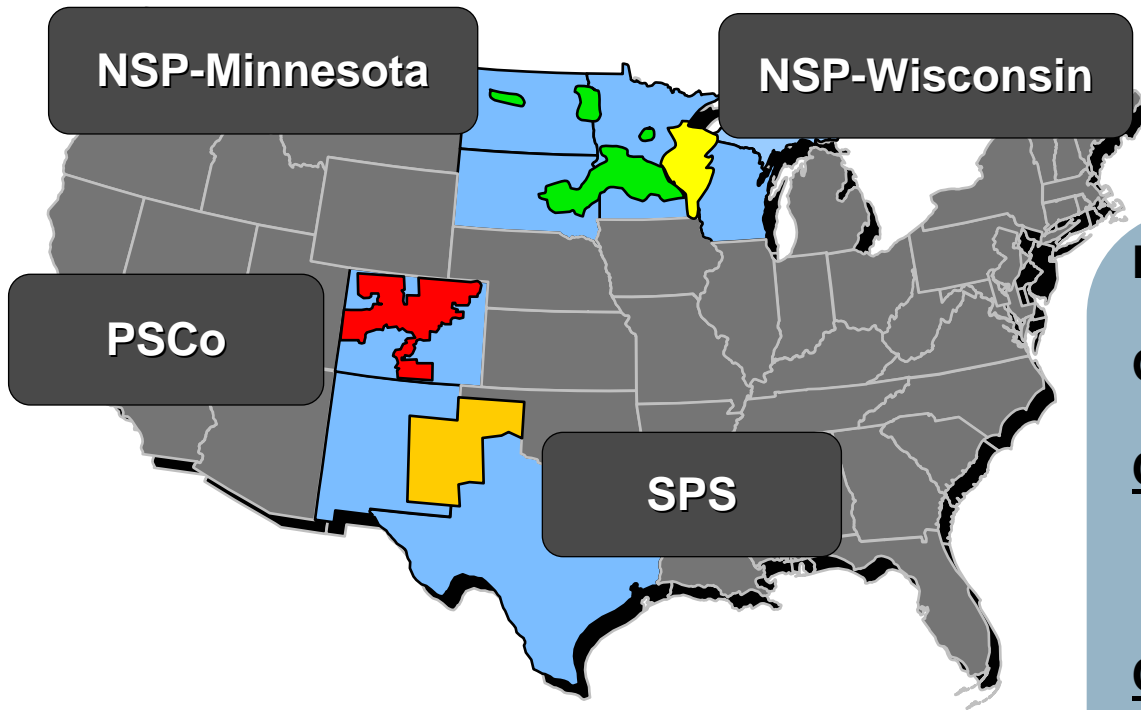




# **The Role of Energy Efficiency in Utility Resource Plans in the Rocky Mountain Region Public Service of Colorado**

**ACEEE National Conference on Energy Efficiency as a Resource  
September 27, 2011**

# Company Profile



**Fully Regulated**

**Operate in 8 States**

**Combination Utility**

**Electric 85% of cont. ops**

**Gas 15% of cont. ops**

**Customers**

**3.4 million electric**

**1.9 million gas**

# Emphasis on Energy Efficiency Grows in Colorado

- **PSCo's History of Energy Efficiency Orders**
  - **2000-2005: Achieve 124 MW**
    - **No energy goals**
  - **2006-2013: Achieve 800 GWh**
    - **Avg. 100 GWh per year**
  - **2009-2016: Achieve 2083 GWh**
    - **Avg. 260 GWh per year**
  - **2012-2019: Achieve 3435 GWh**
    - **Avg. 429 GWh per year**

<b>DSM Spend</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Actual and Planned	\$19.6M	\$50.5M	\$54.7M	\$68.5M	\$76.0M	\$86.0M

