



**Comments Regarding
March 6, 2008 Draft California Energy Efficiency Strategic Plan
(CPUC Rulemaking 06-04-010)**

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Joint Utility Preliminary Energy Efficiency Strategic Plan Section 10: Marketing, Education & Outreach

We are enthusiastic and deeply supportive of the goals of this section:

Californians are engaged as partners in the state's energy efficiency, demand-side management and clean energy efforts for 2009 and beyond with the dual goals of informing them of the importance of energy efficiency, and their opportunities to save.

Appreciating the thoughtfulness of the proposals in this section, we submit our thoughts on several additional proven methodologies and areas of focus that can have transformative impact on Californians' relationship to and engagement in energy efficiency.

Strategy 1: Informational Transparency. Redesign utility bills, target marketing per residential customer, and engage with data rich communications.

Much effort has been devoted to educating consumers about opportunities to save energy, and yet average Californians don't know what they should do. The information they receive currently is both too much and too little—they are overwhelmed with a wealth of options but don't know where to start and what's relevant for them. The key to engaging customers is starting an ongoing dialogue with them about the specifics of their individual energy use, taking into consideration their specific energy consumption, housing and demographic profile and tailoring recommendations to their needs. The difference lies in data rich communications.

Redesign utility bills and introduce Individualized Home Energy Reports: The utility bill is the single greatest touch point with the customer, and not using it to educate customers about energy efficiency is an enormous missed opportunity:

- Compare customer usage to neighbors and efficient neighbors (top 20% of households)
- Bring in external data streams to contextualize data. Importantly, include housing data to compare to like neighbors, GIS data to locate neighboring houses, and demographic data to identify home owners from renters, and environmentally inclined households.
- Enable customers to set their own goals for conservation and track that progress for them on their future bills as a function of their performance against their own past performance
- Provide basic analysis of consumption patterns (high A/C use, high electric heat use) based upon comparisons to like neighbors—the most relevant baseline for comparison.
- Targeted communications

Near term goal: before transitioning this complexity and robust information to the utility bill, a simple first step is to experiment with such messaging and information on standalone reports of the type being implemented presently by SMUD.

Mid-term goal: transition learnings and expertise gained from standalone reports to integrated billing solutions (both online and off).

Much like end of year credit card bill analyses that most major card companies deliver to customers, the value lies in the unique position of the utility – or its software partners -- to analyze customer energy use, provide insights into usage patterns, and drive relevant recommendations.

Target marketing to educate customers and supercharge existing efficiency efforts -- moving beyond segmentation to true one-to-one communications: Data-driven individualized targeting of program offerings enables communication with customers about what is most likely to be meaningful to them, and to get past the noise in the market place currently causing confusion. These targeting efforts also lead directly to increases in program participation.

Successful data driven targeting should:

- Include ongoing analysis of consumption patterns through conventional meters or AMI data
- Import past utility program participation and rebate redemption databases to track customer actions over time
- Combine that information with housing and demographic data (renter/homeowner) to fill out a complete picture of the customers.
- Target customers first by detailed customer segment (heavy A/C user, homeowner, wealthy, no A/C rebate for past 15 years, 25 year old house) and refine messages for each target segment.
- Segmentation should be refined to the level of 50-100 segments for large service areas.
- Beyond customer segmentation, specific overlays should be delivered based on each individual customer's situation. Messages should be targeted based upon past response rates to given channels (phone, mail, internet), current program participation, etc at an individual level.
- Include specific calls to action (“\$10 off this month at Home Depot”) instead of watered down generic messaging (“Buying CFL’s saves you money”).
- Program participation can help to target the right offers to the right customers at the right time, to educate the customer about the value of each offering given their particular situation (savings from new A/C, insulation, etc) and to highlight available rebates and incentives.

Nearly all private sector marketing, from the technology giants Google and Yahoo to the mail houses of Capital One and MBNA, is conducted with sophisticated targeting strategies to drive up response rates and overall impact. The same should be done with energy efficiency marketing.

