

# Utility Energy Efficiency Programs in the Southwest: 2012 Update

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## ABSTRACT

Electric utilities in the Southwest have greatly expanded their energy efficiency programs in recent years. Most southwest utilities are now achieving energy savings of 1 percent or more per year, and a few are striving for 1.5 percent or greater savings (savings as a fraction of retail electricity sales). Arizona has adopted some of the strongest energy savings standards in the country, and Colorado has adopted ambitious energy savings goals for its major electric utility. This paper will describe the trends in utility energy efficiency program spending and savings as well as recent policy developments in each state. The paper will also address the business case for energy efficiency by major utilities in each state. This review will show that there are varying motivations for supporting energy efficiency programs among utilities in the region, and that there is no single best policy (or policies) for making energy efficiency program investments attractive to utilities. The paper will also discuss the challenges to utility energy efficiency program expansion occurring in a few of the states.

## Introduction

Electric utilities in the Southwest (Arizona, Colorado, Nevada, New Mexico, Utah and Wyoming) greatly expanded their energy efficiency programs in recent years. As shown in Table 1, total funding for these programs was only about \$29 million in 2002, SWEET's first full year of activity. Funding steadily increased to \$284 million in 2010 and approximately \$330 million in 2011. For 2012, electric utilities in the region are expected to spend about \$380 million on

**Table 1. Electric Utility DSM Spending in the Southwest, 2002-11**

State	DSM program budget (million \$ per year)					
	2002	2004	2006	2008	2010	2011
AZ	4	4	19	45	94	111
CO	11	21	18	28	66	85
NV	3	11	30	55	46	50
NM	1	1	1	10	24	28
UT	9	16	27	36	51	51
WY	~0	~0	~0	~0	3	4
<b>Region</b>	<b>29</b>	<b>54</b>	<b>95</b>	<b>174</b>	<b>284</b>	<b>329</b>

Source: Southwest Energy Efficiency Project

energy efficiency programs. It should be noted that these funding values include some load management and demand response programs for utilities that implement load management and/or demand response programs jointly with energy efficiency programs. Approximately 80 percent of the region totals shown in Table 1 goes to programs that have a primary goal of electricity savings; i.e., true energy efficiency programs.

The growth in DSM activity in the region has been heavily influenced by policies enacted in recent years. Table 2 summarizes the key policies affecting DSM efforts in each state. In short, there are many more “yes” entries in the chart today compared to five or six years ago. All states have adopted a favorable cost effectiveness test for determining if energy efficiency programs are cost effective as well as convenient and timely cost recovery mechanisms. Integrated resource planning requirements are in place in all states except Wyoming, and four states have adopted some form of energy savings goals or standards for investor-owned utilities. In addition, three states have adopted performance-based incentives to provide a positive financial incentive and/or mitigate any adverse financial impact that operating DSM programs has on the company’s bottom line. However, so far no state in the region has adopted decoupling of electricity sales and revenues for electric utilities.

**Table 2. Key Policies Influencing Electric Utility DSM Programs in the Southwest**

<b>Policy</b>	<b>AZ</b>	<b>CO</b>	<b>NM</b>	<b>NV</b>	<b>UT</b>	<b>WY</b>
Energy efficiency goals or standards	Yes	Yes	Yes	Yes (1)	No	No
Integrated Resource Planning	Yes	Yes	Yes	Yes	Yes	No
Use of Total Resource Cost, Societal, or Utility Cost test as sole/primary cost effectiveness test	Yes	Yes	Yes	Yes	Yes	Yes
Public benefits funds supporting energy efficiency programs	No	No	No	No	No	No
Convenient DSM cost recovery mechanism	Yes	Yes	Yes	Yes	Yes	Yes
Financial incentive for utility shareholders	Yes	Yes	Yes	No	No	No
Decoupling or lost revenue recovery mechanism	No (2)	No	No	Yes	No	No
Collaboration in DSM program design/analysis	Yes	Yes	Yes	Yes	Yes	No
Industrial self-direction option	Partial	Yes	Yes	No	Yes	Yes

Notes: (1) Energy savings are allowed to count towards clean energy standards.

(2) Pending approval for Arizona Public Service Company.

## State Summaries

### Arizona

Electric utility energy efficiency program funding in Arizona doubled from about \$45 million in 2008 to around \$94 million in 2010. Funding further increased to around \$111 million in 2011 and is expected to reach about \$130 million in 2012. Also, all three major Arizona electric utilities (APS, SRP and TEP) exceeded the benchmark of reducing electricity use by 1 percent annually for the first time in 2010. These savings values are based on net savings taking into account free ridership and spillover effects.

