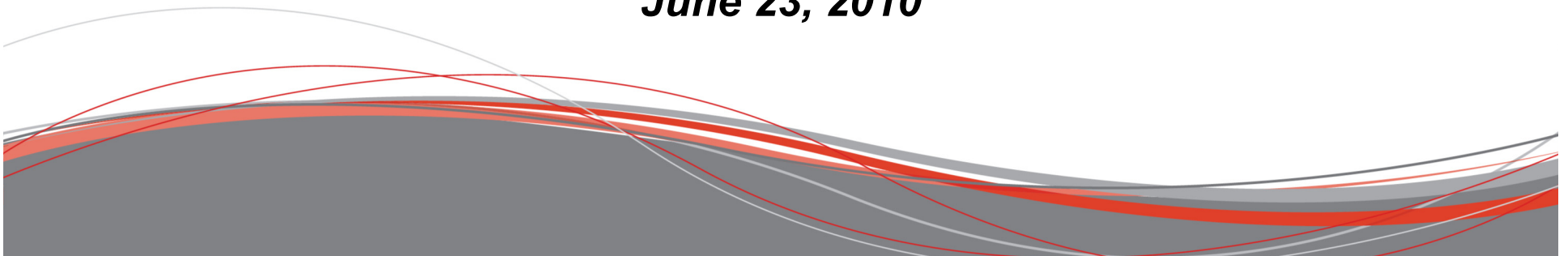




Utility Disincentives: How Can we Overcome them?

Presented by Deb Sundin
deb.sundin@xcelenergy.com
612-330-6022
June 23, 2010



A solid red vertical bar.

DSM Incentives: Agenda

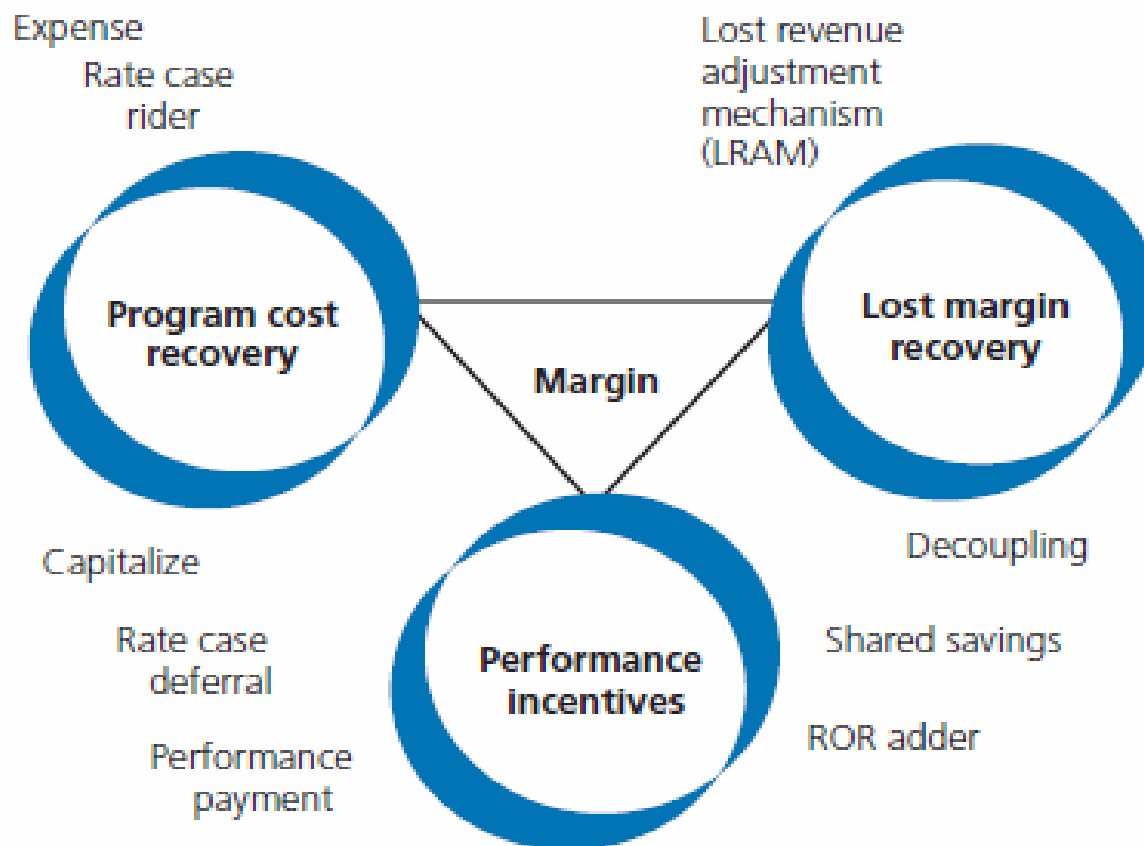
- ❑ Principles behind DSM incentives and related public policy issues
- ❑ Alternative incentives frameworks and pros/cons
- ❑ Xcel Energy's existing cost recovery and incentive mechanisms
- ❑ Latest trends in DSM incentives

