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Moving Markets through Simple, Scaled & Synchronized Midstream Approaches

CEC IEPR Plug-Load Workshop | Sacramento, CA

Julie Colvin | Senior Program Manager
PG&E Residential Programs

June 18, 2015
Dilemmas of Innovation

Risk
Change
Uncertainty
Disruption
Fast
Keep it simple.
3 Key Challenges
Growing Miscellaneous Plug-load Energy Use


Change in residential electricity consumption per household (2012-40)
Retail Market

Top 10 Appliance & Consumer Electronics Retailers have ~80% market share

Retailers indicate ~20% of consistent utility support will influence retailers’ buyers decisions
Midstream Retail Products Platform (RPP) Program Goals
Program Theory & Objectives

### Theory

- A combination of incentives and engagement will motivate retailers to promote, assort, stock, and demand more energy efficient (EE) models than they would have absent the program.

### Short-term Objective

- Motivate participating retailer to promote and sell more efficient models

### Medium-term Objective

- Motivate retailers to regularly demand and stock the most efficient models available from their manufacturer partners

### Long-term Objective

- Induce sustained *structural changes in the market for targeted products* to accelerate and increase adoption for participating and non-participating retailers
Transform the Retail Market

Source: NEEA
Unique Approach
Retail Value Chain: Consumer Products

Manufacturers

What to Build
- 100’s

National Retailers and Distributors

What to Buy
- 10’s

Stores and Websites

What to Sell
- 1,000’s

End Users

What to Use
- 1,000,000’s

Market Transformation Goal

RPP Focus
Make the most efficient choice easy

Today

Tomorrow

Midstream Retailer Incentive

$75 REBATE PER UNIT
Midstream Collaboration: 2014 Retail Plug-Load Pilot

**Objectives:** Operation, Evaluation & Performance

**Market Share of Qualified Appliances**

- **22 Participating Stores**
- **66 Non-Participating Stores**

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<th>Oct-14</th>
<th>Nov-14</th>
<th>Dec-14</th>
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<td>RPP Trial - Appliance Promotion 11/1-12/31/14</td>
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Retail Products Platform
Proposed 2016 Trial Overview

Objectives

Retailers

Products

Performance

Operational

Evaluation

Retailers

Products

Home-Theaters-in-a-Box/Sound Bars
Air Cleaners
Dryers
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Freezers

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Building Scale to Influence Retail

15% Market Share of Utilities seeking approval for 2016 program launch
Opportunity
MT Evaluation Approaches

- Rich data from multiple sources: retail sales, manufacturers, EPA, DOE

Comparison Techniques
- Historical vs. Current Sales
- Forecast vs. Current Sales
- Participating vs. non-participating stores or regions

Market Transformation Evidence
- Survey market participants and stores
- Accelerate code and voluntary standards
- Increase and accelerate adoption
Utilities Scaled Incentives + Streamlined Retailer Engagement

More efficient products on store shelves

More customers choose the efficient option

Energy savings

Market Impacts
Questions?
Logic Model
Example Program Transition Strategy

Market Penetration Reaches 35% Threshold:
- EPA reviews, re-opens specification
- RPP continues ENERGY STAR as Tier 1 level

ENERGY STAR Specification finalized:
- Proposed Levels align 2016 RPP Tier 2
- Effective Date Q3 of following year
- RPP begins incentivizing new ENERGY STAR levels in Q1 of following year

ENERGY STAR Specification becomes effective.
Midstream Collaboration: 2008-2012 TV Pilot

Estimated Energy Use by Size for New TVs

- Design
- Active engagement with DOE and EPA
- Launch

Weighted Average Energy Use (Wats/TV)

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<td>325</td>
<td>108</td>
<td>86</td>
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<tr>
<td>Q3 2008</td>
<td>207</td>
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All Major Retailers participated