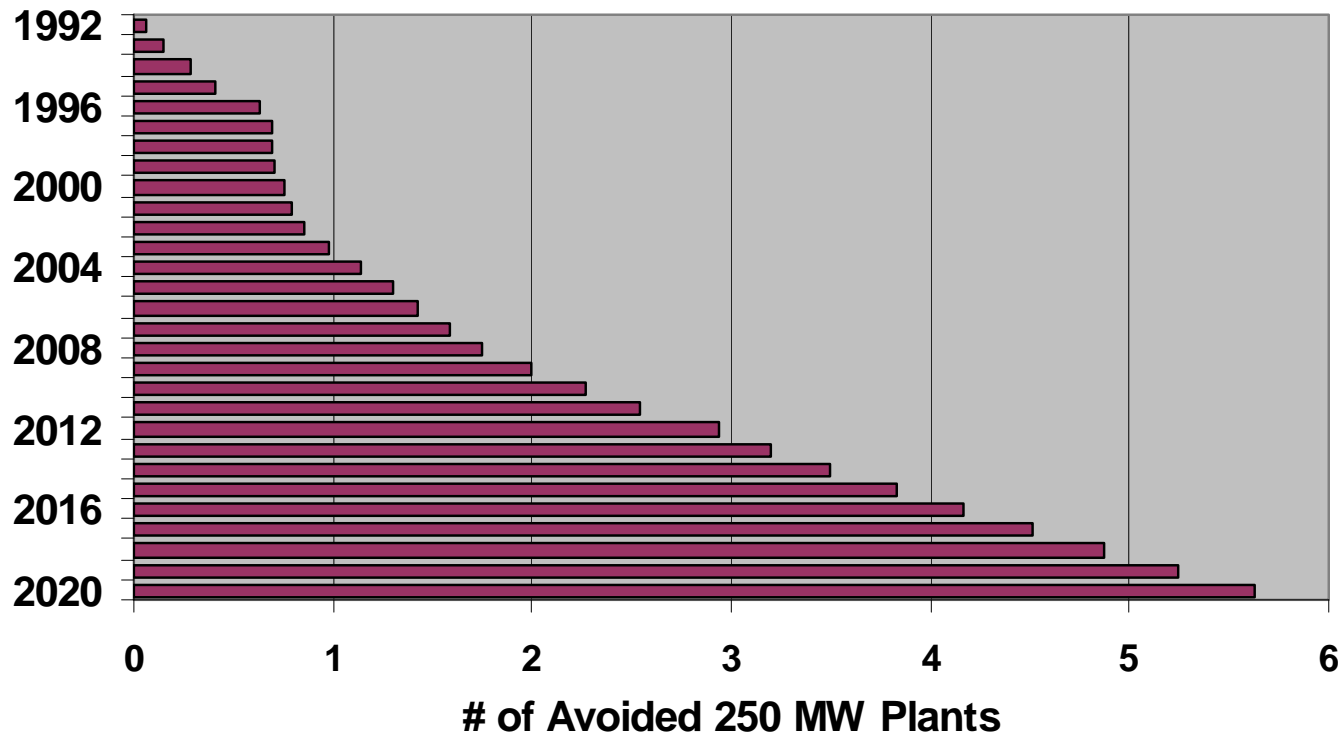
# PSCo's Current Approved Goals

<b>Year</b>	<b>% Sales Reduced</b>	<b>GWh Saved</b>
<b>2010</b>	0.9%	220/252*
<b>2011</b>	0.9%	235/256**
<b>2012</b>	1.14%	330
<b>2013</b>	1.21%	356
<b>2014</b>	1.28%	384
<b>2015</b>	1.35%	411
<b>2016</b>	1.42%	441
<b>2017</b>	1.51%	472
<b>2018</b>	1.59%	504
<b>2019</b>	1.66%	537
<b>2020</b>	1.68%	549

\* Commission ordered goal/actual achievement.

