I. **Introduction**

There are opportunities to cost effectively save electricity in virtually every home, business, factory, or public building. In the aggregate, energy efficiency improvements can be considered a resource that utilities can pursue in place of (or in addition to) building new power plants or acquiring power from independent power producers.

Utilities operate energy efficiency and load management programs (also known as demand-side management, or DSM programs) to stimulate greater adoption of cost-effective efficiency measures and to reduce their peak electricity load. National funding for utility and ratepayer-supported DSM programs increased from $0.9 billion in 1997 to $1.1 billion in 2000, mainly due to adoption of “public benefits” charges and funds in a number of states (York and Kushler 2002). By 2003, DSM program funding further increased to around $1.45 billion (ACEEE 2003).

Leading electric utilities in the country spend 2-3% of their revenues on DSM programs and are saving 0.7-1.0% of electricity sales each year as a result of these programs (Kushler, York and Witte 2004). In other words, these programs cut electricity use 3-5% after five years, 7-10% after 10 years, etc. Furthermore, most utilities emphasize peak load reduction in their DSM programs. Consequently, the percentage reduction in peak demand is greater than the percentage reduction in electricity consumption, sometimes by a factor of two or more.

The Southwest region, including the states of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming, is the fastest growing region in terms of population and electricity consumption. However, the Southwest region is lagging other regions in terms of its commitment to promoting more efficient electricity use. This is beginning to change for a variety of technical reasons. First, excess generating capacity no longer exists in the region, as it did in much of the 1980s and 90s. Second, air conditioning use is rising and utility load factors (the ratio of average electric power demand to peak demand) are declining. Third, natural gas has been the preferred fuel for new power plants in recent years, and the price of natural gas has risen. As a consequence of these factors, electricity rates are rising throughout the region.

Because of these factors and other reasons explained below, policy makers and utilities are increasingly viewing DSM and greater energy efficiency as a legitimate utility resource and/or as a way to help customers manage and reduce their rising energy bills. The budget for DSM and energy efficiency programs is increasing in much of the region, as explained in the state-by-state discussions below.
II. Status of Energy Efficiency Programs in the Southwest

According to the Energy Information Administration (EIA), utilities in the Southwest spent about $16 million on energy efficiency programs as of 1999, only about 0.14 percent of their total revenues (EIA 2001). Utility funding of energy efficiency programs has increased since 1999 in a few Southwest states, most notably in Colorado, Nevada, and Utah. But funding for energy efficiency programs has declined in other states, most notably Arizona.

Table 1 estimates the budget for utility-sponsored demand-side management (DSM) programs in each state during 2001-2005. Total funding nearly tripled from about $21 million in 2001 to $57 million as of 2004. The latter value is equivalent to about 0.4 percent of electric utility revenues in the six-state region. This is far below what is justified given the tremendous cost-effective energy savings potential in the southwest (SWEEP 2002). DSM funding is expected to continue to rise to around $80 million (about 0.6% of revenues) in 2005 due mainly to DSM program growth proposed by the Arizona Public Service Company and other organizations in Arizona.

Table 1. Utility Spending on Demand-Side Management Programs in the Southwest, 2001-05

<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>

It is possible to estimate the impacts from the growth in DSM funding in the region during 2001-2005. Using reasonable assumptions about DSM program effectiveness, the $80 million in DSM program spending expected in 2005 should reduce peak demand by about 240 MW and electricity use by about 480 GWh/yr. These savings are from programs implemented in 2005 alone. If funding continues at this level, DSM programs could reduce summer peak electricity

---

1 The budgets shown in Table 1 include both energy efficiency and load management programs.
2 The savings estimates are based on coefficients of 6 kWh/yr of electricity savings per DSM program dollar and 3 MW of peak demand reduction per million programs dollars. A number of effective DSM programs including PacifiCorp’s programs in Utah and Xcel Energy’s programs in Minnesota have achieved or surpassed these values.
Utility Energy Efficiency Policies and Programs in the Southwest

Demand in the region by about 1,870 MW in 2010 and 3,070 MW in 2015. Likewise, the programs could cut electricity consumption approximately 3,700 GWh per year by 2010 and 6,100 GWh per year by 2015. Consumers could save around $2.8 billion net over the lifetime of efficiency measures installed during 2001-2015 due to DSM programs. Furthermore, this level of electricity savings could cut water use by about 3.0 billion gallons per year and cut CO₂ emissions by about 4.9 million tons per year by 2015. To reiterate, these estimates assume the total DSM program budget in the region remains constant at $80 million during 2005-2015. The energy savings as well as economic and environmental benefits would be even greater if DSM budgets continue to grow in the future.

