

Update on Utility Energy Efficiency Policies and Programs in the Southwest

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Southwest Energy Efficiency Project

- Non-profit public interest organization, founded 2001
- Advances policies and programs to stimulate greater energy efficiency in six western U.S. states
- Works on energy efficiency in the buildings, transportation, utility and industrial sectors
- Major funding provided by charitable foundations, the U.S. DOE, and business allies



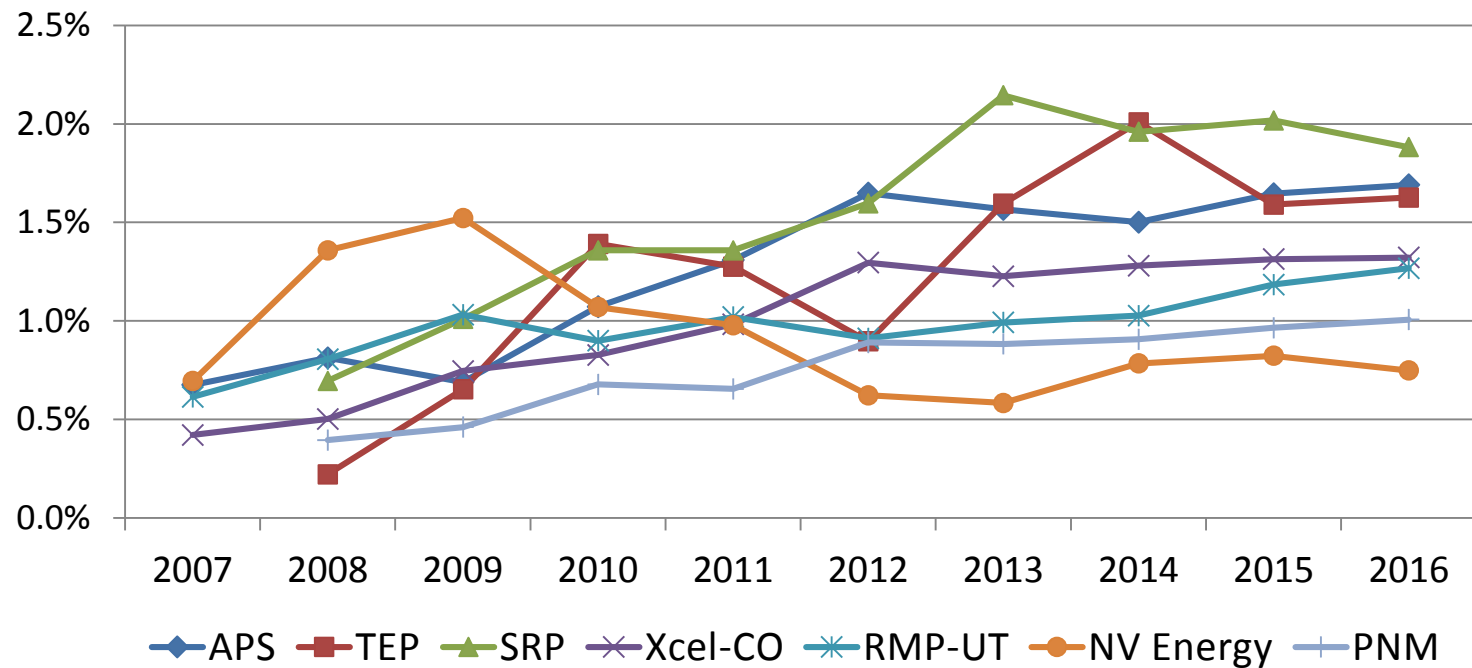
www.swenergy.org

Electric Utility DSM Program Funding Trends in the Southwest

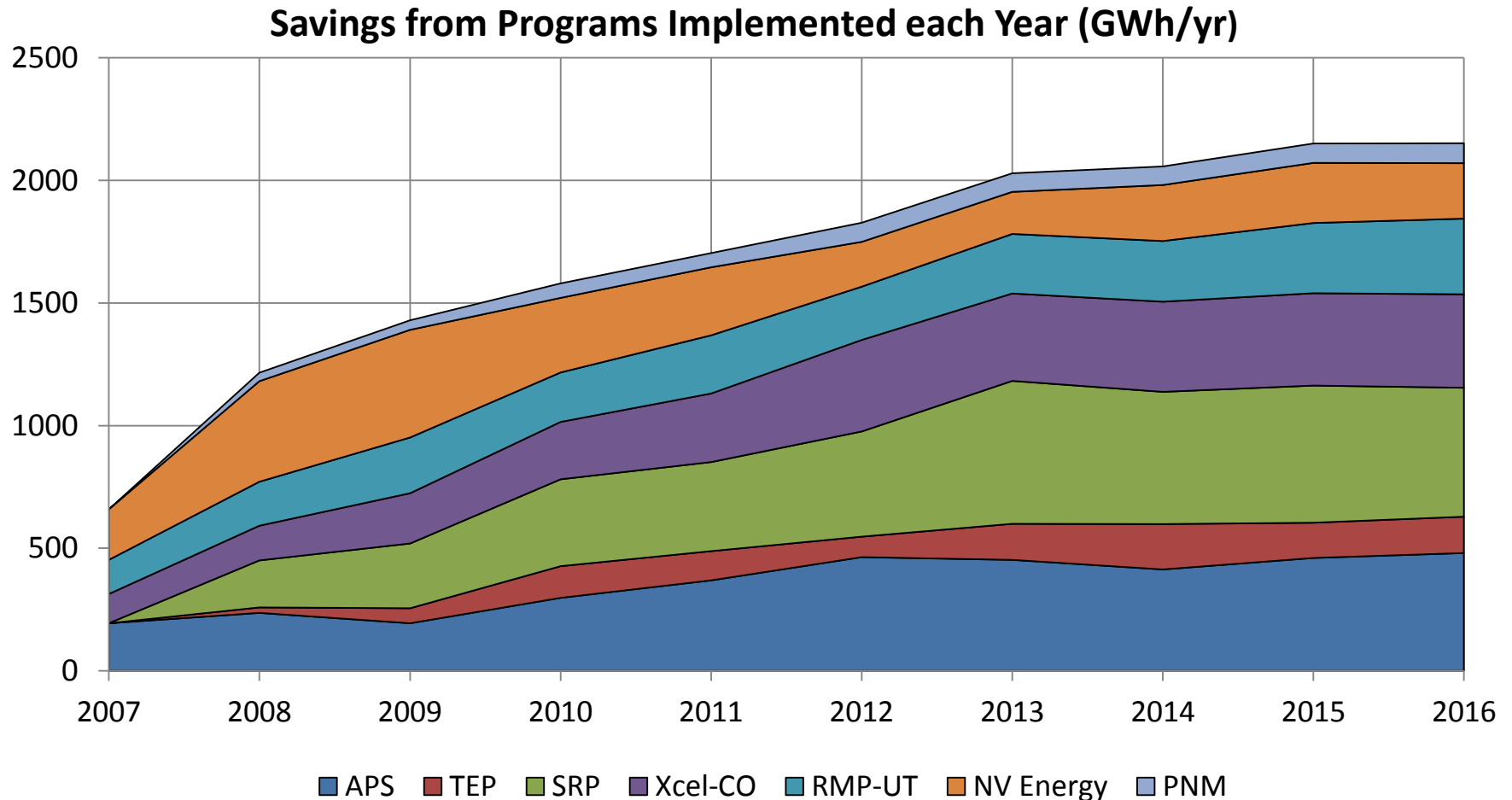
State	Electric DSM Program Spending (million \$ per year)								
	2002	2004	2006	2008	2010	2012	2014	2016	2017 (est.)
AZ	4	4	19	45	94	130	126	127	135
CO	11	21	18	28	66	96	96	106	116
NV	3	11	30	55	46	39	52	49	55
NM	1	1	1	10	24	228	34	40	41
UT	9	16	27	36	51	47	82	60	61
WY	~0	~0	~0	~0	3	4	5	8	9
Region	29	54	95	174	284	343	395	390	417