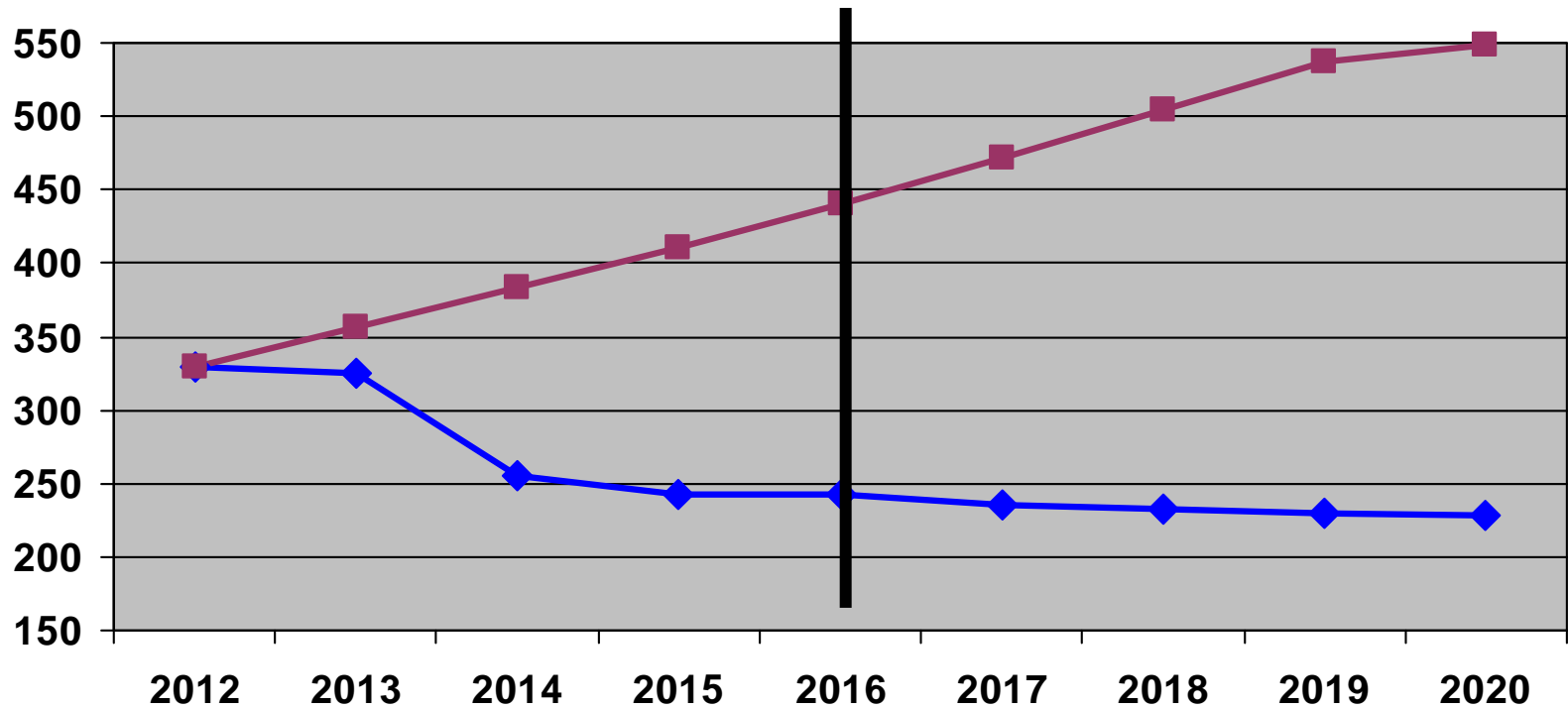
\*\* Commission ordered goal/annual plan goal.

# Estimated Plants Avoided by DSM — Colorado



# Colorado Gap Analysis

2012-20 “Existing Programs minus code impacts vs. Goal”



