



# Update to the Senate Energy, Utilities & Communications Committee



**Michael R. Peevey, President**  
California Public Utilities Commission  
*May 5, 2009*





# Presentation Overview

- **ABOUT THE CPUC**
- **THE ENERGY INDUSTRY**
  - Rates and Low Income Protection
  - Programs that Reduce Green House Gas Emissions
  - Wholesale and Retail Electricity Market Structure
- **THE COMMUNICATIONS INDUSTRY**
- **THE WATER INDUSTRY**
- **CUSTOMER CARE AND PROTECTION**
- **CPUC ADMINISTRATIVE INITIATIVES**
- **APPENDIX: Additional Information**



# The California Public Utilities Commission



**President  
Michael R.  
Peevey**

**Commr.  
Dian M.  
Grueneich**

**Commr.  
John A.  
Bohn**

**Commr.  
Rachelle B.  
Chong**

**Commr.  
Timothy A.  
Simon**

- The CPUC, headquartered in San Francisco, regulates privately owned telecommunications, electric, natural gas, water, railroad, rail transit and passenger transportation companies such as moving companies, limousines and charter buses. The CPUC is responsible for ensuring that customers have safe, reliable utility service at reasonable rates, protecting against fraud, and promoting the health of California's utilities.
- The CPUC's board is comprised of five commissioners who serve staggered six-year terms. The commissioners are appointed by the Governor and confirmed by the California Senate. The Governor selects one of the five commissioners to serve as the CPUC president. The commissioners make all CPUC policy decisions, meeting usually twice a month to discuss and vote on issues.



# CPUC's Role and Responsibilities

**Key Role:** Ensuring private utility customers have safe, reliable service at reasonable rates.

- **Energy**

- Regulate investor-owned electric and gas utilities (such as PG&E, SCE, SDG&E and SCG), which serve over two-thirds of electricity demand and over three-quarters of natural gas demand in the state.

- **Communications**

- Administer universal telephone service programs, issue video franchises, enforce customer service standards for telephone services, and regulate rates for basic phone service and rural carriers.

- **Consumer Protection and Safety**

- Enforce consumer protection laws and service standards, investigate fraud and illegal activity, and prosecute violators of the Public Utilities Code, CPUC orders, and utility tariffs. Inspect and audit power plant operation, utility infrastructure, passenger carriers, household goods movers, freight railroads, and rail transit systems.

- **Passenger Transportation**

- License limousines and buses, and enforce statutes and regulations that apply to these carriers' operations.

- **Rail Safety**

- Inspect freight railroad tracks, equipment, and facilities; evaluate and approve railroad crossings for safety; and verify the safety and security plans of rail transit agencies.

- **Water**

- Regulate investor-owned water and sewer utilities, which serve about 20% of the state's residents.