Principles behind DSM incentives and related public policy issues

- ❑ Utilities earn a return on and off capital invested in power plants
- ❑ Without appropriate regulatory mechanisms, utilities have a strong disincentive to actively pursue DSM
- ❑ Under traditional regulation, utilities typically lose revenues and profits with most forms of energy efficiency
- ❑ Regulatory mechanisms address this problem

“Slide content reproduced with permission from Navigant Consulting, Inc., June 2010.”

Alternative incentives frameworks and pros/cons



Source: US DOE and EPA. "Aligning Utility Incentives in Energy Efficiency." (2007).
<http://www.epa.gov/cleanenergy/energyprograms/napee/resources/guides.html>.

Alternative incentives frameworks and pros/cons

☐ Program cost recovery

- Simple expense rate case rider is common.
- Less common is capitalization

☐ Lost margin recovery

- Lost revenue adjustment mechanism allows a utility to recover margins attributable to decreased energy sales due to energy efficiency programs.
- Decoupling severs the link between revenue recovery and sales. May not be sufficient to make up for loss rate base growth.

“Slide content reproduced with permission from Navigant Consulting, Inc., June 2010.”

Alternative incentives frameworks and pros/cons

- ❑ **Performance incentive mechanisms:**
- ❑ **Performance Target**
 - Incentives are not paid unless a utility achieves some minimum fraction of proposed savings, and incentives are capped at some level above projected savings.
- ❑ **Shared savings (shared net benefits)**
 - Award the utility a percentage of the present value of net benefits achieved by the efficiency programs.
- ❑ **Enhanced ROR**
 - Utilities allowed an increased return on investment for energy efficiency investments or offered a bonus return on total equity investment for superior performance.

“Slide content reproduced with permission from Navigant Consulting, Inc., June 2010.”

DSM Cost Recovery Mechanisms

Minnesota Gas & Electric

- Expenses & incentive collected thru CCRC in base rates & true-up Rate Rider.
- Timely cost recovery
- All expenses including labor
- Carrying charge applied

Colorado Gas & Electric

- Expenses & incentive collected thru Base Rates & true-up Rate Rider (similar to MN)
- Timely cost recovery
- All expenses including labor
- Asymmetrical carrying charge applied to electric; symmetrical to gas

DSM Cost Recovery Mechanisms, cont.

□ Texas

- \$2M built into base rates
- Remainder put into tracker balance for consideration in next rate case

▪ New Mexico

- Rate rider with carrying charges
- Timely cost recovery
- All expenses including labor

□ Wisconsin & North Dakota Residential Gas

- Built into base rates

Performance Incentive in MN Beginning 2010

- ❑ **Shared Savings model similar to existing model**
- ❑ **Percent of net benefits awarded increases as % of sales achieved increases**
 - Net benefits derived from the Utility Cost Test
 - Net Benefits = avoided costs (capacity + T&D + marginal energy) - utility program costs (including rebates)
- ❑ **Calibrated to award \$0.09/kWh at 1.5% of sales achievement, based on expected net benefits filed Plan**
 - Performance relative to Plan is very important
- ❑ **Incentive is driven by energy savings**
 - Incremental achievement will increase incentive
- ❑ **Incentive to increase net benefits**
 - pursue most cost-effective programs
 - Minimize the utility spend or dollars collected from ratepayers

