

California Public Utilities Commission



















2012 Annual Report Submitted To The Governor And Legislature On Feb. 1, 2013

LETTER TO THE GOVERNOR AND LEGISLATURE

Honorable Edmund G. Brown Jr., Governor of the State of California, and distinguished members of the California State Legislature:

I am pleased to present to you the California Public Utilities Commission's 2012 Annual Report and Work Plan. This report highlights major accomplishments and activities of the CPUC in 2012, and offers a view towards what is ahead in 2013 and beyond.

In 2012, the CPUC continued its commitment to safety in all of the industries we regulate.

On the energy front we approved a research and development plan that is expected to result in more than \$552 million in consumer savings by 2020 due to advancements in energy transmission, reliability, and safety. Lawrence Livermore National Laboratory will conduct research that is likely to improve the safety of gas operations by reducing the amount of pressure needed in transmission pipes in order to maintain distribution flows, and also by improving leak detection and predicting pipe breaks. Furthermore, the project is very likely to provide benefits to ratepayers that exceed costs across both electric and gas operations by avoiding unnecessary purchases of power support services and by identifying with precision places where more grid investment is needed.

In transportation, San Francisco, like other major metropolitan locations such as New York City, Washington DC, and Seattle, was presented with a new business model: consumers brought together by mobile communications looking to contract with one another for car rides. The implications of these new business models are unknown, and it is incumbent upon the CPUC to protect public safety and access to transportation services consistent with the law. As a result, we opened a proceeding at the end of 2012 and in 2013 will ensure that regulation is not a hindrance, but is the safety net that the public relies upon for its protection.

Turning to the communications industry, the CPUC addressed the gap, in public safety communications by providing enhanced 911 (E911) caller location information for phone stations served by multiline telephone systems. These multi-line entities such as office complexes, government entities, schools, and hospitals, are often unaware that exact call station location information may not be reaching the 911 call taker. Phone companies are now required to conduct outreach to multi-line customers to make them aware of their E911 options, and to distribute a customer brochure containing specific information.

Additionally, the CPUC continues to oversee water utilities based on four key principles: 1) Safe, high quality water; 2) Highly reliable water supplies; 3) Efficient use of water; and, 4) Reasonable rates and viable utilities. Our goal is to implement regulatory best practices for water, while placing water conservation at the top of the loading order as the best, lowest-cost supply source.

Finally, the CPUC strives to make the California utility sector as diverse and inclusive as California itself. Through our General Order 156 program, 34 companies are participating and working to procure at least 21.5 percent of their goods and services from minority owned businesses. In the 2012 reporting year these companies procured more than \$7 billion from minority owned businesses.

On behalf of my fellow Commissioners and the staff, I am proud to present to you our 2012 Annual Report and Work Plan.

Sincerely,

Mikel R. Kay

Michael R. Peevey CPUC President

A digital copy of this report can be found at:

www.cpuc.ca.gov/PUC/aboutus/docs_etc/ann_report/

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REGULATING ESSENTIAL SERVICES

A CENTURY OF SERVICE TO CALIFORNIA

California's economy depends on the infrastructure the California Public Utilities Commission (CPUC) and utilities provide. For more than 100 years, the CPUC has worked to protect consumers and ensure the provision of safe, reliable utility service and infrastructure at reasonable rates, with a commitment to environmental enhancement and a healthy California economy.

The CPUC is one of the most influential regulatory agencies in the U.S. It regulates essential services including privately owned electric, natural gas, telecommunications, water, railroad, and passenger transportation companies.

The Governor appoints five Commissioners for six year terms to the CPUC and designates one as President. Commissioners make all policy decisions, usually meeting twice a month to vote on issues noted on a public agenda, which may include the adoption of utility rates, rules on safety and service standards, implementation of conservation programs, investigations into unlawful or anti-competitive practices by regulated utilities, and intervention into federal proceedings that affect California ratepayers.

The CPUC acts in both a quasi-legislative and quasi-judicial capacity. It establishes and enforces regulations, and like a court may take testimony, issue decisions, and subpoena witnesses and records. It holds hearings and workshops, and

CPUC Case Processing

- Opened 281 proceedings and closed 335 proceedings;
- Held 472 days of hearings;
- Issued 538 decisions and 521 rulings;
- Received more than 9,087 documents; and,
- Closed 100 percent of the proceedings in a timely fashion.

encourages participation in its proceedings by all affected parties, including the customers of the utilities it regulates.

The CPUC oversees services that are integral to the lives of the people of California. In support of CPUC decision-making



and ongoing regulatory activities, the CPUC employs a dedicated staff of approximately 1,000 professionals. The leadership and work of those divisions is described in detail on the following pages.

Californians spend more than \$50 billion annually for services from industries regulated by the CPUC.

- **Electricity:** 11.5 million customers; 32,698 miles of transmission lines; 239,112 miles of distribution lines; more than 200 electric generation units; \$23.7 billion in revenue
- **Natural Gas:** 10.7 million customers; 103,000 miles of pipelines; \$7.7 billion in revenue
- Telecommunications: 82.7 million numbers assigned, with 34 million to wireless devices;
 2.2 million VoIP lines; 2.1 million DSL lines; 10.5 million residential broadband connections;
 1,030 certified carriers; \$23.9 billion in revenue
- Water: 127 water and 13 sewer utilities serving about 18 percent of California's population; \$1.2 billion in revenue
- **Railroad Safety:** 10,385 miles of main/branch tracks; 16,016 pieces of railroad equipment; several thousand HAZMAT facilities; more than 13,000 crossings; 3,250 private railroad crossings; 12 rail transit agencies





PUTTING CUSTOMERS FIRST

he CPUC has many programs and processes that are actively focused on consumer service and information. These include assisting consumers with disputes against their utility service providers; facilitating public participation in CPUC proceedings; assisting consumers who have physical impairments (such as vision or hearing) or have limited English-proficiency to receive the same services and benefits as all other consumers; and outreach to seniors, small business, and local governments.

PROTECTING CONSUMERS

The CPUC protects consumers in many ways. Trained and dedicated staff provide a wide range of information to utility consumers who have questions about issues ranging from their utility service quality to assistance with bill disputes and paying their utility bill. The CPUC also assists utility customers in resolving issues and disputes they have with their utility service providers. To facilitate these functions, each utility in the state is required to include the CPUC's contact information on its customer bills. When consumers visit the CPUC's website they can find specific instructions on how to obtain information or assistance on resolving their issues and disputes, as well as other valuable information.

The CPUC has a number of channels to intake inquiries, requests for assistance, and informal complaints from consumers, including its toll-free number, 800-649-7570, its website, and U.S. mail. The CPUC also assists non-English speakers through these channels. The primary languages for servicing non-English speakers includes Spanish, Chinese (both Mandarin and Cantonese), and Vietnamese. Staff resources are augmented with printed material and language line service. The CPUC has staff fluent in 34 different languages to provide assistance to consumers.

In 2012, the CPUC received 54,527 contacts to its Consumer Affairs Branch. The contacts are tallied by industry in the table below.

Consumer Contacts to the Consumer Affairs Branch in 2012

	Total Number of Consumer Contacts	Consumer Contacts: Complaints Against a Utility	Consumer Contacts: Inquiries Regarding a Utility	Consumer Contacts Requiring Special Handling*
Telecommunications	28,691	52%	7%	41%
Energy	15,580	66%	16%	18%
Water	3,633	38%	5%	57%
Utilities Not Regulated by the CPUC	6,623	27%	16%	57%
Total	54,527			

*Special Handling Includes: Impounds (a consumer payment that the CPUC holds during pendency of a case to avoid disconnections); LifeLine Appeals (consumers that are denied LifeLine eligibility can appeal the decision); Misdirected Calls (consumers trying to reach their utilities or other agencies); and New Cases (not yet assigned for resolution).



CPUC Consumer Affairs Representative assisting a consumer

The CPUC started posting to its website data on consumer complaints and inquiries made in languages other than English. This data is sorted by utility, making it easier to locate information about utility service providers. In addition, the CPUC has started web-posting the number of public contacts (both phone and written) that the Consumer Affairs Branch receives. This information was initiated with the posting of monthly summary data pertaining to energy, telecommunications, and water contacts.

Assisting Consumers with Disabilities and Limited English Proficiency

The CPUC provides special accommodations under the Americans with Disabilities Act (ADA). Public hearings are held at locations with access for individuals with disabilities, and the CPUC has a dedicated coordinator to assist individuals with specialized needs. The CPUC also provides interpreter services (including American Sign Language) to facilitate public participation at its public meetings and events.

PROVIDING EQUAL ACCESS TO PARTICIPATION IN THE CPUC'S PROCESS

Limited-English proficient consumers may face challenges with understanding the variety of services and discount programs available to help them with telecommunications and energy bills.