# THE ENERGY INDUSTRY

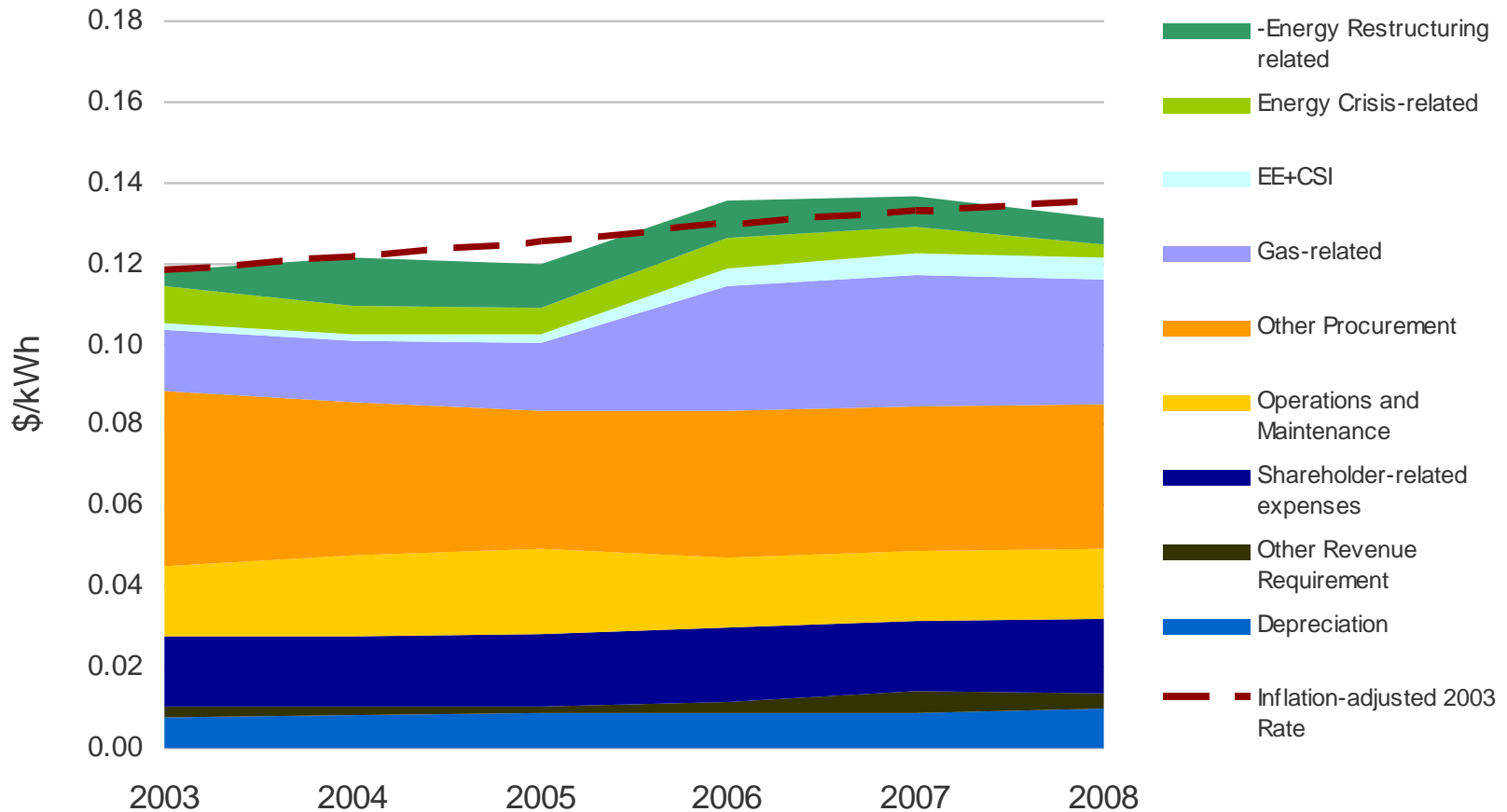


*The CPUC regulates investor-owned electric and gas utilities (such as PG&E, SCE, SDG&E and SCG), which serve over two-thirds of electricity demand and over three-quarters of natural gas demand in the state.*





# Overall Electric Rates Grow Less Than Inflation



## Low Income Programs Provide Bill Assistance and Energy Efficiency Improvements for Eligible Customers

- **Two main programs for low-income assistance:**
  - **California Alternate Rates for Energy (CARE)**
    - Provides a minimum 20% discount on electric and natural gas bills to over 3 million households.
  - **Low Income Energy Efficiency (LIEE)**
    - Provides low income households with energy efficient appliances and weatherization measures at no cost.
  
- **Need for Low Income Assistance Expected To Increase**
  - **Increased Reach:** Utilities will significantly expand the LIEE program to provide LIEE measures for 25% of eligible customers in the 2009-11 period.
  - **Increased Budget:** LIEE and CARE will provide approximately **\$3.5 billion** in assistance to serve over 1 million additional households from 2009-11.
  
- **CPUC examining Energy Utility shut off policy and shut off data.**
  - In 2008, total shut offs by the four California IOUs were about 770,000. Of the total shut offs, 260,000 involved CARE customers.
  - Thus far, shut offs have not increased significantly since the economic crisis worsened in the last few months.
  - The Commission will continue monitoring shut offs and work with stakeholders to increase CARE and bill assistance outreach efforts.



## Ambitious Energy Efficiency Programs

- **Energy Efficiency Strategic Plan**

- Statewide plan adopted by CPUC in late 2008. Identifies strategies to achieve high levels of efficiency through utility, CEC, local government, and market actors:
  - Aggressive levels of efficiency for new homes and commercial buildings.
  - Comprehensive efficiency in existing buildings via “one-stop” integrated services.
  - Phased approach to no-charge efficiency for all low income households.
  - Partnering with Heating, Ventilation & Air Conditioning Sector to market high efficiency equipment and services.

- **2009-2011 IOU Programs**

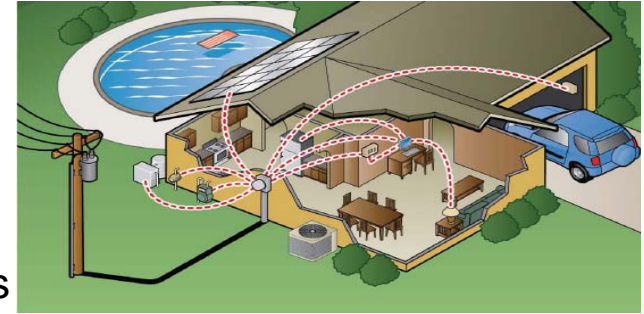
- In July, 2008, utilities proposed \$3.75 billion for next portfolio of programs. Programs are undergoing evaluation and approval process now.





