Overview of Today’s Discussion

- EE/DSM Response To Two Different Situations
  - Summer 2005: A Proactive Plan
- SCE’s Energy Efficiency Response
- Results
- Lessons Learned/Conclusions
The 2000-2001 Energy Crisis EE/DSM Response

Background

- A Massive, Multi-Faceted Statewide Response
  - Started In Early Summer 2000 To Address Shortages Resulting From Disfunctional Restructured Market
  - Ramped Up Over The Next 12-18 Months
    - State Legislative Initiatives Increased EE, Load Management, and Distributed Generation Funding
      - SBx1-5, AB 970, 20-20 Customer Rebate Program
      - CAISO Load Management Programs
      - Utility EE Summer Initiatives and DR Programs

SCE’s Energy Efficiency Programs

- Regular EE Program Offerings Promoted/Modified To Emphasize Immediate Peak Demand Reductions
  - Promotions increased to take advantage of unprecedented customer awareness (prices, supply availability, possibility of outages, restructuring problems)
  - Residential
    - Rebates Applications Increased From 50,000 to 200,000
    - CFL Market Share Increased From .6% to 8.5%
  - Non Residential
    - Standard Performance Contract
      - Peak demand reduction payment added
      - Bonuses offered for installation prior to Summer 2001
The 2000-2001 Energy Crisis EE/DSM Response
SCE’s Energy Efficiency Programs

- Special Summer Initiative Programs Created
  - Swimming Pool Pump Controls and Replacements
  - Refrigerator Recycling
  - LED Traffic Signal Incentives
  - Residential Hard To Reach (Multifamily/Mobile Home Contractor Standard Offer)
  - Campus Energy Efficiency Initiative (UC and CSU)
  - Beat The Heat (Torchiere Exchange)
  - California Oil Producers Electric Cooperative
  - Third Party Initiatives
    - First generation third-party EE program implementation bid
    - Currently on the fifth generation of third-party bids
      - SCE’s 2006-2008 IDEEA/INDEE/Targeted Solicitations

---

The 2000-2001 Energy Crisis EE/DSM Response Results – SCE Energy Efficiency Programs

<table>
<thead>
<tr>
<th></th>
<th>2000/01 Regular EE Programs</th>
<th>2000/01 Summer Initiative EE Programs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>919 million kWh</td>
<td>107 million kWh</td>
<td>1.2 billion kWh</td>
</tr>
<tr>
<td></td>
<td>206 MW</td>
<td>69 MW</td>
<td>375 MW</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$230 million</td>
</tr>
</tbody>
</table>
The 2000-2001 Energy Crisis EE/DSM Response Results – Statewide EE/Load Mgmt/Self Generation

- It Worked!
  - Summer 2000 – Utility Load Management Programs Provide Significant Reliability Benefits, Helping To Avert Rotating Outages On Several Occasions
  - By Summer 2001 All Of The Programs Were Working, and Provided 4,200 MW Of Load Reduction
    - Between 50 and 160 hours of Stage 3 Emergencies (and rolling blackouts) were potentially avoided
    - 374 MW is estimated to be a result of energy efficiency load reductions in Summer 2001, plus another 600 MW ultimately installed under 2000/2001 programs that will be sustained for the economic life of the measures


SCE’s Summer 2005 EE Initiative Background

- Dec 2004 – California agencies concluded that resources in Southern California could be tight under extreme weather and operating conditions in the summer of 2005
- SCE’s analysis concluded that up to 540 MW of additional resources may be needed in SCE and SDG&E service territories (under above extreme conditions)
- With only a short time until summer, additional resource options to meet this need were limited.
  - SCE identified options that could meet the estimated needs but required varying levels of utility and state support to implement
- Actions taken by SCE to meet this shortage were predominately met through expanded demand side management
  - Expanded Existing DSM Portfolio 383 MW
  - Contracted For Mothballed Generating Facilities 175 MW
  - 558 MW
SCE’s Summer 2005 EE Initiative
The DSM Plan

- Energy Efficiency 48 MW
  - Standard Performance Contract Lighting Initiative
  - Small Business Lighting Sweep
  - Residential Appliance Recycling
  - Residential Rebates
- Integrated EE/DR 150 MW
  - 20/20 (Res and Non Res)
- DR Reliability 185 MW
  - AC Cycling (“Summer Discount Plan”)
  - MWD Pump Load Curtailment

