



Joint Legislative Stimulus Hearing



California Public Utilities Commission

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Presentation Overview

- CPUC Coordination with Stimulus Spending Plans and IOU Activities

- Currently Authorized IOU Programs Similar to Activities Eligible for Stimulus Funding
 - IOU Energy Efficiency and Demand Response Programs
 - IOU Renewable Energy, Self-Generation Incentive Program, and the California Solar Initiative
 - IOU Alternative Transportation Activities





How CPUC Expects to Help Coordinate Stimulus Spending

1. Collaborate with CEC on Discretionary Funding Plans

- **State Energy Program (SEP):** Contribute to shaping content of SEP, drawing on Energy Action Plan, California Energy Efficiency Strategic Plan, Integrated Energy Policy Report
- **Energy Star Appliance Rebates:** Advise on cost-efficient administrative mechanism

2. Direct Utilities to Facilitate Effective Use of Funds

- **Low Income Efficiency:** Coordinate selected outreach, service delivery, & monitoring of utility Low Income EE programs with Community Services and Development's Weatherization Program
- **Targeted Utility Facilitation:** Direct IOU efficiency, renewable, & demand response programs to help energy users maximize effectiveness and uptake of stimulus funds





How CPUC Expects to Help Coordinate Stimulus Spending (continued)

3. Support California Success with Competitive Awards:

- **Smart Grid:** Working collaboratively with CEC, CAISO, utilities and others to garner significant funding for competitive applicants to demonstrate and deploy components of the Smart Grid
- **Alternative & Electrified Transportation:**
 - Promote existing CPUC policies to help California applicants secure competitive grants for alternative transportation
 - Ensure appropriate regulatory actions regarding utility distribution infrastructure investments and energy tariffs for charging stations to support alternative transportation and operations





Four Investor-Owned Utilities' Combined 2009-2010 Efficiency & Demand Response Current Spending on Areas Eligible for Stimulus Funding

Energy Efficiency

- **2009** \$800 million authorized for program activities (excluding evaluation)
- **2010** \$1.2 billion proposed for programs

Low Income Energy Efficiency

	Total
2007 (Actual)	\$ 146,943,276
2008 (Budgeted)	\$ 157,725,601
2009 (Projected)	\$ 240,054,282
2010 (Projected)	\$ 310,685,254

Demand Response Programs (one dimension of “Smart Grid”)

- \$325 million for large customers statewide
- \$867 million (2009) and \$1 billion (2010) statewide for SmartMeters





EE Where the Money Goes

Investor-Owned Utility Energy Efficiency Portfolios

Program Types

- **Rebates** – Customer purchases energy efficiency measure at lower cost, with the difference paid by the program
- **Audits** – Inspection of a home or business to identify energy efficiency opportunities
- **Direct Installs** – Installation of energy efficiency measures at no cost to the customer
- **Appliance Turn-In** – Takes inefficient appliances out of circulation with free or rebated recycling services
- **Education** – Training for the general public and trade allies (e.g. builders or building operators)
- **Performance Contracting** – Typically non-residential programs. Pays incentive per unit of energy saved for results of equipment and building; not a rebate per measure purchased or installed
- **Energy Management Services** – Typically non-residential programs. A combination of audit services; rebates, performance contracts and/or direct install; can include load management and self-generation
- **Codes and Standards** – Advocacy and technical assistance on building code updating, as well as code compliance.





State & Local Government Partnerships

Statewide Overview Among 4 IOUs

<u>PROGRAM</u>	<u>Partners</u>	<u>Proposed 2009-2011 Budget</u>
Statewide Institutions	UC/CSUS, Community Colleges, Prisons, State of California	\$54.4 million
City, County, Regional Government	46 Partners representing many cities	\$191 million*
Technical Assistance to Local Government	Available to all local governments in IOU territory. Offered by ICLEI, Local Government Commission, etc.	\$12 million (mostly for strategic plan support on policies, code, enforcement, etc.)