Strategy 2: Behavioral Science. Successful engagement of residential customers cannot happen exclusively through pricing signals. Behavioral Science is a critical component.

As California and the country move aggressively in the expansion of advanced meter infrastructure and the implementation of “Smart Grid” solutions, a large portion of expected ROI is being driven by plans to reduce peak and overall demand through time of use billing and other economic pricing signals. These initiatives are important and will have profound impacts on California’s energy grid. But pure economic signals, such as peak demand pricing, have had a checkered past in motivating customers to modify their behavior around energy use.

In order to fully capitalize on these large investments, economic signaling must be combined with the proven effective methodologies that have come out of the behavioral sciences. These methodologies have demonstrated capacity to motivate and modify behavior.

Behavioral Science techniques work: Recent studies in California have reinforced the reliable impact of behavioral science techniques to influence residential energy consumption.

Studies funded by the Hewlett Foundation have demonstrated that the use of individualized normative messaging (e.g. “you used 15% more energy than your 30 closest neighbors”) in conjunction with injunctive messages leads to sustained reductions of electric and gas consumption by 3-5% across entire neighborhoods.¹ Solicitation of individual customer commitments to save energy and reinforcement of those personal commitments through regular reporting can drive total savings through behavior change to more than 10% across large populations.

Behavioral approaches include:

- *Normative Comparisons:* people are most likely to modify behavior when it is shown that multiple, like peers are engaging in the behavior. The more similar the peer group, and the more highly incident the behavior (people just like you, doing something more than 80% of the time) the more likely people are to react to the message.
- *Public commitments:* Encouraging people to make public commitments to conserve energy has been shown to have dramatic effect on conservation efforts. A gas conservation study in Idaho led to a greater than 20% average drop in gas consumption across a neighborhood of people who made public commitments to reduce consumption.
- *Scarcity:* People act most aggressively when they feel that an opportunity is disappearing. This is one of the key reasons why specific calls to action with time limits are important. An offer to “act now, and save 10% in January on CFLs” yields significantly more action than “buy CFLs and save money”.

Behavioral Science techniques can be measured: The use of statistically representative control groups allows for the reliable measurement and validation of actual savings from behavior change. Some California MUDs are already implementing these programs with accompanying robust validation regimens. The extension of these programs to the entire state is of great value to California.

Strategy 3: Private Industry Involvement. Providing customers with specific calls-to-action and increased subsidies through engagement of market players

To date the costs of marketing, education and outreach efforts, and all energy efficiency programs have been shouldered by ratepayers and utilities. With the creation of large marketing channels, such as utility bills, Home Energy Reports and data-rich efficiency websites, the opportunity exists to channel additive private industry dollars into the equation.

Private industry involvement includes:

- Private industry dollars in the form of coupons and special offers for efficiency offers, included in Home Energy Reports, bills, online, and in separate mailed packets. These special offers serve two purposes:
 1. As mentioned above in Strategy 2: Behavioral Science, special offers provide an opportunity to introduce scarcity and specificity, keys to driving customers to action
 2. These dollars serve to directly increase total effective subsidies of efficient products, a core driver of California’s energy efficiency plans.
- In-store kiosks, powered by utility data and additional customer data (housing, demographics, etc) to provide customers in big box retailers with specific recommendations at the time of sale.

¹ Substantial academic research and large scale field-testing have resulted in consistent reductions of 5-10%. See Cialdini R., Schultz W., Understanding and Motivating Energy Efficiency via Social Norms. 2004

These services act both to help retailers upsell efficient appliances and to provide prescriptions for products that the customer may not know about or know they need.

Increasingly, major manufacturers, retailers and service providers rely on energy-saving features of products to drive sales. Utilities should partner with market players and utilize customer communications to build direct marketing channels for private sector partners. Coupons and special offers from retailers, manufacturers and service providers delivered through utility communications can transform the market.