

California's Energy Efficiency & Demand Response Programs



Dian M. Grueneich, Commissioner
California Public Utilities Commission

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Highest Priority Resource

Energy Efficiency is California's highest priority resource to:



- Meet energy needs in a low cost manner
- Aggressively reduce GHG emissions



Energy Efficiency

California's Highest-Priority Resource



Lowering Energy Costs,
Promoting Economic Growth,
and Protecting the Environment

California Public Utilities Commission
and California Energy Commission

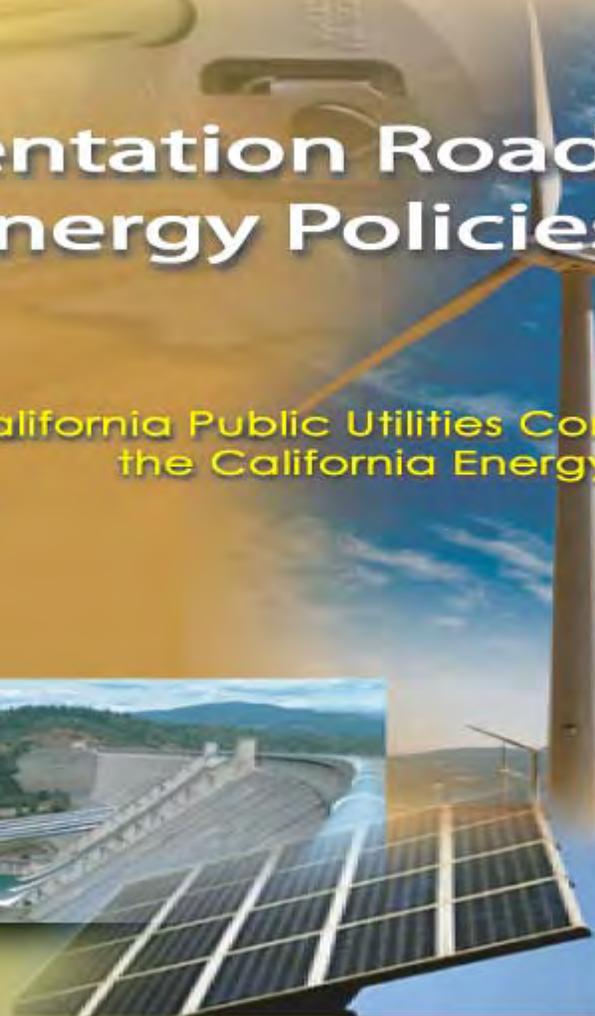


Energy Action Plan II

Implementation Roadmap for Energy Policies

Adopted by the California Public Utilities Commission and
the California Energy Commission

October 2005



Energy Action Plan II

- Loading order continued
 - “Pursue all cost-effective energy efficiency, first.”
- Strong demand response and advanced metering infrastructure programs
- Adds RD&D, climate change, and transportation
 - www.cpuc.ca.gov/Published/Report/51604.htm



California's Aggressive EE Program

- Energy Efficiency goals (2004-2013)
 - 26,506 GWh/year
 - 5,000 MW off-peak
 - 444 Million therms/year
- Eliminates need for 10 new power plants
- Eliminates 9 million tons of CO₂ emissions (equal to 1.8 million cars)
- \$10 billion in net savings to consumers



New Legislation: AB 32 (Global Warming Solutions Act of 2006)

- Codifies the state's emission reduction targets
 - 1990 levels by 2020
- Energy efficiency – a major tool



Strategies for Greenhouse Gas Emission Reductions

CPUC Programs	GHG Savings (Million Tons CO₂)	
	2010	2020
Energy Efficiency Programs through 2013	4	8.8
Additional Energy Efficiency Programs/Demand Response (2014- 2020)	NA	6.3
California Solar Initiative	0.4	3
33 Percent Renewable Portfolio Standard	5	11
Combined Heat and Power Initiative	1.1	4.4
Electricity Sector Carbon Policy	1.6	2.7
Total:	12.1	36.2

Source: Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006.

www.climatechange.ca.gov



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Next Steps in Energy Efficiency

- Shareholder risk/reward incentive mechanism
- Embedded energy savings associated with water efficiency
- Evaluation, measurement and verification
- Update EE potential studies and 10-year savings goals
- Planning process for 2009-2011 program cycle



CPUC Accomplishments in Demand Response Programs

- Rolled-out interval meters for large customers (>200 kW) and placed those customers on time-of-use tariffs (2001)
- CPUC approved the utilities' 2006-08 DR budget proposals (\$262 million)
- Adopted an aggressive long-term dynamic pricing MW goal for the utilities: 5% of system peak demand by 2007 (2003)
- Completed a 2-year pilot program, the Statewide Pricing Pilot, to examine the demand response capability of residential and small commercial customers (2003)



Accomplishments in Demand Response Programs (cont'd)

- Authorized a total of \$70 million in AMI pre-deployment activities for the utilities (2005)
- Directed the utilities to propose default Critical Peak Pricing tariffs for large customers in their General Rate Cases (2006)
- Completed Automated Demand Response System (ADRS) pilot that investigated DR capability of residential customers with automated DR technology and their willingness to pay for the technology (2006)
- Directed the utilities to propose DR measures for Summer 2007
 - 619 additional MWs expected
 - Proposed Decision adopts many of the proposals - Final decision in November



Advanced Metering Update

- PG&E's AMI project with a budget of \$1.74 billion approved in July 2006
- CPUC decision on SDG&E's AMI application is scheduled for Q1 2007
- SCE's AMI application is expected in July 2007 – 18 months ahead of its original schedule



Next Steps in Demand Response

- CPUC decisions on default CPP tariff
- Staff has proposed a new OIR focusing on development of DR measurement protocol, cost-effectiveness methodology, and reassessment of the DR goals





<http://www.cpuc.ca.gov>