

Update on Utility Energy Efficiency Programs in the Southwest

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Electric Utility Efficiency Programs in the Southwest

State	Electric DSM Program Spending/Budgets (million \$ per year)					
	2002	2004	2006	2007	2008	2009 (est)
AZ	4	4	19	32	40	50
CO	11	21	18	32	28	56
NV	3	11	30	27	55	60
NM	1	1	1	4	10	16
UT	9	16	27	28	36	65
WY	~0	~0	~0	~0	1	3
Region	29	54	95	123	170	250

Source: SWEEP data

Per Capita Spending on Electric DSM Programs in the Southwest, 2008

State	DSM Spending (million \$)	Population (million)	Spending Per Capita (\$)
AZ	40	6.50	6.2
CO	28	4.94	5.7
NV	55	2.60	21.2
NM	10	1.98	5.1
UT	36	2.74	13.1
WY	1	0.53	1.9
Region	170	19.29	8.8
U.S.	3,245	304.1	10.7

Trends in Energy Savings and Peak Demand Reduction

Utility	2006		2007		2008	
	First-year Energy Savings (GWh/yr)	Peak Demand Reduction (MW)	First-year Energy Savings (GWh/yr)	Peak Demand Reduction (MW)	First-year Energy Savings (GWh/yr)	Peak Demand Reduction (MW)
AZ - APS	104	17	274	43	280	43
CO – Xcel Energy	43	27	119	38	141	37
NV – NPC	146	54	155	54	304	129
NV – SPPC	70	14	51	10	105	10
UT – PacifiCorp	113	45	139	36	180	40
All	476	157	738	181	1,010	259

Key Results

- ❑ Leading electric utilities (Nevada Power and Rocky Mountain Power-UT) are reducing electricity use by 1.0-1.3% per year
- ❑ Most electric utilities are implementing comprehensive DSM programs but CFLs are providing 30-65% of total electricity savings
- ❑ Program portfolios are very cost effective with a benefit-cost ratio of 2.0-3.0 and an average cost of saved energy of \$0.03-0.04 per kWh under the TRC test

Recent Developments

- ❑ Settlement in 2009 APS rate case includes savings goals of 1.0% of sales in 2010, 1.25% in 2011, and 1.5% in 2012— now under review by the AZ Commission
- ❑ Nevada Power expected to increase its DSM budget from \$50M to ~\$75M per year during 2010-2012; maintain energy savings of at least 1%/yr in spite of diminishing role for CFLs
- ❑ Rocky Mountain Power received approval to increase its DSM tariff rider to 4.6% of retail sales revenue; RMP is saving 1.1% of sales as of 2009
- ❑ Shareholder incentive mechanism adopted in AZ (APS), CO and NV, and is pending in NM

Gas Utility Efficiency Programs in the Southwest

State	Gas DSM Budgets (million \$ per year)		
	2007	2008	2009 (est.)
AZ	--	3.1	3.1
CO	2.2	2.2	15.8
NM	1.6	1.9	1.5
NV	--	0.7	2.0
UT	7.5	18.1	40.0
Region	11.3	26.0	62.4

Key Issues and Challenges

- ❑ Can electric utilities sustain 1% or greater savings per year, year after year? What happens when federal lamp efficiency standards kick in?
- ❑ Can gas utilities ramp up to and sustain savings in the 0.5-1% per year range?
- ❑ What is a reasonable level of utility shareholder incentive, balancing utility and customer concerns?
- ❑ Will there be a customer backlash as DSM budgets reach or exceed ~4% of revenues?

Key Issues and Challenges (cont.)

- ❑ What do we do about smaller utilities including muni's and rural electric cooperatives?
- ❑ What role can emerging technologies and new program strategies play?
- ❑ Will greenhouse gas emissions caps be enacted and if so what will they mean for utility energy efficiency efforts? What about other elements of federal legislation such as RE/EE standards or use of proceeds from sale of emissions allowances?

Summary

- ❑ Budgets for and impacts from utility DSM programs in the SW are growing rapidly
- ❑ Most electric utilities are now implementing comprehensive programs; some are striving to maximize energy savings
- ❑ Electricity savings are surpassing 1% per year for some electric utilities in the region
- ❑ Performance-based financial incentives for utility shareholders gaining acceptance
- ❑ Natural gas DSM is starting to have a significant impact especially in Utah

SWEEP:

Dedicated to More Efficient Energy Use in the Southwest

Resources available online at:

www.swenergy.org

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