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California Energy Commission
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Docket No. 12-EBP-1: AB 758 Comments
4. Unlock consumer action with Residential On-Bill Financing ("OBF")

<u>Situation</u>

According to the *Comprehensive Energy Efficiency Program For Existing Buildings Scoping Report* published by the CEC in August 2012, residential consumers account for 33% of California's electricity demand (whilst also accounting for 43% of California's coincident peak electricity demand), and they account for 38% of California's gas demand.

Moreover, an analysis conducted by PlanetEcosystems (referred to in PlanetEcosystems' submission to the CEC, *Docket No. 12-EBP-1: AB 758 Comments - 3. Utility System Optimization has made price an effective policy lever* shows that nearly 40% of residential electricity demand is accounted for by the heaviest 21% of consumers. Indeed, it also indicates that nearly 70% of residential electricity demand is accounted for by the heaviest 50% of consumers.

Further, that same analysis shows that the heaviest 21% of consumers are able to reduce their electricity consumption by over 60%, and their gas consumption by over 25%, in an economically positive way (an "economically positive" demand reduction is any retrofit, behavior change or energy generation measure that will do more than pay for itself after *all* costs). Similar opportunities apply for the heaviest 50% of consumers.

A sizable opportunity clearly exists for California to leverage the self-interest of residential consumers to make substantive reductions in the state's overall utility service demand through consumers deploying their own resources.

Problem

In order to properly leverage consumer resources and self-interest, California must focus on finding ways to help consumers make the leap and undertake those demand reduction actions that are in their interest. However, much effort appears to be instead focused on the needs of other industry participants, and too little on what actually motivates consumers.

Simply put, we are not listening to, nor molding our demand reduction strategies, sufficiently around the wants and desires of consumers. There are 3 principal barriers to consumer action (aside from the challenge of first engaging consumers) and demand reduction efforts must be quickly oriented to deal with each:

1. Consumers just don't know that there is a substantive wealth-gain opportunity. Estimates show that there are many tens of thousands of dollars in net savings opportunity for the heaviest 50% of California's utility consumer.
2. Consumers don't know what to do. Consumers don't have the skills to efficiently and confidently navigate their way through the range of complex technical, economic and organizational challenges (including complex rebates, price schemes, knowledge of the options, etc.) that will deliver the maximum in wealth gain.
3. Consumers don't want to pay for upgrades that others will benefit from. In short, consumers value the option (literally, a financial option) to be able to move home very highly (perhaps driven by changes in employment or family circumstances), resulting in them applying extremely short break-even periods and high hurdle rates to any upgrade opportunity that requires a first cost.

The first two issues are dealt with in *Docket No. 12-EBP-1: AB 758 Comments - 3. Utility System Optimization has made price an effective policy lever*. The third issue deserves additional attention, as solutions are largely within the purview and capability of policy makers to resolve.

Game-Changer

California's experience with the residential application of PACE programs is largely limited to a short time window where it was in force in Sonoma in late 2009 and early 2010. Prior to the retarding effects of 'under-water' qualifications and FHFA restrictions, the success of the program was unmistakable; despite facing charges of 7% of capital deployed, consumers flocked to undertake upgrades, comforted with the knowledge that spending would be amortized more-or-less over the life of the upgrade undertaken, and only obligating the users of upgrades for their respective usage periods. However, as each of the two of the program's inhibitors took effect, the 'under-water' qualifications and FHFA restrictions, the rate of PACE applications declined coincidently and precipitously. It is very clear that the ability to pass on an upgrade repayment obligation across the transference of a property brought in large numbers of consumers.

California's targets and goals are likely too near-term for a strategy that waits for the PACE situation to be resolved. However, On-Bill Financing represents a proven and undoubtedly more effective approach to resolve the property-transfer barrier inhibiting consumer action (more effective as repayments are built into the monthly utility bills themselves, rather than in separate, biannual repayments).

Policy Implications/Opportunities

Regulatory and operational constraints may make utility service companies unsuitable candidates for operating On-Bill Financing mechanisms. However, numerous other markets have demonstrated that programs involving leasing companies and other specialist capital providers, perhaps together with loan-loss protections, can readily resolve these constraints. California must move urgently to exploit the efforts of Harcourt Brown & Carey with SCG to mitigate these constraints and develop policies, mechanisms and legal structures to create these financing markets, in concert with utility billing systems.