Consumer Electronics Energy Savings Partnerships Tim Michel



PRE Pacific Gas and Electric Company



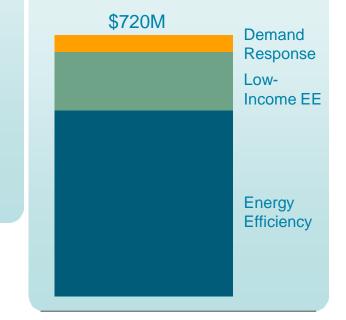
Energy services to 15M people:

- 5.1M Electric customer accounts
- 4.3M Natural Gas accounts

70,000 square miles with diverse topography and climate zones

20,000 employees

2013 PG&E Energy Efficiency and Demand Response Budget



The BCE Program 2008 - 2013

- In 2008, TV's were largest contributor to the growing electronics plug-load
 - New technology (HDTV's, Flat Screens)
 - Increasing sales volume
- Typical mail-in rebates not large enough to impact consumer purchase decisions

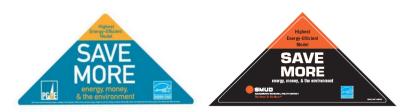


- PG&E offered incentives to Retailers to purchase, stock, market and sell qualified televisions that met and exceeded ENERGY STAR specifications
- Retailers, subsequently worked with their manufacturing partners to supply models that met specifications



In-Store Marketing

POP

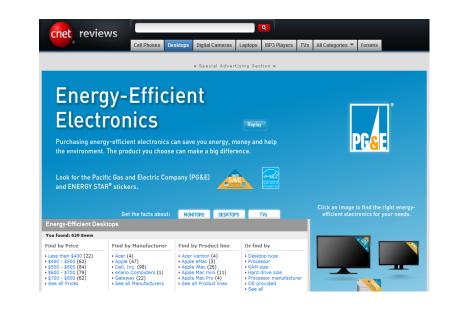


Video Wall



Web Communications

CNET marketing program



Critical BCE Program Learnings

- Retailers engage in programs if you have the right value proposition
 - Engage at the right time
 - Work with retailers' unique go to market strategies to serve their unique customer segments.
- Retailers' interest in program participation driven by size of market opportunity
 - BCE participating utilities represented more than 15% of US market
 - Seven leading retailers participated in BCE
- Mid-stream retail programs transform markets, but create evaluation challenges.
 - Bring in regulators and evaluators during program design and reach agreement on metrics

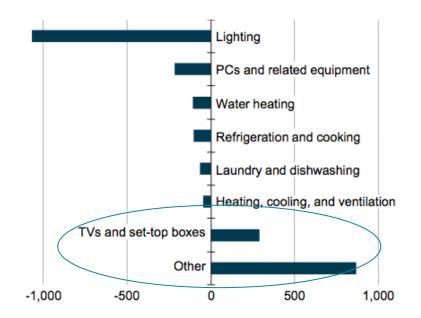
Case Studies

- Timely engagement with Best Buy merchants led them to switch supplier to achieve specification.
- BCE program awareness by Samsung engineers resulted in information requests to support product development
- Retailers encouraged participating utilities to adopt the same program specifications for better program effectiveness



Initial focus on "plug-loads"

- US residential electricity consumption is expected to grow by 21% from now to 2040 even though energy efficiency has slowed demand growth
- Consumer electronics and small electric devices are largest contributor to growth.
- Unit energy savings for electronics and small devices is low and does not justify a down-stream rebate



Change in Residential Electricity Consumption for Selected End-Uses 2012-2014 (kilowatt-hours per household) Source: EIA, 2014 Energy Outlook

What is the 'plug load'?

- No formal technical or legal definition
- Generally understood meanings:
 - · Includes plug-in devices: white goods, small appliances, consumer electronics, office equipment
 - Excludes built-in lighting, major HVAC

Source: University of California, Irvine (CalPlug)



- Create Partnerships
 - EPA: ENERGY STAR
 - Energy Efficiency Program Sponsors
 - Retailers
 - Manufacturers
 - NGO's and Associations
- Innovate for Today's Market
 - Work with regulators and evaluators to inform and measure
 - Advance planning with retailers and leverage each retailers' unique go to market strategy
 - Rolling portfolios of products
 - Omni-channel approach: engage consumers where they shop, when they shop, how they shop
 - Create multi-regional or "national" utility alignment

New Retail Products Program: Trial



PG&E and SMUD Trial with Kmart resulted in a number of "Firsts"

- "First" ENERGY STAR advertisement
- "First" ENERGY STAR signage in store
- "First" ENERGY STAR associate training
- "First" to connect energy savings and Shop Your Way points

Program partnered with Sears Holdings' Merchant and Green Leadership Team, Nakamichi, and ENERGY STAR to qualify the "hero" sound bar!

Just 1 of the many exciting examples during the trial!

Thank You For Your Time!

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