383 MW

SCE’s Summer 2005 EE Initiative
Energy Efficiency Programs

- Standard Performance Contract Lighting Initiative
  - Builds on the successful current SPC program process and delivery channels
  - Offers $750 per peak kW demand reduction, plus existing $.05/kWh saved (first year savings)
    - Avg demand reduction, noon to 6 pm, summer season
    - Brings to bear the entire lighting/energy services market on late adopters
  - Opened May 5, Installations Must Be Complete (operational) by Aug 31
  - Budget/Goal: $30 million/17.95 MW/100 million kWh
SCE’s Summer 2005 EE Initiative
Energy Efficiency Programs

- Small Business Lighting Sweep
  - Builds on SCE’s current Small Biz/CBO Lighting Program
  - Lighting installation firms under contract to SCE perform lighting retrofits in very small businesses at no cost to customer
    - Simple, quick, very low administrative cost (minimal recruitment/sales time)
  - Started May 5, Installations Completed Aug 31
  - Budget/Goal: $10 million/7.3 MW/34.9 million kWh

SCE’s Summer 2005 EE Initiative
Energy Efficiency Programs

- Refrigerator Recycling
  - Builds on SCE’s current appliance recycling program
  - Increases customer incentive from $35 to $50
  - Waives current age restriction, enabling early retirement of post 1990 refers
  - Increased promotion
  - Budget/Goal: $4 million/3.1 MW/18.3 million kWh
SCE’s Summer 2005 EE Initiative
Energy Efficiency Programs

- Residential EE Rebates
  - Builds on SCE’s current Res Rebate Program
  - Expands point-of-sale instant rebates with appliance retailers
    - Refrigerators, Room Air Conditioners, Whole House Fans, Pool Pumps
  - Central Air Conditioners
  - Budget/Goals: $13 million/18.7 MW/21.9 million kWh

SCE’s Summer 2005 EE Initiative
Energy Efficiency Programs-
Results As Of August 31

<table>
<thead>
<tr>
<th>Program</th>
<th>MW</th>
<th>kWh, millions</th>
<th>$, million</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPC SI</td>
<td>23</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>Small Biz SI</td>
<td>7</td>
<td>34.9</td>
<td></td>
</tr>
<tr>
<td>Ref Recycling</td>
<td>3.2</td>
<td>18.3</td>
<td></td>
</tr>
<tr>
<td>Res Rebates</td>
<td>10.2</td>
<td>9.5</td>
<td></td>
</tr>
<tr>
<td>Total SI</td>
<td>43.5</td>
<td>182</td>
<td>57</td>
</tr>
<tr>
<td>Total Regular 04-05 EE Programs</td>
<td>289</td>
<td>1,642</td>
<td>223 (excludes non-resource program costs)</td>
</tr>
<tr>
<td>Grand Total</td>
<td>332.5</td>
<td>1,824</td>
<td></td>
</tr>
</tbody>
</table>
SCE’s Summer 2005 EE Initiative
Energy Efficiency Programs-
Results As Of August 31

- Other Interesting Program Statistics
  - Standard Performance Contract Summer Initiative
    - 634 projects
    - 60% medium sized customers (under 500 kW demand)
    - 60% contractor/ESCO sponsored
    - Additional 4.6 MW, 22 GWh from non-lighting measures (comprehensive projects)
  - Small Biz Lighting Sweep
    - 4,600 small businesses served
    - Mostly T12/magnetic ballasts to T8/electronic
  - Refrigerator Recycling
    - 26,000 units retired/recycled (23,000 refers, 3,000 freezers)
  - Residential EE Rebates
    - 14,000 Room AC units
    - 9,100 Energy Star Refrigerators
    - 6,000 Central AC Systems

SCE’s Summer 2005 EE Initiative
Energy Efficiency Programs-
Conclusions/Lessons Learned

- DSM Resources Take Time To Develop and Deploy, But Can Be A Significant Part Of A Resource Portfolio
  - EE Is A Long Term Proposition With Harvestable Immediate Incremental Impacts At Times Of Need (But Not Too Often!)
  - EE Programs In California Were Maintained At A Significant Level By Forward Looking Policy During The Restructuring Era Thus Could Be Relatively Easily Scaled Up To Meet Short Term Resource Needs
- A Robust EE Provider Market Is Essential To Success Of A Large Scale DSM Resource Procurement Strategy – Especially For Quick Results
- DSM Resources Can Be Acquired Cost-Effectively From All Customer Sectors
  - Good Program Design Addresses All Potential Sources of Savings