## Smart Meters Leading the Way to Smart Grid

- Smart Meters currently in full-scale deployment by PG&E, SCE, and SDG&E
- \$4.5B investment over 5 years
  - Install about 17M meters (electric & gas)
  - Expected completion by 2012
  - Incorporates advanced solid state electronics, wireless communications, and home-area networks
  - Provides hourly consumption data, automatic data collection, and timely detection of grid reliability issues
- Enables significant operational savings and other system benefits driven by customer awareness of load profile & energy costs
- Key to state goals for demand response/peak-reduction, energy-efficiency & conservation, and smart grid upgrade
- Consumer education and dynamic pricing are key to unlocking full potential of Smart Meters
- CPUC initiated Smart Grid rulemaking end of 2008 to determine policies and oversight for future utility investments in electric grid enhancements

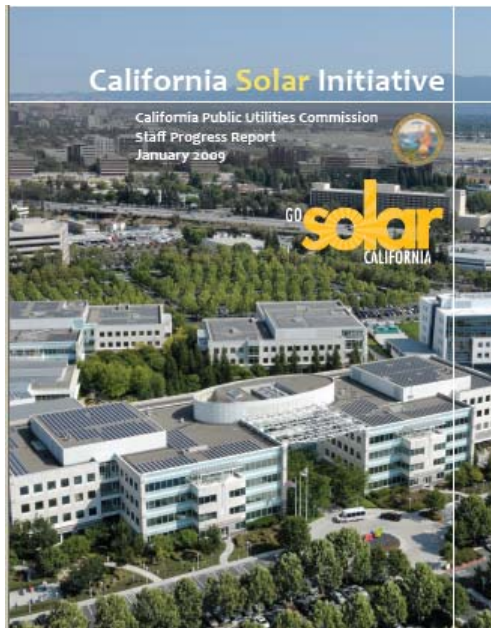


## Empowering Consumers with Dynamic Pricing

- Dynamic pricing refers to retail electric rates that reflect actual wholesale market conditions.
- Dynamic pricing can lower consumer costs, improve system reliability, cut greenhouse gas emissions, and support modernization of the electric grid.
  - 10,000 residential customers in the Bakersfield region that enrolled in PG&E's voluntary critical peak pricing (CPP) rate in 2008 reduced usage by an average of 17% during nine critical peak events.
- Residential:
  - CPP is available to customers with advanced meters on a voluntary basis.
  - Assembly Bill 1X rate freeze effectively prevents default time-of-use (TOU) or CPP; increasing block structure and baseline rates complicate rate design.
- Large commercial and industrial customers (> 200 kW):
  - SDG&E implemented default CPP in 2008.
  - PG&E and SCE have proposed default CPP to be effective in 2010.
- Small commercial and industrial customers (< 200 kW):
  - PG&E has proposed default CPP starting in 2011.
- Utilities developing significant customer education and outreach to help customers understand rates and how they can save money.



## California Solar Initiative (CSI) - Solar Power is Growing



- Solar installations doubled in 2008:
  - 158 MW at 8,200 projects installed in IOU territories.
  - Compares to 78 MW in 2007.
  - California now has 440+ MW of customer-owned solar installed at over 42,000 sites.
- Future demand expected to be strong:
  - CSI program received record number of new applications in December 2008 - highest month on record.
  - CSI program completed another 40 MW at 1,550 sites in January 2009 (likely due to changes in 2009 tax law).
- CSI program represents \$5 billion total utility and private investment in solar technology in CA.
- CSI program rollout of low income and research and development (RD&D) subcomponents in progress.