Performance Incentive in Colorado

- ❑ **Shared-Savings Mechanism plus “Disincentive Offset”**
- ❑ **Utility awarded a fraction of Modified TRC Test Net Benefits w/o Adder**
 - Awards utility for pursuing programs that achieve the highest TRC net benefits
- ❑ **Fraction of net benefits awarded increases based on kWh or Dth achievement in relation to goal**
 - Awards utility to achieve more energy savings
 - Biggest influence in the total award achieved
- ❑ **Electric**
 - Utility also awarded a Disincentive Offset” if kWh achievements >80% of goal kWh
 - Combination of Electric “Disincentive Offset” and % of net benefits award capped at 20% of actual spend
 - Current CO mechanism (2009 & 2010) likely to result in capped award (\$9M to \$12M) potentially less than lost margins
 - Negative net benefits from Low-Income programs excluded to not deter utility from pursuing these programs

Proposed Performance Incentive New Mexico

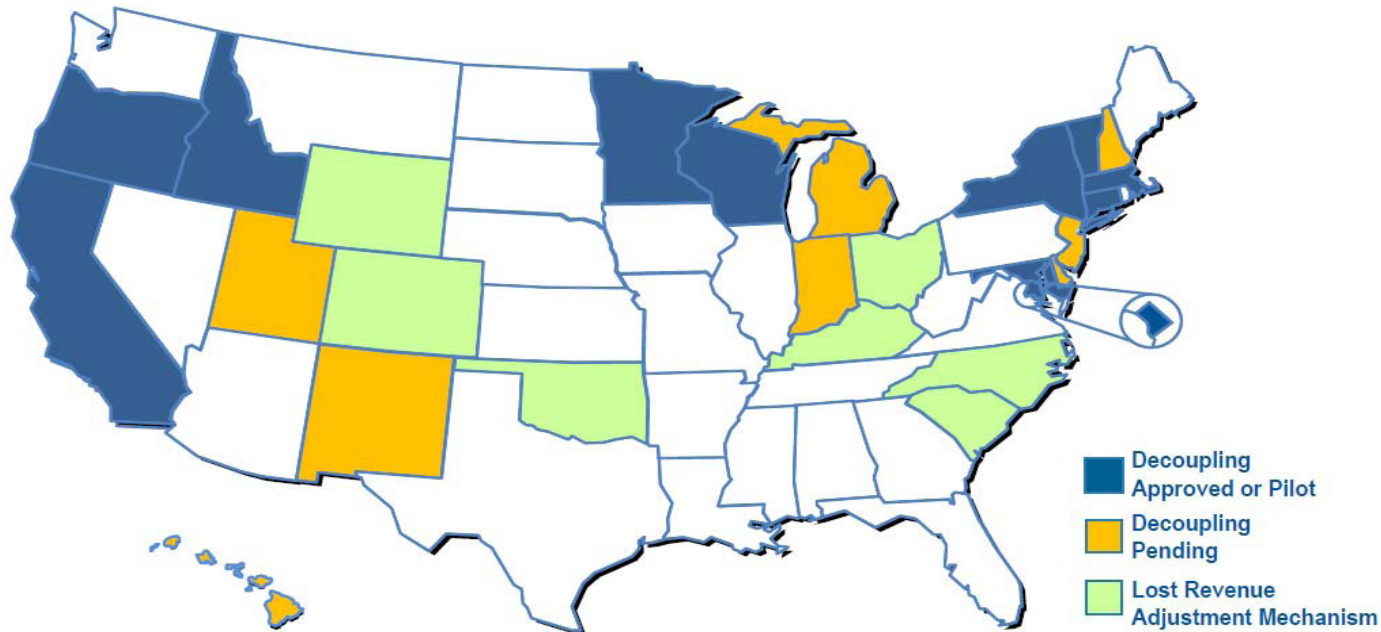
- ❑ Based in Energy (KWh) & Demand Savings (KW) lifetime savings
- ❑ Low Income Programs are given a slightly higher value (1.25 x KWh value)
- ❑ The adder each year will equal the lifetime KWh energy savings times \$0.01 per KWh, plus the total annual KW demand savings times \$10 per KW.
- ❑ Adjustment for Better Performance -If in any calendar year the additional annual energy savings from a given utility portfolio in that year are 1% or more of the total utility retail sales in that calendar year, the adder shall equal \$0.0125/KWh times the lifetime energy savings. If the excess is 1.5% or more, the adder shall equal \$0.015/KWh times the lifetime energy savings.”
- ❑ **Adjustment in Annual Status Report**
 - ❑ An independent evaluator performs M&V
 - ❑ Adjustments to the EE rider are made based M&V results

