the manufacturer's individual models to feature. In these cases, the retailer could choose to feature models that qualify for RPP incentives.

Price

Interview findings suggest that RPP incentives are less likely to motivate retailers to reduce the price of qualified products than to alter their assortment and promotion practices. Only two of the six interviewed retailers indicated they might use price discounts to increase sales of qualified products. One retailer explained they were unlikely to reduce prices as a result of RPP incentives for two reasons. First, because this retailer typically makes decisions on price markdowns at a national level, RPP incentives would cover only a portion of the retailer's cost for the markdown. Second, this retailer does not view RPP incentives as likely to make a difference in an end-user's purchase decision. According to this retailer, "Typically, the markdown isn't great enough to influence a customer's purchasing decision. A \$500 TV and it's a \$10 incentive; \$10 isn't going to influence a customer to purchase that TV."

One of the retailers that reported RPP incentives could motivate them to reduce prices on qualified products stated that they might include qualified models in a markdown the retailer had planned to offer for other reasons. This retailer noted that the incentives could then help offset the cost of the markdown. Another retailer reported that, in response to incentives offered outside the NEEA region that were similar to NEEA's RPP pilot, they had passed incentives on appliances through to the customer as a buy-down. These incentives were larger than those NEEA and other program administrators have offered on consumer electronics products, which this retailer reported providing to the business unit to motivate assortment and promotion of qualified products. A third retailer did not indicate they would lower the price of models already in their assortment but suggested they might alter their assortment to include lower-priced efficient models.

Stocking

None of the interviewed retailers reported incentives were likely to directly influence their stocking practices. Interview findings suggest retailers do not view stocking as a tool to promote certain models over others. Instead, in their stocking decisions, retailers seek to ensure that all of the models in their assortment are available. Retailers described sell through rates are the main influence on stocking decisions. According to one retailer, "[Stocking decisions are] all influenced by the rate of sale. If we sell 20 a week, and we need 20 to last us a week, then we will stock 20....If takes 2 weeks to get an order, will order 2.5 weeks' worth. We would not change the weeks of supply based on a program."

3.2.2. Two Important Factors Limit RPP’s Potential to Influence Retailers

As described above, the conditions necessary for RPP to influence retailer behavior to increase assortment and promotion of efficient products exist. RPP offers incentives that benefit the retail decision-makers it hopes to influence and provides those decision-makers with the information they need to select and promote efficient products. Nonetheless, two primary factors limit the potential for RPP to influence retailer behavior: a need for scale and the diversity of retailer interests and decision-making structures.

3.2.2.1. Scale Needed

Retailers make many of the decisions that RPP seeks to influence on a national scale. As a result, retailers’ consideration of the costs and benefits of promoting efficient products goes far beyond any single program administrator’s service territory, and even beyond NEEA’s regional reach. As one retailer explained, “An average merchant deals with literally hundreds of millions – some merchants buy over a billion – dollars’ worth of product in a year. Trying to influence them with a couple hundred thousand dollars, it doesn’t grab their attention as much as \$10 million would.” This statement is consistent with the reaction of a merchant from a non-participating retailer to a description of RPP. This merchant said, “When you present it to me as [a per-unit incentive of] \$10, but if you project ‘we think we can do XYZ, and it will come out to a million dollars of support,’ that would make a difference.” Retailers consistently reported that as the scale of RPP increased, so would the amount of influence RPP incentives are likely to have in their decision-making.

Interview findings suggest that RPP’s influence on both assortment decision-making and promotion would grow as RPP’s scale increases. In an interview conducted for TV MPER #4, a merchant for one retailer said that, if the program covered a sufficient portion of the market, he would “look to assort the majority of my [models] under this program.” In interviews specific to this evaluation of the RPP pilot, two retailers stated that incentives had the potential to influence larger marketing efforts, but, because the retailers typically carry out these efforts nationally, the program would need greater scale to bring about influence.

NEEA has sought to build the scale of RPP by partnering with other program administrators and engaging with EPA-led coordination efforts on a national level. Through a partnership of multiple program sponsors, RPP seeks to increase the proportion of each retailer’s market in which incentives are available and thus increase the total amount of incentives available to retailers. According to a sustainability staff member from one retailer, “[RPP would be] more effective with a large geographical footprint. We could talk with more people and make more noise about it. If the program is on a small scale, it gets lost in the shuffle.”

In addition to increasing the incentives available to retailers, a large-scale RPP effort provides retailers with the added benefit of interacting with a single, coordinated program rather than many regional programs. As one retailer noted, increasing the scope of RPP would allow them to not “have to deal with so many [program administrator] players.” Another noted that this streamlined relationship could allow for “more collaboration between utilities and the buying teams.” Finally, expanding RPP to a national scale may also make it easier to achieve and claim

program effects, if a proper baseline can be established. Retailers reported that when they are participating in multiple programs, “it’s impossible to say that the NEEA program [specifically] made a difference.”

3.2.2.2. Retailer Diversity

The retailers participating in NEEA’s RPP pilot differ in their culture and approach to the market, the level of regional customization in their stores, and the role RPP’s products play in their larger business. As a result of these differences, each retailer responded to RPP incentives in distinct ways. These differences affect RPP’s potential to influence assortment and promotion of efficient products, the level of scale necessary for RPP to have a pronounced impact on retailer behavior, and the ease with which the retailers interact with program administrators.

Considerations in Assortment Decisions

Interview findings suggest retailers vary in the extent to which they weigh various factors in their assortment decision-making. For example, while most retailers suggested they weighed profit margins more heavily in their assortment decisions, one emphasized that their assortment decisions were focused on meeting projected consumer demand, with profit margins as a secondary consideration. According to this merchant, “the reason we make certain decisions around bringing products into the assortment is strictly based on consumers. We will work as hard as we can to offer what they want.” This merchant provided additional detail in an interview for TV MPER #4, saying profit margins are “taken into consideration, but it all comes back to the customer; what does the customer want? And as buyers, it’s our job to negotiate and get the best cost.” Given this focus on customer demand, this retailer reported RPP incentives would likely have little influence on their assortment decisions.

A non-participating retailer also emphasized the importance of customer demand in their assortment decision-making, suggesting that energy efficiency must be a desirable feature to consumers for incentives to influence their assortment. According to this retailer, “I can’t just say there’s a group that wants us to sell more of these, so I will change my assortment to meet their needs... There is not going to be a direct relationship. Indirectly it might have some influence, but we assort based on what’s right for the customer.” This retailer went on to say that program incentives would “be included in all the other data we gather to make decisions based on what we believe the customer would prefer.”

Level of Regional Customization

Interview findings suggest that retailers vary in the extent to which they allow for regional customization of assortment and promotions. While some retailers described these decisions as made on a national scale, others reported that some customization was possible. One retailer noted that assortment may vary based on differences in store size, as well as regional and demographic differences, but “70% of the assortment will fall into 90% of the stores” nationally.

Another retailer described a somewhat greater level of customization, saying that while their corporate office provided a merchandising plan, regional merchants could customize that plan to reflect the types of customers most likely to visit a particular store. This retailer stated that this regional customization was not necessarily aligned with efficiency program administrator service territories, but noted NEEA's four-state area encompassed multiple, customizable markets. RPP may have a greater influence on retailers that allow for greater regional customization of assortment and promotion decisions. These retailers can limit any costs of changes in assortment and promotion to areas where RPP incentives are available to offset those costs.

Role of RPP Products in Overall Mix

Retailers differ in the role the products RPP promotes play in their overall product mix, and these differences appear to influence their assessment of the scale RPP would need to achieve to have a notable influence on their decision-making. Two retailers stated that 50% of their markets would need to be eligible for RPP incentives to play a significant role in their decisions. These were both general merchant retailers that offer a wide range of products in addition to the targeted categories. As a result, for these retailers, the targeted categories likely contributed a relatively small proportion of their overall sales.

More specialized retailers, who derive a larger proportion of their overall sales from the targeted products, reported a lower threshold for program influence. Two of these retailers stated that, while the Northwest was not sufficient to significantly change their decision-making, a combination of NEEA and California utilities would be influential. One of these retailers stated, "Having California and NEEA would be large enough to bring back large influence on assortment decisions." The other called California, Nevada and the Northwest "a great jumping off point for scale."

Structure of Efficiency Program Interaction

Retailers vary in their approach to managing their participation in energy efficiency programs at the corporate level. Some retailers have a team of corporate sustainability staff members who manage their participation in efficiency programs, acting as a point of contact for the programs and disseminating information from the program to the appropriate actors within their organization. For other retailers, decision-making around program participation is more diffuse, with each business unit responsible for making the decision to participate in a given program and managing its own participation.

One national, non-participating retailer uses this type of diffuse structure in their decision-making around program participation. As a result of the multiple, potential decision-makers involved, it was difficult for the evaluation team to identify an appropriate contact to discuss the retailer's views on RPP. This experience suggests that working with retailers with a diffuse decision-making structure for program participation may pose challenges for RPP, particularly since RPP would likely need to work with multiple business units to address its full range of product categories.

3.2.3. Due to its small scale, NEEA’s RPP pilot had limited influence

Two retailers indicated that NEEA’s incentives influenced their assortment decisions during the RPP pilot. One of these retailers reported that, “we have gone very heavily on the ENERGY STAR products” in their air cleaner assortment because of RPP incentives. For most retailers, however, interviews suggest that, while potential for greater influence exists as RPP’s scale increases, the pilot’s relatively small scale limited its influence on retailers’ decision-making. One retailer noted that, “It has been a transitional year [for RPP] and there is only a small geographic footprint;” as a result, RPP “incentives are not as big an influence on [our] decision-making.” Similarly, another retailer stated that TV merchants were receptive to information about RPP due to their long experience with the TV Initiative, but merchants newer to the program were less receptive. According to this retailer, “With the additional categories, at this point, there is not enough scale, nor are the product categories great enough [in sales volume] that the incentives really have an influence yet.”

3.2.4. RPP faces two key challenges in achieving the scale necessary for influence

An RPP Initiative that covers a large proportion of the U.S. market has the potential to alter the ways retailers assort and promote efficient products. To increase the scale of RPP, NEEA and its partners will need to recruit additional program sponsors and manage retailer sales data across a wide and evolving range of products. Research conducted for this report suggests significant challenges remain in both of these areas.

3.2.4.1. Recruiting Program Sponsors

RPP represents a departure from traditional efficiency program designs, which have largely focused on directly influencing end users’ purchase decisions. Even programs focused at the midstream level, like retail buy-downs, have traditionally used retailers as a medium to influence end-users by prescribing actions for the retailers to take and using incentives to minimize the impact of those actions on the retailers’ business outcomes. RPP, in contrast, seeks to influence the behavior and decision-making of the retailers themselves; influence on end-user purchases is secondary.

As a result of this fundamental shift in focus, traditional approaches to measuring net energy savings and calculating program cost effectiveness, which focus on end-user purchase decisions, are poorly suited to RPP. While NEEA and other program administrators have evaluated RPP and the Business and Consumer Electronics programs that preceded it, evaluators have been challenged to provide quantitative estimates of program influence and new evaluation methods have not yet gained widespread acceptance. This lack of a widely-accepted evaluation methodology results in uncertainty among potential program sponsors, in particular those who are held to net savings targets or cost effectiveness parameters that consider attribution regarding

the potential energy savings they could gain from RPP and the likelihood their regulators will accept those savings claims.²

The non-participating program administrators interviewed for this evaluation appear to accept that market transformation programs like RPP require a change in mindset, both within their organizations and among their regulators. However, these program administrators maintain a need to take a serious and methodical approach to determining if RPP is a prudent and justifiable use of ratepayer funds. The interviewed participants indicated they do not have sufficient information to determine whether the benefits of RPP, in terms of net energy savings, would be sufficient to justify the costs.

In particular, the interviewed non-participating program administrators expressed concern over the potential that the majority of the units for which RPP provides incentives might have sold in the absence of the program.³ In traditional, end-user-focused programs, these types of low net-to-gross ratios typically indicate that a program is not cost-effective. These concerns are compounded by what some interviewees view as poor net-to-gross results achieved through the recent PG&E pilot and concern about whether and how the program will address these results in the future.⁴

The non-participating program administrators expressed dissatisfaction with the response they had received when they raised concerns about the costs and benefits of RPP. Non-participants reported the perception that, in some cases, RPP advocates dismiss their questions and concerns as reflective of a resource acquisition mindset, rather than a market transformation framework more appropriate to RPP. The non-participants, however, described what they sought as basic information necessary to make a prudent decision, unrelated to any tension between resource acquisition and market transformation approaches. They also noted that a number of their existing program models can be defined as market transformation, and that this definition does not preclude a program from being held to some level of cost effectiveness.

Beyond their questions about the cost effectiveness of RPP, non-participating program administrators expressed concern about a variety of other issues related to the Initiative's structure. Non-participants indicated that they were uncertain of which elements of the program they would be able to customize and to what extent, and which elements they would cede control

² NEEA has an established approach to identifying the energy savings attributable to its Initiatives, and this approach is sufficient to meet NEEA's needs. However, NEEA's approach would not meet the regulatory needs of many program administrators around the country that are held to more traditional net savings targets.

