



Nevada Power Company Sierra Pacific Power Company

2007 Regional SWEEP
Energy Efficiency Workshop
November 15, 2006



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

| | 2008 | 2009 |
|--|--------------|--------------|
| Budget | \$47,289,000 | \$46,534,000 |
| First Year Energy Savings (MWH) | 237,345 | 236,975 |



Pending Filing

| | 2008 | 2009 |
|--|-------------|--------------|
| Budget | \$9,409,000 | \$10,470,000 |
| First Year Energy Savings (MWH) | 16,590 | 12,438 |



Energy Education and Consultation

| Project | Budget | | Energy MWH | |
|--------------------------|---------------|-------------|-------------------|-------------|
| | 2008 | 2009 | 2008 | 2009 |
| Non Profit Grants | \$210,000 | \$210,000 | 365 | 365 |
| Energy Education | \$730,000 | \$735,000 | 0 | 0 |



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

| Project | Budget | | Demand Savings MW | |
|---|---------------|--------------|------------------------------|-------------|
| | 2008 | 2009 | 2008 | 2009 |
| ACLM | \$11,811,000 | \$13,133,000 | 37 | 37 |
| Market and Technology Trials | \$500,000 | \$500,000 | N/A | N/A |



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

| Project | Budget | | Energy MWH | |
|-------------------------------|---------------|-------------|-------------------|-------------|
| | 2008 | 2009 | 2008 | 2009 |
| Sure Bet Hotel/Motel | \$2,909,000 | \$1,065,000 | 10,774 | 3,896 |
| Zero Energy Homes | \$330,000 | \$270,000 | 222 | 222 |
| Refrigerator Recycling | \$2,350,000 | \$2,350,000 | 16,392 | 16,392 |



Other Projects

| Project | Budget | | Energy MWH | |
|---|---------------|-------------|-------------------|-------------|
| | 2008 | 2009 | 2008 | 2009 |
| Energy Star Manufactured Homes | \$608,00 | \$671,000 | 1,108 | 1,385 |
| Energy Star Lighting | \$5,237,00 | \$5,384,000 | 93,439 | 102,997 |
| Sure Bet Commercial Incentives | \$8,300,000 | \$7,300,000 | 69,394 | 61,274 |



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

| Project | Budget | | Energy MWH | |
|----------------------------------|---------------|-------------|-------------------|-------------|
| | 2008 | 2009 | 2008 | 2009 |
| Sure Bet Schools | \$800,000 | \$775,000 | 4,889 | 4,889 |
| Sure Bet New Construction | \$4,013,000 | \$2,450,000 | 11,250 | 11,250 |
| Pool Pumps | \$898,000 | \$1,033,000 | 4,500 | 5,400 |



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

| Project | Budget | | Energy MWH | |
|----------------------------|---------------|--------------|-------------------|-------------|
| | 2008 | 2009 | 2008 | 2009 |
| High Efficiency AC | \$9,626,000 | \$11,514,000 | 22,935 | 25,626 |
| Home Energy Display | \$2,000,000 | \$2,000,000 | 4,069 | 6,072 |
| 80 Plus | \$489,000 | \$788,000 | 3,900 | 6,796 |



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

| Project | Budget | | Energy MWH | |
|-------------------------------|---------------|-------------|-------------------|-------------|
| | 2008 | 2009 | 2008 | 2009 |
| Energy Star Homes Plus | \$1,892,000 | \$2,379,000 | 2,884 | 4,038 |
| Next | | | | |
| Next | | | | |



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