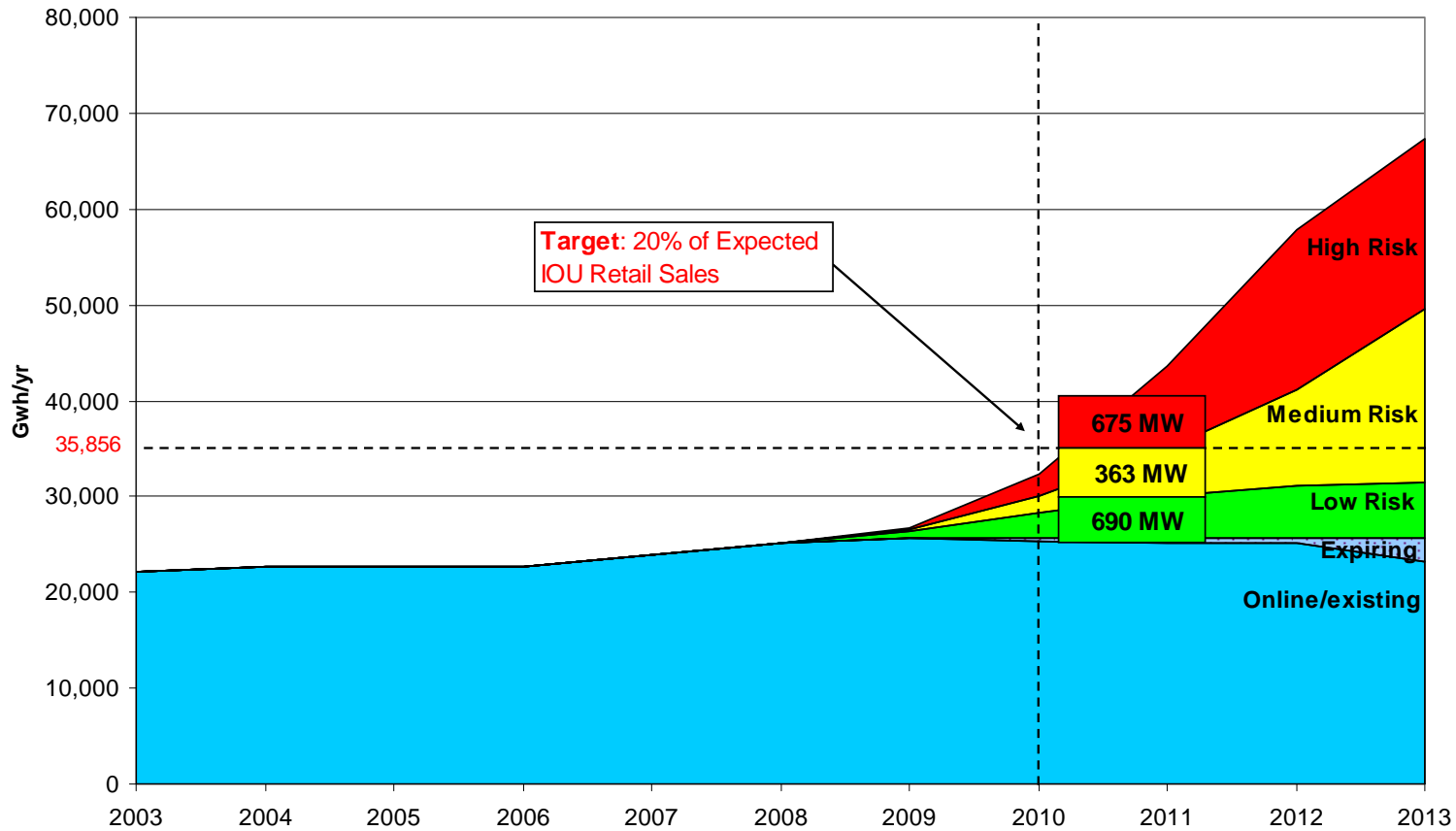


## Aggressive Implementation of Renewable Portfolio Standard (RPS)

- **IOUs will likely deliver between 15% and 18% renewables by 2010:**
  - Based on contracts currently approved or in the pipeline.
  - IOUs will likely reach 20% in 2013.
- **CPUC continues to push hard to reach the 2010 goal:**
  - In 2008, 517 MW of renewable generation came online (mostly wind).
  - Issued staff proposal to ensure that project viability is appropriately assessed during the RPS solicitation process and contract review.
  - Considering expansion of the feed-in tariff program to reduce transaction costs for smaller projects.
  - Identifying plausible resource mixes and reasonable implementation pathways to achieve a 33% RPS by 2020.
- **Explanation of terms in chart on next page:**
  - Risk assessment utilizes information from developers, utilities, and others to determine major project development barriers such as: transmission, financing, and permitting. These barriers are used to characterize projects as high, medium or low risk.
  - Expiring contracts represent capacity already on line that has a high probability of being retained by the IOUs.



### Risk Assessment of Forecasted RPS Generation



California Public Utilities Commission  
February 2009

*Transmission development is the most significant factor impacting project viability and online date.*



## Streamlined Processes Helping Reach RPS Goals

- Initiated statewide planning:
  - Formed the California Renewable Energy Transmission Initiative (RETI) with the CEC and CAISO to identify RPS resources and the transmission projects needed to bring those resources to load centers.
- Coordinated permitting efforts:
  - Working with agencies such as the CAISO, resource agencies and federal permitting agencies and tribes to improve permitting process and actively address transmission infrastructure.
- Supported CAISO queue reform:
  - CAISO, CPUC and other stakeholders collaborated on a proposal for FERC consideration that allows the ISO to reform its Large Generator Interconnection Procedures and expedite the interconnection of thousands of MWs of renewable capacity.





