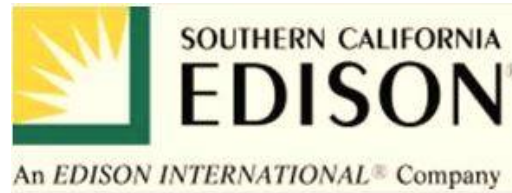


Building Behavior Programs to Serve a Purposeful Role in DSM Portfolios

Shahana Samiullah, Southern California Edison
Patrice Ignelzi, Applied Energy Group

IEPPEC Conference, Berlin
September 2014



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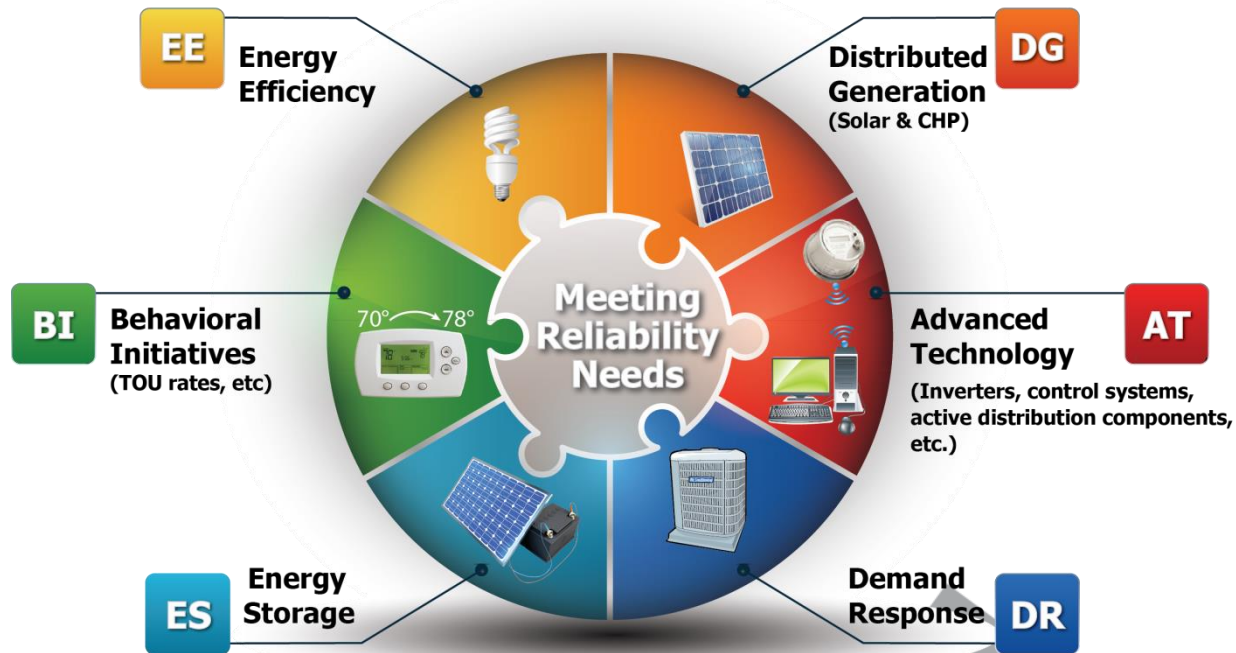
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Meeting Changes in the California Environment

- As add new programs, how to make them effective? What should they look like?
- How deal with programs that are not “traditional”
- Behavior programs are showing valid savings
- What are the evaluation challenges posed by new ilk of programs?

Programs for Reliability Purposes

There's a place for behavior programs



Source: www.sce.com

Deciding to Include Behavior Program in the DSM Portfolio

Three key considerations:

1. Design and operation of the behavior program
2. Assessment of reliability of program savings for local needs
3. Identification of what's driving behavior program savings

Consideration #1

Designing and Operating the Behavior Program

- Program to fulfill regulatory mandate or discretionary offering?
- What different perspectives do program managers, implementers, and evaluators have?
- Use off-the-shelf or design your own program?
- Part of or in parallel with other DSM programs?

Pros and Cons of Developing Custom/In-house Behavior Programs

Pros	Cons
<ul style="list-style-type: none">• Better control of data analytics• Greater understanding of embedded program costs of such programs, to determine the least-cost program savings strategies• Ability to implement a customized approach to serving customers with co-marketing of programs as an integrated DSM offering	<ul style="list-style-type: none">• Steep learning curve to integrate various internal systems and processes• Aligning competing goals such as meeting yearly savings targets versus long-term investment for building the necessary resources and skills to implement these programs

