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# Regulatory Policies to Encourage Energy Efficiency

## A Personal View

ACEEE

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# California's Energy Efficiency Regulatory Framework

ISSUE	APPROACH
Revenue Issues	Decoupling
Policy Goals & Performance Metrics	<ul style="list-style-type: none"><li>•CA statute</li><li>•Energy Action Plans I and II</li><li>•CPUC Savings Goals</li><li>•CPUC Policy EE Rules</li></ul>
Roles & Accountabilities	<ul style="list-style-type: none"><li>•Oversight, program administration, etc.</li></ul>
Portfolio/Program Composition/Approval	<ul style="list-style-type: none"><li>•2006-2008: efficiency as a resource</li><li>•2009-2011: CPUC strategy and “Big &amp; Bold”</li></ul>
Incentive Framework	IOU Risk/Reward Mechanism
Measurement & Evaluation	<ul style="list-style-type: none"><li>•Timing, feedback loops</li></ul>

# Revenue Issues: Decoupling

For many utilities, as sales vary, fixed cost collection also varies

As successful energy efficiency decreases sales, it reduces fixed cost recovery

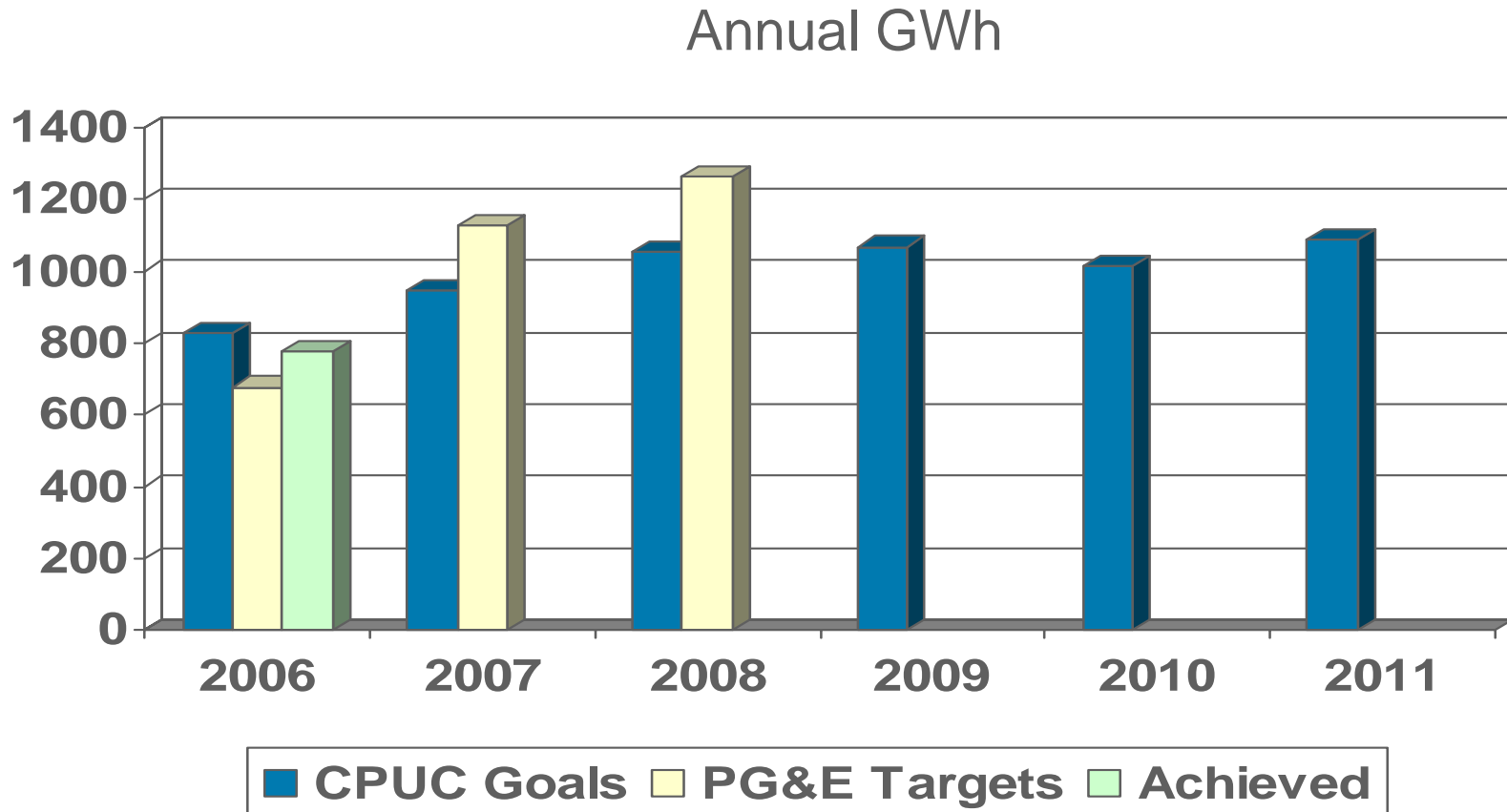
The solution is decoupling

- Base rates on recovering investments and operating costs at predicted or forecasted levels of sales
- If actual sales are lower or higher than predictions, the utility calculates the shortfall or excess of revenues (less variable costs)
  - This difference is used to adjust the succeeding year's tariff up or down
  - Thus the utility's net profit is independent of its sales (but not costs)
- Decoupling insulates against all factors causing sales to vary
- Decoupling a first fundamental component of a successful regulatory strategy to encourage energy efficiency

# Policy Goals & Performance Metrics

- CA statute mandates the CPUC to pursue all cost-effective energy efficiency (PU Code)
- Energy Action Plan I & II (CPUC website)
- Energy Efficiency becomes first in the “loading order” for new resources in California
- CPUC adopts 10-year savings targets
  - Considered “stretch”
