

**Load Management Standards
Workshop on Customer Education and Needs
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Customer Education

- **Objective**

- Educate customers to adopt more conservation-conscious energy behavior, especially as demand increases at critical times.
- Provide information, tools and technology so that customers can understand their options, evaluate financial and environmental impacts, and make appropriate decisions as to whether or not they choose to participate.

- **Situation**

- Customers have varying levels of understanding concerning demand response, time-based pricing and the ability to manage their energy usage.
- There is typically an inverse correlation between the number of customers in a customer class and their level of understanding.
 - There are greater numbers of customers lacking the know-how or ready means to manage their household energy usage or small business operations.
 - There is a longer learning curve for small to medium business and residential customers since most of these customers have little experience with demand response.
- Sufficient time is required to educate and engage customers on tools, data and technology that will help them manage their energy usage and decide if demand response is right for them.
- While awareness prior to choosing a demand response option is important, it is the behavior change after the choice is made that is critical.

Customer Education Process

Aware

Customers are aware and understand the need for demand response options.

Engage

Customers are given a voluntary choice to select the demand response option that best meets their needs.

Adapt

Customers initially and repeatedly use data, tools and technology to better manage their usage and change their behavior.

Adopt

Customers adopt demand response pricing behaviors that benefit themselves and the entire system.

Research Findings on Customer Challenges

- **Statewide Pricing Pilot Research**

- Need to consider electricity usage patterns when determining the right rate option.
- Need to trade off lifestyle and business priorities with the size of their bill.
- Financial savings are a driver for most customers in rate choice.
- Perceived limitations exist around ability to shift usage during a peak event, especially for business customers.
 - Customer comfort and business operational requirements often seen as obstacles to energy consumption shifts.
- Difficult for residential customers without experience to anticipate how to consistently reduce air conditioning usage during peak event.
- Most customers after experiencing peak pricing stated responding to peak pricing was not difficult.
- Residential customers want a pricing plan that is easy to understand.
- SMB customers want and value energy efficiency information.
- Customers want to help the environment or their community when energy demand is high.

Research Findings on Customer Challenges

- **Medium to Large Business Demand Response Research**
 - Business customers were unsure they could shed enough load due to the demands of their business.
 - Business customers need to be able to provide a financial analysis to their management that demonstrates bill savings to offset effort to participate.
 - Curtailments may cost more in missed production and overtime than what businesses would receive in savings/incentives.
 - Business customers were unwilling to impact their own commitments to their customers, tenants and employees in terms of personal comfort and safety.
 - Businesses need sufficient lead time before a peak event.
 - Managers did not want to participate unless they can achieve their load reduction commitment because they were concerned about the financial penalties.
 - Business customers need the flexibility to choose components of program (load reduction amount, timing and length of peak event, and amount of advance notification) that meet the needs of the business.

Research Findings on Customer Challenges

- **Small to Medium Business (SMB) and Residential Demand Response Research**
 - Residential and SMB customers would be more likely to sign-up for the CPP rate if there was a guarantee that their first summer bill would not be higher than it would have been on the current plan.
 - Customers need to be able to adapt their electricity usage to the CPP rate.
 - SMB customers were somewhat split in terms of adapting to a CPP rate plan. Some felt it would be fairly easy to adapt while a good proportion felt it would be somewhat difficult.
 - Impact on their bills drive Residential and SMB customer interest in meter data.
 - SMB customers want and value choice.
 - Residential customers want to help their community when demand for energy is high.

Challenges To Be Addressed

Aware

Context

Why is this happening?

Preparedness

What can I do?

Acceptance

How do I use this?

Engage

Capability

Can I make changes that are necessary?

Planning

What can I do based on these changing prices?

Options

What is available? Are these options right for me?

Knowledge

What does this meter data mean? How do I use it?

Household / Organization

How do I inform all those affected?

Adapt

Training

How do I prepare everyone to respond?

Access

How can I get the right information and how do I leverage it to help me manage my energy usage?

Consequences

What will be the result of these actions?

Adopt

Results

How deeply, and in what manner, has this affected me?

Processes

How well-engrained has this changed behavior become?