The Telecommunications Education and Assistance in Multiple-languages (TEAM) program provides outreach, education, and complaint resolution services on telecommunications matters to limited English proficient consumers in the language of their choice. TEAM uses a statewide network of Community Based Organizations (CBOs) to assist consumers who speak limited or no English, who can be confused by the complex telecommunications marketplace, and can be susceptible to fraud. In 2012, TEAM added two



toll free phone numbers to assist rural consumers in areas where TEAM does not have a local CBO. The calls are answered by

people who speak English, Spanish, Chinese, Vietnamese, and Tagalog, which are the most commonly used languages in California.

In 2012 TEAM:

- Assisted consumers in 32 languages;
- Educated 61,515 consumers about telecommunications issues;
- Helped 2,838 people resolve complaints; and,
- Reached potentially 2 million people to tell them of the program's existence through television, radio, newspapers, and community events.



Based on the success of the TEAM program, in 2011 the CPUC initiated a pilot for a similar program to address energy (electricity and natural gas) utility issues. The energy pilot, referred to as Community Help and Awareness of Natural Gas and Electricity

Services (CHANGES), launched in February 2011. In 2012, the CPUC extended funding for CHANGES through the California Alternate Rates for Energy (CARE) program until the end of the CARE Program 2012-2014 cycle or until alternate or complimentary funding can be put in place, whichever occurs sooner. Since the launch of CHANGES to the end of 2012, it has:

- Assisted consumers in 32 languages;
- Educated 30,439 consumers about safety and measures to lower energy bills;
- Helped 2,441 people with disputes or payment arrangements or to sign up for financial assistance to pay their bills; and,
- Reached potentially 3 million people to tell them of the program's existence through television, radio, newspapers and, community events.

INFORMING CONSUMERS

The public is best served when there is a clear flow of information to and from the CPUC.

As a government agency, the CPUC values providing timely and accurate information to all its stakeholders. The CPUC website provides extensive information about the CPUC's many programs and proceedings. The CPUC has several programs dedicated to providing information to the public, including the News and Public Information Office, the Public Advisor's Office, the Legal Division's Public Records Act Unit, and various others. In addition, current schedules, online forms, and telephone and email contacts are posted and distributed to assist the public in obtaining information from the CPUC.

The CPUC values and encourages input from all interested parties in order to make better-informed decisions that reflect the views of the public it serves. As such, one of its continuous goals is to increase awareness and public participation. To achieve this goal, the CPUC provides procedural information and advice to individuals and groups who want to participate in formal CPUC proceedings.



CPUC Public Advisor's Office staff assisting consumers at a Public Participation Hearing

The public has a variety of ways to provide input to the CPUC through opportunities such as giving verbal opinion by phone, speaking at public participation hearings or CPUC Voting Meetings, providing written comment through email or letter, or becoming an active participant in a formal process.



CPUC Public Participation Hearing in Los Osos, Calif.

The CPUC typically receives thousands of informal comments on a wide variety of issues every month. The

number of comments received are tracked and reported to Commissioners; while specific comments are circulated to the Commissioners, Executive Office, and Assigned Administrative Law Judge for their review. The top issues on which the CPUC received informal comments in 2012 include: Smart Meters, Net Metering, basic phone service revisions, rates, wildfire proceeding, energy efficiency, nuclear power plant closures, pipeline safety, California Solar Initiative, Demand Response, alternate fuel vehicle proceeding, and master meter for mobile home parks.

The Public Advisor's Office provides advice to the public on how to participate in formal CPUC proceedings, find information from CPUC sources, express opinions on CPUC issues, and request interpreters (including American Sign Language) and special accommodations at CPUC public events (such as hearings or workshops).

In 2012, the CPUC held 43 public participation hearings in order to provide the public an opportunity to comment on specific issues. These hearings were held in communities impacted by the specific issue. Collectively, approximately 3,000 individuals attended the events and of those more than 900 made public comments. The CPUC held 20 voting meetings at which 428 individuals made comments.

CPUC SPEAKER SERIES PROMOTES Education and Discussion

In 2012, the CPUC continued to host Thought Leaders, a free and open to the public guest speaker series designed to stimulate thought and discussion of some of the most pressing challenges facing California utility regulators and the private sector industries impacted by state policies. In 2012, the Thought Leaders series tackled topics such as Revitalizing the Clean Energy Economy, The Internet of Things, and Green Economy Partnerships, at which Lieutenant Governor Gavin Newsom served as keynote speaker and moderator.



Lieutenant Governor Newsom and CPUC analyst Devla Singh at Green Economy Partnerships

SAFETY OF ELECTRIC, NATURAL GAS, AND COMMUNICATIONS INDUSTRIES

he CPUC is dedicated to continually improving the safety culture at the CPUC and within all the industries it regulates. Toward this end, the CPUC has instituted an executive Safety Council, consisting of all CPUC Directors, to elevate discussion and share information on all matters related to safety. In addition to the Safety Council, the CPUC's Risk Assessment Sections each provide key risk assessment and risk management expertise in researching, developing, and implementing new tools to enhance safety in California.

NATURAL GAS SAFETY

TThe CPUC ensures that all natural gas pipeline systems operating in California are designed and maintained at acceptable levels of operational safety and reliability for the protection of the general public and utility employees.

Following a pipeline rupture in San Bruno in 2010, the CPUC embarked upon a strategic initiative to change the safety culture of the CPUC and the industries it regulates from a check-the-box compliancy mentality to a diamagnetic risk assessment and risk management climate and culture, reinforced by a more robust enforcement program using the CPUC's regulatory powers.

A critical component of this work is the CPUC's natural gas Risk Assessment Section (RAS), which was established to research, develop, and propose tools to improve pipeline safety and oversight in California. This includes developing meaningful metrics to evaluate the integrity of pipeline systems. In 2012, RAS developed a Natural Gas System Database to identify existing hazards associated with gas pipeline systems. RAS worked with the National Association of Pipeline Safety Representatives to conduct a nationwide survey, interviewed subject matter experts, and reviewed other emerging issues such as cybersecurity, to collect data to populate its database. As a result of its efforts, RAS identified 17 potential gas safety hazards that impact public safety that the CPUC plans to incorporate into its regulatory practices. One of the current projects RAS is working on is the development of meaningful metrics to evaluate the integrity of the pipeline systems.

The CPUC's Consumer Protection and Safety Division (renamed the Safety and Enforcement Division in 2013), which houses RAS, also conducts audits and investigates gas incidents pertaining to investor-owned gas utilities, mobile home parks, and propane systems, and issues involving the Federal Pipelines and Hazardous Materials Safety Administration (PHMSA).

Pipeline Rupture in San Bruno

On January 12, 2012, the CPUC's Consumer Protection and Safety Division (CPSD; renamed the Safety and Enforcement Division in 2013) issued a report on its investigation into the PG&E pipeline rupture in San Bruno that occurred on September 9, 2010. CPSD found that the incident was caused by a combination of the following factors:

- PG&E failed to follow accepted industry practices when it installed the segment of pipeline that ruptured;
- PG&E failed to comply with the integrity management requirements of Title 49 Code of Federal Regulations, Part 192, Subpart O;
- PG&E did not keep adequate records of the pipeline segment that ruptured;
- PG&E had deficiencies in its SCADA system and inadequate procedures related to the work at its Milpitas terminal;
- PG&E was deficient in its emergency response actions after the incident; and,
- PG&E's corporate culture emphasizing profits over safety.

In 2012, the CPUC ordered a formal investigation to examine CPSD's report and to consider issuing penalties and remedies for PG&E's actions. The CPUC plans to issue a decision in 2013.

Natural Gas Safety Action Plan

In order to promote transparency and increase understanding of the CPUC's gas safety and reliability program, the CPUC created a comprehensive, high-level, Gas Safety Action Plan to guide and promote the CPUC's shift in culture from the traditional compliance model to a firm but fair regulatory structure that sets, monitors, and enforces rules for regulated utilities based on risk assessment and risk management. The Gas Safety Action Plan also serves to monitor the CPUC's efforts to implement the decisions resulting from the CPUC's Natural Gas Safety Rulemaking, as well as the various improvements responsive to recommendations made by the Independent Review Panel, and the National Transportation Safety Board in response to the San Bruno pipeline rupture. The plan's focus is to proactively identify, evaluate, and mitigate risks; verify compliance with rules, standards, and risk mitigation measures; propose and litigate enforcement actions; and develop policies and procedures to assess the safety culture of natural gas pipeline operators. The plan is designed to be a living management tool that will drive the CPUC's overarching strategies to improve its Gas Pipeline Safety Program.