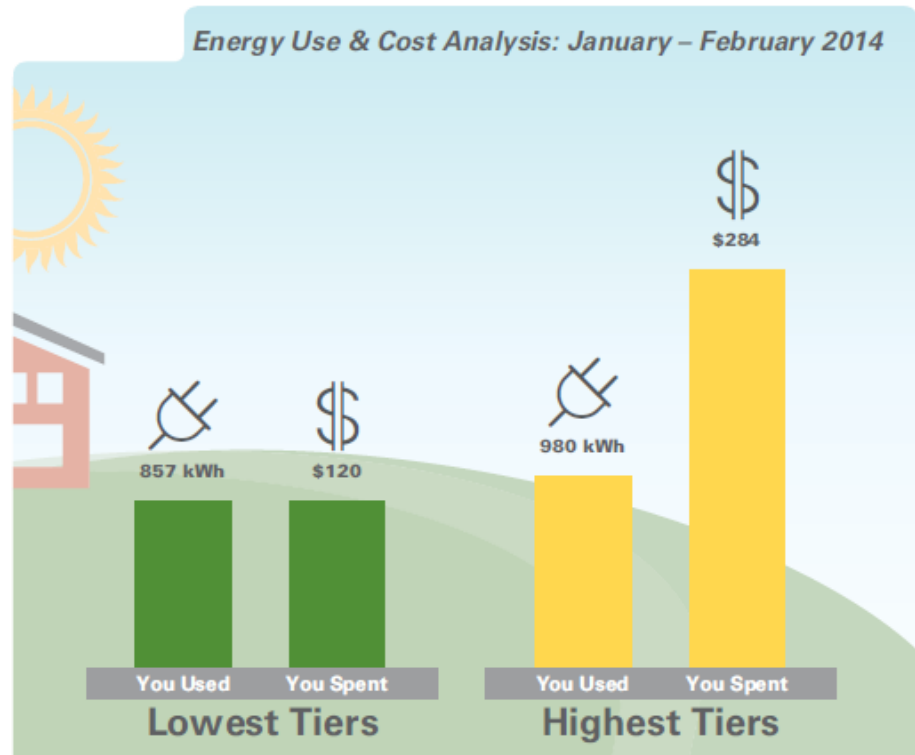
Provide More Customized Information

In addition to comparison with other customers, SCE's Custom Energy Report encourages savings by highlighting effects of tiered pricing

Small Changes Can Have a Big Impact

Only 53% of the energy you used was in the highest tiers, yet it's 70% of your cost.

Making small adjustments can help. If you don't reduce your energy use, you will continue to pay more in the higher tiers.



Example of Combined Program

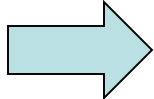
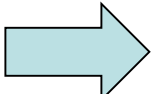
Aims at both appliance purchase and use behaviors

	Interventions	Behavior Change
Traditional Program	Financial incentives to encourage purchase of more efficient models	<ul style="list-style-type: none">• Greater availability of hi-efficiency water heater models• Purchase higher efficiency storage water heater when needed• Encourage early replacement of water heater
Behavior Program Enhancements	<p>In-person interactions with a trusted person</p> <p>Frame information about energy the way customers do; encourage follow-through</p>	<ul style="list-style-type: none">• Get regular AC maintenance through a contract• Buy a more appropriately sized unit• Install low-flow showerheads and faucet aerators, too• Turn down water heater temperature• Drain sediment from storage tank for optimal performance• Take shorter showers

Consideration #2

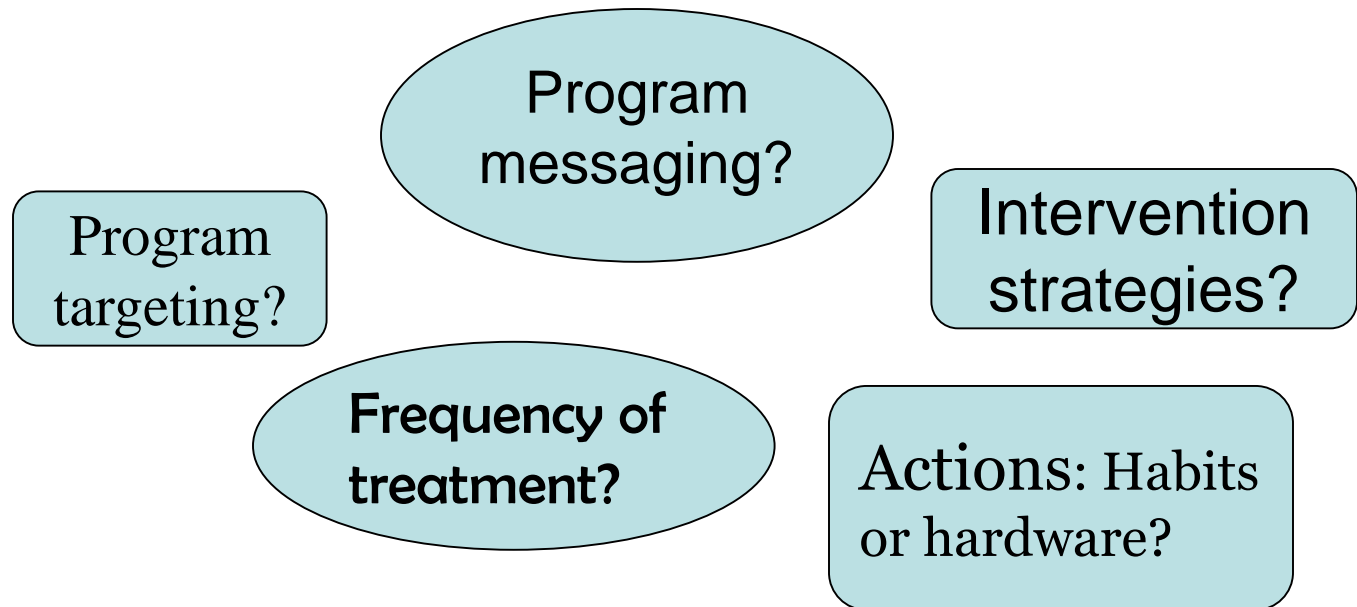
Assessing Program Savings Reliability

Programs must be able to demonstrate savings that meet the established standard of reliability—both for magnitude and persistence of the savings

- Savings levels confirmed through ex-post evaluation  Fairly well established
- Assess persistence and timing of savings  When? How long?

Consideration #3

What's Driving Behavior Program Savings?



Evaluators need to unveil and assess the various factors that contribute to savings

Conclusions and Recommendations

- Design behavior programs to meet same standards for reliability as traditional DSM programs
- Unveil what's behind the reported energy savings
- Develop more detailed program design & test process
- Establish criteria for deciding whether a program is ready for inclusion in the DSM portfolio

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