Best Practices for Demand Management Program Design

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Speakers

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Program Design: Insights 2015

Best Practices for Program Design

- Planning Phase
- Program Development Phase
- Implementation Phase
- Evaluation Phase
Planning Phase

Best Practices for Program Design
Planning Phase:

- **Key Constituents**
  - Regulators & Consumer Advocates
  - Utility
  - Customer

- **Identify Program Goals**
  - MW’s
  - Branding & Customer Satisfaction
  - Financial

Diagram:

- Current Situation & Market Dynamics
  - Regulated, Non-Regulated Market
  - AMI or No AMI in Footprint
  - Segments (Residential, Small Commercial, C&I)
  - Demand Response, EE
  - Type of DR Program: Switch, Thermostat, Dynamic Pricing, PTR
  - Market Penetration Goals
  - Customer Expectations & Market Maturity
  - Initiate vs. Augment
  - Demographics, Psychographics & Usage Data

- Financial
- Customer
- Utility
- Regulators & Consumer Advocates
Program Design: Insights 2015
Program Development Phase:

- Develop offer concept based on insights from planning phase
- High level view of expected customer experience. Factors:
  - Technology
  - Transparency &
  - Engagement
- Minimize complexity & rules
- Role of incentives, cost sharing and early termination fees
- Design validation with experienced vendor(s) - prior to filing tariff
Program Design: Insights 2015

Best Practices for Program Design

Planning Phase

Program Development Phase

Implementation Phase
Implementation Phase:

- If you build it, they will come…if you deploy best practices for participant recruitment

Best Practices

- Understand the Target Demographics
- Building collaborative relationships with regulators and key stakeholders
- Setting appropriate expectations
- Offer/Choice
- Cycling options and technology
- Appropriate mix of communication channels
- Education
- Channel
Implementation Phase:

- If you build it, they will come… if you deploy best practices for participant recruitment
- The right DRMS (Demand Response Management System) is essential for program success
- A multi-vendor approach increases risk
Program Design: Insights 2015

- Planning Phase
- Evaluation Phase
- Implementation Phase
- Program Development Phase
Evaluation Phase: Sample Metrics & Tracking

- Establish clear M&V process and procedures upfront
- Implement strong documentation & metrics based deployment and evaluation

- Build flexibility in program design (via feedback loop) for subsequent program modifications
Program Design: Insights 2015

Planning Phase
- Key Constituents
- Program Goals
- Market Dynamics & Landscape

Program Development Phase
- Offer Concept
- Customer Experience
- Offer Complexity & Rules
- Incentives & Cost Sharing
- Offer Design Validation

Evaluation Phase
- M&V Process
- Metrics
- Built-in Program Flexibility

Implementation Phase
- Recruitment Best Practices
- The Right DRMS
- Risky Multi-vendor Approach
Follow the Road Map of Success
Demand Management Program Design

Presented by: Inia Burginger, APR
Manager, Demand-Side Management
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Demand Response Benefits

- Electricity demand is reduced in response to grid or market conditions
- Balances electricity demand with supply
- Reduces overall peak energy demand and costs
- Less electricity needs to be generated
- Reduces need for costly infrastructure upgrades
- Contributes to “15% by 2015” legislated energy reduction goals
About Pepco Holdings, Inc.

- Serve approximately 5.6 million customers in the District of Columbia, Maryland, Delaware, and New Jersey
  - Atlantic City Electric:
    - 545,000 – electric
  - Delmarva Power:
    - 506,000 – electric
    - 126,000 – natural gas
  - Pepco:
    - 801,000 – electric

- Pepco Energy Services is a non-regulated subsidiary that provides energy efficiency and renewable energy services
Energy Management Programs We Currently Offer

**Demand Management**
- Direct Load Control (A/C)
  - Residential
  - Small Commercial
- Interruptible Rate
  - Commercial
  - Government
- Peak-Time Rebate
  - Residential
  - Small Commercial
- EV Charging Time-of-Use Pilot
  - Residential

**Energy Efficiency**
- Lighting In-Store Price Subsidies
- Appliance Rebates and Recycling
- HVAC Servicing and Rebates
- Home Energy Check-ups
- Home Performance with ENERGY STAR
- Report-Based Behavior Program
- In-Home Display Behavior Pilot
- Income-Eligible Program
- Energy Tools on My Account
- Small Business Program
- Existing Commercial Building Projects
- Combined Heat and Power
Forming, Storming, Norming, Storming, Forming, Norming …
Forming – Planning and Research Phases

- Determine your goals
  - Legislative or regulatory mandates?
    - Goal: MW savings, emission reductions, deadlines
    - Top-down design approach – what will it take to reach the requirement?
  - Business reasons – capacity market, lower peaking energy supply prices, avoided transmission or distribution costs?
    - Goal: MW commitments or cost reductions
    - Bottom-up design approach – what can you realistically accomplish?