Audits of PG&E's Gas Operations

In 2012, CPSD joined PHMSA to conduct audits of PG&E's gas operations as recommended by the National Transportation Safety Board in its report of the San Bruno pipeline rupture. CPSD and PMHSA conducted audits of PG&E's Public Awareness, Operator Qualifications, Transmission Integrity Management, Control Room Management, and Distribution Integrity Management Programs. These comprehensive audits have proven to be beneficial to both the CPUC and PHMSA in that they provided regulatory insight by combining the strengths of both regulatory entities into one with the goal of ensuring the safety and reliability of PG&E's gas pipeline system.

Continuing Oversight of Hydrotesting and Pipeline Replacement Activities

In December 2012, the CPUC approved PG&E's application for its Pipeline Safety Enhancement Plan, which includes hydrotesting 783 miles of transmission pipeline, replacement of 768 miles of pipeline, upgrading 199 miles of pipeline to accommodate in-line testing equipment, and the installation of 228 automatic shut off valves. The CPUC will provide ongoing oversight of these activities throughout 2013, including conducting field inspections and data collection. The CPUC anticipates that it will make a decision on Sempra's Pipeline Safety Enhancement Plan in the first half of 2013, at which time the CPUC gas safety staff will commence similar field oversight of Sempra's construction activities.

New Safety Legislation

Several new laws have helped the CPUC increase the effectiveness of its natural gas safety programs, including the following.

Senate Bill 705

In October 2011, the California Legislature passed Senate Bill (SB) 705, which amended the Public Utilities (PU) Code with Sections 961 and 963. The new code sections require each gas corporation jurisdictional to the CPUC to develop and implement a plan for the safe and reliable operation of its gas pipeline system. On June 29, 2012, the gas corporations filed their safety plans with the CPUC. CPUC staff reviewed each of the safety plans for compliance and found all the plans to be deficient. CPUC staff will meet with the gas corporations in 2013 to resolve the issues. Each gas corporation must resolve all the deficiencies identified by CPUC staff by June 30, 2013.

Senate Bill 44

In October 2011, the Governor approved SB 44, which amended the PU Code with Sections 955 to address emergency shut-down and pressure reduction procedures, emergency response communications procedures, and to require the CPUC to establish compatible emergency response standards in consultation with the first responder community. In 2012, the CPUC consulted with the California Emergency Management Agency, the State Fire Marshal, and members of California's first responder community to establish the emergency response. The CPUC will report to the legislature on the status of establishing compatible emergency response standards in the first quarter of 2013.

Assembly Bill 1694

In July 2012, the Governor approved Assembly Bill (AB) 1694, which modified Sections 4353 and 4453 of the California PU Code. The new PU Code Sections replace the arbitrary schedules employed by the CPUC to inspect mobile home park master-metered natural gas systems and individual propane systems with a risk-based assessment approach. In 2013, the CPUC will implement its new risk-based inspection schedule to focus on the most problematic systems with the highest risks.

CPUC Citation Program

On October 7, 2011, the Governor signed into law SB 879, which increased the maximum amount of the daily penalty provisions set forth in PU Code Section 2107 to \$50,000, and reinforced the CPUC's ability to issue fines against pipeline operators who violate federal and state gas pipeline safety regulations. In turn, on December 1, 2011, the CPUC issued Resolution ALJ-274, which delegated greater authority to its gas pipeline inspectors to issue citations to pipeline operators. The CPUC also requires pipeline operators to provide notice to the CPUC of any self-identified violations. In 2012, the CPUC investigated more than 35 self-identified violations reported by pipeline operators and assessed penalties in excess of \$15 million.

New Pipeline Inspectors

In 2012, the CPUC continued to work with the state legislature and made significant steps to improve its oversight over all of California's natural gas operators. In addition to the new legislation and Gas Safety Program Improvements, the Governor's Budget authorized the CPUC to hire additional pipeline safety inspectors. In 2012, the CPUC hired 16 additional pipeline inspectors, which includes five engineering specialists to oversee the implementation of the new legislation and the pipeline integrity management programs of the pipeline operators.

ELECTRIC SAFETY AND RELIABILITY

CPUC jurisdiction extends to most power plants in California. The CPUC focuses its efforts on approximately 60 large (50 MW or greater) fossil fuel plants that provide more than 58 gigawatts of generating capacity to customers of PG&E, SCE, and SDG&E. CPUC staff conduct comprehensive audits, investigate incidents affecting safe and reliable electricity production and supply, inspect plant outages, prepare special studies, and analyze plant performance data. As large Renewables Portfolio Standards (RPS) projects become operational, the CPUC will conduct similar work at those facilities.

Investigating Power Plant Events

In 2012, the CPUC inspected more than 332 outages. Predictably, outages occur at aging plants, but also at recently built plants that operate new and sometimes unfamiliar technologies. Roughly 80 percent of such outages occurred at plants located in Southern California.

The CPUC investigated 12 incidents or accidents in 2012 where evidence suggested a significant violation of safety, operation, and/or maintenance standards, or larger systemic problem. The CPUC's 2012 investigations fell into multiple categories: boiler or steam tube leaks, equipment explosions, fires, electrical "flash" incidents, chemical releases, and faulty equipment. Some resulted in employee injuries, damaged equipment, and/or posed an inconvenience and potential safety risk to the public.

San Onofre Nuclear Generating Station

After an ammonia leak in late 2011, followed by a major steam generator malfunction in January 2012, the CPUC began to investigate incidents at SONGS that did not rise to the NRC's prescribed definition of a safety event (one which could involve radioactivity), but could nevertheless potentially impact plant reliability and efficiency. In 2012, the CPUC investigated three incidents at SONGS: a hydrogen leak, a fire, and improper fluid in an emergency generator. CPUC staff also initiated a reevaluation of California's common understanding of the respective jurisdictional roles and responsibilities of the NRC and the CPUC.

In October 2012, the CPUC opened a formal investigation into the extended outages of units 2 and 3. The investigation will take place in 2013 and will determine whether to remove all costs related to SONGS from the rates of SCE and SDG&E going forward, and whether to refund SONGSrelated costs already collected in rates back to January 1, 2012.

Onsite Power Plant Audits

A team of CPUC engineers conducts a comprehensive power plant audit in multiple phases. First, the team researches the operating history of the plant, spends at least one week at the plant, and develops findings regarding safety, efficiency, and reliability conditions at the plant. The plant submits a corrective action plan, which CPUC staff can approve, reject, or modify. If a plant fails to initiate corrective actions, the CPUC can undertake an escalating series of enforcement actions. In 2012, the CPUC advanced eight audits through the various audit phases, divided between plants located in Northern and Southern California.

Summer Emergency Preparedness and Reporting

When the California Independent System Operator (ISO) declares Stage 1, 2, or 3 emergencies due to electrical capacity shortages, CPUC staff investigates the causes, estimates a return to service, and circulates special, same-day inspection reports. The CPUC uses this information to brief other state and federal officials and agencies. As part of the CPUC's work in preparing for summer 2012, CPUC inspectors met with each power plant to discuss summer readiness. California did not experience any Stage 1, 2, or 3 alerts during summer 2012.

The CPUC has regulatory authority over the safety and reliability of electric, communications, natural gas, and propane gas systems. The CPUC evaluates the risk assessment, operations, maintenance, and construction efforts of utilities to promote safety and to ensure that the utilities comply with the relevant rules and regulations. CPUC staff conducts engineering review and oversight and operations and system inspections. CPUC staff investigates all incidents to some degree and will conduct comprehensive investigations when appropriate, typically for incidents with significant actual or potential public safety consequences, and incidents that that raise questions as to cause or contributing factors. CPUC staff also investigates and recommends methods or practices to improve safety culture and reduce utility related accidents. Following are areas of interest in 2012.

Risk Management/Risk Assessment

In 2012, the CPUC initiated a high-level review of the electric utilities risk management programs to better understand and evaluate their safety culture and risk assessment programs. This effort will continue in 2013.

Reducing Fire Risk From Electric Powerlines

Fires caused by downed powerlines can result in massive property damage and are a serious risk to public safety. To reduce these risks, the CPUC works to improve the design, construction, and inspection of powerlines as well as improve the coordination between power, telephone, and cable companies that share pole lines. In 2013, the CPUC will consider requiring stricter construction standards in fire-prone areas and reporting requirements for all fires caused by electric lines.

SDG&E Proactive Electric De-Energization

In 2011, the CPUC participated in the creation of the Fire Prevention Plan for San Diego County, which is expected to be finalized in 2013. In 2009, the CPUC ruled against an application from SDG&E that requested approval to proactively de-energize its electric system when certain weather conditions existed that could damage its facilities and cause fires. The CPUC instead ordered all key stakeholders to create a Fire Prevention Plan for San Diego County.