Benefit

What has this done for my bottom line? In what other ways have I benefited?

Ways To Address These Challenges

Aware

Communications

Inform customers of the need and how they can benefit from it

Customer Care

Ensure internal staff is trained and can help customers make an informed decision

Engage

Outreach

Relevantly touch customers with a choice of options

Infrastructure

Provide technology to support demand response

Interval Data

Provide 12 months of interval data clearly explained so customers can evaluate if and when they could potentially change their usage behavior

Rate Options

Provide different rate options that allows customers to determine if it meets their needs

Adapt

Tools

On-line & off-line capabilities

Education

Educational videos, workshops and in-person training

Advice

On-going assistance for all customer types to achieve success

Access

Easy access to energy management tools to help monitor energy usage

Adopt

Billing

The bill should clearly communicate the rate components

Other Programs

Leverage other programs like energy efficiency to reinforce changed behavior

Strategies to Address Challenges and Needs

- **Medium to Large Business**

- Provide sufficient time to educate and engage customers on tools, data and technology that will help them manage their energy usage and decide if demand response is right for them.
- Provide customers with a voluntary and educated choice of environmental and financial options that are understandable and easy to use as well as providing access energy consumption.
- Develop collateral for the Account Managers to use with customers and provide one-on-one consultation to help the customers evaluate their options.
- Conduct an energy audit to help assess their options.
- Provide decision and energy management tools that give customers the ability to evaluate their usage behavior on an on-going basis.
- Give customers the ability to tailor demand response options to meet their personal requirements and needs.
- Provide customers with ways to reduce or shift their energy usage.
- Provide detailed information so that customers can determine how their changed behavior has impacted their bill.

PeakChoice™

- PeakChoice allows customers to create a semi-customized DR program to meet their personal requirements and needs
- Participants can tailor the program by selecting from the following options:

Reduction Amount & Commitment Level

*How many kW you can reduce
Making a best effort to reduce vs. committing to reduce*

Event Duration

Number of hours you have to reduce for each event

Event Notification Lead Time

*Minimum notice you need before you
reduce energy*

Event Window

What time of day an event can occur

Maximum Number of Events

Number of events you will participate in

Number of Consecutive Event Days

*Number of consecutive event-days you
can participate in*

Strategies to Address Challenges and Needs

- **Small to Medium Business and Residential**

- Provide sufficient time to educate and engage customers on tools, data and technology that will help them manage their energy usage and decide if demand response is right for them.
- Provide customers with a voluntary and educated choice of environmental and financial options that are understandable and easy to use as well as providing access energy consumption.
- Develop educational materials that can be sent to the customers and provide consultation to help them evaluate their options.
- Conduct an energy audit to help assess their options.
- Provide decision and energy management tools that give customers the ability to evaluate their usage behavior on an on-going basis. (eg. in home displays)
- Conduct workshops and other educational efforts to provide the customers with information on how they can reduce or shift their usage and how to use the decision/energy management tools.
- Provide detailed information so that customers can determine how their changed behavior has impacted their bill.
- Provide bill protection as customers adapt their behavior.
- Provide enabling technology options (eg. SmartAC).
- Use customer research to shape the development of 3rd party in-home/business technologies.

SmartRate™

- SmartRate is a voluntary electric pricing program that encourages customers to shift or reduce their electric usage during the summer months.
 - Currently being offered first to residential and small to medium businesses in Kern County whose SmartMeter™ electric meter has been installed and are being read and billed remotely.
 - SmartDay™ events will occur on no more than 15 non-holiday weekdays during May through October.
 - Surcharge applies during SmartDay event periods (2-7 pm residential, 2-6 pm commercial).
 - Reduced rate for all summer hours outside the SmartDay event period during June through September.
 - Bill protection is available for all participants for their first full summer giving customers the opportunity to try the new pricing plan.
- Currently conducting workshops with customers to help them understand what they can do shift or reduce their energy usage.
- Customers have online access to their daily and hourly energy usage.
- Marketing activities began in late May and have already produced 10,000 SmartRate enrollments from the first 140,000 eligible residential and small business customers.