## Tradable Renewable Energy Credits (TREC)s Have a Role in the RPS Program

- Are RECs “just a piece of paper”?
  - RECs are associated with actual renewable energy generation that meets the RPS eligibility guidelines.
  - RECs have certain benefits (e.g. increase RPS options, decrease RPS costs, increase renewable energy supply, decrease GHG emissions).
- Will authorizing TREC)s export green jobs?
  - Distinction must be made between in-state and out-of-state issue and TREC)s/bundled contracts.
  - 33% RPS will require significant build-out of California resources.
  - Facilitating in-state projects can be accomplished more successfully by working on permitting and transmission issues.
- Will TREC)s mean importing coal?
  - Currently, TREC)s must comply with same delivery requirements for out-of-state renewables.
  - All contracts of 5 years or more must comply with Emissions Performance Standard.





## CPUC's Revised TRECs Proposed Decision

- A REC is an accounting mechanism that represents 1 MWh of renewable electricity.
- SB 107 (2006) authorized CPUC to approve the use of tradable renewable energy credits once a REC accounting system was operational (WREGIS).
- Revised PD on TRECs was mailed March 26, 2009.
- PD would authorize electric corporations to use TRECs to comply with the current RPS mandates (20% by 2020).
- Use of TRECs for compliance by the three large IOUs would be capped at 5% of their annual procurement target (APT).
- TREC's purchased by any IOU would be subject to a \$50 price cap and price reasonableness review by Energy Division.
- Would allow IOUs to buy RECs from distributed renewable generation once CEC eligibility rules are established.







## Resource Adequacy & Energy Procurement Programs Ensure Reliable Electric Service at Reasonable Cost

- Ensuring resource adequacy
  - The Commission's Resource Adequacy program ensures that sufficient generation is under contract to meet short term needs (1 year out).
  - The need to eliminate once-through-cooling water systems in electric generation stations and the air restrictions in the LA Basin combine to threaten reliability.
- Implementing energy procurement policy to ensure reliable service at a reasonable cost
  - Increased focus on integrating environmental goals into procurement planning.
  - Emphasis on competitive bidding to secure least cost energy supplies.
- Representing Consumer Interests at the Federal Energy Regulatory Commission (FERC).
  - CPUC supports the goals of CAISO Market Redesign and Technology Upgrade (MRTU) that is intended to better protect against excessive price volatility and gaming, promote reliability, and gain market efficiencies. CPUC staff will be monitoring MRTU on behalf of ratepayer interests.





## Limited Direct Access is part of the Current Market Structure

- **In 1998**, Direct Access (DA) was created by the Legislature in electric industry restructuring (AB 1890):
  - Allowed customers of investor owned utilities (IOUs) to switch to competing energy service providers (ESPs).
  - The utility still provides the transmission, distribution and billing functions for DA customers.
- **In 2001**, emergency legislation enacted (AB 1X) to require the CA Department of Water Resources (DWR) to assume responsibility for procuring electric power for retail customers to maintain service reliability.
  - Using authority provided by AB1X, the CPUC suspended the DA program in order to ensure financial integrity of DWR's power purchasing authority.
  - Today, about 8% of IOU load is served by DA providers.
- **In 2007**, responding to a Petition by Direct Access (DA) interests, CPUC opened a Rulemaking to consider “whether, or subject to what conditions, the suspension of DA may be lifted.”



## Overview of CPUC Direct Access Rulemaking

- **Phase I:** considered the CPUC's legal authority to lift the DA suspension in accordance with AB1X and found that CPUC does not now have the authority to reinstitute direct access.
  - *However:* Novation and/or assignment of DWR contracts would satisfy the terms of AB1X, enabling consideration of whether to reinstate DA.
- **Phase II (a)(1):** addressed measures to help expedite removal of DWR from its role as supplier of power to retail customers under AB 1X.
  - Good cause exists to move forward to Phase II (a)(2) of this proceeding for the purpose of implementing negotiations to execute novation of DWR's remaining contracts
  - However: **"While January 1, 2010 is the target for removing DWR from supplying power, we clarify that this is not the target date for reopening direct access" (D.08-11-056)**
- **Phase II (a)(2):** for any DWR contracts for which novation or renegotiation is deemed warranted, Phase II (a)(2) will facilitate the logistics for DWR to effect novation of its contracts or to renegotiate contracts without novation clauses.
- **Phase II (b):** will address the substantive merits of reinstating DA and relevant market prerequisites whereby DA would be in the public interest.
- **Phase III:** Depending on outcome of Phase II (b), would consider rules for a reinstated DA program.





