New Mexico Electric Utility Energy Efficiency Programs: A Success Story
July 2016

History

- In 2005, the state legislature adopted the Efficient Use of Energy Act (EUEA), directing investor-owned utilities to implement cost-effective energy efficiency and load management programs, establishing a cost recovery mechanism for utility investments in efficiency, and directing the Public Regulation Commission (PRC) to establish rules for integrated resource planning.

- In 2008, the EUEA was amended, requiring that electric utility programs achieve 5% savings by 2014 and 10% by 2020 (as a fraction of 2005 electricity sales). The amended EUEA directed the PRC to remove disincentives and allow utilities to earn a profit on investments in cost-effective energy efficiency and load management programs.

- In 2013, the legislature amended the EUEA a second time, setting utility funding of energy efficiency programs at 3% of customers’ bills and changing the cost-effectiveness test from the Total Resource Cost test to the Utility Cost test. At the same time, the legislature lowered the state’s efficiency goal for 2020 from 10% to 8% of 2005 total retail kWh sales and required at least 5% of utilities’ total energy efficiency program budget be spent on programs for low-income customers.

- In 2014, the PRC revised the rules implementing the EUEA. These revisions included establishment of the Utility Cost test (UCT) as the primary means for assessing DSM program cost effectiveness. The latest rules allow utilities to propose performance incentive mechanisms on an individual basis, and makes other rule changes to be consistent with 2013 version of the EUEA. Additionally, the revised rules removed the requirement that individual programs meet the cost-effectiveness threshold, in favor of requiring portfolio-level cost effectiveness.

Utility Energy Efficiency Planning

- The state’s largest electric utility, Public Service Company of New Mexico (PNM), serves about 515,000 customers. PNM’s 2015-16 energy efficiency plan includes a $25.8 million annual budget and an energy savings goal of 80.2 million kWh per year. This plan is intended to bring PNM into compliance with the amended EUEA funding and energy savings requirements.

- Southwestern Public Service Company (SPS) serves about 119,000 customers and El Paso Electric Company (EPE) serves about 95,000 customers in New Mexico. Both utilities have approved energy efficiency plans that meet the 3% funding requirement. SPS’s 2016 plan includes a budget of $11.5 million and projected savings of 31.8 million kWh per year. EPE’s 2016 plan includes a budget of $5.7 million and a savings goal of 17.9 million kWh per year.

Impacts of Energy Efficiency Programs

- As shown in the figure and table below, the three investor-owned utilities in New Mexico ramped up their energy efficiency programs over the past eight years. Combined they achieved electricity savings of 813 million kWh in 2015 as a result of DSM programs implemented during 2008-2015. The savings are equal to 5.4% of total electricity use by retail customers of these three utilities. It is also equivalent to the electricity use of 96,000 typical households served by the utilities.
The estimated net economic benefits from utility efficiency programs operating in New Mexico over the last eight years total $322 million, according the utilities’ own data.

The electric savings in 2015 also resulted in water savings of more than 400 million gallons per year, enough to supply about 2,800 New Mexico households.

As a result of energy efficiency programs implemented over the last eight years, New Mexico’s electric utilities cut their CO₂ emissions in 2015 by about 447,000 metric tons, the equivalent of taking around 89,000 passenger vehicles off the road.

### DSM Program Results of New Mexico’s Investor-Owned Electric Utilities

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSM Program Spending (SM)</td>
<td>8.8</td>
<td>15.6</td>
<td>23.5</td>
<td>27.3</td>
<td>27.7</td>
<td>31.2</td>
<td>34.0</td>
<td>39.0</td>
<td><strong>207.1</strong></td>
</tr>
<tr>
<td>Electricity Savings (GWh/year)</td>
<td>42.2</td>
<td>58.7</td>
<td>87.2</td>
<td>108</td>
<td>130.8</td>
<td>129.7</td>
<td>126.2</td>
<td>130.1</td>
<td><strong>813</strong></td>
</tr>
<tr>
<td>Peak Reduction (MW)</td>
<td>57.7</td>
<td>63.9</td>
<td>83.7</td>
<td>78.4</td>
<td>82.4</td>
<td>88.2</td>
<td>86.7</td>
<td>85.9</td>
<td><strong>NA</strong></td>
</tr>
<tr>
<td>Net Economic Benefits (SM)</td>
<td>35.5</td>
<td>44.7</td>
<td>46.9</td>
<td>65.9</td>
<td>66.9</td>
<td>27.2</td>
<td>34.7</td>
<td>33.8</td>
<td><strong>321.8</strong></td>
</tr>
<tr>
<td>Net Savings (% of Retail Sales)</td>
<td>0.28</td>
<td>0.40</td>
<td>0.58</td>
<td>0.70</td>
<td>0.83</td>
<td>0.82</td>
<td>0.80</td>
<td>0.83</td>
<td><strong>NA</strong></td>
</tr>
<tr>
<td>CO₂ Emissions Reduction (thousand metric tons/yr)</td>
<td>23.2</td>
<td>32.3</td>
<td>48.0</td>
<td>59.4</td>
<td>71.9</td>
<td>71.3</td>
<td>69.4</td>
<td>71.6</td>
<td><strong>447</strong></td>
</tr>
</tbody>
</table>

**Notes:** 2008 Net Economic Benefits include values for PNM and SPS; 2008 value not reported by EPE. CO₂ emissions reductions based on avoiding 550 metric tons per GWh, an average value for PNM’s programs in recent years.

**Source:** Utility data from annual Demand-Side Management reports submitted to the New Mexico Public Regulation Commission.

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