³ For example, RPP incentives may increase the ENERGY STAR market share of a given product from 15% to 20% over the course of a year. In this case, three-fourths of the incentives would be paid on products that would have sold in the absence of the program.

⁴ The evaluation of PG&E's RPP pilot found changes in the proportion of qualified products sold ranging from -1% to 14% for the various product categories included, with an overall net-to-gross ratio of 5.28%. For additional details see: EMI Consulting and Ridge and Associates. 2015. *Pacific Gas and Electric Company Retail Plug Load Portfolio (RPP) Trial: Evaluation Report*. ET Project Number: ET13PGE8052. San Francisco, CA: Pacific Gas and Electric Company.

of to the national coordinating effort. For example, program administrators questioned whether they would be able to determine incentive levels and the products the program covers within their territories. Non-participating program administrators also expressed uncertainty over their ability to get recognition for the participation from their customers, and whether they would be responsible for, or have the option to, provide in-store point-of-purchase materials.

NEEA's stakeholders have raised concerns that parallel many of these points. Like the non-participating retailers, stakeholders expressed concern that participation in national RPP efforts would require NEEA to adopt product specification and incentive levels that are not sufficiently stringent to drive the market in the Northwest. Stakeholders also expressed concerns that, because retailers do not pass the incentives through to customers, RPP would not provide a sufficiently direct benefit to the ratepayers who ultimately fund the incentives. While national RPP efforts are designed to allow program sponsors flexibility in setting specification and incentive levels, the parallels between the concerns of NEEA's stakeholders and non-participating utilities emphasize the need for effective communication around these issues.

3.2.4.2. Data Management

While a larger-scale program would allow for economies of scale that could mitigate some data management challenges, RPP's broader focus and larger scale have the potential to amplify three aspects of data management into more significant challenges than they posed in previous Initiatives. First, RPP's focus on a wider range of product categories increases the challenge of matching models reported in retail sales data to the ENERGY STAR qualified product list. Second, including a larger number of program sponsors, each with unique regulatory requirements, increases the complexity of reporting RPP's outcomes for the data management contractor. Finally, the involvement of multiple actors and retailers' competing priorities can make communication around data needs challenging.

One of the key challenges that NEEA's data management contractor faced under the TV Initiative involved matching the model numbers reported in retailers' sales data submissions to the ENERGY STAR qualified products list (QPL) to determine each product's qualification status. To do so successfully, the data management contractor had to develop an understanding of the structure of manufacturers' model numbers so they could identify whether or not a slight discrepancy between a model number reported in sales data and one listed on the QPL indicated a difference in product design with implications for energy use. Manually reviewing models that the contractor's automated system could not match was a labor-intensive process.

As RPP expanded the range of products eligible for incentives, the data management contractor reported that, while the processes and understanding they developed for TVs provided a useful base of knowledge, a learning curve remained for each new product category.⁵ The contractor

⁵ While the data management contractor reported that model matching posed a challenge, they were ultimately able to produce a dataset of matched models that met the pilot's needs. A detailed review of the pilot's sales data is available in: ILLUME Advising, LLC. 2015. *Retail Product Portfolio: Evaluability Assessment*. Portland, OR: Northwest Energy Efficiency Alliance.

noted that products with multiple options for configuration, like the personal computers included early in the TV Initiative, and those with the shortest product refresh cycles, like TVs, which are typically on the market for only one year, were the most difficult to match. As RPP expands and shifts the range of product categories on which it focuses, the data management contractor will need to continually adapt and update its model matching capabilities to accommodate each new category.

The new data management contractor, which will work with RPP nationally, did not indicate they expected model matching to pose a significant challenge. This contractor reported they have experience with model matching and their system can incorporate wildcard characters and match across multiple fields. The new data management contractor is also working with a subcontractor who has existing partnerships with some participating retailers. The contractor anticipates that these relationships will allow them to access data on retailers' assortments and begin matching models prior to receiving sales data, which will streamline the model matching process.

Both the previous data management contractor and the new contractor recognized the potential difficulties of working with multiple program administrators. The previous data management contractor noted that coordination and cost-sharing had been challenging during the TV Initiative, as program sponsors entered and exited partnerships with the Initiative. Both contractors described relatively similar strategies to address those challenges. Both contractors stated that they would begin with a standard offering that would, ideally, meet the reporting needs of most program administrators, and work with those that needed customized reports on an individual basis. The new data management contractor stated, "Every utility is unique and all have their own ideas on the 'what' and the 'how.' We will just have to deal with those as they come within the constructs of providing a package solution." The previous data management contractor noted that, more than simply providing customized reports, it was important that the data management contractor be a part of planning and relationship-building efforts so they could anticipate the data needs and implications related to any program changes.

Finally, the previous data management contractor noted that, during NEEA's RPP pilot, the process by which they obtained data from retailers had been inefficient. In particular, the contractor noted that a lack of direct contact with retailers had made it challenging to communicate RPP's data needs. This contractor described communicating data needs to Navitas, who would pass them on to the pilot's contact at the retailer, who would in turn pass them on to a technical retail staff member as a "game of telephone," that did not provide "the data we needed or asked for." This contractor noted that, although more direct channels for transmission of data were available, the relatively small scale of NEEA's RPP pilot did not justify their cost. In addition, this contractor suggested that the relatively small scale of the RPP pilot may have reduced the priority retailers gave to the pilot's data requests.

The new data management contractor described a range of options they planned to provide for retailers to submit sales data, including linking their database directly to the retailers' point of sale systems, but acknowledged that some retailers may not be interested in this level of involvement. Regardless of the format in which a retailer submits data, this contractor anticipated that aligning the retailer's data with their tracking system would pose an initial

challenge, but would happen smoothly for subsequent submittals after the initial integration effort.

4. Conclusions and Recommendations

As detailed in Chapter 3, this evaluation identified four key findings:

- › The mechanisms are in place for RPP to influence retailer decisions in the areas of assortment and promotion.
- › Two important factors limit RPP’s potential to influence retailers.
 - Need for scale
 - Diversity of retailers
- › Due to its small scale, NEEA’s RPP pilot had limited influence.
- › RPP faces two key challenges in achieving the scale necessary for influence.
 - Recruiting program sponsors
 - Data management

Our conclusions and recommendations focus on the factors that limit RPP’s potential to influence retailers, and how NEEA can overcome those factors to more effectively motivate retailers to take action to increase sales of efficient products.

4.1. *Conclusion 1: Scale is critical to the success of RPP, and, to achieve scale, NEEA and its partners must overcome concerns about the savings attributable to RPP.*

Retailers consistently reported that RPP’s influence on their decision-making would increase as the scale of the program, in terms of the overall incentives available, grew. Retailers make decisions around assortment and promotion at a national level. Incentives can have a significant impact on those decisions, but to do so, the incentives available must approach the scale of the decisions themselves. The most effective way for NEEA to increase the scale of RPP is to participate in national coordination efforts and work with other early sponsors to encourage additional program administrators to join RPP. By coordinating with program administrators across the country, NEEA can grow the scale of RPP to be much closer to the scale on which retailers make the decisions RPP seeks to influence.

To achieve notable increases in the scale of RPP, NEEA and other program administrators leading RPP’s development will need to help potential program sponsors overcome uncertainty over the costs and benefits of RPP. These program administrators have legitimate concerns over whether participation in RPP would represent a prudent use of ratepayer funds. NEEA and its partners can most effectively address these concerns by demonstrating RPP’s ability to generate energy savings. To do so effectively, however, NEEA and its partners must show that those savings are attributable to RPP. NEEA approaches program attribution and net-to-gross (NTG) calculations differently from many other program administrators, and NEEA’s approach is

sufficient for its own needs. Nonetheless, to expand RPP, an approach that will satisfy program administrators that take a more traditional approach is necessary.

Quantifying the savings attributable to midstream programs like RPP has been a challenge for NEEA and other program administrators in the past. The nature of RPP limits the applicability of traditional evaluation methods. The national scale of retailers' decision-making reduces the potential for comparisons between program areas and similar areas without program activity (i.e., cross-sectional analysis) to demonstrate program influence. Similarly, because manufacturers constantly update their products and incorporate new technologies as they seek to gain an edge over their competitors, comparing program sales with data from even a few years prior (i.e., longitudinal or time-series analysis) may not provide a valid assessment of program-influenced sales. Evaluators have used and proposed a variety of methods to overcome these challenges, ranging from Delphi panels to complex mathematical models, but, to date, none has gained widespread acceptance.

4.1.1. Recommendation 1: Continue to work with its initial partners and EPA coordination efforts to increase the scale of RPP.

NEEA's existing relationships with California utilities provide enough scale to begin to influence some retailers, and NEEA should work to maintain these partnerships. Each of the early sponsors of RPP operates in a unique regulatory environment. As a result, NEEA's perspective on RPP is somewhat different from, and complementary to, the perspectives of its partners, and NEEA's perspective can be a valuable contribution to efforts to bring new program sponsors to RPP. Other program administrators recognize NEEA as a leader in the energy efficiency industry, leaving NEEA well positioned to play a role in recruiting additional partners to RPP.

4.1.2. Recommendation 2: Work to develop an effective approach to estimating baseline sales.

An intuitive and transparent approach to estimating baseline sales, and thus identifying the sales lift and resulting energy savings attributable to RPP, is necessary to satisfy skeptical program administrators and regulators that participation in RPP can be properly assessed to determine if it represents a prudent use of ratepayer funds. As noted above, NEEA does not need to use traditional net-to-gross approaches to satisfy its stakeholders. However, as one of the pioneering sponsors of RPP, NEEA can play a role in developing a widely-accepted approach that will satisfy program administrators that take more traditional NTG approaches and thus overcome one of the key barriers to RPP building scale.

4.2. Conclusion 2: *Because each takes a unique approach to the market, participating retailers differ in the ways they engage with RPP and respond to incentives.*

Some of the important differences between retailers relate to their overall business strategies, and are relatively obvious: more specialized retailers, for whom the targeted categories make up a

larger proportion of overall sales, may be more responsive to RPP, even on a regional scale, than general merchant retailers. Other differences are less immediately apparent. Retailers who give less weight to profit margins relative to consumer demand in their assortment decisions (i.e., low cost, high volume retailers) are less likely to alter their assortment in response to program incentives.

The most important differences influencing retailers' response to RPP, however, may relate to organizational decision-making structures. These structures are particularly important in two areas. First, retailers that allow for a greater degree of customization in assortment and promotion at the regional level may be most responsive to RPP incentives. By limiting actions to regions where RPP incentives are available, these retailers can lower the risks and costs of taking action relative to retailers considering changes on a national scale.

The second important difference in retailer decision-making structures relates to the retailer's approach to efficiency program participation at the corporate level. It may be easier for retailers with a central team of sustainability staff members responsible for managing their utility program participation to engage with RPP than it would be for retailers in which program participation decisions and responsibilities are more diffuse. Central sustainability staff serve as a single point of contact for RPP, informing the relevant individuals within the organization about RPP and managing RPP's data and administrative needs. For retailers that lack this central coordination of program participation, merchants within individual business units typically make decisions about, and manage, their participation in efficiency programs.

4.2.1. Recommendation 3: Ensure that RPP is prepared to work with retailers that do not have a single point of contact to engage with efficiency programs.

In retail organizations that do not centrally coordinate their program participation, RPP may need to work with multiple individuals to address the full range of products RPP seeks to promote, and may need to continually develop new relationships as the product mix changes. Further, merchants must manage a wide range of responsibilities unrelated to participation in energy efficiency programs, and thus may not prioritize the needs of the program. Nonetheless, despite these challenges, RPP's coordinated approach may be far more likely to engage merchants at these organizations than individual programs serving smaller areas.

4.3. Conclusion 3: Model matching remains a potential challenge for RPP.

Matching models between retailer-reported sales data and the ENERGY STAR qualified products list (QPL) was the greatest challenge the data management contractor faced during the TV Initiative, and the broader range of products and more fluid nature of RPP have the potential to amplify these challenges. During the TV Initiative, the contractor found that there were often relatively small differences between retailer-reported model numbers and those appearing in ENERGY STAR QPLs. To determine whether these model number discrepancies indicated differences in product design that could influence energy use, the contractor developed an understanding of the structure of various manufacturers' model numbers and engaged in a time-

consuming manual process to match models. While these steps increased the accuracy of the matching process over time, they are not scalable across multiple products.

NEEA's RPP pilot focused on four product categories, and RPP is designed to easily incorporate new products as technologies and markets shift. It will not be practical to invest the amount of resources that went into accurate TV model matching for each product RPP incents. The new RPP data management contractor anticipates that their systems and existing relationships with retailers will be able to facilitate model matching. Nonetheless, few programs have incorporated model matching on the scale of RPP, and, at the time of our interview, the new data management contractor had not yet begun to engage with RPP data on a large scale.

