



New Mexico Electric Utility Energy Efficiency Programs: A Success Story

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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 and load management 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 2020 energy efficiency standard from 10% to 8% of 2005 retail kWh sales and required utilities to spend at least 5% of their total DSM budget on programs for low-income customers.
- In 2014, the New Mexico Public Regulatory Commission (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 revised rules allow utilities to propose performance incentive mechanisms on an individual basis, and removed the requirement that individual programs meet the cost-effectiveness threshold in favor of requiring portfolio-level cost effectiveness.

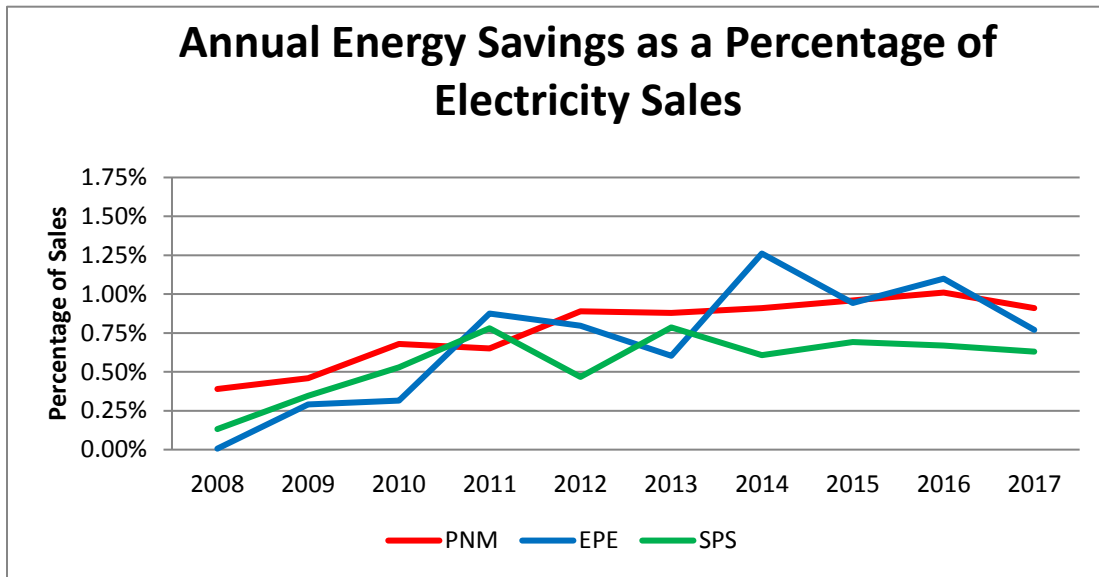
Utility Energy Efficiency Programs

- The state's largest electric utility, Public Service Company of New Mexico (PNM), serves about 520,000 customers. PNM spent \$25.9 million on DSM programs in 2017, and as a result reduced its peak demand by 72.4 MW and saved 74.5 million kWh per year. PNM is on track to meet the energy savings requirements of the EUEA.
- Southwestern Public Service Company (SPS) serves about 120,000 customers and El Paso Electric Company (EPE) serves about 97,000 customers in New Mexico. Both utilities have approved energy efficiency plans that meet the 3% funding requirement. SPS spent \$8.3 million on DSM programs in 2017 and as a result saved about 33 million kWh per year. EPE spent \$4.5 million on DSM programs and as a result saved about 13 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 significantly ramped up their energy efficiency programs over the past decade. Combined they saved 1,055 million kWh in 2017 as a result of DSM programs implemented during 2008-17. The savings are equal to about 7.0% of total electricity use by retail customers of these three utilities. It is also equivalent to the electricity use of 130,000 typical households served by the utilities.

- The estimated net economic benefits from utility efficiency programs operating in New Mexico over the past decade total \$420 million, according to the utilities' own data.
- The electric savings in 2017 also resulted in water savings of around 520 million gallons per year, enough to supply about 3,600 New Mexico households.
- As a result of energy efficiency programs implemented over the past decade, New Mexico's electric utilities cut their CO₂ emissions in 2017 by about 580,000 metric tons, the equivalent of taking around 115,000 passenger vehicles off the road.



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

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | Total |
|---|------|------|------|------|-------|-------|-------|-------|-------|-------|--------------|
| DSM Program Spending (\$M) | 8.8 | 15.6 | 23.5 | 27.3 | 27.7 | 31.2 | 34.0 | 39.0 | 39.7 | 38.7 | 285 |
| Electricity Savings (GWh/year) | 42.2 | 58.7 | 87.2 | 108 | 130.8 | 129.7 | 126.2 | 130.1 | 122.2 | 120.3 | 1,055 |
| Peak Reduction (MW) | 57.7 | 63.9 | 83.7 | 78.4 | 82.4 | 88.2 | 86.7 | 85.9 | 84.0 | 83.4 | NA |
| Net Economic Benefits (\$M) | 35.5 | 44.7 | 46.9 | 65.9 | 66.9 | 27.2 | 34.7 | 33.8 | 33.5 | 30.5 | 420 |
| Net Savings (% of Retail Sales) | 0.28 | 0.40 | 0.58 | 0.70 | 0.83 | 0.82 | 0.80 | 0.83 | 0.81 | 0.80 | NA |
| CO ₂ Emissions Reduction (thousand metric tons/yr) | 23.2 | 32.3 | 48.0 | 59.4 | 71.9 | 71.3 | 69.4 | 71.6 | 67.2 | 66.2 | 580 |

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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