Proposed Performance Incentive in SD

- ❑ Annual Proposed Budget = \$750,900
- ❑ A two part mechanism designed to recover lost margins while sharing the 'benefits' of the costs with ratepayers
 - ◆ ROR based on spend
 - As approved in current base rates
 - $Incentive (1) = Expenditures \times ROR (\%) \times 1/(1 - Tax Rate)$
 - Possible Incentive = \$104,202
 - ◆ Performance Incentive
 - Purpose is to achieve savings in the most cost effective manner possible
 - Shared Savings Model
 - Incentive begins at 90% of goal
 - Possible Incentive = \$225,270

Latest trends in DSM incentives

Lost Revenue Adjustment & Revenue Decoupling Mechanisms for Electric Utilities by State

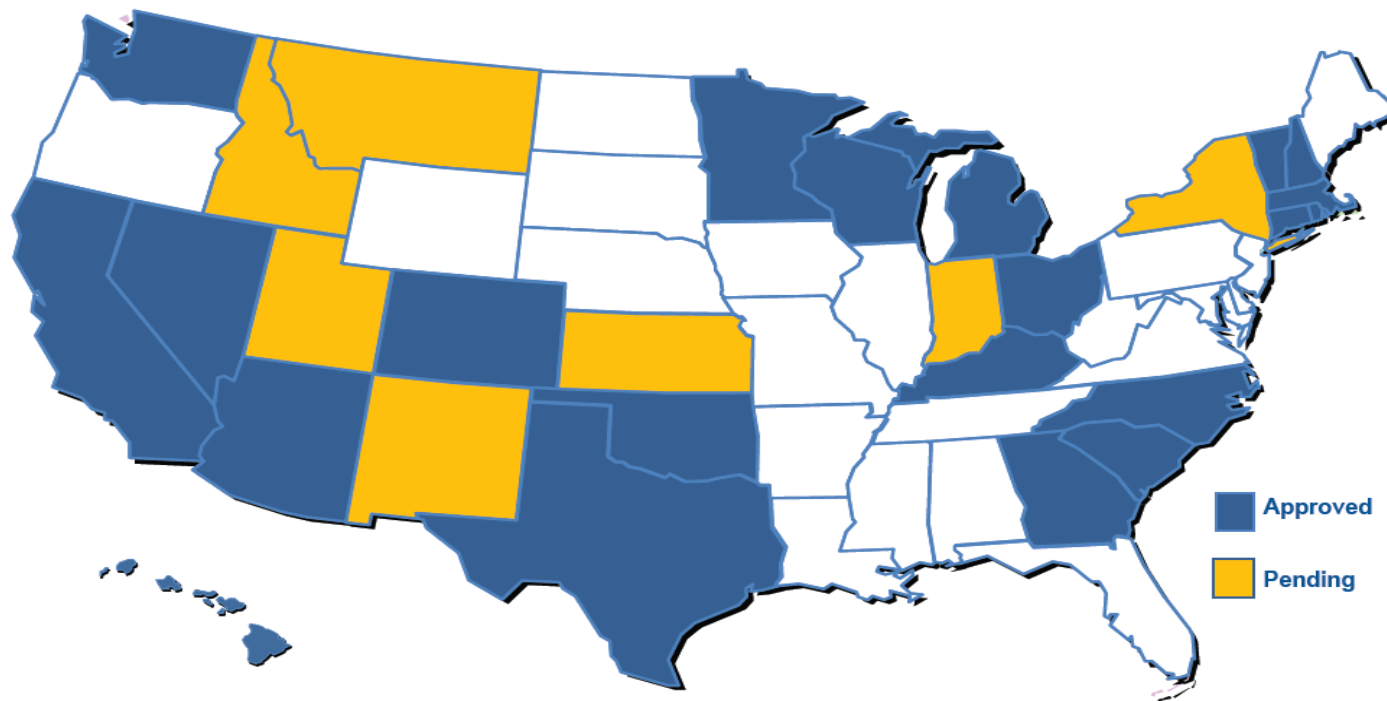


"Slide content reproduced with permission from Navigant Consulting, Inc., June 2010."

Source: Edison Foundation, Institute for Energy Efficiency. 2010. "State Efficiency Regulatory Frameworks."

Latest trends in DSM incentives

Performance Incentives for Electric Efficiency by State



"Slide content reproduced with permission from Navigant Consulting, Inc., June 2010."

Source: Edison Foundation, Institute for Energy Efficiency. 2010. "State Efficiency Regulatory Frameworks."