**Arizona**

Utilities in Arizona reported spending $6.4 million on DSM programs in 1999 (EIA 2001b). Utility restructuring policies and rules were developed in Arizona during 1996-2000. During this period, the Arizona Corporation Commission (ACC) instructed utilities to include a Systems Benefit Charge (SBC) in their restructuring plans. The SBC was intended to fund renewable energy, energy efficiency, low-income assistance, nuclear fuel disposal, and power plant decommissioning programs.

In May 2000, the ACC adopted an Environmental Portfolio Standard (EPS) that requires utilities to derive at least 1.1 percent of their electric power from new solar and other renewable energy sources by 2007. Half of this renewable generation must come from solar electric technologies. To support this renewable energy mandate, utilities were allowed and encouraged to transfer SBC funds, with the exception of low-income assistance programs, to the EPS budget. In recent years, the EPS budget of the regulated utilities was $18 million per year, funded through a combination of SBC funds and an EPS surcharge.

The upshot is that while utilities in Arizona are supporting renewable energy sources, most notably solar photovoltaic power development, they were carrying out very modest energy efficiency programs as of 2004. It is estimated that electric utilities in Arizona spent only about $4 million per year (less than 0.1 percent of their retail sales revenues) on energy efficiency programs during 2002-04. Much of this went to promotion and financial assistance for energy-efficient new home construction, often tied to home builders using electric space and water heating.

This situation is expected to change starting in 2005 due to advocacy by SWEEP and Arizona’s consumer advocate (RUCO). Both organizations intervened in a rate case initiated by Arizona Public Service Co. (APS) and advocated much greater funding for energy efficiency programs. In August 2004, nearly all of the parties to the rate case announced a settlement agreement that includes $16 million in annual energy efficiency program funding starting in 2005. The agreement includes a preliminary budget allocation by program area along with an incentive mechanism for APS shareholders based on DSM program performance, capped at 10% of total DSM expenditures. The $16 million budget is a floor on energy efficiency program spending.

---

3 These savings estimates are from DSM programs implemented during 2001-2015; i.e., they exclude any savings from pre-2001 programs.
The budget could rise if additional cost-effective electricity savings opportunities are identified and approved by the Commission. In addition, a DSM program collaborative will be set up to advise APS on program design, implementation, and evaluation if the settlement is approved by the ACC. The ACC is expected to reach a decision on the DSM proposal and other elements of the rate case later this year.

DSM program funding by other electric utilities in Arizona (most notably the Salt River Project and Tucson Electric Power Co.) is also likely to rise in 2005. The ACC has convened a series of DSM workshops to discuss the potential for expanded DSM efforts and DSM policy in the state. Tucson Electric Power has offered to increase its annual DSM program funding from about $1 million to $3.3 million during the course of these workshops, contingent on receiving adequate funding for the EPS. The Salt River Project is also considering expanding its currently limited DSM programs. A report by the ACC staff including DSM policy recommendations is due by December 2004. In addition, Governor Napolitano convened a Renewable Energy and Energy Efficiency Working Group in August 2004 to help the state develop new initiatives for increasing the implementation of these environmentally friendly energy resources.

**Colorado**

Colorado has not approved electric utility restructuring legislation and has no SBC in place. Legislation adopted in 2001 instructs the Public Utilities Commission (PUC) to “give the fullest possible consideration to the cost-effective implementation of new clean energy and energy-efficient technologies in its consideration of generation acquisitions for electric utilities, bearing in mind the beneficial contributions such technologies make to Colorado’s energy security, economic prosperity, environmental protection, and insulation from fuel price increases.”