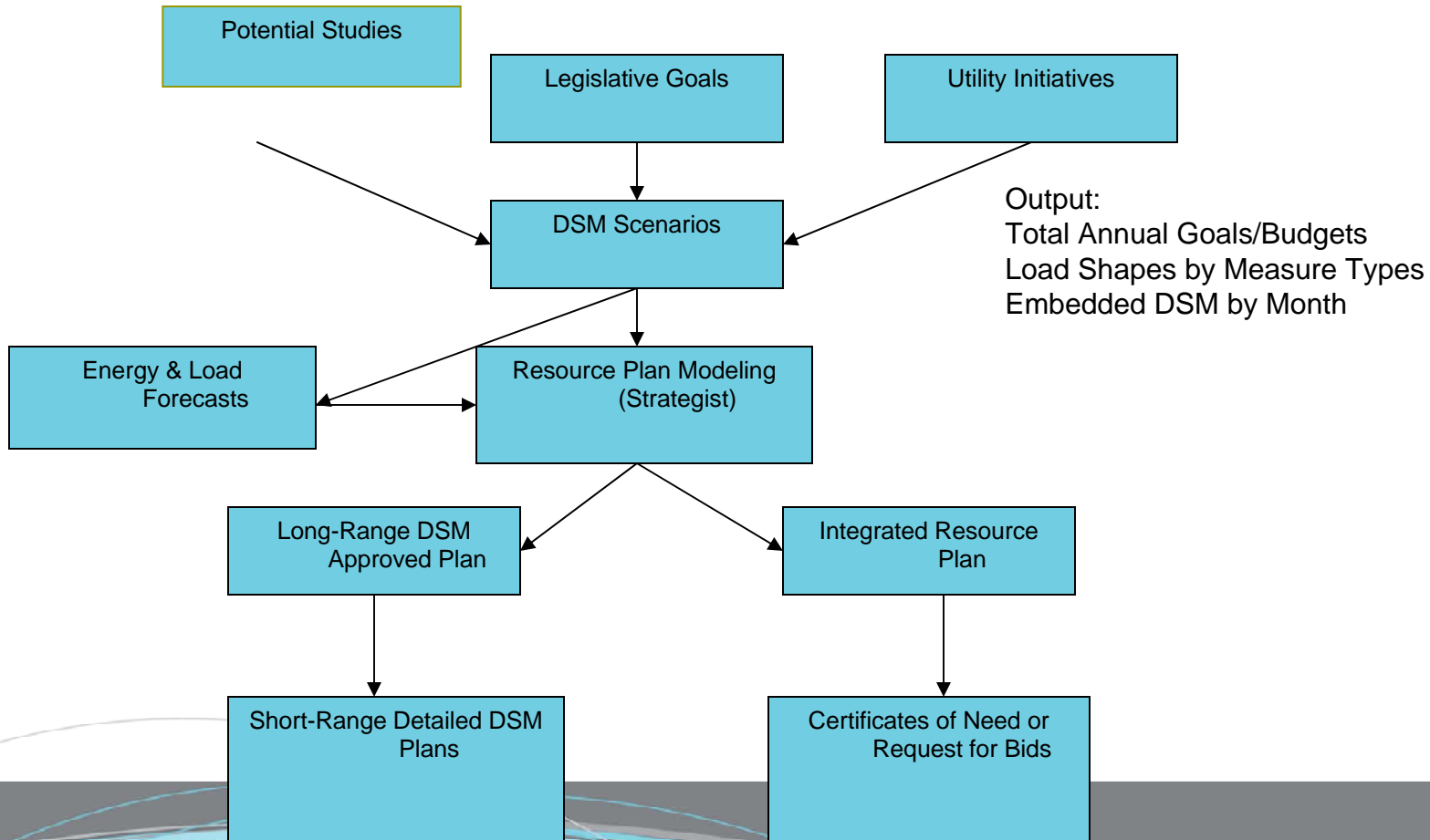
- Minimal growth from C&I customer segment
- Lighting programs drop 100 GWh/yr from 2012 to 2014

Existing Programs minus code impacts GWh Goal

# Filing the Gaps Depends on Several Factors

- **Rapid, sustainable growth in current programs.**
- **Maximize near-term CFL opportunities.**
- **Expand residential Behavior Change.**
- **Evaluate commercial Behavior Change.**
- **Introduce and expand LED solutions.**
- **Multiple new technologies.**
- **Targeted higher rebates.**
- **Improved services.**
- **Expand market transformation programs.**

# EE & Resource Planning Cycle





# Treatment of EE in Colorado Resource Planning

- **PSCo's Expected EE Achievement Impacts included in Sales and Demand Forecast**
  - **Approved Goals through 2015**
  - **2015+ limited to 411 GWh**
- **Achievement of Approved Goals will be included as a sensitivity**
  - **Tested on Net PV of Revenue Requirements**
- **EE decisions allow EE resource to be determined outside resource planning process but reflected in RP process**

# Issues to Consider

- **Forecasting Long-Term Energy Efficiency**
  - **Planners need reliable forecasting methods for energy efficiency over resource plan time horizon.**
- **Increasing Budgets**
  - **Energy efficiency costs born by customers earlier than costs for adding future supply.**
  - **Concept of least-cost difficult for customers to understand.**
- **Utility Financial Disincentives**
  - **Energy efficiency should be equal or more profitable than the supply side options.**

## **Contact Information:**

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