4.3.1. Recommendation 4: Monitor the accuracy of model matching for RPP products.

The annual ENERGY STAR Unit Shipment and Market Penetration reports provide a reference against which NEEA can evaluate the accuracy of RPP model matching. An ENERGY STAR penetration that is notably higher than the proportion of models in retailers' sales data matching to the ENERGY STAR QPL would indicate that the model matching process may be missing some qualified models. In addition to paying incentives, accurately matching models is critical to informing NEEA's decisions on products to include in RPP and understanding the pilot's effects.

Appendices

Appendix A: Detailed Logic Model Review

Appendix B: Detailed Participating Retailer Interview Findings

Appendix C: Detailed EPA, and Participant and Nonparticipant IOU Staff Interview Findings

Appendix D: Detailed Data Management Findings

Appendix E: Data Collection Instruments

A. Appendix A: Detailed Logic Model Review

This appendix summarizes Research Into Action’s assessment of the Retail Product Portfolio (RPP) logic model for consistency with other sources of program information and the strength of the causal connections in the model. Interviews with NEEA’s Initiative manager, the Initiative’s implementation contractor, and a review of Initiative documents inform this assessment. NEEA’s existing logic model is included in Appendix A, below.

Appendix B presents a revised logic model that reflects the suggested changes. Below we present a series of tables that elaborate on the changes we suggest and the rationale for each change. The first five tables each focus on one section of the logic model, beginning with Activities, followed by Outputs, then Short-, Medium-, and Long-term outcomes. The final table offers suggestions to clarify the language in certain logic model elements.

Detailed Findings and Recommendations

Table 3 lists suggested changes to the Activities listed in the logic model. The existing logic model lists some Outputs and Outcomes that are expected to follow from an Initiative Activity in the field with the Activity itself. To simplify the logic model and remove potential confusion, we recommend moving these items (noted in Table 1 below) from Activities to the Outcomes and Outputs areas as appropriate. We also recommend adding two additional Activities to the logic model – setting specifications for qualified products and providing incentives to participating retailers – to explicitly highlight their importance to RPP.

Table 3: Logic Model Activities

Existing Activity	Proposed Activity	Reason
Retail Engagement <ul style="list-style-type: none"> • Sign-up for program • Supply Data • Financial transfers • ID buying cycles 	Revise to: “Recruit and engage retailers”	The sub-bullets represent outputs expected to result from the Initiative’s efforts to recruit and engage retailers rather than program activities themselves.
Extra Regional Coordination <ul style="list-style-type: none"> • PG&E • California • ESTAR Partners Provide volume necessary for cost-effectiveness and to make RPP attractive to retailers	Revise to: “Participate in West Coast and National RPP coordination efforts” Move sentence beginning “Provide volume...” to short-term outcomes.	Removing the list of specific partners with which RPP will coordinate streamlines the text. Increasing the volume of shoppers in participating program administrator territories is an output of this activity. Influencing retailers to take action and achieving cost effectiveness is an outcome.
Product Spec Development <ul style="list-style-type: none"> • Efficiency Tiers 	Revise to: “Develop protocols for product on/off boarding and defining qualified efficiency tiers.”	Simplifies and clarifies text and explicitly adds specification setting as a key Initiative activity.

- On/off boarding of products
- Manufacturer/Technology
- Data collection/analysis

“Impact ENERGY STAR Decision making process”	Revise to “Participate in industry discussions regarding specifications and standards”	This is an important Initiative activity. NEEA has played a key role in voicing the EE side for qualifying products through comment letters and it is important to continue this Activity with new products. However, <i>impacting</i> the ENERGY STAR decision making process is an outcome of NEEA’s activity of participating in the process.
Engagement in Assessment of Evaluation Activities/ Approach	Remove	Encompassed in conducting evaluation Activities
<i>None</i>	Add “Provide incentives to participating retailers”	Providing incentives to retailers is a key Activity that motivates retailers to participate in the program and influences their assortment and marketing decision making process. As such a key leverage point, providing incentives should be called out as a separate activity from Retailer Engagement.

In the current logic model, many items listed as Outputs result from program Activities but are not things the program directly controls; therefore, they can be revised or moved to Outcomes. We also recommend adding Outputs resulting from the revised program Activities that are critical to program success (Table 4).

Table 4: Logic Model Outputs

Existing Output	Proposed Output	Reason
A critical mass of utilities and regional partners commit resources	Revise to “Increase in number of participating program administrators and retailers”	As currently stated this combines both an output and an outcome. The output of the Initiative Activities is an increase in utility participation. The outcome of participation increasing is the achievement of a volume of utilities sufficient to influence retailers’ decision-making.
Retailer buying/marketing decisions altering towards more EE products	Move to Short-Term Outcomes Add: “Participating retailers receive incentives for selling qualifying products”	Changes in retailer decisions and behavior are an outcome of the Initiative’s activities; they are not a direct product of those activities (i.e. an output).

		Providing incentives to participating retailers is the activity most directly linked to altering retailer behavior. The output of that activity is the receipt of the incentives themselves.
<ul style="list-style-type: none"> • Data ‘roadmap’ for RPP developed • Data management system assessed • Reliable market share and per unit energy savings informs program design 	<p>Revise first two bullets to: “Comprehensive database of participating retailer sales data including Data Roadmap”</p> <p>Move third bullet to Short-Term Outcomes</p>	<p>The first two bullets can be combined to simplify the logic model.</p> <p>The third bullet is an Outcome that derives from the Activities of collecting sales data from retailers and developing a data management system.</p>
Paradigm shift away from traditional evaluation to one focus on market transformation and access and analysis of full category sales data	Revise to “Evaluation focus on market transformation and access and analysis of full category sales data”	As stated, this combines an output and an outcome. Evaluations focused on market transformation and access and full category sales data analysis themselves are an output. A paradigm shift is not something the Initiative directly controls and is thus an outcome.
<p>“Success metrics proposed and validated</p> <p>Positive consideration of evaluation techniques/Outcomes by regulatory bodies”</p>	<p>Revise first bullet to “KPIs identified, baseline defined, and data captured for ongoing evaluation of KPIs”</p> <p>Move second bullet to Short Term Outcomes.</p>	<p>The revision adds specificity to the first bullet, directly connecting it to the activity of conducting evaluation activities, including baseline and KPI assessment.</p> <p>Closely related to the “paradigm shift” in the previous output, regulators’ positive consideration of evaluation techniques is not something the Initiative directly controls. It is an outcome of a shift in evaluation focus.</p>
None	Add “Retailers are aware of specifications and incentive levels”	This is an Outcome of providing retailers with qualified product information in a timely manner
None	Add “Comment Letters supporting directional changes to Codes, Standards, and Specifications”	This is the direct Outcome of participation in industry discussions regarding standards and specifications.

As described in Table 5, we recommend reconfiguring the Short-Term Outcomes listed, moving or removing some of the current Outcomes, and adding new Outcomes.

Table 5: Logic Model Short-Term Outcomes

Existing Short-Term Outcome	Proposed Short-Term Outcome	Reason
<p><i>[Current Activity]</i> Provide volume necessary for cost-effectiveness and to make RPP attractive to retailers</p>	<p>Revise to “Initiative achieves sufficient scale (in number of utilities, number of customers, and incentive budgets) to influence retailer behavior and achieve cost effectiveness.</p>	<p>Increases in the number of utilities, customers, and incentive budgets are all outputs of the “Extra Regional Coordination” activity, and are captured in the revised output.</p> <p>The short term outcome of this activity is achieving sufficient scale to influence retailers.</p>
<p>Increase in the number of customers eligible for RPP</p>	<p>Remove: captured in above recommendation.</p>	<p>See above.</p>
<p>Increase in total RPP incentive budget across all sponsors</p>	<p>Remove: captured in above recommendation.</p>	<p>See above.</p>
<p>Increase in number of utilities/sponsors signing contracts</p>	<p>Remove: captured in above recommendation.</p>	<p>See above.</p>
<p>A critical mass of utilities and regional partners commit resources (Duplicated)</p>	<p>Remove: captured in above recommendation.</p>	<p>See above.</p>
<p>“Increase in ENERGY STAR (ES) market share (or higher tier)”</p>	<p>Remove: duplicative of med-term outcome.</p>	<p>This outcome appears in the short term, med-term, and long-term outcomes. It is most appropriately a Med-Term Outcome. It follows from the short-term outcome of retailers incorporating incentives into their decision-making, and it will likely take time for changes in assortment and promotion to take effect and begin to influence sales of qualified products.</p>
<p><i>[Current Output]</i> Retailer buying/marketing decisions altering towards more EE products</p>	<p>Revise to “Retailers and merchants incorporate incentives into their assortment and marketing decision-making process”</p>	<p>As noted above, although currently listed as an Output, this is an Outcome from increasing participants, providing incentives, and providing retailers with necessary information.</p> <p>The suggested revision clarifies the language.</p>
<p><i>[Current Output]</i> Reliable market share and per unit energy savings informs program design</p>	<p>Add</p>	<p>As noted above, while this is currently listed as an output, it is more accurately an outcome of the program activities of collecting sales data and developing a data management system.</p>

We recommend moving and revising some Med-Term Outcomes to more clearly state the sequence of outcomes expected to result from Initiative activities (Table 6).

Table 6: Logic Model Med-Term Outcomes

Existing Med-Term Outcomes	Proposed Med-Term Outcomes	Reason
“Change in retailer stocking and marketing decisions towards more EE products”	Revise to “Retailers increase the proportion of EE products in their assortments and favor EE products in marketing”	If retailers are considering the Initiative in their marketing and assortment decisions in the short term, changes in product assortments and marketing should be present in the medium-term. The revised language reflects areas our research suggests the Initiative is most likely to influence.
“Change in shelf-space dedicated to EE products/alternatives”	Remove: Addressed above	Changes in shelf-space reflect changes in assortment. Based on our research, this is a more likely area of influence than stocking. As a result, we suggest replacing the reference to stocking above with assortment and eliminating this outcome, which would then be redundant.
“Positive indicators associated with support of evaluation approaches within areas where RPP is active”	Remove	Addressed in Short-Term Outcomes

As described in Table 7, some of the Long-Term Outcomes are already encompassed in other elements of the logic model. The remaining Long-Term Outcomes can be revised for clarity and simplicity.

Table 7: Logic Model Long-Term Outcomes

Existing Long-Term Outcomes	Proposed Long-Term Outcomes	Reason
“Change in shelf-space dedicated to EE products/alternatives”	Remove	Addressed in Med-term Outcomes.
“Increase in ENERGY STAR (ES) market share (or higher tier)”	Revise to “Manufacturers increase number of models that meet ENERGY STAR (or higher) specifications”	As written, this is duplicative of a med-term outcome. In the long-term, an increase in ENERGY STAR market share, combined with retailers’ increase in assortment and promotion of EE products should influence manufacturers’ product design.

“ENERGY STAR criteria developed for new product categories”

Remove

Because RPP is unlikely to target product categories that do not have ENERGY STAR specifications, the connection between program activities and this outcome is not clear.