In 2010, the Arizona Corporation Commission (ACC) approved three landmark policies: 1) an electric energy efficiency standard (EEES); 2) a decoupling policy statement, and 3) new integrated resource planning rules. Together these policies established strong regulatory support for the growth of energy efficiency programs. The first policy requires regulated electric utilities to achieve 22 percent energy savings by 2020, with 2 percent of the total possible through a credit for demand response efforts (ACC 2010a). The second policy enables investor-owned electric utilities to file specific decoupling proposals in general rate cases in order to align company financial interests with energy efficiency objectives (ACC 2010b). And the third policy allows for meaningful opportunities for energy efficiency to compete on a level playing field with conventional energy supply resources.

Following the adoption of these policies, both APS and TEP expanded their energy efficiency programs and surpassed the savings requirement of 1.25 percent first year savings from programs implemented in 2011 (APS 2012a; TEP 2012). Furthermore, the two regulated utilities proposed further program enhancements in 2012 aimed at achieving 1.75 percent first year savings. APS received approval and is attempting to step up the energy savings with only a modest increase in program budgets in 2012. TEP, however, had not received approval of its 2012 program proposals as of May 2012.

The ACC has approved a performance-based shareholder incentive mechanism for APS. The incentive amount is tied to the level of energy savings achieved relative to the goal each year and is expressed as a percentage of the net economic benefits, ranging from 6 percent of net benefits once APS achieves 85 percent of its annual savings goal to 10 percent of net benefits when the utility exceeds 125 percent of the savings goal. The incentive is also capped as a percentage of program expenditures. In 2010, APS spent \$43.7 million on its energy efficiency programs and achieved 105 percent of its annual energy savings goal, earning an incentive of \$6.1 million (APS 2011). The incentive represented about 4 percent of the estimated net economic benefits for customers from efficiency programs implemented that year. APS executives are concerned that the incentive cap is too restrictive and leads to an insufficient incentive relative to the level of energy savings and net benefits achieved by the programs. The ACC, on the other hand, is concerned that the structure of the incentive cap may encourage increased spending.

In June 2011, APS filed a rate case that included a full revenue-per-customer decoupling mechanism. However, the Staff of the ACC, the Arizona consumer advocate, and several parties opposed full decoupling and recommended adoption of a lost revenue recovery mechanism instead. APS agreed to this proposal as part of a broader partial party settlement agreement in the rate case, while SWEEP and NRDC continued to support full revenue-per-customer decoupling. The matter will be decided by the ACC in the summer of 2012.

In 2011-12, APS developed a new IRP that accounted for the EEES and demonstrated that the energy savings will result in the deferral of two large baseload power plants from the early 2020s to the early 2030s (APS 2012b). SWEEP and Lawrence Berkeley National Laboratory independently have estimated that the deferral of these two power plants will provide about \$7 billion in utility bill savings for APS customers over the next 20 years (LBNL 2010).

The Salt River Project (SRP) is a large unregulated utility operating in Arizona. In 2006, SRP's Board of Directors adopted a Sustainable Portfolio Standard which guides the utility's pursuit of energy efficiency and renewable energy resources. In May 2011, the SRP Board unanimously approved several revisions to the Sustainable Portfolio Standard (SRP 2011) including:

- An increased and accelerated goal for the company to achieve 20 percent of its expected retail energy requirements through the implementation of energy efficiency and renewable energy resources by FY 2020;
- Energy savings targets of 1.5 percent per year in FY 2012-2014, 1.75 percent per year in FY 2015-2017, and 2.0 percent per year in FY 2018-2020. The previous Sustainable Portfolio Standard had no annual energy efficiency program savings targets.
- A commitment to support building energy codes and standards, for which the company can count up to 50 percent of the energy savings as a credit towards achievement of the Sustainable Portfolio Standard.
- Approval of a FY 2012 Energy Efficiency budget of \$49.1 million, a significant increase over the previous year's \$39.3 million budget.

The energy efficiency programs providing the most energy savings in Arizona include residential lighting (i.e., CFL upstream incentives for retailers), prescriptive and custom incentives for businesses, and a voluntary pre-pay meter plus in-home display program implemented by SRP. Studies conducted by SRP indicate that customers who participate in the program reduce their electricity use by around 11 percent on average (EPRI 2010). In addition, Arizona utilities are implementing relatively successful Home Performance with ENERGY STAR retrofit programs involving comprehensive home assessments, audits and retrofits by BPI-certified contractors, rebates for major retrofit work, and an unsecured loan offer.