In July 2000, the PUC accepted a settlement proposed by Xcel Energy (formerly known as Public Service of Colorado) and other parties regarding DSM programs as part of an Integrated Resource Planning proceeding. Xcel is the largest utility in Colorado and is responsible for about 60 percent of the power sold in the state. The Settlement calls for Xcel to spend up to $75 million over five years on energy efficiency and load management programs, with a goal of reducing summer peak load in 2005 by at least 124 MW.

As it implemented this agreement, Xcel’s DSM program budget grew from $3.2 million in 2001 to about $20 million in 2004. The utility is able to recover DSM expenditures through a DSM cost adjustment mechanism that appears on customers’ utility bills. The programs the company is implementing include:

- incentives for consumers who purchase high efficiency air conditioning systems or evaporative coolers,
- air conditioner cycling load control program for households and small businesses,
- incentives for commercial and industrial energy efficiency projects that are selected through a bidding process,

---

4 SB 01-144, effective Aug. 8, 2001.
- design assistance and incentives to increase the energy efficiency of new commercial buildings, and
- retro-commissioning assistance to increase the efficiency of existing commercial buildings.

Xcel reported that it expects to exceed the 124 MW peak demand savings goal spending about $61 million over the five-year period (Xcel Energy 2003). The company also estimates that the benefit-cost ratio for its 2001-2005 DSM programs as a whole is about 2.45\(^5\) (Xcel Energy 2004). However, in spite of the effectiveness of its current DSM programs, Xcel has stated that it will end company-sponsored DSM programs by the end of 2005.

In its 2004 Least-Cost Plan submitted to the Colorado PUC, Xcel Energy did not propose extending any of the company-sponsored DSM programs underway at that time. Instead the company proposed a DSM bidding process that would enable larger scale DSM projects to participate in all-source resource solicitations that the company plans to issue. Xcel also proposed constructing a new 750 MW coal-fired power plant and requesting a waiver from bidding requirements for that plant.

DSM bidding in conjunction with the all-source solicitation process is unlikely to stimulate much (if any) additional DSM for a number of reasons. First, at Xcel’s request, the PUC changed the goal of electric resource planning in Colorado from minimizing consumers’ total electricity bills to minimizing electricity rates. It is more difficult for DSM projects or programs to meet this objective, compared to the objective of helping to reduce total electricity bills. Second, the bidding application is complex and the outcome is uncertain. Third, bids must provide at least 1 MW of peak demand reduction or 8,760 MWh per year of electricity savings. Interveners in the Least-Cost Resource Planning docket including SWEEP are arguing for continuation and expansion of company-sponsored DSM programs.

Some of Colorado’s municipal utilities and rural electric cooperatives are conducting energy efficiency programs. The Fort Collins municipal utility adopted a new energy policy in 2003 that includes strong energy efficiency goals, namely to reduce electricity use per capita 10% and peak demand per capita 15% by 2012 (City of Ft. Collins 2003). After adopting this policy, the utility developed a DSM plan, increased its DSM budget, and launched a number of new programs. Holy Cross Energy, a cooperative based in Glenwood Springs, expanded its DSM budget and programs in 2004. In addition, Colorado Springs Utilities is developing a new energy resource strategy in 2004 that is expected to lead to the expansion of energy efficiency and DSM programs.

**Nevada**

The investor-owned utilities in Nevada phased out DSM programs in the mid-1990s as they prepared for deregulation and restructuring. In July 1997, Nevada adopted utility restructuring legislation. But in 2001, in the midst of the western electricity crisis, the legislature repealed this

\(^5\) This benefit-cost ratio is based on the Total Resource Cost perspective, which accounts for all costs (utility and participant) associated with the implementation of energy efficiency measures along with the economic benefits to the utility.
Utility Energy Efficiency Policies and Programs in the Southwest

bill. Nevada Power Co. and Sierra Pacific Power Co. (which merged in 1999) were back to being vertically integrated, regulated utilities. As such the companies are required to submit Integrated Resource Plans (IRPs) every three years, a policy adopted in Nevada in 1983. DSM programs were restarted in 2001, but with a budget of only about $2 million that year. Most of this funding was for education and promotion activities.