Figure 3: Original Logic Model

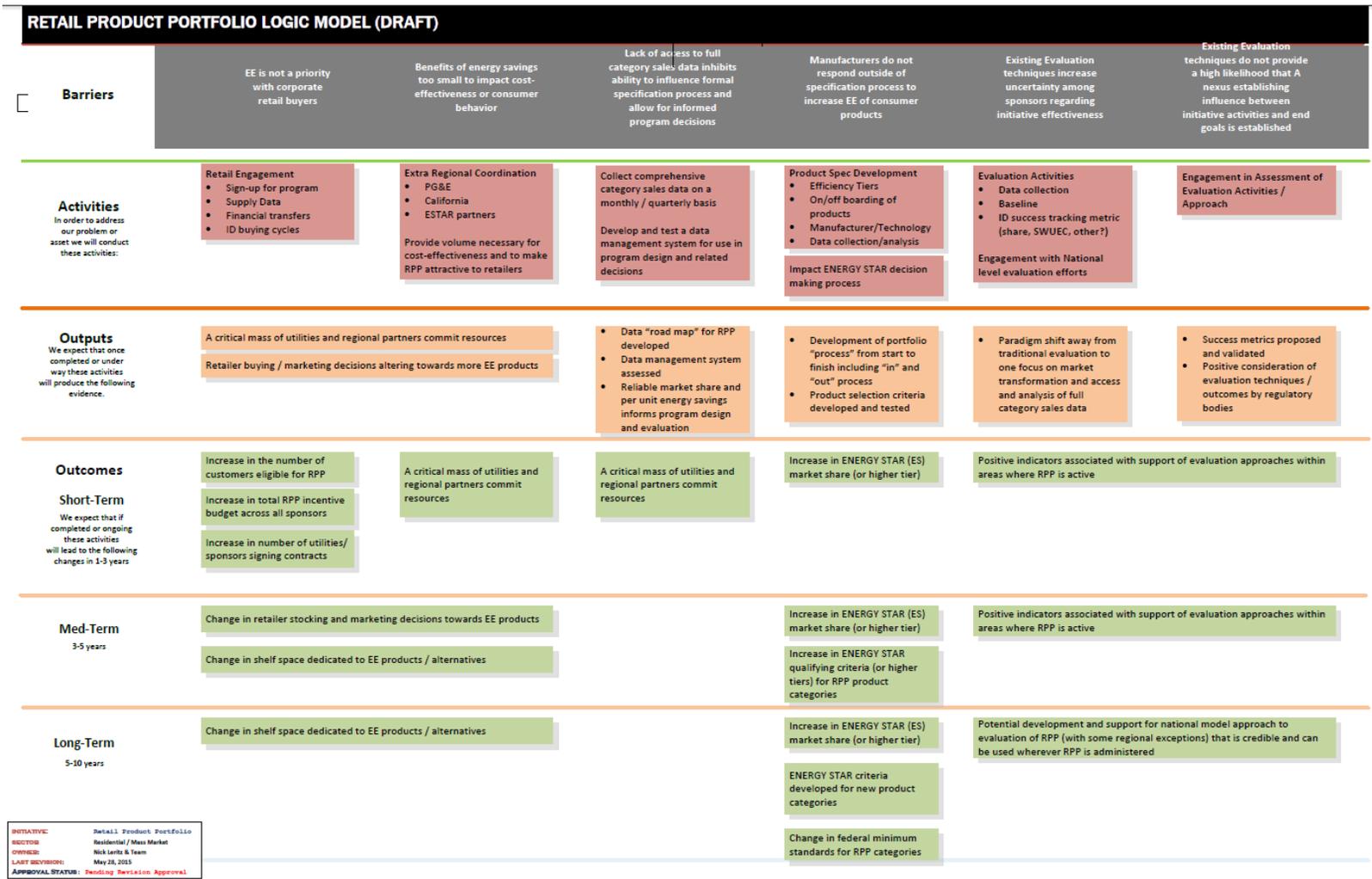
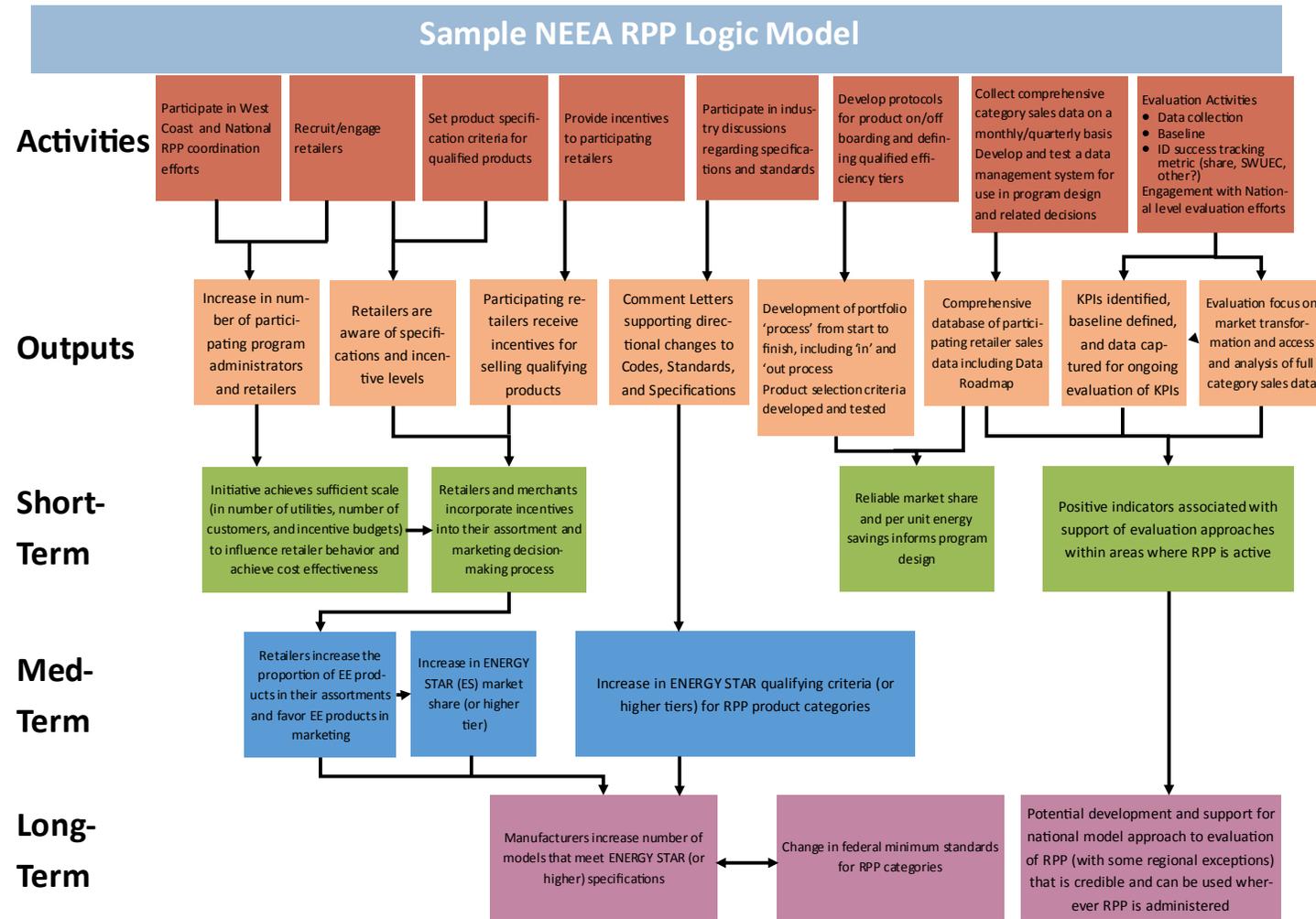


Figure 4: Suggested Logic Model



B. Appendix B: Detailed Participating Retailer Interview Findings

This appendix presents findings from in-depth interviews with corporate staff members at retailers participating in NEEA’s Retail Product Portfolio (RPP) pilot. In conducting these interviews, we reached out to the individuals who are the pilot’s key contacts at each participating retailer. The evaluation team completed seven interviews with corporate staff members representing all six of the participating retailers. Interview respondents included both sustainability staff members and merchants who are primarily responsible for the decisions RPP hopes to influence. Table 8 summarizes the roles of the interview respondents. These interviews primarily focused on the pilot’s influence on retailer behavior and the potential to scale RPP.

Table 8: Retailer Interview Respondents

Role	Number of Respondents
Sustainability Staff	4
Merchant Staff	3
Total	7

In addition to the retailer interviews conducted for this evaluation, our findings draw on interviews conducted for TV Initiative Market Progress Evaluation Report MPER#4.⁶ During those interviews, we asked participating retailers to describe differences between RPP and the TV Initiative. These questions sought to provide context to allow interviewers to differentiate between responses focused on the TV Initiative and those focused on RPP, which was ongoing at the time of the interviews. However, they also provided data on retailers’ experience with NEEA’s RPP pilot. Finally, because the program theory of change underlying RPP is very similar to that of the TV Initiative, and retailers reported that the participation process for both programs is largely the same, we also reference findings from previous TV Initiative MPERs, as we believe these findings are particularly relevant for RPP.

We are continuing to pursue interviews to broaden our participating retailer sample, seeking to include additional merchants at two of the retailers with whom we have spoken. To assess the outcomes of NEEA’s critical success factors, we will also conduct in-depth interviews with a variety of other market actors. Table 2: identifies key populations we plan to interview for this evaluation, and the proposed number of completes for each population. The final report will integrate findings from all of these data sources.

⁶ Research Into Action, Inc. 2015. *Television Initiative MPER #4*. Report #E15-316. Portland, OR: Northwest Energy Efficiency Alliance.

Table 9: In-depth Interview Populations and Anticipated Sampling

Population	Anticipated No. of Completes	Interviews Completed to Date
Participating retailers	8	6
Nonparticipating retailers	2	0
EPA ENERGY STAR staff	2	2
NEEA RPP staff and implementers	4	2
California RPP staff	3	3
Nonparticipating utilities	3	2
Data management firms	3	0

The sections below describe our initial key findings, from the participating retailer interviews completed thus far.

Program Design

Conditions Necessary for Influence

Interviews for this evaluation confirm findings from previous evaluations of NEEA’s TV Initiative that the program theory underlying the RPP Initiative is fundamentally sound. Retail staff responsible for the product assortment and promotion decisions that the Initiative hopes to influence are informed about the Initiative’s incentives with sufficient time to consider the incentives in their decision-making. These retail staff members stand to benefit from the incentives their organizations receive, and, for some retailers, program participation supports corporate sustainability goals.

Awareness of Incentives

The interviewed retailers confirmed that they were aware of changes in qualified products and incentives with adequate lead-time to incorporate that information into their assortment decisions. Nonetheless, retailers noted that more lead time would allow them to more fully incorporate program incentives into their planning. According to one retailer, “If [merchants] know nine months in advance that ten of the TVs they are looking at have a greater per-unit incentive, that is a deciding factor in what they will assort.” This retailer reported they were aware of proposed RPP specification levels for 2016 with sufficient lead time, although no formal agreements regarding those specifications were in place. Another retailer noted that a minimum of six months of lead time would be necessary to influence assortment, but stated they had received information about RPP with sufficient lead time.

Other respondents noted that decision-making around some product categories requires more lead time than others, for example, decisions around air purifier assortments occur further in advance of those products reaching stores than decisions around TV assortments. Retailer interviews did not suggest any general guidelines NEEA could use to predict decision-making

timelines for a particular product category. Turnover of merchants is another reason retailers cited that more lead-time can be beneficial. One retailer reported, “There is a lot of turnover in buyers so to find the right person that makes that decision that takes a while. They are making decisions [in late July] for Christmas and beyond. So the sooner the better.”

Allocation of Incentives

Interviews for this evaluation confirmed previous findings from TV Initiative MPERs that retailers credit incentives they receive from programs like RPP to the profit and loss statements of both the business unit responsible for the product category and the store where the qualified product was sold. Merchants for each product category work within that category’s business unit, and retailers have emphasized that the business unit’s profitability is an important metric for the merchants. For example, in an interview for TV Initiative MPER #2, one retailer said, “The merchants, as much as we would like them to, don’t care about anything other than their bottom line.” Store-level staff also benefit from the increased profitability that Initiative incentives contribute to their stores. One retailer explained that their company assigns profitability goals to each store at the beginning of each year, and stores that exceed those goals may be eligible for bonuses.

While RPP incentives may motivate retailers to feature qualified products in their promotions, interview findings suggest the retailers would fund the cost of those promotions from their business unit’s larger budget. Retailers reported they typically do not directly allocate specific amounts of RPP incentives to specific promotional activities. As one retailer explained, “[Incentives go] into the overall bucket, and we might end up spending something on some kind of marketing fund – nothing directly, ‘this check coming in will pay for this specifically.’” As discussed below, retailers may seek to leverage larger promotions to increase sales of efficient products.

Finally, RPP further benefits some retailers by helping them achieve their corporate sustainability goals. One retailer reported, “[General Managers] love the idea that we are doing the right thing for our customers.” The interviewed retailers did not indicate how they might tie RPP products into their larger corporate sustainability efforts or otherwise communicate the benefits of efficient products to their customers. Nonetheless, these findings suggest that the degree of potential influence varies greatly by specific retailer.

Areas of Influence

Retailers make decisions in four areas that are particularly influential in increasing the uptake of energy efficient products:

- › **Assortment:** Retailers determine how many models within each category they will carry in their stores and the specific models that will fill each of those slots. Including a larger proportion of efficient products in a retailer’s assortment could increase the likelihood that a consumer will select an efficient model.

-
- › **Promotion:** Retailers may promote certain models in a variety of ways, including featuring them in print or broadcast advertisements and giving them special displays or favorable placement in stores. Promotions featuring efficient products could increase uptake of those products. Training sales staff on the benefits of efficient products and encouraging them to direct customers to those products is another element of product promotion.
 - › **Price:** Retailers set the prices of the products they sell, and may choose to discount certain products. Reducing the prices of efficient products could increase sales of those products.
 - › **Stocking:** Retailers determine the number of units of each model in their assortment they will keep in each store. Stocking a larger number of units of efficient products might increase the availability of those models, and thus increase their uptake.

Interview findings suggest RPP incentives have the greatest potential to influence assortment decisions, and could also affect marketing decisions. The incentives are less likely to influence stocking decisions or prices. The following sections provide additional detail on the program’s potential to influence each retailer decision.

Assortment

Assortment decisions are the behavior that RPP is most likely to influence. Four of the six retailers interviewed reported that the incentives have the potential to influence merchants’ decisions around product assortment, especially as the program scales. Consistent with previous evaluations, retailers described the influence of RPP incentives on their assortment decisions as a tie-breaker: the incentives would motivate them to select the more efficient option when deciding between two models that were similar in other ways.

