Creating a More Energy Efficient Future for Residential Customers

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Pacific Gas and Electric Company



Energy services to 15M people

70,000 square miles with diverse topography and climate zones

Demand Response Budget D/R Low-Income EE **Energy Efficiency**

Over \$700mm

Energy Efficiency and

- Largest Annual Energy Efficiency Investments
- PG&E Serves Approximately 4% of the U.S. Households

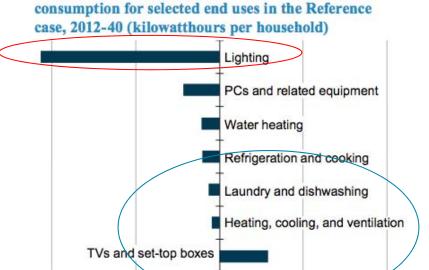


EIA: The Annual Energy Outlook 2014

- Residential electricity demand to grow by 21%, to 1,657 billion kWh in 2040
- Growth comes from increasing market penetration of smaller electric devices (and cooling in warmer climates)

California Direction

- Support market transformation of the EE industry
- Form partnerships to increase availability and adoption of energy efficient plug load solutions
- Increase energy savings accuracy through historic and current category sales data, opportunity to secure quantitative and qualitative market information
- Reduce plug-loads by 40%



Other

500

1,000

-500

Figure MT-11. Change in residential electricity

Big goals!

-1,000



Why a "Midstream" Approach?

- Energy efficiency programs increased market share and performance of energy efficient products, driving down per-unit energy savings resulting in smaller per unit incentive offerings relative to incremental cost
- Small incentives do not influence customer purchasing

Then



- 30% energy savings economical
- Mail-in rebates up to \$200 available

Now



 Soon, costeffective rebates may be closer to ~\$25

Cost effective "downstream" programs becoming rare!



Program Sponsors requested ENERGY STAR to facilitate the midstream RPP process:

- Outreach to create scale
- EM&V to overcome regulatory concerns
- Improve operational efficiencies
 - Legal / Participation Agreements
 - Implementation and Field Services
- More accurate and cost effective data
 - Support for seamless data transfer
- Harmonize product selection
 - Forum for program sponsors to agree on products and specifications

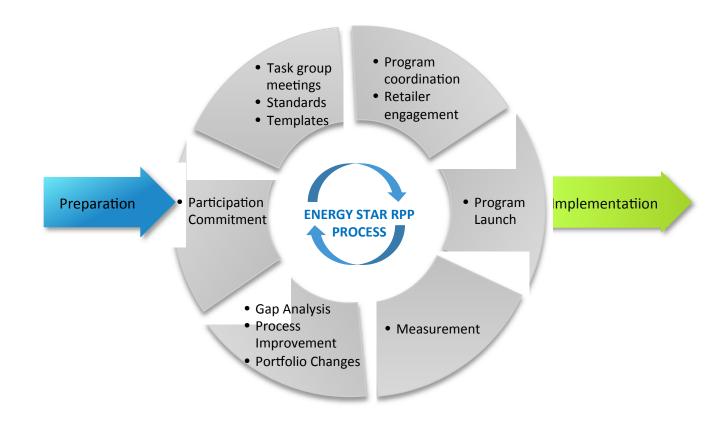


Lower cost, more impact!

PG&E

ENERGY STAR Retail Products Platform

- A grassroots, coordinated approach to align energy efficiency programs with retailers' business models
- A collaborative national effort to address energy savings opportunities in growing "miscellaneous/plug load" through consistent program design





- Launch a coordinated ENERGY STAR RPP Program
 pilot with 3 retailers and 5 products
 - Best Buy, Sears and The Home Depot
 - Electric and gas dryers, Air cleaners, Freezers,
 Sound bars, Room air conditioners
- Build scale with other Program Sponsors
- Drive cost effectiveness



2017

More retailers, more program sponsors and more products

Market Transformation!