Assembly Bill 793

Energy Management Technologies
Agenda

1. Overall Approach to AB 793
2. Existing Offerings that Meet AB 793
3. Strategies for Increasing Participation & Deployment of Existing EMTs
4. New EMT Offerings to be Launched on 1/1/17
5. Anticipated EMTs to be Launched Post 1/1/17
6. Marketing & Education Plan Overview

Disclaimer: Content is intermittent. Strategies, tactics, products, timing, etc. subject to change.
Our Approach to AB 793 Has Been…

1. Clearly Understand AB 793 Objective

2. Research & Assess energy reduction opportunities across defined segments

   We're seeking to understand & assess reduction opportunities relevant to how customers use energy. Our ME&O strategy will reflect several data points leading towards an optimized product selection, customer marketing & solution development.

<table>
<thead>
<tr>
<th>Opportunity Areas (major usage)</th>
<th>Viable Reduction Opportunity By Customer Segment</th>
</tr>
</thead>
<tbody>
<tr>
<td>HVAC</td>
<td>Low Income</td>
</tr>
<tr>
<td>Pool Pump</td>
<td>x</td>
</tr>
<tr>
<td>Refrigeration</td>
<td>x</td>
</tr>
<tr>
<td>Lighting</td>
<td>x</td>
</tr>
<tr>
<td>Electronics</td>
<td>x</td>
</tr>
</tbody>
</table>

3. Create solutions that meet all stakeholder needs

4. Segmentation: AB 793 indicates that Residential or SMB customers are the primary target market(s) for our EMT incentive program. Edison will continue to refine these macro segments to appropriately align customer needs with EMT offerings & incentives.

5. SCE will employ a multi-phased approach to meeting AB 793. We will introduce and deploy new products & incentives over time which will enable us to learn from initial EMT launches by gaining new insights (technology, customer, marketing, etc.), conduct additional research and gradually refining our approach to ensure the best use of ratepayer dollars.
Existing Offers That Meet AB 793

SCE offers close to 2 dozen (and counting) product, service & software options that meet the definition of an energy management technology (EMT) as defined by AB 793. These technologies include, but are not limited to:

WeatherBug Home, Nest TOU Pilot, My Account, Budget Assistant, Home Energy Reports, eHome Energy Reports, Smart Thermostats (DR), Tier 1 Power Strips, Energy Efficiency Online Audit Tool (EEAT), Green Button, Green Button Connect, Rate Analyzer, Auto DR, Energy Manager, Cost Manager, Bill Manager, Business Energy Advisor, Kill-A-Watt, Hybrid Heat Pump Water Heaters, HAN device registration (SPD Incentive Plus), Rates (PTR-ET-DLC, Care, Fera), HEER, HEES, ESAP (Low Income), In Home Display (Pilot) ……

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Strategies for Increasing EMT Participation

1) Streamlining SCE existing EMT Portfolio
   a. An internal team is currently evaluating SCE’s EMT portfolio to identify efforts and technologies that should be expanded, need little to no improvement or should be relegated. Effort will free resources to improve our efforts and to focus on high value EMT opportunities to expand.

2) Improving on the functionality, design & customer experience for existing EMTs
   a. For example, SCE is currently redesigning its rate analyzer tool to include scenario planning.
      a. What if...I had a PEV, Solar production, etc. What rate would work best?

3) Enhancing our data analytics capabilities to better identify and target potential EMT participants/enrollees
   a. E.g. Propensity modeling

4) Expanding program rules to broaden customer eligibility
   a. E.g. for our ESA (low income) program, we received approval to retarget existing participants with new measures. Traditionally, customers have been capped once receiving measures.
   b. E.g. Auto DR eligibility will be expanded to include customers <100kw

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### Jan 1, 2017 EMT Solutions

<table>
<thead>
<tr>
<th>Most Likely EMT Solution</th>
<th>Brief Description</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Smart Thermostat (DR)</strong></td>
<td>To offer a smart thermostat CO-Incentive with SCG. SCE To offer $1.25 per KWh reduction &amp; SCG to offer a $50 upfront EE incentive. $75/50 split.</td>
<td>In Q1 - Residential</td>
<td>Res, Low</td>
</tr>
<tr>
<td><strong>Smart Thermostat (EE)</strong></td>
<td>To offer upfront EE incentive to acquire a Smart Thermostat. Unlike “programmable” thermostats, “smart” thermostats can be connected via Wi-Fi, can incorporate local weather &amp; humidity &amp; can learn and adjust based on algorithms or 3rd party prompts from the “cloud.”</td>
<td>In Q1 - Residential</td>
<td>Res, Low</td>
</tr>
<tr>
<td><strong>Tier 2 Advance Power Strip (APS)</strong></td>
<td>To offer tier 2 advanced power strips to small businesses (0-199KW), multi-family units &amp; middle income families.</td>
<td>Q1 - SMB, Multi Family, Middle Income</td>
<td>Res, Low</td>
</tr>
<tr>
<td><strong>Points &amp; Rewards Pilot (Opower)</strong></td>
<td>Edison will initiate a points and rewards pilot by where customers will earn points for taking utility selected actions such as completing an audit, saving energy &amp;/or enrolling in programs.</td>
<td>Q1 - Residential</td>
<td>Res, TBD</td>
</tr>
</tbody>
</table>

- EMT incentives/rebates contingent upon work paper results

**Study in progress. Solution contingent upon EE workpaper savings and approval. Incentive amount to be determined.**
### Post Jan 1, 2017 EMT Offerings