As part of a 2001 IRP proceeding, a collaborative process was established for developing and analyzing a wider range of DSM program options. Based on the work of the collaborative, the utilities proposed expanding their DSM programs starting in 2003. After further discussions, an agreement concerning the budget and focus of new programs was reached by all parties to the IRP proceeding. The agreement called for $11.2 million per year in utility-funded energy efficiency and load management programs with an emphasis on peak load reduction but also significant energy savings. The Nevada PUC approved this proposal, and the new programs were launched in March 2003. These programs included:

- promotion of ENERGY STAR® appliances and lighting products,
- incentives for high efficiency air conditioning systems, air conditioner tune-ups, and duct sealing,
- a recycling program for older refrigerators,
- incentives for all types of efficiency measures implemented by businesses,
- consumer education efforts,
- technical and financial assistance to enhance low-income home weatherization in the state, and
- time-of-use rates.

The first year of program implementation was relatively successful. The utilities report saving 35 GWh/yr of electricity and reducing peak demand by 16 MW, exceeding initial projections (Balzar, Geller and Wellinghoff 2004). For 2005, Sierra Pacific Power proposed increasing its DSM budget to $3.2 million per year, a 60% increase compared to the first year. Both utilities are proposing to implement commercial new construction programs, and Nevada Power is starting to assist Clark County (Las Vegas) schools with energy efficiency projects. Also, the utilities are modifying some of the programs launched in 2003 to enhance their performance.

The Nevada PUC approved a new policy concerning DSM cost recovery in mid-2004. The utilities are now allowed to earn their approved rate of return plus 5% (e.g., a 15% return if the approved rate is 10%) on both trial and full-scale DSM programs. This gives the utilities greater financial incentive to expand their DSM programs and introduce new programs. However, there still is not an unambiguous policy on which test to use to evaluate the economic feasibility of DSM programs in Nevada, although the Total Resource Cost test is the main test being used.

In 2004, the Nevada State Office of Energy and a Renewable Energy and Energy Conservation Task Force that was set up by the legislature jointly decided to prepare a state energy efficiency strategy. They asked the Southwest Energy Efficiency Project (SWEEP) to lead the development of this strategy, with significant input from entities in the state. The strategy is expected to be completed by the end of 2004. It could lead to new energy efficiency policy initiatives by
Governor Guinn and/or the legislature, which in turn could result in the expansion of utility DSM programs.

**New Mexico**

Utilities in New Mexico reported spending about $1.5 million on energy efficiency programs in 1998 and 1999 (EIA 2001). In April 1999, New Mexico adopted utility restructuring legislation. This law created a small SBC of 0.3 mills/kWh to fund energy efficiency, low-income assistance, renewable energy, and consumer education programs. The SBC, which totals about $6 million statewide, was scheduled to begin in 2002. But the restructuring legislation was repealed by the legislature in the wake of the western electricity crisis.

Utilities in New Mexico are operating relatively limited energy efficiency programs. Public Service Co. of New Mexico, the largest utility in the state, only provides information on energy savings options through bill inserts and the internet. Xcel Energy, which bought Southwestern Public Service Co. (the second largest utility in the state), provides rebates for high efficiency air conditioners, low-interest loans for home retrofits, and financial incentives for a wide range of efficiency measures implemented by its commercial and industrial customers. Xcel also sells compact fluorescent lamps at a discount.

In September 2004, Governor Richardson convened a Utility Energy Efficiency Task Force in New Mexico. The main objective of the Task Force is to provide the Governor with recommendations concerning utility energy efficiency policy and programs, in order to greatly increase the efficiency of electricity and natural gas use in the state. The Task Force could influence state policy in ways that lead to expanded efficiency and DSM programs starting in 2005 or 2006.

**Utah**

Utah has not approved electric utility restructuring legislation and has no systems benefit charge. The Utah Public Service Commission adopted IRP requirements and rules in 1992. These rules require biennial resource plans and state that the Total Resource Cost test be used to determine if DSM programs are economically justified. In May, 2000, the state utility commission established an SBC task force that was charged with evaluating the cost-effective energy efficiency potential in Utah, the success of previous utility efficiency programs, and the desirability of an SBC mechanism. The task force hired a consultant to carry out an efficiency potential study. The study concluded that there is substantial cost-effective energy savings as well as cogeneration potential in the state (Nichols and von Hippel 2001).