## **Colorado**

Electric utility energy efficiency program funding in Colorado more than doubled from about \$28 million in 2008 to around \$66 million in 2010. Funding then rose to around \$85 million in 2011 and is expected to reach about \$100 million in 2012. Xcel Energy, the main investor-owned utility in the state, reached the benchmark of reducing electricity use by 1 percent per year, based on net energy savings, for the first time in 2011.

Legislation enacted in 2007 directed the Colorado PUC to establish energy savings goals and a performance-based incentive mechanism for regulated electric utilities. It also established the Total Resource Cost test as the basis for determining if energy efficiency programs are cost effective and directed utilities and the PUC to include valuation of avoided emissions and other non-energy benefits in TRC calculations. In 2008, the PUC established energy savings goals through 2020 for Xcel Energy along with a shareholder incentive mechanism (Colorado PUC 2008). The performance-based incentive mechanism allows the utility to receive a small fraction

of the net economic benefits resulting from programs implemented each year, with the fraction dependent on the level of energy savings achieved relative to the savings goal each year.

In 2011, the Colorado PUC adopted more ambitious energy savings goals and a revised shareholder incentive mechanism for Xcel Energy (Colorado PUC 2011). The PUC's new goals call for energy savings reaching 1.2 percent of sales in 2013, 1.4 percent of sales by 2016, and 1.7 percent of sales by 2020. The new goals are 30 percent higher than the goals adopted by the PUC in 2008. The new shareholder incentive mechanism, structured the same manner as the previous incentive mechanism, is meant to both remove any disincentive to energy efficiency investment and provide Xcel a profit assuming the energy savings goals are met or exceeded.

In 2010, Xcel Energy spent \$54.7 million on DSM programs and achieved about 235 GWh per year of annual energy savings, 115 percent of the goal set by the PUC (Xcel Energy 2011). Based on the TRC test used in Colorado, the portfolio of DSM programs had a benefit-cost ratio of 3.3. The utility received a bonus of \$17.5 million in addition to program cost recovery, equivalent to about 8 percent of the estimated total net economic benefits resulting from programs implemented in 2010. Xcel reports that its 2011 energy efficiency programs saved about 290 GWh per year (Xcel Energy 2012). Programs will continue to expand in 2012 and beyond as the company strives to meet energy savings goals that increase each year.

Other utilities in Colorado implementing comprehensive energy efficiency programs for customers include Black Hills Energy (a smaller IOU) and the municipal utilities serving Fort Collins and Colorado Springs. The PUC adopted the same energy savings goals in percentage terms for Black Hills as it did for Xcel Energy in 2008. Black Hills estimates it saved about 0.9 percent of sales per year from programs implemented in 2011. Fort Collins Utilities estimated its 2010 programs resulted in gross energy savings of 20.5 GWh/yr, equivalent to about 1.4 percent of retail electricity sales, with net savings equivalent to about 1.2 percent of sales (FCU 2011). Municipal utilities and rural electric cooperatives are not subject to PUC regulation in Colorado; nor do they operate under any legislative mandates with respect to energy efficiency efforts.

## **Nevada**

In 2005, legislation was enacted in Nevada that added energy savings from utility DSM programs to the state's Renewable Portfolio Standard. Utilities are allowed to comply with the Standard in part with verified energy savings from DSM programs, up to a limit of 25 percent of the requirement in any particular year. With the addition of energy savings, the Standard was renamed the Clean Energy Portfolio Standard. The total Standard was equal to 12 percent of electricity supply in 2009-2010, 15 percent in 2011-2012, and increases to 20 percent of supply in 2015 and then to 25 percent in 2025.

In response to this policy, Nevada Power Company (NPC) and Sierra Pacific Power Company (SPPC), now jointly owned and operated by NV Energy, greatly expanded their energy efficiency programs starting in 2006 (see Table 1). In 2009, the two utilities achieved net energy savings of about 440 GWh per year, equivalent to about 1.5 percent of retail electricity sales that year. This placed the utilities among the leading utilities in the nation with respect to energy savings achievement. The programs providing the most energy savings were residential lighting and commercial building retrofit incentives.

Due to delays in approval of NPC's 2010-2012 DSM plan and other factors including a slumping state economy, DSM program expenditures declined in 2010 and energy savings achievement fell to about 305 GWh per year or about 1.1 percent of retail sales. Further

reductions in energy efficiency program savings occurred in 2011 as Nevada was stuck in a deep economic recession, load growth turned negative, and the Public Utilities Commission of Nevada (PUCN) increasingly questioned the desirability of robust utility energy efficiency programs.