Transformer Loading Study

Residential transformers can become overloaded due to increased consumer demand; heat waves in particular dramatically increase residential use of air conditioning, which can overload transformers and result in power outages. In 2012, the CPUC continued its work to mitigate these effects by conducting a study that examines the impact of increased demand on distribution transformers during so-called "heat storms". The study led to proposed rules aimed at reducing power outages associated with transformer overloading, which the CPUC expects to consider in 2013.

Low Transmission Lines

Low transmission lines can be extremely dangerous, and their occurrence increases the chance of power outages, contact with humans, and the risk of shock or electrocution. In October 2010, the North American Electric Reliability Corporation issued an alert to electric utilities to verify "asbuilt" conditions of overhead transmission lines due to the possibility of low lines that are in violation of existing laws. In 2011 and 2012, the CPUC met with electric utilities to determine the severity of the issue and are currently reviewing corrective action plans to ensure that the hazards are being addressed. The CPUC is examining the root cause of the low lines to determine if additional measures should be taken to prevent reoccurrence in the future.

Safety of Electricity and Communication Infrastructure Facilities

In response to several wildfires that were reportedly ignited by powerlines, the CPUC is considering several new and revised regulations to reduce the fire hazards associated with overhead powerline facilities and aerial communication facilities located in close proximity to powerlines. In particular, CPUC General Order 95 was revised to require Communication Infrastructure Providers (CIPs) to inspect their aerial facilities according to specific inspection cycles, require pole-loading calculations wherever there is a material increase in load on the pole, and require CIPs to attach a marker to newly constructed or reconstructed CIPs facilities or joint-use poles.

Electric Substation Inspections

Proper inspection of electric substation operations is critical to identifying, documenting, and resolving many safety and reliability concerns. In 2012, the CPUC approved a new General Order establishing the minimum inspection and maintenance standards for electric substation in California. The CPUC will begin auditing electric substations in early 2013.

Transfer of Master-Meter/Submeter

Many residents of Mobile Home Parks and Manufactured Housing communities (collectively, MHPs) do not receive electricity and/or natural gas directly from investor owned utilities (IOUs). Instead, the IOUs serve a master-meter customer, in this case the MHP, who then distributes the electricity or natural gas, or both, to individual coaches, or homes. Because the utilities do not own or operate the MHP submeter systems they do not have the same maintenance or safety responsibilities as they do for their own distribution systems. The CPUC examined measures taken to encourage replacement of submeter systems with direct utility electricity and natural gas service to MHPs as a way to improve the safety and reliability of service. The CPUC plans to issue a decision on the matter in 2013.

Southern California Windstorm

On November 30, 2011, and December 1, 2011, powerful winds caused damage to electric and communication facilities in SCE's service territory, resulting in prolonged power outages. The majority of the damage occurred in the San Gabriel Valley area. Two-hundred forty-eight SCE wood poles supporting electric and communications facilities and 1,064 SCE overhead conductors were damaged causing 440,168 customers to lose power. The highest number of simultaneous customer outages was 226,053. Power was not fully restored until December 8, 2011. In 2012, the CPUC investigated the causes of the outages and SCE's response to the outages and issued a staff report.

The report determined that SCE and Communication Infrastructure Providers, who jointly own poles in SCE's service territory, violated safety factor requirements. CPUC staff found that SCE's restoration time was inadequate, the information in SCE's emergency procedures was not up to date, and SCE personnel did not follow the training schedule outlined in its Local Public Affairs Plan. SCE also did not ask for mutual assistance from other utilities.

The report will be used to guide the CPUC's Safety and Enforcement Division in its work with SCE to resolve the problems identified and implement the recommendations. If the Safety and Enforcement Division is unable to obtain satisfactory compliance from SCE, the Safety and Enforcement Division intends to request that the CPUC open a formal proceeding to consider enforcement action and potential financial penalties.

Resource Adequacy Citation Program

CPUC staff can issue citations for specific violations of the CPUC's system and local resource adequacy requirements. In 2012, the CPUC issued and collected payments on two citations totaling approximately \$8,160. The first citation was to Glacial Energy of California for failing to replace a procurement deficiency within five business days of the date of notification of the deficiency. The second was to Shell Energy North America for failure to file a month-ahead System Resource Adequacy Compliance Filing at the time or in the manner required.

Renewables Portfolio Standard Citation Program

CPUC staff can issue citations for non-compliance with the CPUC's Renewables Portfolio Standard (RPS) requirements. The CPUC collected payment on a citation issued September 2, 2011, to Liberty Power Holdings, LLC for failing to file a Routine RPS Compliance Report at the time required. Liberty initially appealed Citation No. E-4257-02 in the amount of \$4,000 but later withdrew its appeal and paid the fine on January 25, 2012.

Investigations

The CPUC investigates allegations of utility tariff/rule/code violations. A CPUC investigation is comparable to an indictment in a prosecutorial process. An investigation is issued after the CPUC has gathered evidence and is prepared to make its case for penalty actions to the Commissioners.

Malibu Fire Investigation

In September 2012, the CPUC approved a settlement between its safety staff and three of the parties in the investigation into the Malibu Fires of 2007 (I.09-01-018). The fires resulted from high winds that knocked down utility power lines, igniting the dry ground brush. Under the settlement, AT&T Mobility LLC, Sprint Telephony PCS, L.P., and Cellco Partnership LLP, d/b/a Verizon Wireless, pay \$12 million, \$6.9 million of which goes to the State's General Fund and \$5.1 million of which goes to the Enhanced Infrastructure and Inspection Fund (EIIF), established pursuant to the settlement agreement. The money paid to the EIIF will be used to strengthen utility poles in Malibu Canyon and to conduct a statistically valid survey of jointuse poles in Southern California Edison's service territory for compliance with General Order (GO) 95 safety requirements.

Investigation Into PG&E's Monitoring of Anti-Smart Meter Groups

In 2010, a PG&E employee allegedly infiltrated several anti-Smart Meter advocacy groups using deceptive means. In April 2012, the CPUC initiated an investigation into PG&E's monitoring of anti-Smart Meter groups to determine whether PG&E violated the law. On November 26, 2012, CPUC staff entered into a settlement with PG&E and The Utility Reform Network. Under the terms of the settlement, PG&E would make a settlement payment to California's General Fund of \$390,000. The parties filed a joint motion for CPUC adoption of the settlement on November 30, 2012.

CPUC Approves Settlement Over Seventh Standard Substation Project

In January 2012, the CPUC authorized the settlement between its safety staff and PG&E regarding PG&E's violation of state law and regulations on environmental and endangered species protection in construction of its Seventh Standard Substation Project. Under the terms of the settlement, PG&E will pay \$100,000 to the State's General Fund and will donate \$50,000 to the Endangered Species Recovery Program at Stanislaus State University.

COMMUNICATIONS SAFETY

Violations of Third-Party Verification Rules

The CPUC protects consumers from providers that illegally switch consumers' phone carriers without customer authorization, a practice known as slamming. In 2012, the CPUC reviewed 199 slamming cases related to consumer complaints and issued no slamming citations. This compares favorably to 2011, in which the CPUC reviewed 221 cases and issued two slamming citations, indicating a reduction in the number of carriers that violated the third party verification rules.

Investigations

The CPUC investigates allegations of telecommunication tariff/rule/code violations, including cramming, slamming, misleading advertising, unfair business practices, and ratemaking misrepresentations. Based on the evidence uncovered by CPUC staff during its investigations, staff can request that the CPUC open a formal investigation. CPUC staff provides testimony in such investigative proceedings and proposes remedies, penalties, and restitutions.

In one such case in May 2011, the CPUC instituted an investigation into OSP Communications and John Vogel to determine whether OSP and Vogel crammed more than 736,000 California consumers and billed them more than \$8 million for collect calls they neither received nor authorized in violation of the law. The investigation also looked into whether The Billing Resource LLC and Integretel should refund and disgorge all monies billed and collected on behalf of OSP. In November 2012, CPUC staff and Vogel signed a settlement agreement. Under the terms of the agreement, OSP would make full reparation to California consumers for collect call charges that were neither authorized or received, and pay a penalty of \$2,.8 million to California's General Fund. A joint motion for CPUC adoption of the settlement was filed on January 17, 2013.

Reviews of Applications for CPCNs

The CPUC performs background reviews to determine the fitness and truthfulness of applicants, and to detect any misleading representations in applications for Certificate for Public Convenience and Necessity (CPCN) for Nondominant Inter-Exchange Carriers and Competitive Local Carriers. Where warranted, CPUC staff submits a protest to an application within 30 days of the item appearing on the CPUC's Daily Calendar, explaining the grounds for its objection to the application.

In 2012, CPUC staff reviewed 30 applications and protested four. Of the four protests, one applicant withdrew its application, one has settled, and two are active proceedings.