Two retailers indicated that NEEA’s incentives have influenced their assortment decisions. One retailer reported that “we have gone very heavily on the ENERGY STAR products” in their air cleaner assortment as a result of RPP incentives. This retailer expressed a desire to use additional “special buys” to further promote efficient air cleaners, particularly as part of seasonal promotions.⁷ Another retailer cited an example of an assortment decision several years ago in which TV Initiative incentives motivated them to select a more efficient plasma TV model over a less efficient one. According to this retailer, “At that time, [the incentive] was enough that it made the sway from one brand to another.” This retailer noted that, when this assortment decision took place, incentive levels were higher and the participating program administrators covered a larger portion of the retailer’s market than NEEA’s RPP pilot. We discuss the importance of scale in generating program influence further below.

⁷ These comments are notable given the relatively small scale of NEEA’s RPP pilot. The retailer that made these comments allows for a relatively high degree of regional customization in their assortment relative to other retailers, and NEEA staff reported paying a relatively large of incentive funds to some retailers for air cleaners. Both of these factors may have helped overcome the pilot’s limited scale to influence this retailer’s assortment.

A merchant from one retailer reported that RPP incentives would be unlikely to influence her assortment decisions. While other retailers indicated the profit margins various models offered played a larger role in their assortment decisions, this retailer emphasized that their assortment decisions were focused on consumer demand, with profit margins as a secondary consideration. According to this merchant, “the reason we make certain decisions around bringing products into the assortment is strictly based on consumers. We will work as hard as we can to offer what they want.” This merchant provided additional detail in an interview for TV MPER #4, saying profit margins are “taken into consideration, but it all comes back to the consumer; what does the consumer want? And as buyers, it’s our job to negotiate and get the best cost.” As a result, incentives, which increase the profit margins of qualified models, have little potential to influence this retailer’s assortment decisions.

The interview respondent from another retailer, a sustainability staff member, reported he was not involved in assortment decision-making, although he informed the merchants of the amount of money their business units were earning from RPP incentives. In an interview conducted for TV MPER #4, a merchant for this retailer said that, if the program covered a sufficient portion of the market, he would “look to assort the majority of my [models] under this program.”

Promotion

Four retailers noted that incentives also have the potential to influence marketing campaigns and promotional activities. According to one of these retailers, “it could just mean that our guys are fronting the product that is getting the incentive, we’re moving that to a different area.” This retailer and another stated that incentives had the potential to influence larger marketing efforts, but, because the retailers typically carry out these efforts nationally, the program would need greater scale to bring about influence. One retailer stated, “If [merchants] are getting substantial amounts of funds from a certain energy efficient group of products, they will look to sell more of those, so you may see more of those types of products in a national ad.”

One retailer noted, however, that it may be more challenging for RPP to influence promotion than assortment, saying “every square inch of an ad or a web page is paid for by someone [manufacturers]. And those dollars far exceed anything that utilities will give.” Nonetheless, this retailer noted that retailers may be able to leverage manufacturer-funded promotions by featuring RPP-qualified models in cases in which the manufacturer specifies only the number of their models they want to appear in an ad.

Another retailer reported that in-store promotion of qualified products was consistent with their sales strategy, which focused on motivated and involved salespeople. This retailer noted that in-store promotional materials provided a visual prompt to support salespeople in using energy efficiency as a selling point in their discussions with customers. This retailer also noted that salespeople typically benefitted from sales of more efficient products because these products are typically somewhat more expensive.

Price

Interview findings suggest that RPP incentives are less likely to motivate retailers to reduce the price of qualified products than to alter their assortment and promotion practices. Only two of the six interviewed retailers indicated they might use price discounts to increase sales of qualified products. One retailer explained they were unlikely to reduce prices as a result of RPP incentives for two reasons. First, because this retailer typically makes decisions on price markdowns at a national level, RPP incentives would cover only a portion of the retailer's cost for the markdown. Second, this retailer does not view RPP incentives as likely to make a difference in an end-user's purchase decision. According to this retailer, "Typically, the markdown isn't great enough to influence a customer's purchasing decision. A \$500 TV and it's a \$10 incentive; \$10 isn't going to influence a customer to purchase that TV."

One of the retailers that reported RPP incentives could motivate them to reduce prices on qualified products stated that they might include qualified models in a markdown the retailer had planned to offer for other reasons. This retailer noted that the incentives could help offset the cost of the markdown. Another retailer did not indicate they would lower the price of models already in their assortment, but suggested they might alter their assortment to include efficient models at lower price points.

Finally, a third retailer reported a preference for more customer-facing incentive approaches, like buy-downs or downstream rebates. This retailer stated that these customer-facing incentives served as a tool for their sales associates, saying, "The sales associates are a strategic differentiator, getting them involved is important to carry these rebates as well. You lose some of that if you are going with a pure midstream approach." Another retailer reported that, in response to incentives offered outside the NEEA region that were similar to NEEA's RPP pilot, they had passed incentives on appliances through to the customer as a buy-down. These incentives were larger than those NEEA and other program administrators have offered on consumer electronics products, which this retailer reported providing to the business unit to motivate assortment and promotion of qualified products.

Stocking

None of the interviewed retailers reported incentives were likely to influence their stocking practices. Interview findings suggest retailers do not view stocking as a tool to promote certain models over others. Instead, in their stocking decisions, retailers seek to ensure that all of the models in their assortment are available. Retailers described sell through rates are the main influence on stocking decisions. According to one retailer, "[Stocking decisions are] all influenced by the rate of sale. If we sell 20 a week, and we need 20 to last us a week, then we will stock 20....If takes 2 weeks to get an order, will order 2.5 weeks' worth. We would not change the weeks of supply based on a program."

Program Experience

While they confirmed that the program theory is sound, retailer interviews suggest that NEEA's RPP pilot has had relatively little influence on the behavior of most participating retailers. This is primarily due to the pilot's limited scale in terms of the proportion of the retailers' market eligible for incentives. One retailer noted that "it has been a transitional year [for RPP] and there is only a small geographic footprint;" as a result, RPP "incentives are not as big an influence on [our] decision-making." Similarly, another retailer stated that TV merchants were receptive to information about RPP due to their long experience with the TV Initiative, but merchants newer to the program were less receptive. According to this retailer, "With the additional categories, at this point, there is not enough scale, nor are the product categories great enough that the incentives really have an influence yet."

Retailers consistently reported that as the scale of RPP increased, so would the amount of influence RPP incentives would likely have in their decision-making. As one retailer explained, "An average merchant deals with literally hundreds of millions – some merchants buy over a billion – dollars' worth of product in a year. Trying to influence them with a couple hundred thousand dollars, it doesn't grab their attention as much as \$10 million would."

Retailers differed, however, in their assessments of the minimum proportion of their market that would need to be eligible for RPP incentives to bring about program influence. Two retailers stated that 50% of their markets would need to be eligible for RPP incentives to play a significant role in their decisions. These were both general merchant retailers that offer a wide range of products in addition to the targeted categories. As a result, for these retailers, the targeted categories likely contributed a relatively small proportion of their overall sales.

More specialized retailers, who derive a larger proportion of their overall sales from the targeted products, reported a lower threshold for program influence. Two of these retailers stated that, while the Northwest was not sufficient to significantly change their decision-making, a combination of NEEA and California utilities would be influential. One of these retailers stated, "Having California and NEEA would be large enough to bring back large influence on assortment decisions." The other called California, Nevada and the Northwest "a great jumping off point for scale."

Both of these retailers noted, however, that RPP's influence would increase as its scale grew. According to a sustainability staff member from one of these retailers, "[RPP is] more effective with a large geographical footprint. We could talk with more people and make more noise about it. If the program is on a small scale, it gets lost in the shuffle." Findings from TV Initiative MPER #4 are consistent with retailers' assessment that RPP's influence would increase as its scale grows. A decrease in the Initiative's scale as program administrators in California and Nevada ended their support for midstream TV incentives were likely one contributor to the decline in the Initiative's influence in 2013 relative to 2012.

As the scale of RPP grows, retailers see having one national program, compared to many regional programs, as a potential benefit. One retailer reported that increasing the scope of RPP to be national would benefit them because they would not "have to deal with so many players."

RPP has already made great strides in improving consistency for retailers. One retailer reported that compared to the TV Initiative, “[RPP is] just getting more consistent through all the players (such as utilities, retailers, and implementation contractors).” Another also reported that there is “more collaboration between utilities and the buying teams.” While consistency and collaboration have improved, a program using the same specifications nationwide would amplify these benefits for retailers. Increasing to a national scale may also simplify evaluators’ efforts to confirm program influence through interviews with retailers. One retailer reported that when they are participating in multiple programs, “it’s impossible to say that the NEEA program made a difference” in decisions that would influence sales of qualified products. This retailer suggested that the influence of a larger, coordinated effort would be easier to pinpoint.

Conclusion

Retailer interviews conducted to date suggest that, while NEEA’s RPP pilot has had limited influence on the behavior of most participating retailers, the conditions are in place for RPP’s influence to grow as its scale expands. In particular, RPP has the potential to influence retailers’ decisions around product assortment and promotion, influencing them to select or feature the more efficient option when deciding between two models that are similar in other ways.

The interviews conducted for this evaluation provide qualitative indicators that the potential for RPP to influence retailer behavior exists, but they do not provide quantitative estimates of the magnitude of that influence. Through RPP, NEEA is collecting a great deal of data that will allow it to track changes in the markets for its targeted products over time, providing early indications of change in sales of efficient models as a proportion of all sales within a category. It is important to note, however, that these changes may occur over multiple years. RPP’s influence will grow as it scales, and it will take time for that influence to become apparent in the market as product design cycles and retailer assortment decisions vary by product category. Finally, additional research is necessary to identify a baseline against which to compare observed market changes in order to quantify the lift in sales of efficient products attributable to RPP.

C. Appendix C: Detailed EPA, and Participant and Nonparticipant IOU Staff Interview Findings

The purpose of this appendix is to summarize the findings from six in-depth interviews, evenly split between organizations currently involved with RPP or soon to join the initiative and organizations who, after varying levels of review, have decided not to participate at this time. Organizations involved in RPP that were interviewed include PG&E and EPA as well as SCE—who, during the interview, indicated that they will be joining RPP on a pilot basis in 2016. Nonparticipating organizations interviewed include National Grid, Baltimore Gas & Electric, and Wisconsin Focus on Energy.

The purpose of the interviews was to gain a broader perspective on RPP, to identify and understand any issues and concerns associated with the concept, and to help NEEA understand potential sponsor organization interest in RPP and the prospects for gaining greater utility/regional participation in the near future.

Awareness

All of the organizations interviewed are aware of RPP, though the depth of understanding among the three nonparticipating organizations varied somewhat, with two of the three reporting that they have met with EPA, PG&E, and/or the current RPP implementation contractor (Navitas) on one or more occasions. Most interviewees said that they are aware of, or have attended, presentations that PG&E (in collaboration with EPA) have given around the concept at various industry conferences and events.

Motivation to Participate

Interviewees unanimously agree that new programming concepts are needed in the white goods, plug load, and consumer electronics markets. All interviewees reported that it is becoming increasingly difficult to offer traditional (i.e., consumer rebate oriented) energy efficiency programs for many products within these categories because of low unit savings and high program costs. The consensus is that cost-effectiveness has been declining for some time and a number of organizations said they have eliminated or have begun to phase out products from their program portfolios. And, as a result, they need new programming ideas to replace lost savings and address the remaining savings potential within these key product categories.

Interviewees also recognize the difficulty retailers face in interacting with various utilities around the country. A number of interviewees cited examples of retailers who are inundated with requests from individual utilities and have either stopped participating or indicated they plan to stop participating in individual programs. According to interviewees, retailers are communicating that they are not seeing enough benefit to justify the cost of participation and that a more streamlined and consistent approach to working with utility energy efficiency programs is needed.

EPA staff reported that EPA became involved in RPP because aligning utilities in support of a consolidated specification for products has been successful in the past. EPA staff noted that the existence of different specifications at the jurisdictional level can be difficult for manufacturers and retailers. EPA also seeks to “move markets” which requires coordination and standardization among many different utility programs targeting different technologies and using different program methods.

With respect to receptivity to new programming concepts, it is clear that retailers, utilities, EPA and sponsor organizations are interested in discovering “what’s next” for white goods, plug load devices, and consumer electronics. There is broad agreement that the status quo has to change in order to capture the remaining potential in these product categories.

Participation Decision

The decision to participate in RPP, for any given entity, is complex and multifaceted. Potential sponsors face a litany of questions about the concept both internally and externally. Internally the decision to participate in RPP involves a host of individuals, including program planners, implementers, and evaluators. Most organizations have an internal process, varying in formality, whereby a new concept such as RPP is “screened” to see if it meets both internal criteria for acceptance and regulatory requirements.