# THE COMMUNICATIONS INDUSTRY



*The CPUC manages universal telephone service programs, issues video franchises, monitors customer service and public safety standards for telephone services, regulates rates for basic phone service and rural carriers, licenses telephone corporations, and responds to federal telecommunications initiatives.*





## Ensuring Universal Telephone Service

- **California High Cost Fund B Program (CHCF-B) Reform:**
  - Reduced the size of the fund for the support of high cost service areas by targeting support to only the highest cost areas.
    - In 2009, the CPUC will consider the use of a Reverse Auction mechanism to determine future CHCF-B recipients.
    - The CPUC will conduct an affordability study pursuant to SB 780 (Wiggins).
  
- **California Teleconnect Program (CTF) Reform:**
  - CTF provides a 50% discount on telecommunications and Internet access services to schools, libraries, health care organizations, community-based organizations, and California Community Colleges.
  - In 2008, the Commission made the CTF program more competitively and technologically neutral, and expanded the program to:
    - Include community colleges; and
    - Fund a portion of the California Telehealth Network (CTN) that is not otherwise paid for by the FCC.
  - At the end of 2008, the CTF program had a total of 3,330 participants.



## Ensuring Universal Telephone Service

- **LifeLine Program Reform:**

- In 2008, LifeLine provided discounted basic local telephone service to an average of 2.3 million subscribers per month, and implemented the following improvements:
  - Established enrollment/recertification via CPUC website.
  - Established call center assistance in 12 languages with TTY availability.
  - Adopted pre-qualification process- begins July 1, 2009.
- Considering further LifeLine reform in 2009:
  - Including wireless and VoIP providers in the program.
  - Providing a set monthly subsidy to customers to be used with provider of choice.
  - Increasing income eligibility to 200% of Federal Poverty Guidelines.

- **Deaf and Disabled Telecommunications Program (DDTP):**

- Launched Pilot Program to distribute free wireless phones designed for the deaf.
- In 2009, anticipate permanent adoption of Pilot Program and expansion to persons with vision disabilities.
- In 2009, will offer Speech Generating Devices for persons with speech disabilities.





## Broadband Deployment

- **California Advanced Service Fund Program (CASF) Implementation:**
  - Program budget of \$100 million over two years for Broadband deployment:
    - Distributed \$8.5 Million in funding for 13 projects in unserved areas.
    - Approved \$620,000 in funding for 7 projects in underserved areas.
  
- **Further Broadband deployment anticipated in 2009:**
  - Considering CASF criteria adjustments to expand available projects.
  - Optimizing California's share and use of federal economic stimulus Broadband grants/loans.
  - Improving mapping of Broadband availability in California.



## Advancing Emergency Preparedness of Telecommunications Systems

- CPUC reported to the Legislature on standards for telephone emergency backup power and emergency notification pursuant to AB 2393 (Levine).
  - CPUC held workshops on need for setting standards and for those who rely on specialized equipment provided via CPUC programs.
  - The CPUC proceeding is focused on customer education regarding battery backup limitations. A final decision is expected in 4<sup>th</sup> quarter 2009.
- CPUC reported on the impact of the 2007 Southern California Firestorm on communication networks. In 2009, the CPUC will:
  - Follow up with carriers regarding report recommendations.
  - Support CalEMA efforts to develop statewide emergency alerting capabilities.





# THE WATER INDUSTRY



*The CPUC is responsible for ensuring that investor-owned water utilities deliver clean, safe, and reliable water service at reasonable rates.*





## Advancing Water Regulation

- CPUC regulates 129 water utilities serving about 20% of California residents; and 13 sewer utilities.
  
- **Water Conservation**
  - Governor's 20% per capita reduction by 2020 initiative for all water utilities
    - Coordinating efforts with other state agencies
  - Aggressive water conservation policies for our larger investor owned water utilities that:
    - Decouple Sales and Revenues, and
    - Include Inclining Block Rates
  
- **Water / Energy Nexus**
  - Re-defining water conservation as an energy efficiency strategy
  - Pilot programs underway
    - Conserve water, use less energy intensive water, make delivery systems more efficient





# Customer Care and Protection



*The CPUC responds to ratepayer inquiries, resolves customers' informal complaints regarding their utility billing and services, assists the public participating in Commission proceedings, and investigates and enforces public safety standards.*



# Focusing on Our Customers

### ● Wins for the Consumers:

- Helped utility customers receive \$2.5 million in refunds/bill credits.
- Improved response time to consumers by 65% – in 2008 complaints were resolved, on average, in 79 days; compared to 228 days in 2007.
- Translated 230 documents into 19 different languages to better reach our diverse communities.
- Launched a new database in November 2008 – the Consumer Information Management System (CIMS) – to expedite the informal complaint process for consumers with utility complaints, improve data quality, and reduce paperwork.

