Energy Efficiency Policies and Programs in the Southwest

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Presentation at the ACEEE National Conference on Energy Efficiency as a Resource
Berkeley, CA
Sept. 26, 2005
Southwest Energy Efficiency Project (SWEEP)

- Public interest initiative promoting greater energy efficiency in AZ, CO, NV, NM, UT, and WY
- Founded in 2001, based in Boulder, CO
- Working on state legislation, expansion of government and utility energy efficiency programs, program design, combined heat and power, and consumer education
- Majority of funding provided by the Energy and Hewlett Foundations, U.S. Department of Energy, and U.S. Environmental Protection Agency

www.swenergy.org
Utility DSM Funding in the Southwest

<table>
<thead>
<tr>
<th>State</th>
<th>DSM program budget (million $ per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2001</td>
</tr>
<tr>
<td>AZ</td>
<td>8</td>
</tr>
<tr>
<td>CO</td>
<td>4</td>
</tr>
<tr>
<td>NV</td>
<td>2</td>
</tr>
<tr>
<td>NM</td>
<td>2</td>
</tr>
<tr>
<td>UT</td>
<td>5</td>
</tr>
<tr>
<td>WY</td>
<td>~0</td>
</tr>
<tr>
<td>Region</td>
<td>21</td>
</tr>
</tbody>
</table>
Arizona – Utility DSM Program Status

- Utilities were allowed to shift SBC energy efficiency funds to solar electric programs
- Agreement to increase EE program funding by APS to $16M per year; APS has proposed 10 DSM programs
- Agreement includes a performance-based financial incentive, TBD
- Salt River Project and Tucson Electric Power also expanding DSM programs
- Societal cost test used to determine DSM program cost effectiveness
Colorado – Utility DSM Program

Status

- Agreement in Xcel Energy 2004 Least-Cost Planning docket – requires Xcel to reduce peak demand by 320 MW and save 800 GWh/yr by 2013 (2006-2013 programs)
- Xcel will spend up to $196 million on DSM programs during 2006-2013; now developing new programs
- Also, PUC will review DSM policy in 2006
- Other utilities such as Colorado Springs and Fort Collins municipal utilities expanding DSM programs as well
Nevada – Utility DSM Program Status

- Restructuring repealed, utility DSM programs restarted in 2001
- DSM Collaborative established; DSM funding by Nevada Power and Sierra Pacific Power now up to $14 million per year (0.5% of revenues)
- Utilities are given a financial incentive (rate of return + 5%) for DSM programs
- New legislation adds energy savings from DSM programs to state RPS; significant DSM expansion proposed for 2006
New Mexico – Utility DSM Program
Status

- Utilities now implementing relatively limited DSM programs
- Energy Efficiency Act of 2005 establishes DSM program cost recovery mechanism, directs IOUs to develop and implement cost-effective programs, directs PUC to remove any financial barriers
- PNM has proposed some limited gas DSM programs; PRC has opened docket to develop more detailed DSM rules
Utah – Utility DSM Program Status

- Integrated Resource Planning (IRP) required; Utah Power (PacifiCorp) is directed to implement all cost-effective DSM under Total Resource Cost test
- Tariff rider allows simultaneous program cost recovery, but no financial incentive
- PacifiCorp spending around $23 million (~2.0% of revenues) on DSM programs in 2005 and still growing
- Utility is expanding DSM in order to avoid supply-side expansion
# Key Utility DSM-Related Policies

<table>
<thead>
<tr>
<th>Policy</th>
<th>AZ</th>
<th>CO</th>
<th>NM</th>
<th>NV</th>
<th>UT</th>
<th>WY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Resource Planning</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Use of Total Resource Cost or Societal test as sole/primary cost effectiveness test</td>
<td>Yes</td>
<td>Partly</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Public benefits charge supporting energy efficiency programs</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>DSM cost recovery mechanism</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Financial incentive for utilities</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Collaboration in DSM program design/analysis</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
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<td>No</td>
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<tr>
<td>Industrial self-direction option</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
Themes in DSM Program Design

- Utilities have a strong interest in reducing peak demand, i.e., reducing cooling load and improving AC efficiency
- Potential in region for evaporative cooling
- Large amount of new construction in the region
- Limited awareness and availability of some energy efficiency measures such as CFLs in portions of the southwest
- Growing interest in demand response
Building Energy Code Status

- Recent version of IECC adopted as mandatory statewide code in New Mexico and Utah
- Recent version of IECC adopted in Denver, Phoenix, and all major cities and counties in Nevada
- Enforcement and compliance are critical issues in the region
Natural Gas DSM Program Status

- Very few gas utility DSM programs now underway in the southwest
- Southwest Gas Co. has proposed new programs ($4.4 million per year) in Arizona, along with decoupling of sales and revenues
- Public Service of NM has proposed gas DSM programs for its residential customers
- Gas DSM enabling legislation adopted by CO legislature in 2005 but vetoed by Gov. Bill Owens
Conclusions

- Electric utility energy efficiency programs are on the rise in the Southwest – region no longer lagging in DSM expenditures
- Policies including Integrated Resource Planning, use of Total Resource or Societal Cost test, convenient cost recovery mechanisms are making a difference
- Reducing peak demand a major focus
- Building energy codes have been updated in most of the region, but enforcement and compliance are issues
SWEEP:
Dedicated to More Efficient Energy Use in the Southwest

Resources available online at:
www.swenergy.org

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