Note: More local governments can be added as partners during the cycle within this budget proposal. * About \$15 million is for the Palm Desert Pilot.





Proposed IOU 2009-2011 Appliance Rebate Programs (before Stimulus Supplement)

- **Projected Appliance Rebate Program Spending:**
\$425 million
- **Most Popular Measures covered:**
 - Energy Star Refrigerators, efficient Central & window A/C, TVs, and water heating
 - Not including \$100s millions for Compact Fluorescent Lights
- **Prospective New Measures:**
 - In home energy use displays, solid state lighting (e.g. LEDs), “Hot-Dry” climate heating ventilation & A/C equipment





Water Efficiency Pilots (and Water Agency Partners) **Prospects for water and energy efficiency on a larger scale**

1. PG&E Large Commercial (EBMUD, Sonoma Co. Water Agency)
2. PG&E Emerging Tech (EBMUD, San Jose Water Company)
3. PG&E High Efficiency Toilets (Santa Clara Valley Water District)
4. SDG&E Recycled Water (San Diego Co. Water Authority)
5. SDG&E Managed Landscape (San Diego Co. Water Authority)
6. SDG&E Large Commercial Audits (San Diego Co. Water Authority)
7. SCE Leak Detection (Los Virgenes Municipal Water District, Apple Valley Ranchos Water Company)
8. SCE High Efficiency Toilets (Irvine Ranch Water District)
9. SCE pH / Evapo-Transpiration Controllers (MWD)





ARRA Expands Funding for Renewable Projects to Utilize Investment Tax Credits, Grants, or Loan Guarantees

Status of Financing for RPS Projects			
	# Projects	MWs	% of Total
Financing secured	4	173	4%
Some financing secured	15	3,391	75%
Seeking financing	4	94	2%
Not yet seeking financing	16	812	18%
Unknown	3	72	2%
total	42	4,542	100%





SEP also can Augment Funds for Self-Generation and Solar Energy

IOU Self Generation Incentive Program

- Annual Budget: \$83 million
- 340 MW of DG installed to date; 111 MW of DG pending

IOU California Solar Initiative

- Estimated remaining general program annual budget: \$170 million
- 198 MW of solar PV installed; 162 MW of solar PV pending
- Additional \$200 million committed to solar for low income households





Alternative Transportation

CPUC authorized utility programs & activities

- EPC Act Compliance programs
- Safety Studies
- Customer Outreach
- Load Management Studies (EV load is addressed under DR and EE load management programs)
- System Impact Studies
- Truckstop and Port Electrification programs
- Codes and plug standardization programs
- Impact of vehicle electrification on Long-Term Procurement Plans and Smart Grid Proceedings
- Low Emission Vehicle Programs
- Advanced Metering Infrastructure/SmartMeter Program





Alternative Transportation (continued)

Tariff-Related Activities

- CPUC has authorized Time of Use rates specific to EV battery charging and CNG refueling. (Off-peak rate is much lower than the partial peak and on-peak charge)
- CPUC studying further revisions to rate structure to increase the economic incentive to drive alternative fuel vehicles.

Utility Funding 2009 & 2010

Total projected 2009 & 2010 IOU ratepayer funds for alternative transportation: \$51.5 million

- PG&E: \$11.7 million per year
- Edison: \$11.1 million per year
- SDG&E/SoCalGas: \$3.0 million per year