PacifiCorp, the main electric utility operating in the state through its Utah Power and Light subsidiary, spent only about $2 million per year on energy efficiency programs during the late 1990s. But due in large part to the efficiency potential study and consideration of DSM programs in a rate case filed by the utility in 2001, PacifiCorp launched an expanded set of energy efficiency programs in mid-2001 including:

- a residential compact fluorescent lamp distribution program;
• a prescriptive rebate program for a wide range of energy-efficient lighting, HVAC, and other efficiency measures implemented by commercial and industrial customers; and
• incentive payments per unit of energy and peak demand saved for customized efficiency projects implemented by larger commercial and industrial customers.

In 2003, PacifiCorp launched three new programs—incentives on high efficiency residential air conditioners and evaporative coolers, an air conditioner cycling load control program, and second refrigerator pick-up and recycling program. These programs resulted from a collaborative DSM program development and analysis effort that PacifiCorp, SWEEP, PUC staff, and other organizations undertook in 2002.

The total budget for the utility’s DSM programs grew from about $5 million in 2001 to about $18 million in 2004. The latter is equal to approximately 1.8% of its retail electricity sales revenues. In addition, PacifiCorp is continuing to develop new DSM programs including a residential new construction program and commercial/industrial retro-commissioning and lighting load control programs. With the initiation of these new programs, the utility is expected to spend around $22 million (~2.2% of revenues) on its DSM programs in 2005 and even more in 2006.

PacifiCorp’s DSM programs are having a significant impact. Programs implemented in 2004 are projected to save about 110 GWh/yr of electricity and cut peak demand by about 70 MW (Bumgarner 2004). The programs are very cost effective with an average levelized cost of saved energy of about $0.02/kWh according to the utility’s 2003 Integrated Resource Plan (PacifiCorp 2003).

PacifiCorp is now receiving DSM cost recovery through a tariff rider that allows the utility to charge customers for the estimated cost of PUC-approved DSM programs the year in which they are run. This policy was developed through a negotiation process among interested parties and was approved by the Utah PUC in 2003. The utility receives cost recovery only; there is no profit margin or financial incentive mechanism for utility shareholders.

In conjunction with developing the tariff rider for cost recovery, an industrial self-direction option was developed by interested parties and subsequently approved by the PUC. This policy allows larger industries to avoid paying the majority (but not all) of the DSM tariff rider if a company is investing in energy efficiency projects on its own without technical or financial support from PacifiCorp. The company must demonstrate it is doing so to PacifiCorp or its contractor. This in effect is an alternative DSM option for large industries. It is leading to some incremental investment in energy efficiency measures, but it is too early to judge how well this policy is working.

Wyoming

Wyoming has not approved electric utility restructuring legislation and has no systems benefit charge or general policy on utility energy efficiency programs. PacificCorp is the largest investor-owned utility in Wyoming and is responsible for 70 percent of retail electricity sales. Although PacifiCorp has well-funded DSM programs in Utah, it is conducting very limited
energy efficiency programs in Wyoming. These programs include free energy audits for businesses, low-interest loans for retrofit projects, and a contribution to the state’s low-income weatherization program. The utility’s total DSM budget in Wyoming is only about $150,000 per year (Bumgarner 2004). However, PacifiCorp proposed expanding DSM programs in Wyoming in its 2003 Integrated Resource Plan (PacifiCorp 2003). This has not happened, however, because the state still has excess generating capacity and the state regulatory agency has not supported expansion of these programs (Bumgarner 2004).

III. Policy Summary

Table 2 summarizes the key policies affecting DSM activity in each of the states. The states that have adopted most of these policies (i.e., Nevada and Utah) have higher and growing levels of DSM program spending. Conversely, the states that have not adopted these policies have minimal DSM program spending. DSM-related policies will change significantly, and DSM programs will greatly expand, if the proposed DSM settlement for Arizona Public Service Company is approved by the Arizona Corporation Commission.