Externally, sponsor organizations have various regulatory requirements or guidelines that must be considered in order to ensure that a programming idea will be deemed a prudent use of ratepayer dollars. Some also have to take into consideration the viewpoints of other utilities under the same regulatory guidelines, as these “other utilities”—should they not support the concept—could effectively thwart their plans to participate.

There is a recognizable level of tension around the information needed to inform program participation decisions. Nonparticipating entities report that organizers (EPA, PG&E) are not providing the specific types of information (outlined under “barriers” below) they need to make informed decisions.

Barriers

The nonparticipating organizations we spoke with all operate under a resource acquisition (RA) framework. These organizations appear to accept that market transformation (MT) programs like RPP require a change in mindset both internally and in the regulatory world. However, non-participants view the basic tenants of RA program decision-making to be relevant regardless of program type. Thus, while they are open to RPP, they maintain a need to take a serious and methodical approach to determining if RPP is a prudent and justifiable use of ratepayer dollars.

These organizations, like most other program administrators, have methods of varying degrees of formality to screen new program concepts for cost effectiveness. Key to this process is understanding program costs and projected savings (particularly net savings) along with a clear and consistent story to justify key assumptions. Key inputs to cost effectiveness models include

overall administrative costs, incentive costs (i.e., projected number of incented units X per-unit incentive), as well as per-unit savings assumptions, per-unit incremental cost assumptions, baseline assumptions, and net-to-gross savings assumptions. The California utilities, which plan to participate in RPP in 2016, also lack a formal regulatory framework for RPP and continue to work with regulators (and regulatory consultants) toward a framework to effectively track progress and evaluate the program.

Non-participants reported the perception that, in some cases, the questions and concerns they raise regarding RPP are dismissed as reflective of a resource acquisition (RA) mindset. Nonetheless, from the non-participants' perspective, the information they are requesting is what any organization would require to make a prudent decision; it has little to do with a tension between RA and MT.

Fundamentally, these non-participants indicated they do not have sufficient information to determine whether the benefits of RPP, in terms of net energy savings, would be sufficient to justify the costs, and thus be a prudent and justifiable use of ratepayer dollars. In particular, interviewed organizations expressed concern over the potential that the majority of the units for which RPP provides incentives would have been sold in the absence of the program. For example, RPP may offer an incentive on a product that has a 15% ENERGY STAR market share and raise that market share to 20% in a given year. From the perspective of some interviewees, this would mean that three-fourths of the incentives were paid on units that would have sold in the absence of the program. These concerns are compounded by what some interviewees view as poor net-to-gross results achieved through the recent PG&E pilot and concern about whether, and how, the program will address these results in the future. Related to these concerns, non-participants expressed uncertainty regarding how RPP will select products for inclusion and set qualifying criteria to ensure that product specifications truly motivate retailers to take action.

Because of this mindset, it is particularly important for current program sponsors to be clear about the benefits and costs of RPP. It may be the case that paying incentives on all qualifying models is the most expeditious and prudent way to motivate retailers toward greater levels of energy efficiency. Therefore, carefully and transparently comparing the total costs of RPP (including all incentive costs) to the benefits expected (estimated net savings) may be the best way to address this concern.

In addition to concern over the benefits of RPP, some non-participating organizations expressed uncertainty over the costs. These respondents are concerned about the volume of sales that may occur through the program and the potential budget implications. These respondents sought information about how RPP will set contracts with retailers and how those contracts will protect sponsors should sales volume exceed expectations. Some participants also expressed concern about how RPP will integrate with current program efforts. Respondents reported their organizations are likely to continue running at least some of their traditional rebate programs and were unsure how savings would be allocated to various initiatives to avoid double counting.

Importance of Current Sponsors (PG&E, EPA, NEEA)

As previously stated, the interviewed organizations demonstrated a high level of awareness of the concept of RPP. Most interviewees said that they are aware of, or have attended, presentations that PG&E (now in collaboration with EPA) have given around the concept at various industry conferences and events. PG&E and NEEA are respected and influential leaders in the utility energy efficiency community. Respondents suggested that having such leaders talking about and preparing for the future and being smart and strategic heading into it makes taking risk a little easier for others.

Nonparticipating organizations, with few exceptions, view the involvement of PG&E, NEEA, and EPA positively. In particular, a number of interviewees stated that the energy world often looks to California for new ideas and innovation. They also view NEEA as an organization who has brought innovation and new ideas to energy efficiency programming.

PG&E, in particular, noted that NEEA has been an important contributor to the ongoing dialogue with California regulators. NEEA, as an organization focused on market transformation, brings an important perspective to those conversations. NEEA is also recognized, by both PG&E and EPA, as an important sponsor of RPP. It is clear to everyone involved that “scale” is an important goal of RPP, and NEEA’s four-state reach greatly expands RPP’s coverage of the market.

National Data Collection Contractor

All interviewees recognize the importance and need for a national data collection contractor given the volume of data involved. All understand that it would not be workable to have multiple data collection organizations interacting with retailers. The only concern respondents raised is how individual utilities will directly award a contract to the national data collection contractor given their own contracting departments and associated rules. While not an insurmountable obstacle, it is a concern.

Sponsors and potential sponsors both stated that a national data collection contractor should be able to provide the level of “territory specific” sales information needed to assess program impacts. For most, this appears to mean full category sales information at the store level (for the stores falling within the service territory of the sponsor organization). They also realize that a single contractor is the best way to assure retailers that the data they provide is secure and protected.

D. Appendix D: Detailed Data Management Findings

During the evaluations of the NEEA TV Initiative and other midstream programs, retailers have emphasized the value and confidentiality of their sales data. Retailers are quite reticent about sharing these data, and the breadth and granularity of the data retailers have provided to NEEA through RPP and the TV Initiative sets these efforts apart from many other midstream programs. The granularity of the data retailers' report to NEEA is central to RPP's evaluability. Consequently, the role of the RPP data management contractor is critical to the success of the pilot, and the contractor's ability to scale up activities as RPP targets more and different product categories and as more program administrators adopt RPP are important to the pilot's long-term success.

Given the importance of the data management contractor to the success of RPP, the Team interviewed two data management firms: Energy Solutions, the RPP pilot's current data management provider, and ICF International, who was chosen to be the data management firm that would collect and manage all the data from retailers for program administrators participating in RPP nationally. These interviews explored the firms' perspectives on collecting, aggregating, sanitizing, and disseminating the sales data, including understanding their perspectives on maintaining the confidentiality necessary to ensure retailer participation and possibly drawing on success in other industries. As part of the in-depth interview process, the Team emailed the interview guide in advance to the data management groups.

Key Data Related Challenges:

The primary challenge for Energy Solutions was the content of the data itself: matching the data manufacturers reported to ENERGY STAR (QPLs) to the data retailers reported to Energy Solutions. On a more specific level, the most challenging measure that was encountered were computers (laptops and desktops) due to the considerable degree of customizable configuration. Measures with high turn-over rates in the marketplace have posed an additional database content related challenge: for example televisions see numerous iterations of models within the same year, while dishwashers do not turn their models over as frequently.

Another major challenge from a database management perspective was the inefficiency of retailer data flow. The retailers did not prioritize the program because of insufficient funding (due to RPP being a pilot that lacked scale and with limited budget). While NEEA made a considerable effort to engage the retailers, the pilot's ability to dictate data requirements were limited. Energy Solutions also did not directly engage with the retailers. Energy Solutions passed their data needs to Navitas, the implementation contractor that handled retailer relationships, a communication chain that Energy Solutions staff deemed a "game of telephone".

How to overcome challenges:

To overcome the model matching issues, Energy Solutions developed associations: understanding what model related back to what model on the ENERGY STAR list. If a model

wasn't on the ENERGY STAR list or related to the ENERGY STAR list in a very tangible way, then it was deemed ineligible. Energy Solutions developed an understanding of the model numbers and their nomenclature that allowed them to identify product families and understand which model number components (comprised of numbers and letters) corresponded to energy using features and which ones did not make a difference to ENERGY STAR qualification (for example, corresponding to aesthetic differences).

Energy Solutions stressed the importance of a direct connection link with the retailers and their systems. This type of direct connection may not necessarily require a considerable commitment of time and resources from the retailers – in fact, the goal is the opposite. The new data manager anticipates that once it can establish the connections and “get the data flowing,” the data transfer process will happen smoothly. Energy Solutions stated that a simpler and easier data transfer process would benefit both retailers and the program.

Challenges From ICF's perspective:

ICF anticipates that initiating the process and getting the data flow set up will pose a challenge, but expects this will be an initial “speedbump” and once resolved data flows will happen smoothly. ICF has partnered with Planet Ecosystems as a sub-contractor to support their RPP data management efforts. Planet Ecosystems has experience integrating its systems with retailer catalogs and retailer inventory. This experience will allow ICF to see what is in a retailer's catalog prior to receiving point-of-sale (POS) data. Both ICF and Planet Ecosystems have worked with all of the retailers before and are familiar with their systems. Further, Planet Ecosystems has worked with some of the retailer APIs⁸ which are publically available, and this offers an additional level of data aggregation. Still, ICF anticipates that some retailers will be better than others at maintaining and assuring data quality and validating and potentially coding their data will likely pose a challenge, especially for retailers whose data are not consistent or clean.

Scaling (working with additional retailers and PMs):

The most critical aspect of scaling will be data acquisition and establishing direct connections with retailers. This is the most important piece that Energy Solutions believed will help make RPP run smoothly. As for scaling the program and the logistics of working with different retailers, Energy Solutions noted the importance of structuring contracts in a way that facilitates leveraging multiple utility participants (i.e., cost sharing). Offering a straight fee for the basic application, and knowing how to appropriate cost sources across many partners to do effective cost sharing was something that was challenging as partners – often with different products – entered and exited the TV Initiative. The greatest challenge was with the logistics of ensuring the data management contractor was not receiving different messages from different partners and resolving conflicting requests.

Regarding scaling by bringing in new program administrators, Energy Solutions believed the greatest challenge will be accommodating program administrators (PAs) like NEEA that are interested in pursuing very aggressive efficiency levels and others that might favor more lenient

⁸ Application Program Interface: a set of routines, protocols, and tools for building software applications.

specifications. Another challenge of scale and the introduction of additional program managers is the longevity of program management staff. This is an area where the data system provider can help provide consistency between project managers (PMs). By offering robust reporting and dashboarding functions, the data management system can effectively incorporate some institutional knowledge, so as PMs turn-over, there is an existing knowledge-base that isn't lost with staff attrition.

Finally, Energy Solutions stated that setting expectations is extremely important, and suggested that the most effective way to work with multiple sponsors would be to offer a standard data reporting platform. When necessary Energy Solutions suggested the data management provider could offer additional features. The reporting capabilities and information put in front of the PAs including dashboards that can be produced will allow a deeper dive into the data. Real-time data and reporting should give the PA confidence – so they can do some checking in a time-efficient graphical way to make sure they feel confident the program is moving in the right direction.

ICF Perspective on Scaling the Program

ICF reported one of the advantages to their platform is that it is specifically designed to handle multiple sponsors. Much of the configuration and automation they are doing now for other programs and administrators is transferable. The cost for ICF, and ultimately the administrators, will go down as more sponsors participate – therefore scalability is seen as an added benefit and not a problem. ICF believes they will have little to no impact with respect to bringing in new retailers, but they can ensure the system that is setup will not be a barrier to participation.

Scalability was a key design goal behind the current ICF system and the data flow process is designed to be automated. Since the program is starting with three different sponsors, everything ICF is building is taking scalability into account. ICF reported that even with just NEEA and California sponsors, their systems will reflect sponsors with diverse requirements. Further, the systems being configured now are being designed and implemented with an eye toward transparency. Therefore, ICF anticipates that the work that is happening now will not have to be redone, it can be reused as is, and, according to ICF, will be able to “just plug in an additional sponsor.”

ICF stated the “standard catalog” of reports it is developing will be extensive and will not require considerable adjustments as the program grows. Ultimately, ICF anticipates the programs’ key performance indicators (KPIs) and metrics are likely to be similar from one utility to the next. One goal is to have a standard offering that PAs sign up for, and work with them on individual needs that do not affect other partners. With additional sponsors, it becomes more likely that ICF will have a partner that will ask for “everything.”

According to ICF, scaling the program for new retailers is different than scaling the program for sponsors. ICF plans on having a standard API and basic template for the minimum required dataset that will be needed for the database to read in each retailers POS data. ICF understands that not every retailer is going to want to use this template, so the goal is to ensure the data integration only happens once for a retailer. Scaling the infrastructure that the system is built on (infrastructure related to the processing power and the data storage capacity needed to support

additional retailers) with additional sponsors, with more transactions coming through, is straightforward and ICF was not concerned about this.

Security

Energy Solutions' reporting process was based on the need for data security and aggregation, and was delivered via a file to NEEA's secure server. Energy Solutions would post the report on NEEA's secure server so staff that were granted access to that folder could download and review it. Energy Solution staff took a "first cut" at what they thought NEEA wanted and then iterated with NEEA staff on refinements to the reports they put together to address the common questions NEEA asked and items NEEA wanted to tap into at various times.