Dismissal Without Prejudice of Application of Cytel

In November 2012, the CPUC dismissed the CPCN application of Cytel, Inc. CPUC staff had uncovered evidence that Cytel's only named officer was involved in a slamming scheme and had protested Cytel's application due to Rule 1.1 violations and questions about its fitness to operate. In August 2012, Cytel requested withdrawal of its application.

Settlement Agreement with Tele Circuit Network

In December 2012, the CPUC approved a settlement agreement between CPUC staff and Tele Circuit Network

Corporation and granted Tele Circuit a CPCN to provide inter- and intra-local access and transport area services in California as a switchless reseller. This settlement resolved CPUC staff's protest that Tele Circuit had operated without a CPCN between 2009 and 2011. Tele Circuit agreed to pay a fine of \$32,500 for operating without a CPCN during that period.

Adopted Settlement Agreement with Kingstone Telecommunications

In August 2012, the CPUC approved a settlement agreement between its staff and Kingstone Telecommunications and granted Kingstone a CPCN to provide limited facilities-based interexchange service as a Non-Dominant Interexchange Carrier (NDIEC) statewide in California. Kingstone provides prepaid phone card services. Kingstone applied for a CPCN as an NDIEC in September 2011. CPUC staff protested Kingstone's application because Kingstone failed to disclose this fact along with the investigation of Krossland by the California Attorney General in its application. The settlement agreement requires Kingstone to pay a penalty of \$6,500 to the California General Fund and to file an amended application.

New Rules to Prevent Cramming

In 2012, CPUC staff continued work implementing the Market Rules to Empower Consumers and Prevent Fraud – Rules Governing Cramming Complaints that were adopted by the CPUC in D.10-10-034, revising Part 4 of General Order 168. The revised rules establish cramming reporting requirements applicable to all Billing Telephone Corporations (BTC) and Billing Agents and combine two former sets of rules into a comprehensive standard set of rules applicable to all BTCs, including resellers and wireless service providers.

Through a series of meetings with industry representatives, parties agreed on a standard template for submitting the required quarterly data and submitted data for 2011 and for the first through third quarters of 2012. CPUC staff and parties worked in collaboration to develop materials to educate consumers on how to avoid being crammed. Since the rules were adopted, wireless and wireline BTCs have terminated or suspended billing for more than 1,500 service providers for whom unacceptable practices were identified. In March 2012, AT&T and Verizon announced that they were ending third-party billing on subscribers' landline bills for enhanced services due in part to CPUC's new cramming rules.

CPUC staff, in response to a directive in D.10-10-034, are currently preparing a report on the effectiveness of the rules in protecting California consumers, and new developments in the wireless industry.



ENERGY

he CPUC regulates 70 percent of California's electric sales and 99 percent of the state's natural gas. In 2012, the CPUC continued its national and world-wide leadership stature in adopting policies and managing the financial support to provide energy services across the wide geography of California. The CPUC has done this while stimulating the transformation of the electric and gas sectors to provide clean energy solutions and utilizing robust market tools that enable adoption of new and emerging technologies through innovative business and financial services.

Highlights for 2012 include:

- More new renewables were built than any year prior;
- Continued assistance to the California Air Resources Board in its adoption of Cap-and-Trade rules for California's greenhouse gas goals;
- Findings that utility energy efficiency programs saved the equivalent of avoiding four 500 megawatt (MW) power plants; and,
- Installation of 340 MW of solar systems on homes and businesses, the highest level ever in a single year.

Addressing Climate Change in California's Energy Sector

California continues to demonstrate national leadership on the issue of climate change. The electricity sector is tasked to reduce greenhouse gas (GHG) emissions by approximately 51 million metric tons from emissions otherwise expected in 2020, or about one-third of the total state GHG emissions. Climate change policy and legislation are expected to account for most of the state's emission reduction goals, representing approximately 75 percent of the total reductions required by 2020.

With Senate Bill 2 codifying a 33 percent renewable energy mandate in 2011, the CPUC moved forward with policy development and implementation including energy efficiency and demand response, increased renewable deployment, electrification of transportation, and combined heat and power systems. The CPUC in 2012 issued a decision on how revenues generated from the sale of emissions allowances allocated to the investor-owned utilities would be used.

The CPUC continues to work with other state agencies on the California Clean Energy Futures effort and continues to participate in the Western Climate Initiative, which promotes development of a Western states and Canadian regional climate framework.

Preparing for Initial Sales of Plug-in Electric Vehicles

The CPUC has continued to work with the California Energy Commission, California Air Resources Board, California Independent System Operator, the California Plug-In Vehicle Collaborative, and other stakeholders to identify policies and strategies that facilitate the widespread deployment of electric vehicles. In addition to steps under the auspices of Senate Bill 626 and the Alternative Fueled Vehicles proceeding, the CPUC has taken actions pursuant to Governor Brown's Executive Order to deploy 1.5 million Zero-Emission Vehicles on California roadways by 2025.

In 2012, CPUC activities included:

- Directing the electric utilities to conduct research in collaboration with the California Air Resources Board to evaluate electric vehicle loads on the distribution system and the costs associated with their grid impacts;
- Working with the utilities to develop a submetering protocol that would allow customers to bill their electric vehicle load off of customer-owned meters embedded within vehicles or charging stations;
- Approving a temporary discounted energy rate for government agencies in Southern California Edison's territory to demonstrate and develop the market for zero-emissions electric buses;
- Collaborating with state agencies, vehicle and equipment manufacturers, and environmental stakeholders to identify the policies, market structures, and technological requirements necessary to enable vehicles to provide grid energy services by managing charging

levels and discharging vehicle battery electricity onto the grid;

- Reviewing pilot and demonstration proposals that investigate the potential of electric vehicles to provide demand response, frequency regulation, and seamlessly integrate with grid infrastructure; and,
- Considering options for the use of utility revenue from the sale of Low Carbon Fuel Standard credits to ensure that revenues help facilitate the adoption of alternative fuel vehicles and benefit vehicle drivers.

Bringing Needed EV Infrastructure to California

In 2012, the CPUC entered into a settlement of outstanding claims stemming from the California energy crisis under which NRG Energy will invest more than \$100 million in charging infrastructure — including 200 DC fast chargers and 10,000 "make ready" plug-in units at 1,000 locations to spur electric vehicle adoption. To meet the CPUC's goal of ensuring that the electric vehicle charging infrastructure is available to Californians of all income levels, NRG will ensure that mixed-income housing locations are identified, evaluated, and pursued for the make readies.

Electric Program Investment Charge

Achieving the state energy and climate change goals will almost certainly require the development and deployment of new technologies as well as the adoption of new operational approaches in the provision of energy services. In recognition of the critical role that public funding plays in catalyzing these new technologies and approaches, in May 2012, the CPUC adopted the Electric Program Investment Charge (EPIC) to provide funds to support the development and deployment of next generation clean energy technologies and tools. Funding for this program runs from 2013-2020 in the amount of approximately \$162 million per year, and is to be used to support each of the following areas: Applied Research and Development, Technology Demonstration and Deployment, and Market Facilitation. The EPIC funds will be administered by the California Energy Commission, as well as the by the three investor-owned utilities, specifically Pacific Gas and Electric Company, Southern California Edison, and San Diego Gas & Electric. On November 1, 2012, each of the Program Administrators submitted the first of three triennial investment plans to the CPUC for consideration. These plans propose projects areas where EPIC monies would be spent as well as the eligibility and selection criteria that, if approved by the CPUC, will be used to determine how funding is ultimately allocated to support specific projects. Upon CPUC approval of the Administrators' respective investment plans, the Administrators will begin implementing the program and make awards to individual projects. The CPUC anticipates issuing a decision regarding these first investment plans in 2013.

Cap-and-Trade

As part of Assembly Bill 32 (AB32), the California Air Resources Board (CARB) has established a Cap-and-Trade program that both establishes overarching limits on the total greenhouse gas emissions that can be released into the atmosphere from California sources between 2013 and 2020, as well as creates a system of tradable permits and offsets to help ensure that emission reductions are achieved at least cost to the California economy. To help further mitigate the cost impacts under this program, CARB allocates a significant share of emission allowances to each of the state's electric distribution utilities, including the investor-owned utilities (IOUs). The IOUs are required to sell the entirety of their allowances at auctions held quarterly by CARB, with the proceeds from those sales to be used for the exclusive benefit of retail ratepayers consistent with the goals of AB32. Within this overarching context, the CPUC has two principal responsibilities with regard to the Cap-and-Trade program.