### ● New Consumer Programs:

- Initiated a Senior Awareness Campaign to educate the elderly about consumer programs such as CARE, LifeLine, and LIEE.
- Launched the Telecommunication Education & Assistance in Multiple language (TEAM) program, July 2008, which uses CBOs throughout the State to educate and assist non-English speaking consumers – 433 complaints resolved, \$21,000 refunds to consumers.



## Focusing on Our Customers

- **Outreach & Small Business Efforts:**
  - Expanded our outreach program to reach an additional 600 clients— CBOs, small businesses, and government officials—to ensure that the public is able to provide feedback to the CPUC on policy issues.
  - Established a dedicated hotline number, 1-800-253-0500, for Small Businesses.
  - Sponsored two Small Business Expositions to assist them in obtaining state and utility procurements—over 400 businesses and 50 exhibitors attended; 15 firms held over 1,000 matchmaking sessions between small businesses and utility companies to discuss procurement opportunities.



## Enforcing the Consumer Protection Initiative

- **CPUC Anti-Slamming Program**

- The CPUC adopted modifications to the slamming citation program to incorporate the FCC's newly revised third-party verification requirements and further strengthen consumer protection.
- The CPUC issued 18 slamming citations fining telecommunications providers up to \$1,000 for each violation of the third-party verification requirements.

- **CPCN Application Review**

- The CPUC continues to perform background reviews to detect the fitness, truthfulness and accuracy of telecommunication providers' applications for transfers of ownership or control, Wireless Identification Registration Numbers, and Certificates of Public Convenience and Necessity (CPCNs). Staff file formal protests against applications if warranted.

- **Prepaid Calling Cards**

- In 2009, the CPUC will implement a more robust prepaid calling card enforcement program, in light of passage last year of AB 2136 (Mendoza) and AB 2885 (De La Torre).



## Ensuring the Safety and Reliability of Gas, Electric & Communications Facilities

- **Investigating Southern California Fires**
  - CPUC staff is submitting testimony in three formal investigations to determine if:
    - Utility owned and operated facilities contributed to the October 2007 fires.
    - If utilities providing service violated provisions of the Public Utilities Code and CPUC General Orders.
- **Recommending New Rules to Ensure Public Safety in High Fire Areas**
  - Staff working with California electric and communication providers to revise and clarify CPUC regulations.
- **Studying Electric Utility Pole Safety Factors**
  - The CPUC is conducting a study to ensure that safety factors involving utility poles are not compromised due to excessive loading exerted on the poles by utility equipment. This is specifically at issue on joint poles that are shared by electric and communication utilities.





# CPUC Administrative Initiatives





## Commission Wide Initiatives

- **SB 960 Compliance**

- Resolved 343 of 357 proceedings consistent with legislative deadlines (96 percent) and continue to work on closing older proceedings.
- Closed over 429 proceedings in 2008 and reduced the average time that formal matters are open by approximately 44%.

- **Modernizing the Commission**

- Continued to streamline processes and procedures to take advantage of new technology while maintaining parties' due process rights.
- Electronic filing is a success! Since established in September 2006, we now receive 89% of filings electronically, which are all available on the Commission's web site. We are in the process of developing online templates in order to assist the general public in preparing its filings.

- **Reviewing CPUC processes**

- Currently exploring ideas through stakeholder input to streamline and clarify CPUC processes in order to promote even greater efficiency, transparency, and effectiveness in the decision making process.





# Appendix

## Additional Information on:

- Empowering Consumers with Dynamic Pricing - Definitions
- Distributed Generation & Feed In Tariffs
- Recently Completed & Active Transmission Cases
- Natural Gas Infrastructure & Supply Access



# Empowering Consumers with Dynamic Pricing

- Definitions:
  - **Time-of-use (TOU):** A rate in which predetermined electricity prices vary as a function of usage period, typically by time of day. TOU is not “dynamic” since it does not vary from day-to-day. TOU has been mandatory for large commercial and industrial customers in California since the early 1980’s.
  - **Critical Peak Pricing (CPP):** A dynamic rate that allows a short-term price increase to a predetermined level to reflect real-time system conditions. Prices are relatively lower during non-critical peak periods.
  - **Real-time pricing (RTP):** A dynamic rate that allows prices to be adjusted frequently, typically on an hourly basis, to reflect real-time system conditions.
  - **Peak Time Rebate (PTR):** A program that provides customers a rebate for demand reductions below a customer-specific baseline when the program is called due to market or system conditions. The reliance on a baseline adds complexity and could result in significant overpayments to some customers. However, utilities are implementing PTR for residential customers since the Assembly Bill 1X rate freeze prevents a simpler dynamic rate design.