During 2004-2010, DSM program expenditures in Nevada were rate based and utilities were allowed to earn their approved rate of return plus 5 percent on the equity portion of DSM program expenditures. This was considered an adequate financial incentive by the utilities at least when energy savings were relatively modest. However, as savings increased the utilities became increasingly concerned about lost revenues that occur between rate cases. In 2009, the utilities advocated and the legislature approved expensing and lost revenue recovery policies, replacing the previous rate base and bonus rate of return policies.

The first docket to determine the amount of lost revenue that the utilities were entitled to recover was held in 2010-11 and was highly contentious. NV Energy proposed lost revenue recovery from energy savings that were ongoing at the time of the rule change but were due to DSM programs implemented prior to it as well as lost revenues based on gross rather than net energy savings. Commission staff and the consumer advocate strongly objected to these proposals, leading the PUCN to allow the utilities to recover only a portion of the lost revenue that they had requested (PUCN 2011). The utilities started collecting lost revenues in July 2011. In addition, the PUCN directed the utilities to make some programmatic cuts and modify M&V procedures as part of the lost revenue recovery docket.

Due to the factors mentioned above, the utilities along with Commission staff and the state's consumer advocate proposed further cuts in energy efficiency programs as part of new docket that included review of the 2012 DSM budgets. Energy efficiency advocates pushed back and challenged the proposed cuts in programs that continue to be cost-effective in spite of lower avoided costs. In March 2012, the PUCN approved significant funding cuts for 2012 relative to previously approved levels and eliminated the residential lighting and low-income weatherization programs (PUCN 2012). The lighting program was dropped in spite of its apparent cost effectiveness even with the lower avoided costs projected by the utilities, due in part because Nevada has enacted lamp efficiency standards that are more stringent than the federal EISA standards.

The prevailing attitude at the PUCN at this time appears to be to ratchet back DSM programs and thereby reduce the short-term rate impacts, even if it means sacrificing longer term economic benefits. The fact that the utilities are allowed to collect lost revenue in addition to recover program costs has contributed to this negative outlook. Due to the controversy over lost revenue recovery, there appears to be some interest at the PUCN in replacing this policy with decoupling and/or a performance-based shareholder incentive mechanism.

## **New Mexico**

The Efficient Use of Energy Act, enacted in 2005, directs utilities in New Mexico to implement cost-effective DSM programs, indicates use of the Total Resource Cost test for evaluating cost effectiveness, establishes a convenient cost recovery mechanism, and directs the Public Regulation Commission (PRC) to establish rules for integrated resource planning. In 2008, the Act was amended to add energy savings requirements as well as a directive to the PRC to remove disincentives and allow utilities an opportunity to earn a profit on investment in cost-effective energy efficiency and load management program (EUEA 2008). Investor-owned electric utilities are required to achieve 5 percent electricity saving by 2014 and 10 percent

savings by 2020, from programs implemented starting in 2007. The 2008 EUEA amendments also directed utilities to acquire as much cost-effective energy efficiency and load management resources as possible.

As a result of these policies, electric utility DSM program funding in New Mexico more than doubled from about \$10 million in 2008 to around \$24 million in 2010. Funding then rose to \$28 million in 2011 and is expected to reach about \$35 million in 2012. Two smaller utilities, Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy, and El Paso Electric Company each saved about 0.9 percent of retail sales from programs implemented in 2011 and are expected to exceed 1 percent savings in 2012, based on net energy savings. However, Public Service Company of New Mexico (PNM), the main investor-owned utility in the state, only saved about 0.6 percent of retail sales from programs implemented in 2011 (PNM 2012).

Regarding disincentive removal and providing utilities the opportunity to profit from energy efficiency investments, the PRC adopted a relatively simple interim “adder” approach in 2010 following lengthy stakeholder discussions that resulted in a proposal along these lines. The interim adder provides utilities a fixed amount per kWh and peak kW saved each year, in addition to program cost recovery. However, the Attorney General and industrial consumers opposed this policy and challenged it in Court. In 2011, the State Supreme Court ruled that any adder must be cost-based rather than based on arbitrary values. The PRC responded that the interim adders adopted for PNM and other utilities do comply with the Supreme Court ruling, and the PRC approved specific adders based on a showing that such adders were equal to or less than lost revenues due to DSM programs for all three utilities.