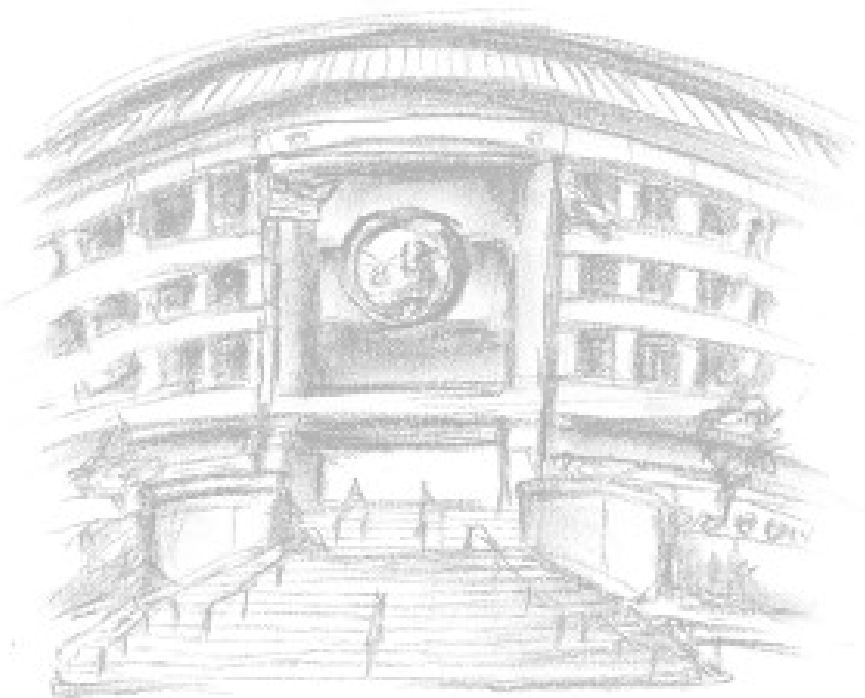




**Thank you
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PG&E 2009-2011 Proposed Efficiency Portfolio (\$ Millions)

PROGRAM/COST ELEMENT	REQUESTED BUDGET
Residential	\$311.5
Commercial	205.2
Industrial	110.0
Agricultural	83.7
New Construction (Residential & Non-residential)	90.3
Lighting Market Transformation	0.5
Heating Ventilation Air Conditioning	101.6
Codes and Standards	19.3
Emerging Technologies	42.2
Workforce Education and Training	48.3
Marketing Education and Outreach	27.0
Statewide DSM Coordination/Integration	1.2
Government Partnerships	217.4
Third Parties	334.3
Zero Net Energy Pilots	35.3
Local DSM Coordination/Integration	7.3
On-Bill Financing	32.7
Evaluation Measurement & Verification Expense	124.8
Evaluation Measurement & Verification Capital RRQ	8.8
Zero Net Energy Lab/Demo/Other Capital RRQ	1.8
TOTAL	\$1,802.9





Southern California Edison Energy Efficiency March 2009 Application Budget and Savings



Edison 2009-2011 Requested Budget: \$1,343 million

<u>Portfolio Metrics</u>	<u>Forecast</u>	<u>Goal</u>	<u>% of Goal</u>
Energy Savings (Gross GWh)	5,320	3,529	151%
Demand Reduction (Gross MW)	1,026	741	138%

Notes:

- 1) Proposed Program Plans based on 3-year cumulative 2009-2011 goal only.
- 2) Includes impacts that Edison expects to be installed in 2009-2011; does not include impacts forecasted to be installed in 2012-2015.





SDG&E and SoCalGas Proposed Efficiency Portfolio March 2009 Mandated Scenario



Mandated Scenario	SDG&E	SoCalGas
Budget (\$million)	\$514	\$542
PUC Savings Goal		
GWH	1591	na
MW	306	na
Therms (millions)	27	168
Portfolio Targets		
GWH	921	na
MW	208	na
Therms (millions)	12	112
Primary program proposal to attempt meeting goal--aggressive customer incentive levels.		
Available savings from EE potential studies do not meet CPUC goals.		
PUC goal is based on maintaining the cumulative goal from 2004-2011.		
Portfolio cost effectiveness below PUC threshold of 1.5.		