Table 2. Key Utility DSM Program Policies by State

<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>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Use of Total Resource Cost or Societal test</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>as sole/primary cost effectiveness test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public benefits charge supporting energy</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>efficiency programs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSM cost recovery mechanism</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Financial incentive for utilities</td>
<td>No (1)</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Collaboration in DSM program design/analysis</td>
<td>No (1)</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Industrial self-direction option</td>
<td>No (1)</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

(1) The DSM policy proposed in August 2004 by Arizona Public Service Company and other parties includes a cost recovery mechanism, a performance-based financial incentive for the utility, a collaborative working group to assist with DSM program design and review, and a self-direction option for large industries.

The details of the policies matter of course. Colorado has integrated resource planning requirements (now called least-cost resource planning), but the PUC has adopted minimization of electricity rates as the goal of resource planning. Consequently, resource planning may hinder
rather than help expand energy efficiency efforts in the state. Also, it is apparent from the table that adoption of “public benefits” charges is not common in the region. However, this has not been a major obstacle to energy efficiency or DSM program activity.

IV. The Human Factor

Public policy (good, bad, or absent) is influencing the scale and nature of utility energy efficiency efforts in the region. But certain individuals are also playing a critical role. There have been “champions” for expanded energy efficiency efforts in Arizona, Nevada, and Utah, either in the state energy office or in the consumer advocate’s office. Also, there have been very supportive individuals in key positions within PacifiCorp and the Nevada utilities. These individuals are committed to developing and implementing effective DSM programs, as well as a supportive policy framework.

On the other hand, certain individuals in Colorado, in particular members of the state PUC and a key policy maker within Xcel Energy, have been hostile to utility energy efficiency programs. These individuals have hindered the development of supportive policies and effective DSM programs in the state.

Public interest groups, and individuals within them, are also influencing utility energy efficiency efforts in the Southwest. In recent years, SWEEP has been the principal public interest organization advocating the expansion of utility energy efficiency programs and assisting with program design. Prior to the founding of SWEEP in September 2001, Western Resource Advocates (previously known as the Land and Water Fund of the Rockies) served as the primary advocacy group for DSM efforts. Both organizations have had a significant impact on energy efficiency policies and programs in the region.

V. Conclusion

Utility DSM and energy efficiency programs are on the rise in the Southwest. The total budget for these programs increased from about $21 million in 2001 to $57 million in 2004, a compound growth rate of nearly 40% per year. DSM program funding is expected to increase to around $80 million in 2005. In spite of this rapid growth, DSM program funding as of 2005 will equal only about 0.6% of total electric utility revenues for the region as a whole. For comparison, the leading utilities (including PacifiCorp in Utah) are devoting 2-3% of their revenues to DSM programs.

The growth of DSM programs is underpinned by technical factors including the disappearance of excess generating capacity, declining utility load factors, and rising natural gas prices. But certain policies are spurring the development and implementation of DSM and energy efficiency programs as well. These policies include integrated resource planning requirements, use of the Total Resource Cost or Societal Cost test to determine the economic feasibility of DSM programs, and convenient DSM cost recovery mechanisms. Utility shareholders have a financial incentive for implementing DSM programs in one state (Nevada) and an incentive mechanism is under consideration in a second state (Arizona).
While public policies are important, so is the existence of “champions” in state government, the utilities, and in public interest groups. These individuals are the major force behind the adoption of favorable public policies as well as expansion of DSM program budgets. In addition, these individuals have established DSM program design and analysis collaboratives that are contributing to program development and enhancement. Last but not least, committed utility staff and contractors are crucial for the implementation of effective DSM programs.

DSM has become a significant resource in the region. The $80 million expected to be spent on these programs in 2005 alone should reduce peak demand by about 240 MW and cut electricity use by about 480 GWh/yr. If the regional DSM budget remains constant at $80 million per year, DSM programs implemented during 2001-2015 could reduce peak demand in 2015 by over 3,000 MW and electricity consumption that year by over 6,000 GWh/yr.

This is a good start, but much more can and should be done. Additional policy reform is needed to support the continued growth of utility DSM programs in the region, especially in Colorado, New Mexico, and Wyoming. Furthermore, program funding and scope should be expanded in all states in order to derive the maximum economic and environmental benefit from this attractive clean energy resource.
References