First, the CPUC issued a decision directing that approximately 85 percent of the investor-owned electric utilities revenue generated from the sale of greenhouse gas emission allowances be allocated to households as both a rate reduction and a semi-annual "climate dividend." Pursuant to CARB's Cap-and-Trade regulations, the use of the allowance revenue generated from the sale of the allowances allocated to the IOUs, estimated to be between \$5.7 billion and \$22.6 billion between 2013 and 2020, is subject to CPUC authority. The CPUC determined that these monies should be credited directly to residential customers, small business customers, and customers deemed to be "Emissions Intensive and Trade Exposed". Among the policy objectives deemed to be a high priority were the following: preservation of the carbon price signal, limiting the economic impacts of Cap outcomes on low income households, and ensuring that any use of the revenues does not unfairly advantage the IOUs over Direct Access or Community Choice Aggregators.

Second, as part of its role in approving the IOUs' procurement activities, the CPUC is responsible for approving the IOUs' plans and approach to the purchase of Cap-and-Trade compliance instruments, including both CARB-issued emission allowances, as well as CARB-certified offsets. To that end, in April 2012, the CPUC issued a decision that approves the IOUs' procurement plans, including those elements that relate to the purchase of Cap-and-Trade compliance instruments, subject to specific constraints intended to limit ratepayer cost exposure given uncertainties around allowance and offset pricing, and the nascent state of the carbon markets in California.

ENERGY EFFICIENCY

Energy efficiency is the most cost effective, reliable, and environmentally sensitive resource available to meet growing energy demand in California. The CPUC continues to build on California's rich history in energy efficiency and has accelerated its efforts to implement the most ambitious energy efficiency and conservation programs in the U.S. utility industry. In 2012, the CPUC marked the conclusion of the \$3.1 billion 2010-2012 program cycle and approved a \$1.9 billion portfolio of utility programs for 2013-2014.

Making Energy Efficiency "Business as Usual" in California

In 2012, the CPUC implemented a two-part decision-making process that provided extensive program guidance to the utilities and subsequently approved (with modifications) their 2013-2014 energy efficiency portfolios. The CPUC adopted new energy savings goals that utility programs must meet, updated cost-effectiveness rules, and signaled a transition away from short-lived measures towards deep retrofits and market transformation programs such as Energy Upgrade California. The CPUC authorized approximately \$1.9 billion for the two-year period, including a \$220 million commitment to financing programs and \$75 million granted to new Regional Energy Networks and Community Choice Aggregators, which will be administering their own energy efficiency programs. (Regional Energy Networks are a new concept for this cycle of energy efficiency programs. They are independently administered by local governments to better leverage energy efficiency expertise at the local level, and they serve as an incubator for new ideas.) With annualized budgets that surpass those for the 2010-2012 program cycle, the CPUC anticipates the portfolios to produce cost-effective energy savings 5,000 GWh of electricity, 830 peak MW, 120 million therms of natural gas, and estimated 16,000 green jobs.

The 2013-2014 portfolios cover 14 categories of programmatic activities and redirect the utilities' efforts to new areas of emphasis. For instance, the role of compact fluorescents has been diminished while lighting programs are directed to shift their focus to light-emitting diode technologies. Regional Energy Networks in the Bay Area and Southern California will offer financing programs, retrofit programs, and continuing American Recovery and Reinvestment Actfunded Energy Upgrade California activities, which are expected to increase program participation five-fold over the 2010–2012 program cycle. Additionally, marketing, education, and outreach efforts are recalibrated for 2013–2014 to feature the new Energy Upgrade California energy efficiency brand, and the utilities and stakeholders will collaborate with a workforce expert to develop a comprehensive workforce, education and training strategy.

Energy Upgrade California

- Under Energy Upgrade California approximately 2,500 single family homes were treated in 2012. There was an average of 29 percent energy savings per home. The program is administered by the investor-owned utilities together with new private sector partners and local governments.
- Energy Upgrade California provides substantial incentives for energy improvements to existing homes when these actions produce at least 10 percent and up to 40 percent savings per home. The program also provides training and scholarships to strengthen California's home energy performance contractor workforce and has the long-term goal of transforming the home energy improvement industry to produce well-organized, high-performance, and high energy-savings outcomes.

Energy Efficiency Strategic Plan and Assembly Bill 758 Collaboration

In 2012, new research was completed on pathways to achieve the state's zero-net energy goals for newly constructed buildings. The CPUC and California Energy Commission collaborated on two action plans to implement the Strategic Plan's ambitious goals for new and existing buildings: a Codes and Standards Action Plan and a Research and Technologies Action Plan. The CPUC continues to work closely with the Energy Commission on its development of a comprehensive statewide buildings retrofit program pursuant to Assembly Bill 758, and expects to incorporate the California Energy Commission's plan into the CPUC's next energy efficiency portfolio cycle.

Evaluation, Measurement, and Verification of Efficiency Programs

In 2012, the CPUC released its triennial report to the Legislature to provide an update on the energy efficiency and conservation programs overseen by the CPUC. The report includes information regarding authorized utility budgets and expenditures, as well as projected and actual energy savings. The report included utility-reported energy savings estimates as of December 31, 2011, and indicates that cost-effective energy savings exceeded CPUC goals at the two-year point of the three-year cycle.

The report was part of a larger annual reporting effort initiated by the CPUC in 2012. The CPUC expects to issue an annual evaluation report that will provide more timely evaluation results to be used for more effective program planning purposes. In 2013, CPUC expects the annual report to include evaluated savings for most programmatic areas addressed in the 2010-2012 program cycle.

Assisting Low Income Energy Consumers

2012-2014 CARE and Energy Savings Assistance Budget

The CPUC authorized approximately \$5 billion to continue California Alternate Rates for Energy (CARE) and the Energy Savings Assistance (ESA) programs for the large investor-owned utilities. CARE provides reduced rates and ESA provides energy efficiency retrofits for qualifying low income customers. CARE program highlights include program changes to increase the number of income eligible customers and decrease the number of income ineligible program participants, stricter recertification practices, new post enrollment verification models and best practices, and a statewide process to reduce high usage rates. ESA highlights include increased focus on the multifamily sector by leveraging with other low income and mainstream energy efficiency programs, a new suite of program measures based on updated cost effectiveness assessment, and new evaluation studies directed to improve program design.

Implementation of New Process for High Usage CARE Customers

New program rules will address egregious and potentially fraudulent use of the CARE rate. According to these new program rules, CARE customers with monthly electric usage above 600 percent of baseline must drop usage or be de-enrolled and removed from the program for 24 months. Customers with electric usage of 400 to 600 percent of baseline in any monthly billing cycle must undergo postenrollment verification and, if not previously enrolled in the program, must apply for the ESA program within 45 days of notice. These enhanced program rules aim to ensure that the CARE subsidy is being utilized by the people who really need it and qualify.

CPUC ESA Program and Community Services Development Weatherization Assistance Programs

With the goal of sharing resources and improving outcomes for low income populations, the CPUC and Community Services Development paired up to identify three jointly administered pilots: a solar thermal water heating pilot, a high energy use/underserved low income population pilot in PG&E's service territory, and bulk purchasing of appliance and weatherization measures in Southern California.

Upcoming Activities

The CPUC established three working groups to further develop key issues in the ESA program dealing with costeffectiveness, workforce training, and mid-cycle program modifications. The goal of the working groups is to better inform the CPUC on the ESA program direction, design, and delivery improvements going forward.

Finally, in an effort to ensure CARE program participation is limited to income eligible customers, the CPUC directed the investor-owned utilities to develop and implement both interim and long-term verification models to cost-effectively identify and income verify those enrollees who have a high probability of being ineligible for the program. The utilities will develop and roll out these models, with CPUC oversight, in 2013.

Power Procurement and Ensuring Resource Adequacy

The CPUC ensures that utilities plan for and make investments in energy resources necessary to provide California consumers with reliable service at low and stable prices. Utility procurement of energy resources must be cost effective and consistent with the goals of the Energy Action Plan and its loading order. In 2012, despite extended outages at the San Onofre Nuclear Generating Station, the resources procured by CPUC-regulated load serving entities were adequate to meet electric system needs and there was no loss of electric service because of insufficient generation. The CPUC continued to develop and refine its Resource Adequacy program and deliberated policy issues such as accounting of demand response into the resource mix.

Expiration of Department of Water Resources Contracts

Since 2002, investor-owned utility customers have paid for the costs of power contracts entered into by the California Department of Water Resources (DWR) at the height of the 2001 electricity crisis. The contracts also required DWR to establish large cash reserves that reflected the significant size of the DWR obligations to its suppliers. In 2012, all of the contracts except Kings River (100 MW) expired and the CPUC continued to ensure that these energy cost reductions are reflected in the electric rates paid by investor-owned utility ratepayers. The last DWR contract expires in 2015.

