Introduction

- Who
- Renewable Portfolio Standard
- Summary Data
- Project Discussions
- Challenges and Opportunities
Where are we?

Service Territory:
- 1.2M Customers
- 7,800 MW Peak
- 3% Growth
Renewable Portfolio Standard

- 9% of sales  2007 and 2008
- 12% of sales  2009 and 2010
- 15% of Sales  2011 and 2012
- 18% of Sales  2013 and 2014
- 20% of Sales  2015
- 25% of 20% By Energy Efficiency Measures
- 50% of 25% Must Be Residential
## Overall Portfolio

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Budget</strong></td>
<td>$47,289,000</td>
<td>$46,534,000</td>
</tr>
<tr>
<td><strong>First Year Energy</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Savings (MWH)</strong></td>
<td>237,345</td>
<td>236,975</td>
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## Pending Filing

<table>
<thead>
<tr>
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<th>2008</th>
<th>2009</th>
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<tbody>
<tr>
<td><strong>Budget</strong></td>
<td>$9,409,000</td>
<td>$10,470,000</td>
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<tr>
<td><strong>First Year Energy</strong></td>
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<tr>
<td><strong>Savings (MWH)</strong></td>
<td>16,590</td>
<td>12,438</td>
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## Energy Education and Consultation

<table>
<thead>
<tr>
<th>Project</th>
<th>Budget</th>
<th>Energy MWH</th>
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<tbody>
<tr>
<td></td>
<td>2008</td>
<td>2009</td>
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<tr>
<td><strong>Non Profit Grants</strong></td>
<td>$210,000</td>
<td>$210,000</td>
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<tr>
<td><strong>Energy Education</strong></td>
<td>$730,000</td>
<td>$735,000</td>
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</tbody>
</table>
Small Commercial Education

- Facility Operator Certification for Utility Systems
  - Targets Facility Operators
  - 11 full days sessions leading to certification
  - Technical, project development and presentment and other skills
  - 968 MWH Annual Energy Savings at Sierra in 2006
Residential and Commercial Builder Support

- Train Building Department Staff
  - IEEC Latest Version Adopted
- Train Builders
  - Energy Star Standards
- Energy Star Partners
  - 72.6% Market penetration in 2006
## Miscellaneous

<table>
<thead>
<tr>
<th>Project</th>
<th>Budget 2008</th>
<th>Budget 2009</th>
<th>Demand Savings MW 2008</th>
<th>Demand Savings MW 2009</th>
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<tbody>
<tr>
<td>ACLM</td>
<td>$11,811,000</td>
<td>$13,133,000</td>
<td>37</td>
<td>37</td>
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<tr>
<td>Market and Technology Trials</td>
<td>$500,000</td>
<td>$500,000</td>
<td>N/A</td>
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</table>
Market and Technology Trials

- Home energy displays
- Highly efficient air conditioning technologies
- Duct sealing
- ADsorption chiller
- Night Breeze – ventilation system
- Cansolair – solar heating
## Other Projects

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>Sure Bet Hotel/Motel</td>
<td>$2,909,000</td>
<td>$1,065,000</td>
<td>10,774</td>
<td>3,896</td>
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<tr>
<td>Zero Energy Homes</td>
<td>$330,000</td>
<td>$270,000</td>
<td>222</td>
<td>222</td>
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<tr>
<td>Refrigerator Recycling</td>
<td>$2,350,000</td>
<td>$2,350,000</td>
<td>16,392</td>
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## Other Projects

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</thead>
<tbody>
<tr>
<td>Energy Star Manufactured Homes</td>
<td>$608,000</td>
<td>$671,000</td>
<td>1,108</td>
<td>1,385</td>
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<tr>
<td>Energy Star Lighting</td>
<td>$5,237,000</td>
<td>$5,384,000</td>
<td>93,439</td>
<td>102,997</td>
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<tr>
<td>Sure Bet Commercial Incentives</td>
<td>$8,300,000</td>
<td>$7,300,000</td>
<td>69,394</td>
<td>61,274</td>
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</table>
Sure Bet Commercial Incentives

- Prescriptive
- Custom
- Building Optimization Assessment
  - Control Upgrades
- Direct Install
- Upstream HVAC Buy-downs
- Upstream Motors Buy-downs
Lighting In-store Events
Lighting Model Homes

- 16 Builders
- All sockets
- 40,000 CFLs
- 24 Hour Security Lighting
- Promotional Material in Kitchens
- Leveraging to production homes
Lighting Loyalty Club Awards

- Rampart and Cannery Casinos
- Cater to Locals
- CFL promotion
- Shared funding
- Tuesday and Thursdays
- Awarded 3 pack of CFLs based on points earned
- Limit 12 bulbs
Loyalty Club Awards
Loyalty Club Awards
Loyalty Club Awards
Loyalty Club Awards
Loyalty Club Awards
Lighting Employee Promotions

- Station Casinos
- 12 pack to each of 15,000 employees
- 180,000 CFLs
- Educational Opportunity
- Focus on lower income customers
- Three day program
- More to come!
Lighting Employee Promotions
Lighting Hispanic Outreach

- Fiestas Patrias
Lighting Hispanic Outreach

- Home Depot
Retail Partners
## Other Projects

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</thead>
<tbody>
<tr>
<td>Sure Bet Schools</td>
<td>$800,000</td>
<td>$775,000</td>
<td>4,889</td>
<td>4,889</td>
</tr>
<tr>
<td>Sure Bet New Construction</td>
<td>$4,013,000</td>
<td>$2,450,000</td>
<td>11,250</td>
<td>11,250</td>
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<tr>
<td>Pool Pumps</td>
<td>$898,000</td>
<td>$1,033,000</td>
<td>4,500</td>
<td>5,400</td>
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</table>
Sure Bet Schools

- Energy Benchmarking
  - Based on the results CCSD formed a group led by SBS to address the bottom 25% of their schools to determine how to make them more energy efficient.
  - SBS performed site visits to uncover control system problems causing the poor performance.
  - This has already led to CCSD discussions to start a retro-commissioning division to improve many other schools.
Sure Bet Schools

- Small School District Program
  - Upfront project funding is a major issue
  - Identify list of potential projects at each school district
  - RFP for ESCO with set interest rates, margins, M&V protocol etc.
  - Promote availability to school districts with incentives to improve attractiveness for school and ESCO
  - Monitor ESCO performance
# Other Projects

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<tbody>
<tr>
<td>High Efficiency AC</td>
<td>$9,626,000</td>
<td>$11,514,000</td>
<td>22,935</td>
<td>25,626</td>
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<tr>
<td>Home Energy Display</td>
<td>$2,000,000</td>
<td>$2,000,000</td>
<td>4,069</td>
<td>6,072</td>
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<tr>
<td>80 Plus</td>
<td>$489,000</td>
<td>$788,000</td>
<td>3,900</td>
<td>6,796</td>
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</tbody>
</table>
Home Energy Displays

- Full presentation tomorrow
High Efficiency AC

- Increased SEER/EER
- Quality Install
- Tune up
- Verification of effectiveness essential
- Slow start - AC contractor community push back
- Implementation push back
## Other Projects

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<tbody>
<tr>
<td>Energy Star Homes Plus</td>
<td>$1,892,000</td>
<td>$2,379,000</td>
<td>2,884</td>
<td>4,038</td>
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<tr>
<td>Next</td>
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Challenge and Opportunity

- Changing standards
  - Reduced margins
- New Laws
  - Lighting efficiency requirements
  - Energy inspection on sale of a home
- Avoided cost uncertainty
- Existing unit residential projects
- Ever growing expectations