In spite of controversy over the disincentive removal and shareholder incentive mechanism, funding for energy efficiency programs has continued to grow in New Mexico as has the energy savings resulting from the programs. PNM will file a new DSM plan in the latter part of 2012 that will be reviewed by the PRC. As part of this docket, energy efficiency advocates will try to bring PNM’s level of energy savings up to the levels being pursued by other utilities in the state; i.e., in excess of 1 percent savings per year.

## **Utah**

The Utah Public Service Commission (PSC) first adopted Integrated Resource Plan (IRP) requirements and rules for electric utilities in the early 1990s. These rules require biennial resource plans, direct the utilities to include cost-effective demand-side resources in the plans, and state that the Total Resource Cost test be used as the primary test for determining if DSM programs are cost effective. The rules were changed in 2009 to indicate that the Utility Cost test be used instead of the TRC as the primary test for determining DSM program cost effectiveness. Utility DSM programs are individually approved by the PSC and may be continued indefinitely once they are approved, as long as they continue to be cost effective. The PSC has generally supported implementation of all cost-effective DSM programs.

PacifiCorp, the only investor-owned electric utility operating in Utah through its Rocky Mountain Power (RMP) subsidiary, has significantly increased its energy efficiency and load management programs over the past eight years. Funding rose from \$27 million in 2006 to \$49 million in 2010 -- approximately 3.4 percent of retail sales revenue. The utility achieved net energy savings of 202 GWh per year from programs implemented in 2010, equal to about 0.9 percent of retail electricity sales (RMP 2011a). DSM program spending declined to about \$45 million in 2011 but savings increased to 244 GWh per year, about 1.1 percent of electricity sales

(RMP 2012). Programs delivering the most energy savings include residential lighting incentives, custom incentives and a self-direction option for industries, and prescriptive incentives for commercial customers. RMP also implements relatively successful residential retrofit and ENERGY STAR new homes programs (RMP 2012).

The Utah legislature approved a non-binding joint resolution in 2009 that supports the goal of saving at least 1 percent of retail electricity sales through DSM programs each year (Utah Legislature 2009). The non-binding resolution also encourages adoption of decoupling as well as performance-based incentives for utility shareholders. The PSC approved decoupling for the state's investor-owned gas utility but not for PacifiCorp so far. In addition, PacifiCorp has not requested nor has the PSC approved any form of shareholder incentive mechanism. The utility does obtain program cost recovery on a contemporaneous basis through a tariff rider mechanism.

PacifiCorp ramped up DSM programs in the past decade due to IRP requirements, adoption of an assured and convenient cost recovery mechanism, and the fact that the programs helped the utility avoid capitol-intensive investment in new power plants. Utah is a relatively high growth state and PacifiCorp is in a resource-deficit position. The Company's 2011 IRP included a greater level of energy efficiency resources than its previous IRP. By 2020, energy efficiency and load management programs are projected to provide about 13 percent of system capacity and 11 percent of energy within the company's total resource mix. Energy efficiency is expected to be the largest new resource added during 2012-2030 (PacifiCorp 2011).

Due to PacifiCorp's capital structure, the company has had a financial interest in reducing or deferring costly capital investment in order to limit new debt. This motivated the company to expand DSM programs during the past decade even though it only receives program cost recovery. However, PacifiCorp is increasingly concerned about the short-term impact of its energy efficiency programs on revenues and has asked the PSC to ensure the company is not penalized financially when it implements cost-effective DSM programs for its customers. The PSC rejected a partial decoupling mechanism that was proposed in a PacifiCorp rate case in 2010, but was strongly opposed by the state's consumer advocate. There were no formal discussions of disincentive removal or shareholder incentives for PacifiCorp as of May 2012.

## Wyoming

Wyoming has not enacted any legislation related to utility DSM programs. PacificCorp (RMP) is the largest investor-owned utility in Wyoming and is responsible for about 55 percent of retail electricity sales in the state. As part of a settlement agreement in the sale of PacifiCorp to MidAmerican Energy Holdings, PacifiCorp agreed to conduct a DSM market potential study and file an application "to implement prudent and cost-effective DSM programs in Wyoming that can be shown to be in the public interest and to propose in the application an appropriate cost recovery mechanism."

In 2008, PacifiCorp proposed and received approval to implement six DSM programs with an estimated total budget of \$34 million during 2009-2013 (1.7 percent of 2008 revenues on average). The programs are modeled on the utility's successful DSM programs in Utah and include incentives for a wide range of residential efficiency measures, refrigerator recycling, incentives for all types of efficiency measures adopted by businesses, and an industrial self-direction option.