Increasing Direct Access

The Direct Access (DA) program enables electric end-use customers to purchase electricity from competitive providers called Electric Service Providers (ESPs). The DA program was suspended on September 20, 2001, in the aftermath of the energy crisis. The CPUC is currently implementing the four-year phased program authorized by SB 695, which allows DA load to gradually increase to the maximum level that existed before DA was suspended. During 2012, a major focus in the DA area was to refine ESP financial security requirements and adopt rules governing the final "hard" cap on DA load.

Community Choice Aggregation

In 2002, through AB 117, the California Legislature established the Community Choice Aggregators (CCAs) program, which allows local governments to aggregate and serve the electric loads of customers within their jurisdictions. On May 7, 2010, Marin Energy Authority (MEA), a public agency, started its CCA program, Marin Clean Energy (MCE), and is currently the only active CCA serving approximately 90,000 customers. In 2011, Senate Bill (SB) 790 was enacted, which directs the CPUC to consider and adopt a code of conduct, rules, and enforcement procedures governing the conduct of electrical corporations relative to the consideration, formation, and implementation of CCAs. Pursuant to SB 790, the CPUC issued a decision on November 20, 2012, through which it adopted a formal Code of Conduct governing the ongoing interactions between CCAs, and established a complaint procedure for issues related to CCA and utility interactions. The CPUC expects the new rules and procedures will provide CCAs with the opportunity to compete on a fair and equal basis with other load serving entities and assist customers by enhancing their ability to make educated choices among authorized electric providers. The CPUC received on November 21, 2012, a letter to certify an Updated Implementation Plan from the City and County of San Francisco to facilitate the launch of their CCA program, CleanPowerSF.

RENEWABLE **E**NERGY

The California Solar Initiative (CSI) is designed to incentivize 3,000 MW of distributed solar generation by 2017, and the program appears on-target to reach this goal. Now in the sixth year, the CSI program has installed a remarkable 1,000 megawatts (MW) of new solar in 2012, with customer-owned solar systems installed at more than 100,000 sites throughout the state's investor-owned utility service territories. Program data shows that total system costs have decreased by 22 percent since 2007. The emergence of thirdparty ownership models such as solar leases and power purchase agreements has been driving demand in the residential sector, which remains robust despite declining state incentives.

Self-Generation Incentive Program

The Self-Generation Incentive Program (SGIP) provides incentives for distributed generation and storage technologies that reduce greenhouse gas emissions in the investor-owned utility territories of PG&E, SCE, SDG&E, and SoCalGas. In the second quarter of 2012, SGIP reopened with several improvements over the 2010 SGIP – including performancebased incentives, an expanded list of eligible technologies, and a required energy efficiency audit. SGIP saw tremendous growth in the number of advanced energy storage applications received, now with nearly 350 project applications in the pipeline, and continued growth in the comparative share of fuel cell applications. The California Energy Commission's Emerging Renewables Program (ERP) was consolidated into SGIP this year. SGIP now offers incentives to any sized wind or fuel cell system (wind and fuel cell systems under 30 kilowatts were previously incentivized under ERP.

CSI-Thermal and NEM

Regulatory changes affecting customer generation in 2012 focused on the CSI-Thermal program and Net Energy Metering (NEM). Incentives for solar thermal systems were increased in response to market conditions, and the CSI-Thermal Low Income Program began accepting applications in early 2012. The CPUC has also initiated a study to analyze the costs and benefits of NEM, which will be completed in 2013.

Implementing the California Renewables Portfolio Standard

The CPUC is committed to statewide environmental goals and the role of renewable power in achieving those goals. In 2011, Senate Bill (SB) 2 (Simitian, 2011-2012 1st Ex. Sess.) made significant changes to the Renewables Portfolio Standard (RPS) program. SB 2 increased the renewable target to 33 percent by 2020 for both retail sellers and publicly owned utilities, and created three compliance periods (from 2011-2013; 2014-2016; and 2017-2020) to measure progress in reaching this target. The investor-owned utilities must average 20 percent renewable energy during the first compliance period from 2011 to 2013. In March 2012, California's three large investor-owned utilities reported that they served 20.6 percent of their retail sales with RPS-eligible generation in 2011, up from 17 percent in 2010.



Large Investor-Owned Utilities' Actual and Forecasted RPS Generation



Utility-Scale Renewable Distributed Generation

The RPS solicitation process is the primary method for the development of utility-scale renewable energy in California and is designed to capture the least-cost best-fit renewable projects. Since the more economically competitive projects tend to be large, take several years to develop, and are often located in remote areas that require new transmission, the CPUC has considered a variety of programs to encourage the small to medium-scale market segment.

The potential benefits of this market segment include:

- Quick project development timelines;
- Avoidance of new transmission;
- Declining technology prices; and,
- Hedging against riskier, large-scale renewable projects.

Introduction of a New Renewable Auction Mechanism

The Renewable Auction Mechanism (RAM) is a simplified and market-based procurement mechanism for renewable distributed generation projects up to 20 MW on the system side of the meter. The CPUC adopted RAM as the primary procurement tool for system-side renewable distributed generation because it will promote competition, elicit the lowest costs for ratepayers, encourage the development of resources that can utilize existing transmission and distribution infrastructure, and contribute to RPS goals in the near term. To begin the program, the CPUC authorized the utilities to procure 1,000 MW through RAM by holding twice annual auctions over two years. Going forward, the CPUC may adjust the capacity authorization to reflect each utility's particular need for system-side distributed generation projects under 20 MW. RAM is a unique program because it streamlines the procurement process for developers, utilities, and regulators. It allows bidders to set their own price, provides a simple standard contract for each utility, and allows

all projects to be submitted to the CPUC through an expedited regulatory review process.

Combined Heat and Power

Combined Heat and Power (CHP) is recognized as a potentially significant source of energy cost savings and emissions reductions. In 2012, the CPUC continued implementing two ground-breaking programs supporting CHP. Following the effective date in November 2011 of a new statewide program for the procurement of at least 3,000 MW of CHP by 2015, the CPUC has overseen the first round of CHPonly competitive solicitations conducted by the investorowned utilities, which is intended to result in approximately 1,320 MW of newly contracted CHP. The program includes a requirement for the utilities to each conduct at least two additional CHP-only competitive solicitations. The CPUC has also approved three types of standard contracts for the CHP feed-in tariff program. This program requires investorowned utilities to purchase excess power from small, new, and highly efficient CHP facilities at a standard price and standardized contract terms and conditions. The contracts approved by the CPUC provide highly efficient CHP facilities that generate less than 20 MW an easy means to sell power that isn't needed for on-site energy demand.

Renewable Feed-in Tariff

Assembly Bill (AB) 1969 (Yee, 2006) added Section 399.20 to the Public Utilities Code's RPS statute, which created a renewable feed-in tariff for projects sized up to 1.5 MW. The purpose of the feed-in tariff program is to stimulate the development of small-scale renewable distributed generation by streamlining the process for generators to sell power wholesale to the investor-owned utilities through a standard contract without having to engage in timely contract negotiations.

Since 2007, the Legislature has adopted several amendments to Section 399.20, as set forth in SB 380, SB 32, and SB 2 (1X). The CPUC is currently implementing these amendments in Rulemaking 11-05-005. Most recently, on May 24, 2012, the CPUC adopted D.12-05-035 establishing a market-based feed-in tariff pricing mechanism called the Renewable Market Adjusting Tariff, or Re-MAT.

Interconnection

Recognizing interconnection as the pathway between distributed generation and the grid, in 2012 the CPUC accomplished a major reform of the interconnection tariff, Electric Rule 21. Rule 21 uses a screen-based approach for the interconnection of customer-side resources, and functions efficiently for those projects. However, screens designed for small, load-reducing generation did not function well for

distributed generation projects eligible to participate in feedin tariffs and other new system-side programs, resulting in an uncertain and opaque interconnection process. That changed in September 2012, when the CPUC approved a multi-party settlement that modernized interconnection standards and rules for all forms of distributed generation. Through new first-look siting tools, new levels of permitted distributed generation penetration that are the highest in the nation, well-defined engineering standards, and clear deadlines for the utility and the customer, Rule 21 will now better serve California's distributed generation industry and utilities as this market segment grows. Some of California's new Rule 21 interconnection protocols have in fact been proposed for adoption by the Federal Energy Regulatory Commission. The CPUC's interconnection proceeding remains open in 2013, and will continue to address interconnection cost issues and improvement of technical operating standards for greater integration of distributed generation into the grid.

TRANSMISSION, DISTRIBUTION, AND OPERATIONS

Improving Transmission Planning and Statewide Renewable Resource Priorities

The CPUC works closely with the California Independent System Operator (ISO) and the California Energy Commission to ensure that transmission planning in the state is efficient. The CPUC is working on a detailed study of the operational implications and requirements for achieving a 33 percent Renewables Portfolio Standard by 2020. The CPUC is also closely involved in the Renewable Energy Transmission Planning Process which extends statewide and takes a more proactive and integrated big picture view of transmission and resource priorities. In 2012, the CPUC submitted long-term procurement plan scenarios that included Renewable Energy Transmission Initiative scenarios to the ISO.