First Year Energy Savings as a Fraction of Retail Electric Sales

Annual Energy Savings as a % of Retail Sales,
by program year



Energy Savings Trends – Major Electric Utilities in the Southwest



A Decade of Electric Utility DSM Programs in the Southwest Region

- ❑ Over 20 billion kWh/yr of electric savings as of 2016
- ❑ Nine baseload power plants avoided (300 MW each)
- ❑ ~\$7.0 billion in net economic benefits for households and businesses
- ❑ 70 million tons of avoided CO₂ emissions during 2007-16



Gas Utility DSM Program Spending and Saving Trends

Utility	DSM Program Funding (Million \$)				DSM Program Savings (thousand Dtherms)			
	2014	2015	2016	2017 (est.)	2014	2015	2016	2017 (est.)
NMGC	4.3	4.3	4.4	5.9	75	79	76	114
Questar	26.3	24.2	23.3	23.7	600	762	901	1,028
SW Gas (AZ)	3.7	3.0	4.6	4.6	463	360	350	373
Xcel Energy	12.5	12.9	13.7	13.1	607	598	615	636
Region	46.8	44.4	46.0	47.3	1,745	1,799	1,942	2,151

Recent Positive Developments



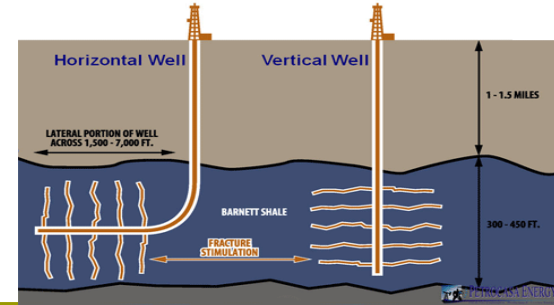
- ❑ Major EE legislation adopted this year in Nevada
 - Requires PUCN to adopt energy savings goals
 - Requires accounting for non-energy benefits
 - Dedicates 5% of total DSM budget to low-income programs
 - Cost effectiveness at portfolio rather than program level
- ❑ Decoupling approved for Xcel Energy in Colorado
- ❑ Gov. Hickenlooper Executive Order – calls for 2% annual electric energy savings by 2020
- ❑ Rocky Mountain Power proposing to expand EE programs in Wyoming

Challenges: Future Energy Savings Goals



- ❑ EERS policies end in 2020 in some states (Arizona and New Mexico)
- ❑ APS proposing a shift towards more emphasis on peak demand management programs and less emphasis on energy savings starting in 2018; also reducing total level of investment in DSM
- ❑ Rocky Mountain Power proposing lower energy savings targets in Utah in 2018
- ❑ Xcel Energy proposing lower energy savings goals in Colorado starting in 2019