Due to a number of factors including the time required to set up new DSM programs, lack of customer awareness initially and the economic recession, programs ramped up slower



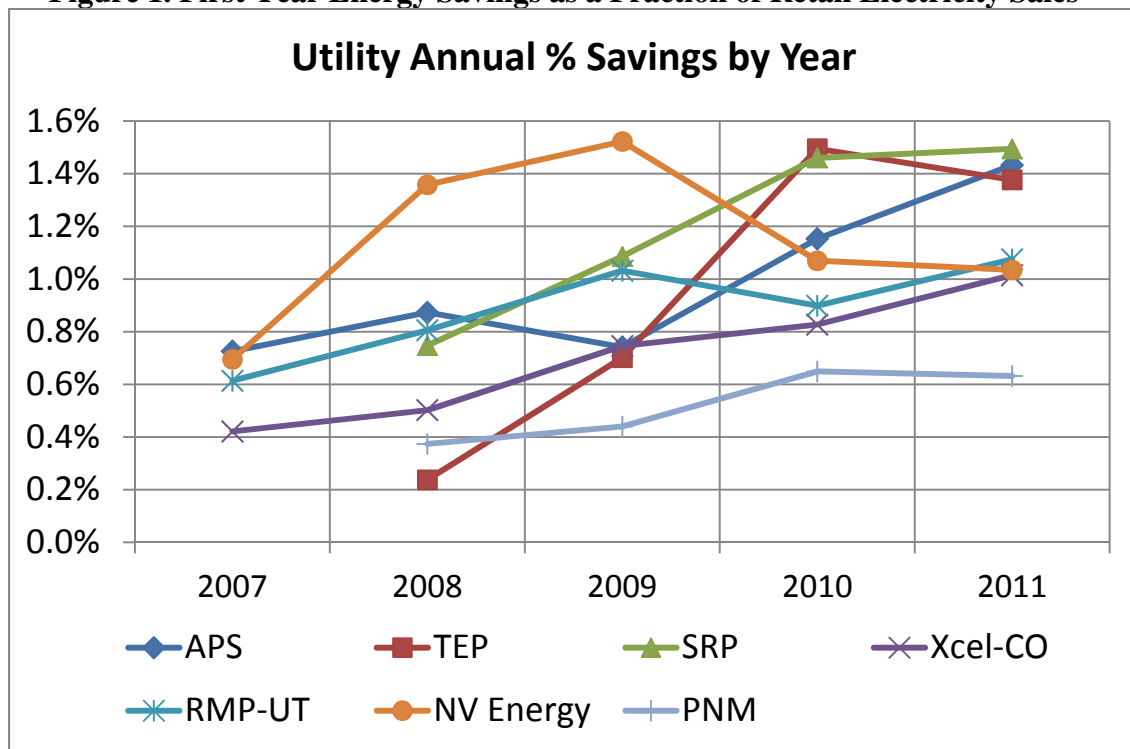
than expected. RMP reported achieving about 22 GWh per year of net energy savings in 2010, representing just 0.2 of retail sales that year (RMP 2011b). In spite of relatively low energy savings, the portfolio of programs implemented in 2010 had benefit-cost ratios of 3.6 under the Utility Cost test, 2.2 under the TRC test, and 0.98 under the RIM test. In addition, the industrial sector provided about 43 percent of total energy savings in 2010, more than was provided by either the residential or commercial sectors.

In 2010, RMP proposed a number of revisions to its initial DSM plan including program enhancements, increased rebate levels, and expanded marketing and customer education efforts. The utility also revised its budget and energy savings projections for 2010-2013, and proposed suspending the DSM surcharge temporarily due to a significant surplus in the DSM balancing account. The Wyoming PSC approved these changes in mid-2011, and customer participation and energy savings increased significantly in 2011. As is the case in Utah, RMP obtains cost recovery for approved programs in Wyoming through a tariff rider but has no decoupling or shareholder incentive mechanism.

## Analysis and Discussion

There has been significant growth in the energy savings resulting from electric utility energy efficiency programs implemented in the Southwest in recent years. Figure 1 shows the energy savings trends by major utility, using the unit first year energy savings as a fraction of retail electricity sales from programs implemented each year. As of 2011, the three Arizona utilities were achieving 1.4-1.5 percent savings, the main utilities in Colorado, Nevada and Utah were achieving 1.0-1.1 percent savings, and PNM was lagging in achieving only about 0.6 percent savings.