## Distributed Generation - Feed-In Tariffs

- **Small Renewable Generation Feed-In Tariff**
  - Feed-in tariff program originally conceived by AB 1969 (2006, Yee)
  - Supports RPS program, offering a standard power purchase agreement for IOUs to purchase renewable energy from facilities sized under 1.5 MW
    - PG&E has 13 customers on tariff (5 hydro, 7 landfill gas, 1 wind)
    - SCE and SDG&E have no customers on tariff yet
  - Ongoing program modifications under consideration
    - Expanding Feed-in tariff to projects up to 20 MW
    - Changes to terms and conditions may apply for larger contracts
      - Staff recently held workshop on terms and conditions (February 10, 2009)
- **Combined Heat and Power Feed-In Tariff**
  - Program authorized by AB 1613 (2007, Blakeslee)
  - Implementation under consideration
    - Staff proposal recently released draft contract (February 3, 2009)



## Distributed Generation – Other Programs and Applications

- **Self Generation Incentive Program**
  - Provides incentives to wind and fuel cells, previously funded onsite CHP and solar
  - SGIP program has installed 305 MW at over 1,200 project sites
- **Solar Water Heating Pilot Program (SWHPP)**
  - On January 16, 2009, California Center for Sustainable Energy (CCSE) released their Interim Evaluation Report
  - Energy Division staff is currently reviewing results of report and working on a staff proposal
- **Utility-owned Distributed Generation Applications**
  - SCE proposes to install 250 MWs of distributed rooftop solar PV at the distribution level and spend up to \$962 million (PD issued March 13, 2009)
  - SDG&E seeks to install 52 MWs of distributed solar PV systems with single-axis tracking at a cost of approximately \$250 million
  - PG&E seeks to install 500 MWs of distributed solar PV
    - 250 MWs owned by PG&E at a cost of \$1.45 billion
    - 250 MWs owned by third-party developers at a cost of \$246/MWh



## Completed and Active Transmission Cases

- SDG&E's Sunrise Powerlink - increases import capacity into San Diego Region by 1,000 MW; projected on-line date 2010/11; estimated cost \$1.8B; CPCN approved December 2008; D.08-12-058.
- Currently 8 applications pending before the Commission; approximate cost of \$1.6 billion; adds approximately 7900 MW of capacity. (*several highlighted on next slide*)
- Next 2 years – anticipate 39 applications, worth over \$9 billion in transmission investment.



## Active Transmission Cases Represent Significant Infrastructure Investment

- **SCE's Devers-Palo Verde 2**
  - Would increase import capacity from Arizona in LA Basin by 1,200 MW; estimated costs \$600M; CPCN approved January 2007; State of Arizona denied project in May 2007.
  - SCE applied for backstop siting with FERC.
  - SCE also filed a petition to modify (currently pending) to request to construct transmission line only in California to access renewables.
  
- **SCE's Tehachapi Region Projects**
  - Provides 4500 MW of capacity from wind-rich resource area into LA Basin.
  - First three phases projected on-line date in April 2010; provides 700 MW of new capacity; estimated cost \$894M; issued two CPCNs March 2007.
  - Final project phase was filed by SCE June 2007; phased construction (on-line dates 2011 through 2013).
  - Total project cost approximately \$2.4 Billion.
  
- **PG&E's Central California Clean Energy Transmission Project**
  - Upgrades Path 15 by increasing the transfer capability by approximately 1250 MW to facilitate delivery of Tehachapi wind resources to PG&E services.
  - Project expected to be filed by PG&E 3<sup>rd</sup> quarter 2010; projected on line date 2012, project cost approximately \$1 billion.



## Improving Natural Gas Infrastructure, Reliability and Supply Access

- Adequate natural gas infrastructure:
  - Helps maintain highly reliable delivery,
  - Reduces likelihood of price spikes
  - Allows more gas storage when prices are low
- CPUC actions on natural gas infrastructure include:
  - Approving significant expansion of storage capacity in 2008, considering additional storage expansion requests in 2009
  - Approving in 2008 key PG&E contracts for interstate pipeline capacity rights on the proposed Ruby Pipeline project, which will allow major new access to low-priced Rockies supplies for Northern CA in 2011
- PG&E and SoCal Gas have been expanding their local gas transmission system capacity, in 2008-2009.
- SoCalGas implemented the firm access rights framework in 2008, improving the reliability of gas delivery at receipt points.
- CPUC will consider in 2009 SoCalGas proposal to implement \$1.1 billion Advanced Metering Infrastructure project.