<table>
<thead>
<tr>
<th>Likely EMT Solutions</th>
<th>Brief Description</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>FY ‘18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart Plugs</td>
<td>Smart plugs enable older, non-smart appliances to become “smart” through the use of hardware that sits between energy consuming appliances and the energy source.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Segments: Residential &amp; Low Income, SMB</td>
</tr>
<tr>
<td>Smart Lighting</td>
<td>Smart lights use sensors &amp; microprocessors to enable automated &amp; wireless control aimed at using lights most efficiently. Many systems support demand response capabilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Segments: Res., Low Inc., SMB</td>
</tr>
<tr>
<td>Smart Appliances</td>
<td>Smart appliances have the ability to automatically adjust their operation dependent on predetermined algorithms or signals from consumers, utilities or 3rd parties.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Segments: Res., Low Income, SMB</td>
</tr>
</tbody>
</table>

### Additional Products Being Evaluated:

- Smart/connected refrigerators
- smart/connected dishwashers
- Smart/Connected Room AC’s
- Smart Connected washers
- Smart/Connected lighting
- smart connected lighting controls
- smart hubs (phone apps, excluding the phone)
- Auto DR Cloud based study
- Energy disaggregation
- Energy channel 2.0
- Software platforms (fee based)
- Software Platforms (non-fee based)
- Energy Efficiency Online Auditing Tool (EEAT)
- Whole Home Energy Solution
- Ecovent
- Joint measures across shared utility customers with SoCal Gas

**Deployments contingent upon workpaper approvals and savings**
ME&O Overview

1. **Q4 2016** – We will leverage & expand upon existing marketing efforts to further raise EMT education & awareness levels.
   a. Awareness is low. Only 6% of population has purchased a Smart Thermostat & purchase intent is approximately 14%, the same as a smoke detectors, blinds, drapes & power strips (non-smart)
   b. 20% of current smart thermostat owners don’t enroll in a DR program because they aren’t aware that the option exists
   c. Existing efforts to leverage: Aliso Canyon, Time of Use (Including pilots), “Super Users” (600k)

2. **Q4 2016** – Edison has a robust marketing plan in place. We’ve committed to marketing and incentivizing our Smart Thermostats DR solution to customers

3. **Key Channels**

<table>
<thead>
<tr>
<th>AB 793 Products</th>
<th>Marketing Activity</th>
<th>Segment</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart Thermostat</td>
<td>Mass Media &amp; Digital</td>
<td>Residential</td>
<td>Oct</td>
<td>Nov</td>
</tr>
<tr>
<td>Smart Thermostat</td>
<td>Social Media</td>
<td>Residential</td>
<td>Oct</td>
<td>Nov</td>
</tr>
<tr>
<td>Smart Thermostat</td>
<td>Print &amp; DM</td>
<td>Residential</td>
<td>Oct</td>
<td>Nov</td>
</tr>
<tr>
<td>Smart Thermostat</td>
<td>Outreach</td>
<td>Residential</td>
<td>Oct</td>
<td>Nov</td>
</tr>
<tr>
<td>Smart Thermostat</td>
<td>All Quarters</td>
<td>Residential</td>
<td>Oct</td>
<td>Nov</td>
</tr>
<tr>
<td>Smart Thermostat</td>
<td>Special Offers</td>
<td>Residential</td>
<td>Oct</td>
<td>Nov</td>
</tr>
<tr>
<td>Smart Thermostat</td>
<td>Special Offers</td>
<td>Commercial</td>
<td>Oct</td>
<td>Nov</td>
</tr>
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Note: All tactics, timing & channels will be included in Advice Letter Filing. Impartial view above
Appendix
NEST/Edison (Current TOU Pilot)

Get up to $200 to try something new.

Be part of a new Time-of-Use (TOU) rate plan study with Southern California Edison (SCE) and you’ll get up to $200 in bill credits over the course of a year.

With TOU rate plans, energy is more expensive when there’s high demand – like in the afternoons and evenings – and cheaper at other times. This study will help SCE design future TOU rate plans that will help customers like you potentially lower their energy bills.

And the best part? Even if your bills go up on your new rate plan, SCE will figure out how much you would have paid on your current plan and credit you the difference. You just need to stay in the study for a year.
WeatherBugHome (Current SCE Pilot)

**Weather Optimization**

Using the weather to predict just how much heating or cooling a home needs to keep you comfortable.

**Demand Response**

Keeping comfort our top priority, we determine the best time to lower energy consumption during times of peak energy use to maintain system stability and help alleviate the load on the grid.

**Home Energy ScoreCard**

Monthly insights into a home’s energy efficiency. Learn what’s driving your energy use and how you can reduce your bill!

**WeatherBug Mobile App**

Find out how the weather is impacting your heating and cooling costs with the WeatherBug mobile app! Available for free on iOS and Android.
What is AB 793

AB 793 was passed in October 2015 & it does two things primarily:

1) It expands the definition of “weatherization tools” to include Energy Management Technologies (EMTs)
   a. Existing laws requires SCE to perform home weatherization services for low income customers if the CPUC deems it necessary

2) AB 793 Requires SCE To:
   • Develop an incentive program targeted towards residential or Small & Medium sized Business customers (SMB) to acquire & use Energy Management Technologies (EMTs) in their homes or businesses
   • Educate residential and SMB customers about SCEs EMT incentive program; to help customers better understand & manage their energy using EMTs
   • Report yearly energy savings that stem from the AB 793 incentive program