**Figure 1. First Year Energy Savings as a Fraction of Retail Electricity Sales**



Another important metric is the energy savings achieved per unit of utility program spending. Table 3 shows these values by utility for 2011, excluding any funding for load management or demand response programs from the calculations. The values range from Xcel Energy saving 5.6 GWh per year per million dollars to TEP saving about 11 GWh per year per million dollars. The wide range in values is caused by a number of factors including the mix of programs being implemented by each utility, the importance of residential lighting in the program mix, economies of scale, and the magnitude of the incentives being paid to customers. For example, TEP achieved over half its 2011 savings from CFLs which have relatively high energy saving per utility program dollar.

**Table 3. Energy Savings in 2011 per Unit of Utility Program Spending  
(GWh per year per Million \$)**

APS	NV Energy	PNM	RMP - UT	SRP	TEP	Xcel Energy - CO
7.2	8.3	5.8	6.8	8.7	11.3	5.6

The significant expansion of utility energy efficiency programs in the Southwest has led to some pressure to restrain program funding (or funding growth) particularly in the states hardest hit by the economic recession which includes Arizona and Nevada. Major utilities in both states experienced a drop in total electricity sales between 2008 and 2011, leading to less need for energy savings in the short run and lower avoided costs from energy savings. Utilities in these states are under pressure to get more “bang per buck” or just spend fewer dollars on energy efficiency programs in this difficult economic environment. This is challenging the utilities to develop more effective programs, drop programs that are no longer cost effective, and develop a stronger justification for continuing programs that are marginal.

Ensuring that electric utilities are not harmed financially when they help their customers save electricity has also proven to be a challenge in the Southwest. Good progress has been made in Arizona and Colorado by providing utilities with a performance-based incentive tied to energy savings and net economic benefits achieved. However, adder or lost margin recovery policies have been problematic in both New Mexico and Nevada. A decoupling proposal for electric utilities was rejected in Utah and is unlikely to be approved in Arizona. Decoupling may become more attractive in the future as a result of the backlash to the adder and lost revenue recovery policies in New Mexico and Nevada. Also, some form of decoupling has been adopted for gas utilities in Arizona, Colorado, Nevada, Utah and Wyoming. Positive experience with decoupling for gas utilities may lead electric utilities, regulatory commissions, and consumer advocates to be more willing to try decoupling on the electric side.

In spite of these challenges, electric utility energy efficiency programs in the Southwest are proving to be effective in terms of saving energy and generating substantial net economic benefits over the lifetime of the measures and programs. As noted throughout the paper, energy efficiency program funding and energy savings are rising for the region as a whole. As the leading energy efficiency advocates in the region, we are proud of what has been accomplished in the past decade and remain optimistic that even greater energy savings, economic benefits and environmental benefits will be achieved in the coming decade.

## References

- ACC 2010a. **Electric Energy Efficiency Resources Standards**. Docket No.RE-00000C-09-0427. Phoenix, AZ: Arizona Corporation Commission. <http://images.edocket.azcc.gov/docketpdf/0000116125.pdf>
- ACC 2010b. **Decoupling Policy Statement**. Dockets No. E-00000J-08-0314 and G-00000C-08-0314. Phoenix, AZ: Arizona Corporation Commission. <http://images.edocket.azcc.gov/docketpdf/0000121666.pdf>
- APS 2011. **Demand-Side Management Semi-Annual Report**. Phoenix, AZ: Arizona Public Service Company. March 1. <http://images.edocket.azcc.gov/docketpdf/0000123447.pdf>
- APS 2012a. **Demand-Side Management Semi-Annual Report**. Phoenix, AZ: Arizona Public Service Company. March 1. <http://images.edocket.azcc.gov/docketpdf/0000134811.pdf>
- APS 2012b. **IRP. 2012 Integrated Resource Plan**. Phoenix, AZ: Arizona Public Service Company. March. <http://www.aps.com/files/various/ResourceAlt/2012ResourcePlan.pdf>
- Colorado PUC 2008. **Order Granting Application in Part**. Docket No.07A-420E. Denver, CO: Public Utilities Commission of Colorado. May. [http://www.swenergy.org/news/news/documents/file/2008-06-Xcel\\_DSM\\_Policy.pdf](http://www.swenergy.org/news/news/documents/file/2008-06-Xcel_DSM_Policy.pdf)
- Colorado PUC 2011. **Order Granting Application with Modifications**. Docket No.10A-554EG. Denver, CO: Public Utilities Commission of Colorado. April. <http://www.swenergy.org/news/news/documents/file/Xcel%2010A-554EG%20PUC%20order.pdf>
- EPRI 2010. **Paying Upfront: A Review of Salt River Project's M-Power Prepaid Program**. Technical Update 1020260. Palo Alto, CA: Electric Power Research Institute. Oct.
- EUEA 2008. **Efficient Use of Energy Act**. New Mexico Legislature. Santa Fe, NM. [http://www.swenergy.org/news/news/documents/file/2008-02-NM\\_Bill.pdf](http://www.swenergy.org/news/news/documents/file/2008-02-NM_Bill.pdf)
- FCU 2011. **Energy Policy – 2010 Annual Update**. Fort Collins, CO: City of Fort Collins Utilities. June. [http://www.swenergy.org/news/news/documents/file/Fort\\_Collins\\_Energy\\_Policy\\_2010\\_annual\\_update.pdf](http://www.swenergy.org/news/news/documents/file/Fort_Collins_Energy_Policy_2010_annual_update.pdf)
- PacifiCorp 2011. **2011 Integrated Resource Plan**. Portland, OR: PacifiCorp. March 31. [http://www.pacificorp.com/content/dam/pacificorp/doc/Energy\\_Sources/Integrated\\_Resource\\_Plan/2011IRP/2011IRP-MainDocFinal\\_Vol1-FINAL.pdf](http://www.pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/Integrated_Resource_Plan/2011IRP/2011IRP-MainDocFinal_Vol1-FINAL.pdf)