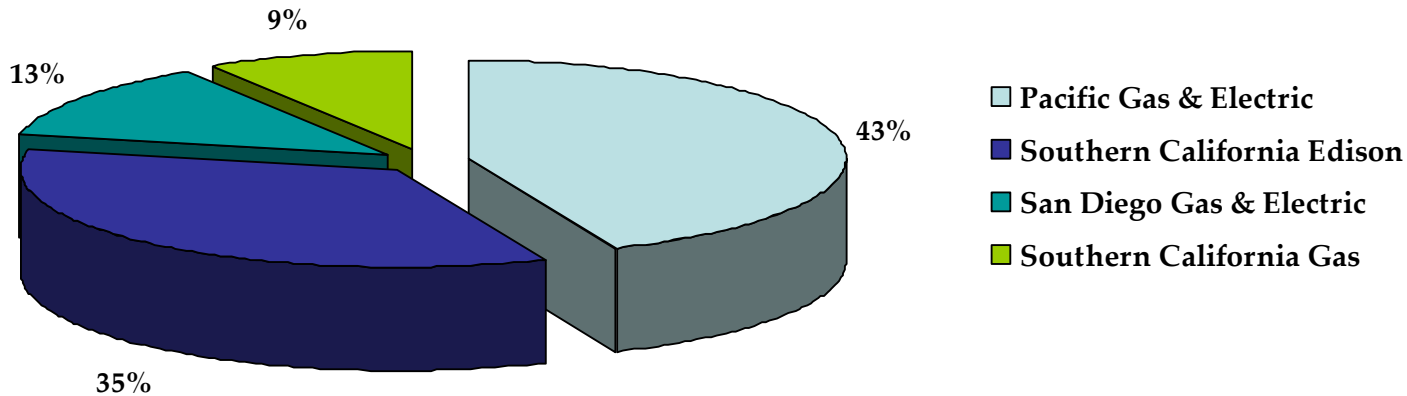




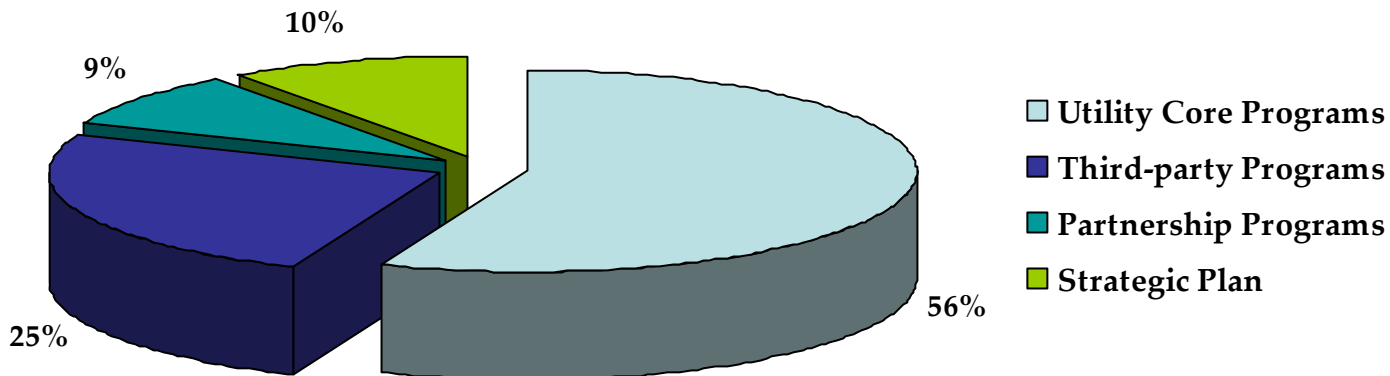
EE: Where the Money Goes

2009-2011 Investor-Owned Utility Portfolios (as proposed 7/08)

By Utility



By Program Implementer





EE: Where the Money Goes for Residential End Uses 2009-2011 Investor-Owned Utility Portfolios (as proposed 7/08)

"Where the Money Goes" Percentage by End Use (Residential Example)