Challenges: Other Factors



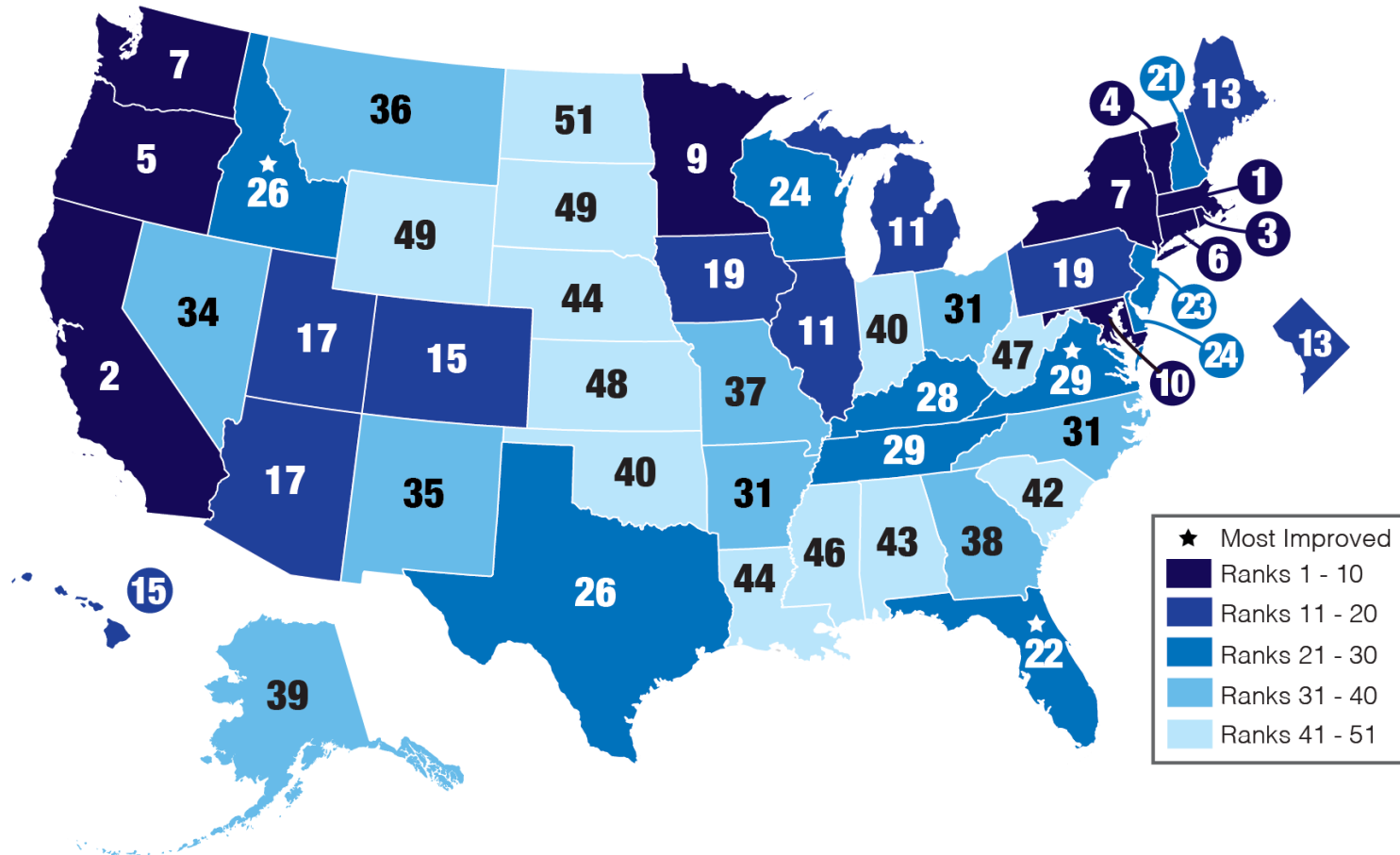
- ❑ Low natural gas prices and declining capacity costs reducing value of energy savings
- ❑ Growing renewables penetrations and evolving load shapes are changing the value of energy savings by time of day and year
- ❑ Uncertain future for residential lighting programs
 - Potential 2020 federal lighting standards
 - Rapid decline in LED lamp costs
- ❑ Increased need for flexible energy efficiency and DR resources as utility systems get more complex

Other Opportunities



- ❑ Take advantage of new/emerging energy savings technologies and program strategies
 - LED lights in all sectors; controls; smart thermostats
 - Upstream incentives, Strategic Energy Management
- ❑ Utilize smart meters and AMI data to achieve more energy savings and peak demand reduction, and do so in a flexible manner
- ❑ Adopt more sophisticated rate designs that enhance EE and DR efforts
- ❑ Help state and local governments meet their clean energy and climate action goals

2017 ACEEE State Energy Efficiency Scorecard



Source: American Council for an Energy-Efficiency Economy

2017 ACEEE Utility Energy Efficiency Scorecard

Utility	Ranking
Xcel Energy - CO	10th (tie)
APS	15th (tie)
SRP	21st (tie)
PacifiCorp - UT	23rd
Nevada Power	35th (tie)

Source: American Council for an Energy-Efficiency Economy

Thank You!

**To All SWEEP
Allies that
have renewed
or initiated
membership
for 2018**



We welcome new Business Allies!

SWEEP:

Dedicated to More Efficient Energy Use in the Southwest

Resources available online at:

www.swenergy.org

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