- PNM 2012. **PNM Energy Efficiency Program 2011 Annual Report.** Albuquerque, NM: Public Service Company of New Mexico. March 27. [http://www.pnm.com/regulatory/pdf\\_electricity/ee\\_ar\\_11.pdf](http://www.pnm.com/regulatory/pdf_electricity/ee_ar_11.pdf)
- PUCN 2011. **Order.** Dockets 10-10024 and 10-10025. Carson City, NV: Public Utilities Commission of Nevada. May 23, 2011. [http://www.swenergy.org/news/news/documents/file/PUCN\\_Order\\_5-23-11.pdf](http://www.swenergy.org/news/news/documents/file/PUCN_Order_5-23-11.pdf)
- PUCN 2012. **Order.** Dockets 11-07026 and 11-07027. Carson City, NV: Public Utilities Commission of Nevada. March 15, 2012.
- RMP 2011a. **2010 Annual Energy Efficiency and Peak Reduction Report - Utah.** Salt Lake City, UT: Rocky Mountain Power. [http://www.swenergy.org/news/news/documents/file/RMP\\_2010\\_UT\\_DSM\\_Annual\\_Report.pdf](http://www.swenergy.org/news/news/documents/file/RMP_2010_UT_DSM_Annual_Report.pdf)
- RMP 2011b. **2010 Annual Energy Efficiency and Peak Reduction Report - Wyoming.** Salt Lake City, UT: Rocky Mountain Power. [http://www.pacificorp.com/content/dam/pacificorp/doc/Energy\\_Sources/Demand\\_Side\\_Management/WY\\_DSM\\_Report\\_2010.pdf](http://www.pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/Demand_Side_Management/WY_DSM_Report_2010.pdf)
- RMP 2012. **2011 Annual Energy Efficiency and Peak Reduction Report - Utah.** Salt Lake City, UT: Rocky Mountain Power. April 27.
- SRP 2011. **Resolution of the Board of Directors of the Salt River Project Agricultural and Power District Regarding Revision to Sustainable Portfolio Principles.** Tempe, AZ: Salt River Project. May 23. <http://www.srpnet.com/environment/earthwise/pdfx/spp/May23/FinalDraftResolution.pdf>
- TEP 2012. **Annual DSM Progress Report January – December 2011.** Tucson, AZ: Tucson Electric Power Company. March 1, 2012. <http://images.edocket.azcc.gov/docketpdf/0000134776.pdf>
- Utah Legislature 2009. **Joint Resolution on Cost-Effective Energy Efficiency and Utility Demand-Side Management.** H.J.R. 9. <http://le.utah.gov/~2009/bills/hbillenr/hjr009.pdf>
- Xcel Energy 2011. **2010 Demand-Side Management Annual Status Report.** Denver, CO: Public Service Company of Colorado. April 1. <http://www.xcelenergy.com/staticfiles/xcel/Regulatory/Regulatory%20PDFs/2010COStatusReport.pdf>
- Xcel Energy 2012. **2011 Demand-Side Management Annual Status Report.** Denver, CO: Public Service Company of Colorado. April 2. <http://www.xcelenergy.com/staticfiles/xcel/Regulatory/Regulatory%20PDFs/CO-DSM-2011-Annual-Status-Report.pdf>