Energy Solutions emphasized the importance of limiting access to data and limiting the data that is distributed. Aggregating and summarizing the raw data into usable reports and making sure protections are in place to prevent the people that access the data from sharing it too widely are essential to reporting security. Finally, the majority of staff that need to review the data would have their needs met by aggregate reports, and tiered administrative roles for access can ensure that only those that truly need it have access to the raw data.

ICF Perspective

During the pilot period, Navitas worked directly with the retailers through ENERGY STAR working groups to define secure systems and levels of data aggregation that would be acceptable to the retail partners. The retailers therefore have been part of the process of defining data security. Having retailer buy-in is important in making retailers comfortable from a process perspective. Once sufficiently large retailers are participating in working groups, providing input, and signing up to participate, ICF anticipates that other retailers will follow suit.

ICF has established rules within the database system, including encryption, data transfer protocols, and administrative (data access) roles. Additionally, ICF mentioned that they had passed PG&E's extremely rigorous data qualifications process, which is expected to be one of the more extensive qualifications for any utility sponsor that may participate in the RPP program.

E. Appendix E: Data Collection Instruments

RPP: Participating Retailers Interview Guide

Instrument Information

Table 10: Overview of Data Collection Activity

Descriptor	This Instrument
Instrument Type	In-depth interview
Estimated Time to Complete	30 minutes
Population Description	Retailers participating in RPP
Type of Sampling	Census
Contact Sought	Corporate sustainability staff and/or merchants and other staff from business units responsible for targeted products
Fielding Firm	Research Into Action

Table 11: Research Objectives and Associated Questions

Research Objective	Research Issue	Associated Questions
Understand pilot's influence on retailer behavior	Retailer motivations and barriers for participation in RPP	Q9, Q1, Q12, Q13
	Incentives' influence on retailers	Q1, Q2, Q2, Q3, Q4, Q5, Q6, Q10, Q11
	Potential for influencing retailers as RPP scales	Q2, Q3, Q4
Evaluate potential to scale RPP	Feasibility for adding additional products to RPP	Excluded to keep to 30 minutes
	Data collection capacity needed to scale RPP	
Understand key program relationships	Relationships between staff and market actors	Q7, Q8, Q9

Introduction

Thanks again for taking the time to talk with us about your experience with RPP. As I said in my [phone call/email], we're doing some research to help the Northwest Energy Efficiency Alliance understand what RPP has accomplished so far, what its potential is as it grows, and how it could improve. This will help NEEA and its stakeholders decide how to proceed with their retail partnerships. Before we begin, do you have any questions about our work?

And do you mind if I record the call? The recording is purely to help with my note-taking. We won't share it with NEEA or anyone else, and we won't report anything in a way that would identify you.

Program Influence (~15 minutes)

To start, I'd like to ask a few questions about RPP's influence on your purchasing decisions. RPP offers incentives for sales of energy efficient products in certain categories in the Northwest. NEEA would really like to understand how those incentives influence the way you approach the categories they target. The current product categories in RPP are TVs, air purifiers, sound bars and dishwashers.

- Q1. How are the funds you receive as incentives from RPP used? Do these differ by product category?
1. Are the funds assigned to specific groups or business units? If so, which ones?
 2. How do those groups benefit from the incentives they earn?
 3. Do the funds directly support any specific activities? If so, what are they?
 4. Do the funds reduce the cost of the products for consumers?
- Q2. Is the potential to earn an incentive a consideration in [your/merchants'] decisions around which products to **assort**?
1. [If yes:] What role does it play in your assortment decisions? Does this differ by product category?
 2. [If no:] Why not?
 3. How, if at all, would the role the incentive plays in your assortment decisions change if more utilities around the country offered similar incentives?
 4. What proportion of your stores nationwide would need to be eligible for incentives to bring about those changes? Are CA, and the Northwest enough?
 5. Currently NEEA is piloting RPP regionally, but RPP will also become a nationally branded program through the EPA. Would a nationally branded program bring about those changes? Would you still need the same % of stores?
- Q3. And what about your decisions around which products to feature in **marketing** and promotions – would the availability of incentives enter into those decisions?
1. [If yes:] What role would the incentives play in your decisions around promotions?
 2. [If no:] Why not?
 3. How, if at all, would the role the incentive plays in your promotion decisions change if more utilities around the country offered the incentives? Would this differ by product category?
- Q4. Finally, what about **stocking** – did the NEEA RPP pilot change the mix of models offered in stores in the region?
1. [If yes] What changes did you make (probe by each product category included)
 2. [If no] would broader participation (more utilities around the country) alter your stocking practices?

-
- Q5. Did the incentives offered by NEEA through RPP influence your decisions around the number of units of efficient models to keep **in stock** in each store? Did this differ by product category?
1. [If influence:] Would the incentives motivate you to vary your stocking practices in regions like the Northwest, where the incentives were available, relative to other regions?
- Q6. What other ways, if any, might incentives like the ones RPP offers change the way you **sell** qualified products?
- [PROBE to understand influence of both regional and national programs]

Program Engagement (~10 minutes)

I'd like to hear about your interaction with Navitas Partners, the company that works with NEEA to implement RPP.

- Q7. I understand Navitas informs you about changes in qualified products and incentives. How much lead time do you need this information in order to incorporate it into your planning and decision making around qualified products? Does this differ by product category?
1. Do you receive this information at the right time to incorporate it into your planning and decision-making around qualified products?
- Q8. Is the information Navitas gives you when they inform you about changes in qualified products and incentives sufficient for you to fully take advantage of the program?
1. [If not:] What other information could Navitas provide?
- Q9. Other than learning about changes to qualified products or incentives, how frequently are you in contact with Navitas?
1. What kinds of topics do these interactions typically cover?
 2. [If not addressed:] What questions or concerns have you had about participation in RPP?
 3. Has Navitas been able to effectively respond to your questions and concerns?
- Q10. When Navitas tells you about changes in qualified products and incentives, what do you do with that information?
1. How, if at all, do you incorporate it into your work?
 2. Who else within [retailer] do you share it with?
 3. [If share internally:] How have those people reacted to information about the program? What kinds of decisions does the information impact?
 4. How, if at all, do you use the information in your interactions with people outside of [retailer], like vendors or manufacturers?

General/Closing (~5 minutes)

What you've told us so far has been really valuable. We just have a few more general questions about your experience with RPP.

- Q11. In your opinion, are the kinds of incentives that RPP offers an effective way to increase the energy efficiency of consumer electronics products as compared to traditional customer rebate programs? Why do you say that?
- Q12. From your perspective, what has been the most effective part of the RPP Initiative?
- Q13. How, if at all, could the RPP Initiative work with you more effectively?
- Q14. Those were all the questions we prepared. Is there anything we haven't discussed that you think would help us understand what NEEA has accomplished with RPP and what the program's potential is?

RPP: Non-Participating Retailers Interview Guide

Instrument Information

Table 12: Overview of Data Collection Activity

Descriptor	This Instrument
Instrument Type	In-depth interview
Estimated Time to Complete	15-20 minutes
Population Description	Retailers not participating in RPP (Lowe's and Fred Meyer)
Type of Sampling	Purposive
Contact Sought	Corporate sustainability staff and/or merchants and other staff from business units responsible for targeted products
Fielding Firm	Apex Analytics

Table 13: Research Objectives and Associated Questions

Research Objective	Research Issue	Associated Questions
Understand barriers to participation	Retailer motivations and barriers for participation in RPP	1,2,3
Evaluate potential to scale RPP		8
Understand program influence	Incentives' influence on retailers	4,7,Q3,Q4,Q6,12

Introduction [FOR INTERVIEWERS]

Thanks again for taking the time to talk with us. As I said in my [phone call/email], we're doing some research to help the Northwest Energy Efficiency Alliance understand what RPP has accomplished so far, what its potential is as it grows, and how it could improve. This will help NEEA and its stakeholders decide how to proceed with their retail partnerships. It is crucial to this effort that we gain the perspective of retailers that did not participate in the program. Before we begin, do you have any questions about our work?

And do you mind if I record the call? The recording is purely to help with my note-taking. We won't share it with NEEA or anyone else, and we won't report anything in a way that would identify you.

Motivation and Barriers to Participation (~5 minutes)

1. Are you familiar with the Retail Product Portfolio (RPP) program being offered by NEEA?
 - 1 Yes [Continue to Q3]
 - 2 No
 - a. [If no, then ask for another contact that might be familiar, if no other contact available, then describe program – included below]

RPP works directly with corporate-level buying groups of national retailers to provide mid-stream incentives on qualified energy-efficient products. Incentives for the RPP pilot were based on TV's, air purifiers, sound bars, and dishwashers. These incentives are intended to influence retail buying and stocking practices, to ultimately drive manufacturing and higher product standards and specifications for a portfolio of energy-efficient products sold through the retail channel. Notably, the Initiative does not dictate how retailers should use NEEA incentives. As a midstream model, participating retailers can leverage the incentive funds to create their own strategies to increase the energy efficiency of sold products through a number of actions, such as lower prices to end users, changes in product assortment and placement, changes in corporate marketing approaches, changes in point-of-purchase materials, etc. [Skip Question 2 below]

2. Did you consider participating in the program? What were the primary reasons that **[COMPANY]** chose not to participate?
3. **[For those aware of program: What changes to the program] [For those unaware: What information and resources]** would be required to get you to participate?

Program Influence (~15 minutes)

[PROBE to understand influence of both regional and national programs]

4. Outside of any program administrator-based efficiency program influence or participation, can you please describe how, if at all, the energy efficiency of electronics and appliances may factor into your assortment and promotional decision making?
5. What are the primary factors driving the inclusion of efficient products in your assortment and marketing mix? Is it consumer driven, manufacturer driven, or some other factors?
6. From your perspective, what influence do you think the program may have had on the market? Do you believe the program could change the market? Are the kinds of incentives that RPP offers an effective way to increase the energy efficiency of products such as TVs,

air purifiers, sound bars, and dishwashers? Do you think it drove manufacturers to offer a different assortment?

7. Do you think the program influenced sales in your stores?

[If yes] How did it influence the sales in your stores?

[If no] Do you think the program has the potential to influence the sales in your stores?

8. The program may scale up to more of a National program rather than regional – what impact do you think this may have on the sales of efficient products offered through the program?

9. Regarding your decisions around which products to feature in marketing and promotions – would the availability of RPP incentives enter into your decisions?

- i. [If yes:] What role would the incentives play in your decisions around promotions?
- ii. [If no:] Why not?
- iii. How, if at all, would the role the incentive plays in your promotion decisions change if more utilities around the country offered the incentives?
- iv. What proportion of your sales would need to be eligible for incentives to bring about those changes?

10. How, if at all, would incentives like the ones NEEA and other utilities are offering through RPP influence your decisions around the number of units of efficient models to keep in stock in each store?

- i. [If influence:] Would the incentives motivate you to vary your stocking practices in regions like the Northwest, where the incentives were available, relative to other regions?
- ii. Would you alter your stocking practices if more utilities around the country offered incentives?
- iii. [If so:] What proportion of your sales would need to be eligible for incentives for you to do that?

11. What other ways, if any, might incentives like the ones RPP offers change the way you sell qualified products?

12. Those were all the questions we prepared. Is there anything we haven't discussed that you think would help us understand regarding the RPP?

RPP: Data Provider Interview Guide

Instrument Information

Table 14: Overview of Data Collection Activity

Descriptor	This Instrument
Instrument Type	In-depth interview
Estimated Time to Complete	15-20 minutes
Population Description	Data providers
Type of Sampling	Purposive
Contact Sought	Staff from business units responsible for RPP data management
Fielding Firm	Apex Analytics

Table 15: Research Objectives and Associated Questions

Research Objective	Research Issue	Associated Questions
Understand winning DB provider perspective	How DB management process will work, what firm can do to help with retailers concerns	All Q's in Section 1
Understand Energy Solutions DB perspective	How DB management process worked for RPP, what lessons learned from working with retailers to help inform new DB provider	All Q's in Section 2

Introduction [FOR INTERVIEWERS]

Thanks again for taking the time to talk with us. As I said in my [phone call/email], we're doing some research to help the Northwest Energy Efficiency Alliance understand what RPP has accomplished so far, what its potential is as it grows, and how it could improve. This will help NEEA and its stakeholders decide how to proceed with their retail partnerships. The role of the RPP data management contractor is critical to the success of the pilot, and the contractor's ability to scale up activities as RPP targets more and different product categories and as more program administrators adopt RPP are important to the pilot's long-term success. Before we begin, do you have any questions about our work?

And do you mind if I record the call? The recording is purely to help with my note-taking. We won't share it with NEEA or anyone else, and we won't report anything in a way that would identify you.