- CPUC adopts detailed policies/rules implementing above

# CPUC Goals and PG&E Targets 2006-2011



MW and Therms similar: PG&E ramps to exceed CPUC goal by 2009

PG&E annual sales about 80,000 GWH

# Roles & Accountabilities: Who does what

- Policy Oversight CPUC
- Research for Policy CPUC
- Quality Assurance CPUC
- Program Impacts CPUC
- Dispute Resolution CPUC
- Portfolio Management IOUs
- Program Choice IOUs with input from Ad. Groups
- Program Implementation IOUs and Non-utilities

# Incentives: 2007 CPUC Risk/Reward Mechanism

- Tied to CPUC goals (numerical goals)
- Uses foregone supply-side earnings as a reference to set absolute earnings (EE as a resource) and share of net benefits
- Combined into a two-stage, two-tier system
  - Qualify against CPUC savings Goals & Earn against net benefits
  - From 85%-100% - revenues at 9% & from 100% + revenues at 12%
  - Penalties below 65% (greater of . . . )
- Uses final 2006-2008 savings (March 2010) impact results (EE as a resource)
- Partial interim payment in 2008, 2009 at 70% of computed earnings.
- Caps on 2006-2008 penalties and earnings (for PG&E, \$180 million)
- A balance between
  - CPUC need for superior, actual EE savings
  - IOU value placed on a reliable revenue stream

# Evaluation: Timing and Feedback Loops

- The process feeds on information:
- Quality Assurance and Impacts
  - Annual verifications (expenditures and installations)
  - Interim and final determination of savings
  - Refreshed policy analysis (potential studies, etc.)
- Program and market assessments
  - Determine and communicate actual market operations; customer response
  - Foundation for program change and improvement

# Were Not Done Yet

## Coming Over the Horizon

- Carbon
  - Point of regulation
  - Direct regulation or cap & trade or ?
  - Traditional EE measurement too slow
- Market saturation of specific measures
- Customer saturation of “green” and GHG messages (attribution)
- Balance of resource and market transformation perspectives

Will California’s resolve to create path breaking solutions continue?