- Research
  - Programs offered by others, best practices, industry news
  - Current codes and standards
  - Partner and contractor options
  - Likely costs
Storming – Program Design and Launch Phases

- Which changes in energy-use patterns will meet your goals?
  - Capacity markets: programs that reduce consumption occasionally, when needed
    - Direct load control, interruptible rates, AMI interval data-enabled dynamic pricing programs such as peak-time rebates, real-time pricing
  - Lower peaking or supply rates: programs that reduce peak consumption at consistent times
    - Time of use, peak time pricing, interruptible rates, behavioral programs (reports, in-home displays, smart-phone app pushes), solar distributed generation, conservation voltage reduction
Storming – Program Design and Launch Phases

- Which programs for which customers?
  - Residential – single-family, multi-family, multi-metered
  - Business – small business, industrial
  - Government

- What will incentivize customer participation?
  - Money? Helping the environment? Cool gadgets? Neighbor Competition?

- Control-it-yourself? Automatic direct control? Both?

- Funding source – surcharge, base rates, shareholder costs?

- Approval process and length
  - From regulatory bodies
  - From board of directors

- To market or not to market? There is no question.
Storming – Program Design and Launch Phases

- **Budgets**
  - Include equipment, labor, marketing and advertising, educational literature, in-house staff time, outsourced program management fees, customer incentives
  - Total Resource Cost > 1 = good
  - Be good stewards of your customers’ dollars

- **Staff training** – program managers, analysts, equipment installers, call center operators

- Plan your rollout then roll out your plan
Norming – Implementation Phase

- Enlist the right partners
  - Knowledgeable, experienced, willing to fix issues quickly
  - Stay involved
- Farsighted vision is critical
  - Multi-year amortization is likely, so manage well
  - Keep sufficient equipment in inventory
  - Maintain sufficient field staff
  - Engage strategic advertising and marketing firms
  - Interact smoothly with other programs
- Execute your rollout plan, but be flexible for surprises
Storming – Adjusting to those Surprises

- Customers reject the offer
  - Apathy or Big Brother
  - MMA program

- Competing services enter the market
  - Wi-fi devices, home energy management services, do-it-yourself thermostats

- Changes in regulatory requirements or market conditions
  - Changing capacity market rules
  - Cyber security realities
Forming – Minor Adjustments or Back to the Drawing Board?

- Pepco MD Residential Program
- MMA program

Norming – Implementation Phase

- Continue
- Know more storms will break
Thank You!
Building a Successful Demand Management Program

The Power of Consistency and Customer Focus

Your comfort zone is unique.
Energy Select lets you do it right.

With Energy Select, 87 percent of the time you'll pay less for your electricity than other Gulf Power customers.

The Energy Coach says,
"THE NAME OF THE GAME IS SAVING!"
Get Energy Select, a free money-saving tool for your home.

ENERGY select®
GULF POWER
A SOUTHERN COMPANY
From humble beginnings...

Gulf Power Company’s Energy Select was initiated in 2000, as an automated TOU-CPP program.

With the goal of being a residential advanced energy management system that delivers increased value to customers while providing peak reduction benefits and more efficient use of generation.
Key Components

• Variable Price Rate
  – Low
  – Med
  – High
  – Critical
Key Components

• Unique equipment enabling customers to pre-program devices to automatically respond to variable prices
  – Programmable Thermostat
  – Load Control Relays
  – Online Programming
  – Mobile Functionality
    • “Set it and forget it”
 Constants

• Goals
• Customer Focus
• Recruiting
• Change
• Looking Ahead
Variables

• Technology
• Rates
• Fees
• Competitors
• Customers
What our customers say...

• Customer Satisfaction
  ➢ 89% Satisfied
  ➢ 81% VERY Satisfied

• Marketing
  ➢ Direct mail accounts for nearly 60% of enrollees
  ➢ Followed by referrals at 15%
Thank you!
Learn More!

Comverge Utility Conference
Vinoy Renaissance St. Petersburg Resort.
April 8-10, 2015
St. Petersburg, FL
www.comverge.com/cuc

Webinar: Using Big Data and a Bring Your Own Device Approach to Optimize Your Demand Response Program
Date/Time: May 19th 12:00pm Eastern
Details: coming soon on comverge.com and energycentral.com
Q&A