For Selected Data Management Provider (~20 minutes)

4. Are you familiar with the Retail Product Portfolio (RPP) program being offered by NEEA?

3 Yes

4 No

a. [If no, then ask for another contact that might be familiar, if no other contact available, then describe program – included below]

RPP works directly with corporate-level buying groups of national retailers to provide mid-stream incentives on qualified energy-efficient products. The RPP pilot offered incentives for sales of energy efficient TV's, air purifiers, sound bars, and dishwashers. These incentives are intended to influence retail buying and stocking practices, to ultimately drive manufacturing and higher product standards and specifications for a portfolio of energy-efficient products sold through the retail channel. Notably, the Initiative does not dictate how retailers should use NEEA incentives. As a midstream model, participating retailers can leverage the incentive funds to create their own strategies to increase the energy efficiency of sold products through a number of actions, such as lower prices to end users, changes in product assortment and placement, changes in corporate marketing approaches, changes in point-of-purchase materials, etc.

5. Has your company worked with similar programs before? [If yes] Please provide some details of these programs and the data management process that was used.

6. Do you have any logic/flow/process charts that details how data are captured for these programs? Can these be shared with us?

7. Please describe how your company ensures data integrity. What is the QA/QC process?

8. The program plans to scale up to a National program rather than regional – what impact do you think this may have on the data management process? Please describe the adaptations that would be required to scale this to a National effort, from a database management perspective.

9. What are the primary challenges you anticipate in working with multiple program sponsors for the RPP data management process, and how would you best address these challenges?

10. Please describe the reporting process that you expect will allow NEEA to understand program performance. How will these reports be developed (in what environment), and will they be accessible via secure web-based environment?

11. What are the primary challenges you anticipate in working with multiple retailers for the RPP data management process, and how would you best address these challenges?

-
12. How do you plan to determine which of the models in the sales data retailers submit qualify for RPP incentives?

How, if at all, would that process need to change if RPP adopted specifications other than just ENERGY STAR or ENERGY STAR Most Efficient, for example if the RPP specification level were set at 20% more efficient than ENERGY STAR for some product category?

[If not addressed:] Do you plan to match sales data to ENERGY STAR qualified product lists (QPLs)?

[If so:] We understand that retailers might alter model numbers slightly in their own tracking, or that very minor design changes that do not impact energy use might nonetheless lead manufacturers to change a model number. What processes do you anticipate using to determine whether products with model numbers that do not match the ENERGY STAR QPL exactly are truly non-qualified?

13. As you may be aware, the retailers have serious concerns about data confidentiality, and historically, having retailers share sales data for program impact evaluation has been extremely difficult. What do you think your company can do to help assuage retailers' fears, and potentially allow additional retailers sign up?
14. Have you received any NEEA-based protocols for this project, and, if so, do you believe there is anything critical that is missing from them? (By protocols, we are referring to confidentiality and security agreements with the retailers and NEEA).
15. Those were all the questions we prepared. Is there anything we haven't discussed that you think would help us share with NEEA staff to ensure a successful deployment of the RPP program?

For Energy Solutions ONLY (~20 minutes)

We would like to understand and learn from your experiences working with the RPP so that best practices and lessons learned can be shared with the new data management provider for the RPP program.

1. What have been the most challenging aspects of working with the RPP program (from a database management perspective)?
2. If starting over, what changes would you make to the process?

-
3. Do you have any logic/flow/process charts that details how data are captured for these programs? Can these be share with us?
 4. As you are probably aware, the program will scale up to a National program rather than regional – what impact do you think this may have on the data management process? Please describe the adaptations that would be required to scale this to a National effort, from a database management perspective.
 5. What are the primary challenges you anticipate for NEEA and their new provider in working with multiple program sponsors for the RPP data management process, and how would you best address these challenges?
 6. Please describe the reporting process that you used that allowed NEEA to understand program performance. How were these reports be developed (in what environment), and were they accessible via secure web-based environment?
 7. What are the primary challenges you anticipate for NEEA and their new provider in working with multiple retailers for the RPP data management process, and how would you best address these challenges?
 8. As you are well aware, the retailers have serious concerns about data confidentiality, and historically, having retailers share sales data for program impact evaluation has been extremely difficult. What do you think the new database provider can do to help assuage retailers' fears, and potentially allow additional retailers sign up?
 9. Those were all the questions we prepared. Is there anything we haven't discussed that you think would help us share with NEEA staff to ensure a successful deployment of the RPP program?

RPP: California Utility Interview Guide

Instrument Information

Table 16: Overview of Data Collection Activity

Descriptor	This Instrument
Instrument Type	In-depth interview
Estimated Time to Complete	15-20 minutes
Population Description	PG&E, SMUD, SCE, SDG&E
Type of Sampling	Purposive
Contact Sought	RPP evaluation and program management staff
Fielding Firm	ILLUME Advising & Rick Winch

Table 17: Research Objectives and Associated Questions

Research Objective	Research Issue
Understand the results of the nature of the relationships critical to driving RPP	Is coordination effective on all fronts for RPP
Assess product selection, and data collection processes	Are systems effective to scale the model
Understand program influence	Given evaluation work already done in CA what influence is RPP having

Given ILLUME has conducted interviews with the PG&E program and evaluation staff as part of the RPP evaluability assessment for NEEA we will use this interview to update those learnings. Because this is a distinct interview process we have provided high level interview topics, rather than specific questions.

Introduction [FOR INTERVIEWERS]

Thanks again for taking the time to talk with us. As I said in my [phone call/email], we're doing some research to help the Northwest Energy Efficiency Alliance understand what RPP has accomplished so far, what its potential is as it grows, and how it could improve. Understanding the experience and the perspective of [PG&E/SMUD] with your pilot program will help NEEA as they move forward with the RPP model.

And do you mind if I record the call? The recording is purely to help with my note-taking. We won't share it with NEEA or anyone else, and we won't report anything in a way that would identify you.

Motivation and Barriers to Participation

- What is the primary reason for your participation in the RPP pilot?
- Are you exploring any other approaches/programs to address white goods, consumer electronics, and plug load?
- What barriers is the pilot facing in California, regulatory, retailer, data collection, etc.?

NEEA

- What influence has NEEA's pilot had on your pilot?
- Explore the influence and expectations of the NEEA evaluability assessment and the pilot evaluation. How will the results affect the work in CA? Will those findings be used in CA? How has CA leveraged NEEA thus far?
- Has the cooperation between NEEA and CA been effective?
- How is the CA pilot different than the NEEA pilot?
- How would you characterize differences in the evaluation needs (i.e., what an evaluation must address) in California vs. NEEA?
- Do you think the evaluation needs of most utilities around the country will be most similar to the needs of California or NEEA? Why? Why Not?
- What (if any) influence do you think NEEA will have on your program design moving forward?

Logistics

- Explore the process of adding new products, any challenges within the utility or as part of the broader collaboration?
- Explore data collection;
 - a. how is it going?
 - b. what challenges if any have there been?
 - c. is the data needed for evaluation being collected?
 - d. as the programs scales will data collection pose a challenge?
 - e. what expectations are there around the new data collection protocol?
 - f. any concerns that the retailers may not provide needed data as program scales?

Influence and Evaluation

- Explore [for PG&E based on their evaluation report] retailer influence on:
 - a. Purchasing now and into the future
 - b. Marketing now and into the future

-
- c. Share of targeted products now and into the future
- Explore key findings from the PG&E evaluation work [e.g. how concerned are you that nonparticipant comparison approaches are unlikely to be possible in the future? Do you have any concerns over the findings – including the low “Early Leading Indicator” NTG ratio?]
 - Do you think an evaluation approach that is more qualitative and preponderance of the evidence based (compared to the initial quantitative approaches in the pilot evaluation) will be accepted by the regulatory community?

Those were all the questions we prepared. Is there anything we haven't discussed that you think would help us understand regarding the RPP?

RPP: ENERGY STAR Staff Interview Guide

Instrument Information

Table 18: Overview of Data Collection Activity

Descriptor	This Instrument
Instrument Type	In-depth interview
Estimated Time to Complete	15-20 minutes
Population Description	EPA ENERGY STAR staff
Type of Sampling	Purposive
Contact Sought	ENERGY STAR Staff
Fielding Firm	ILLUME Advising & Rick Winch

Table 19: Research Objectives and Associated Questions

Research Objective	Research Issue
Understand interest in RPP	Why are they supporting RPP, what is the vision
Understand product selection criteria	What is the process and any challenges for adding products
Understand program relationships	How are relationships forming, are they moving in the right direction for taking RPP to scale

We view these interviews to be very open ended and less structured as such we have high level provided interview topics below.

Introduction [FOR INTERVIEWERS]

Thanks again for taking the time to talk with us. We're doing some research to help the Northwest Energy Efficiency Alliance understand the RPP potential is as it grows, the ability to take it to scale and how it could improve.

And do you mind if I record the call? The recording is purely to help with my note-taking. We won't share it with NEEA or anyone else, and we won't report anything in a way that would identify you.

Motivation and Barriers to participation

- Why is EPA supporting RPP?

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- What are the key opportunities or barriers you see with RPP? From a coordination perspective, retailer perspective, data collection perspective, utility perspective (what are you hearing as barriers, opportunities, etc)
 - From your perspective how does CA and NEEA involvement influence RPP/how important is their participation in getting this off the ground?
 - How do you expect national coordination and sponsorship by EPA to help utility participation?
 - What are your primary concerns about RPP? Explore evaluation, scale, cost effectiveness, targeted products, etc.
 - What type of concerns about RPP are you hearing from perspective utilities? Explore evaluation, scale, cost effectiveness, targeted products, etc.
 - Do you have (or have you heard) any concerns with respect to the fact the RPP will effectively “compete” with existing or prospective utility programs?

Logistics

- Explore the process of adding new products, any challenges with coordinating this as part of the broader collaboration?
- Explore data collection;
 - g. Is getting data via a national data collection contractor feasible?
 - h. What level of detail do you expect to track/collect [exploring whether it will be enough to determine SWUEC]
 - i. Do you feel like you are able to collect the granularity of data needed to track and assess program performance?
 - j. Specific sales may not be able to be attributed to any utility, how can you help address this barrier?

Retailers

- How is RPP being received by retailers (from the EPA perspective)?
- What barriers or concerns are retailers sharing if any?
- How quickly (by how many percentage points) do you think the ENERGY STAR market share of a given product category will have to change per year in order for the program to be successful?
- Are there other metrics (other than changes in ENERGY STAR market share) that you think will be particularly important when judging the success of RPP? What are they? Why do you see them as important?

Those were all the questions we prepared. Is there anything we haven't discussed that you think would help us understand regarding the RPP?

RPP: Non-Participating Utility Interview Guide

Instrument Information

Table 20: Overview of Data Collection Activity

Descriptor	This Instrument
Instrument Type	In-depth interview
Estimated Time to Complete	15-20 minutes
Population Description	Non-participating utilities across the US
Type of Sampling	Purposive
Contact Sought	Program management staff
Fielding Firm	ILLUME Advising & Rick Winch

Table 21: Research Objectives and Associated Questions

Research Objective	Research Issue
Understand interest in RPP	Are they aware of the model and if so would they or are they planning to participate
Understand any barriers for participation from an implementation and evaluation perspective	What challenges might RPP face in going to scale and gaining additional utility participation
Understand how they view program influence	What influence will early evaluations have on non-participating utility decision to participate?

We view these interviews to be very open ended and less structured as such we have high level provided interview topics below.

Introduction [FOR INTERVIEWERS]

Thanks again for taking the time to talk with us. We're doing some research to help the Northwest Energy Efficiency Alliance understand the RPP potential is as it grows, the ability to take it to scale and how it could improve.

And do you mind if I record the call? The recording is purely to help with my note-taking. We won't share it with NEEA or anyone else, and we won't report anything in a way that would identify you.

Awareness Motivation and Barriers to Participation

- Are you aware of RPP? (if not explain the pilot)

Motivation and Barriers to participation

- Is your utility considering participating? why/why not?
- Who made or would make the decision to participate?
- What are the key opportunities or barriers you see with RPP? What aspects of the design offer the most opportunity or challenges?
- Does your utility currently offer energy efficiency programs, including downstream incentives to customers, that address products (e.g., white goods, consumer electronics, plug load) that might be offered by RPP? If so, how does this impact your decision to participate?
- Does CA and NEEA involvement in RPP influence your potential participation? If so, how?
- Does the national coordination and sponsorship by EPA help support your participation and/or increase or decrease your interest?
- Have you reviewed any of the materials that EPA has sent out on RPP? If so, do you find them helpful in understanding the program? Do you have any specific feedback you would like share regarding the materials?
- What are your primary concerns about RPP? Explore evaluation, scale, cost effectiveness, targeted products, etc.
- If planning to pilot RPP when would that be? Can you share any details on the pilot in terms of products and retailers?

Logistics

- Explore the process of adding new products, any challenges within the utility or as part of the broader collaboration?
- Explore data collection;
 - k. Is getting data via a national data collection contractor feasible for your utility?
 - l. Specific sales may not be able to be attributed to your utility, how might this be affect your participation/would this pose challenges?

Those were all the questions we prepared. Is there anything we haven't discussed that you think would help us understand regarding the RPP?