Ratepayer-funded Energy Efficiency: Nationwide Trends

Lisa Wood
South Dakota Energy Efficiency Workshop

Pierre, South Dakota
June 23, 2010
In 2008, ratepayer-funded EE programs saved 96 TWh. But, significant potential for much more energy efficiency savings.

96 TWh represented about 2.6% of total usage in 2008.
Ratepayer funded EE budgets are growing significantly

LBNL forecasts $12.4 billion of ratepayer funded EE by 2020 (under high scenario) – a three-fold increase from today.

Source: LBNL’s The Shifting Landscape of Ratepayer-Funded Energy Efficiency in the U.S. (October, 2009) by Galen Barbose, Charles Goldman, and Jeff Schlegel
In 2009, ratepayer-funded electric efficiency budgets totaled $4.4 billion in the U.S. Electric utilities responsible for 87% (CEE).
Majority of consumers look to their electric utility as a source of energy efficiency information

What groups or organizations would you look to for more information on how to use electricity more efficiently?

- Your electric utility: 55%
- Retailers (e.g., Home Depot): 25%
- Federal government: 20%
- Home contractors: 17%
- Local government: 10%
- State government: 14%
- Web/online: 3%
- Other: 4%

EEI PowerPoll Q1 2010
Aligning incentives for EE investments – three regulatory components

Program cost recovery

Lost margin recovery  Performance incentives
State regulatory environments are evolving to support increased electric utility EE efforts

The number of states aligning utility incentives with investments in EE has increased significantly over the past 2 years

<table>
<thead>
<tr>
<th>Energy Efficiency Incentive Mechanism</th>
<th>Number of states</th>
<th>Pending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed-cost recovery mechanisms</td>
<td>Lost revenue recovery</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Revenue decoupling</td>
<td>12</td>
</tr>
<tr>
<td>Performance incentives</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>Virtual power plant</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
Electric utility lost revenue and decoupling mechanisms by state (details vary by state)
Electric utility performance incentives by state (details vary by state)

July 2010

© 2010 Institute for Electric Efficiency
Thoughts on EE funding mechanisms

- Example. Over past few years, NV Energy significantly increased EE investments under a bonus ROE incentive. This year, NV Energy filed for decoupling mechanism. Commission approved.
  - 2005: Spent $10.8 million and saved 174,023 MWh
  - 2008: Spent $44.9 million and saved 817,926 MWh

- Incentives work! States with mechanisms that support EE have more EE savings.

- Most states use the TRC (total resource cost) test. In Florida (where RIM test was historically used for EE), focus is on load shifting, not energy savings.

- To-date, most contention has been around performance incentives (EM&V issues) not lost revenue recovery/decoupling.
Utility scale smart meter deployments, plans, and proposals (IEE, February 2010)

*This map represents smart meter deployments, planned deployments, and proposals by investor-owned utilities and large public power utilities.
Smart meter platform and home area network technologies will take EE and DR to new levels

It’s all about giving customers the tools and the know-how to be smarter energy consumers. Educate, educate, educate!

HAN communication

SmartMeter communication