Environmental Review of New Transmission Facilities

In 2012, there was significant progress towards the construction of CPUC approved transmission lines providing capacity for solar, wind, and geothermal renewables along with added reliability and lower cost energy access. The 123-mile SDG&E Sunrise Powerlink 500/230 kV line approved in December 2008 through San Diego and Imperial Counties was completed in 2012. The California portion (150 miles) of SCE's Devers-Palo Verde #2 500 kV line approved by the CPUC in November 2009 underwent environmental compliance/construction in 2011 with construction started in 2012 and is anticipated to be online in 2013. Further, the remaining SCE Tehachapi 500 kV line segments (4-11), which were approved by the CPUC in December 2009, are also in the compliance/construction phase and are estimated to be online by December 2015.

The CPUC has been actively involved in the environmental review and permitting of a number of substation and transmission projects for interconnecting renewable projects. SCE has two projects, the Red Bluff and Colorado River Substations expansions in Riverside County. These substations will allow the interconnection of large solar generators. The two substation projects were approved by the CPUC in 2011 with construction started in 2012 and are expected to be online by 2013. The SDG&E ECO Substation that will allow the interconnection of approximately 1,200 MW of renewable generation was approved in 2012.

In 2013, there will be continued progress in constructing the major transmission lines and substations for future renewable project interconnections. In addition, the CPUC will be conducting environmental and permit review on a number of transmission line upgrades to accommodate several wind and solar projects in the PG&E and SCE service territories.

The CPUC safeguards California ratepayer interests for Western power grid investments.

Facilitating Regional Transmission Planning

California has always relied upon and participated in the west-wide interconnected electric system with its diverse electricity supply resources. Accordingly, the CPUC monitors and participates in western transmission planning and related activities with the Western Electricity Coordinating Council and its Transmission Expansion Planning Policy Committee (TEPPC), as well as activities and forums sponsored by the Western Governors' Association, such as the Western Renewable Energy Zone Initiative. The Western Governors' Association is utilizing Department of Energy funding under the ARRA to extend this effort by enlisting stakeholders in exploration of collaborative permitting and resource procurement opportunities. The CPUC has been actively involved in development and ongoing implementation of the expanded west-wide transmission planning process benefitting from federal funding. This process is centered on TEPPC, and focuses on renewable and other alternative energy futures.

Representing California in Federal Wholesale Power Regulation

The CPUC participates in Federal energy proceedings to advocate California's interests, including utility customers' rates and services.

Advocating for California Consumers in Transmission Rate Cases

The CPUC intervenes in transmission rate cases at the Federal Energy Regulatory Commission (FERC) to ensure just and reasonable rates by providing testimony and by negotiating and litigating rate cases. In 2012, and going forward, the CPUC's FERC-related work included four transmission rate cases involving PG&E, SCE, and SDG&E. The CPUC also provided comments in a proceeding on Energy Storage accounting principles and treatment of storage technologies — and in a proceeding regarding the interaction between the gas and electric industry. The CPUC's work in FERC proceedings is a critical factor in FERC reducing the utilities' requested revenues, which has saved California customers more than \$150 million in transmission costs.

OVERSIGHT OF ELECTRIC RATES

The CPUC thoroughly reviews the costs to the major energy utilities of owning, maintaining, and operating the electric and gas infrastructure. Approximately 50 percent of the total costs are reviewed and authorized in General Rate Cases (GRCs). The GRCs generally occur on a triennial basis and address costs that can be predicted with a fair degree of accuracy over the next three years. The GRC decisions address allocation of costs among various customer classes and rate design and specify how the utilities' authorized revenues are to be adjusted during the years between rate cases. Fuel and purchased costs representing approximately 25 percent to 35 percent of utilities' total revenue requirements are recovered in the annual Energy Resource Recovery Account (ERRA) proceedings, as these costs are difficult to predict. The CPUC processed the following GRC-related reviews and fuel and purchased power cost reviews during this report period.

SDG&E and SoCalGas General Rate Case

SDG&E and SoCalGas filed their 2012 GRCs in December 2010. The CPUC is expected to issue a decision in early 2013. SDG&E requested an increase of \$238 million (7.5 percent) in electric and \$39 million (6.3 percent) in gas revenues in 2012 citing various factors driving its costs. SDG&E filed its 2012 phase two GRC applications on electric marginal costs, revenue allocation, and rate design in September 2011 and a CPUC decision is expected in the second quarter of 2013. In July 2012, the CPUC authorized a 2012 ERRA revenue requirement of \$815 million for SDG&E. The CPUC

expects to decide on SDG&E's 2013 ERRA revenue requirement in mid-2013

SCE General Rate Case

In 2012, the CPUC issued a decision in Southern California Edison's (SCE) General Rate Case (GRC), allowing SCE to recover from ratepayers an increase of 5.04 percent over present rates, representing the reasonable costs of providing safe and reliable electrical service to customers in 2012. SCE had requested a 16.6 percent increase over current rates. The Decision was the result of the CPUC's detailed review of the future operations and service requirements of SCE.

PG&E General Rate Case

In November 2012 PG&E filed its 2014 GRC requesting \$6.3 billion in electric revenue requirements and \$1.8 billion in gas revenue requirements. PG&E's request would increase its GRC revenue requirements by 14 percent for electric and 37 percent for gas. PG&E cites the need to make expenditures on safety and reliability related projects as major drivers of its GRC request. PG&E will file its 2014 phase two GRC application addressing electric marginal costs, revenue allocation, and rate design in the first quarter of 2013.

Time Varying Pricing: Customer Transition and Education

Most small and medium commercial customers and small agricultural customers have been on flat rates that only vary by time of the year, with a winter rate and summer rate. Time-varying rates are rates that also change depending on the time of day. Examples of time-varying rates include time-of-use rates, critical peak pricing, and real time pricing. In November 2012 PG&E began to transition small and medium commercial customers from a flat rate to a time-of-use rate. On a time-of-use rate, electricity costs more during peak hours, usually in the afternoon or evening, and less during off peak hours. The rate better matches the cost of serving customers, and encourages customers to use less electricity during peak hours. The CPUC directed PG&E to prepare customers for the rate change by providing them with information about options to help them save, including online and onsite energy audits, energy efficiency rebates, and demand response programs. Applications are pending to determine the timing for implementation of time-varying rates for small commercial customers of SCE and SDG&E.

Residential Rate Design

In June 2012, the CPUC opened a proceeding to examine the structure and design of current residential electric rates in California. The proceeding will evaluate how well current rates 1) reflect cost based on usage, 2) encourage energy conservation, 3) reduce use during peak demand periods, 4) provide user-friendly customer choices, and 5) encourage economically efficient decision-making. The proceeding will also review whether the current tiered rate structure supports statewide energy goals of promoting efficient use of energy in the home and the expansion of renewable and local sources of electric energy generation. The goal of the proceeding is not to set actual rates, but to develop the CPUC's vision of an ideal rate structure that would be equitable and understandable to California residential customers, and also to identify changes in current laws needed to allow the implementation of that vision. The proceeding is expected to result in a decision by the end of 2013.

NATURAL GAS COST AND STORAGE

Natural gas commodity prices remained at low levels in 2012, ranging from about \$2.20 to \$3.80 per MMBtu. While the CPUC does not regulate natural gas commodity prices, it takes necessary steps to enable utilities to gain better access to new sources of supplies, develop a diverse supply portfolio, ensure adequate natural gas infrastructure, and to reduce natural gas demand.



Assuring Adequate Storage Infrastructure and Supplies

Natural gas storage capacity increases delivery reliability and provides significant economic benefits to consumers.

Sacramento Natural Gas Storage (SNGS) requested authorization in 2007 to construct natural gas storage facilities as a public utility. The CPUC completed its assessment in 2012 and found the project was not needed to ensure adequate supplies of natural gas in the Northern California region.

ENERGY AUDITS

Audits of the Energy Procurement Quarterly Compliance Reports

The energy utilities' procurement process is a complex endeavor with large sums of money at stake. Auditing the utilities' quarterly procurement compliance reports is one of the tools the CPUC uses for energy procurement oversight. The CPUC completed 12 quarterly electric and gas procurement audits addressing approximately \$3.7 billion of energy procurement by three utilities.

The CPUC found instances with each of the utilities where they were not in compliance with CPUC directives, including but not limited to: errors in transaction reporting, failure to post information for their Procurement Review Group (PRG) meetings, failure to have all employees sign the utilities' Code of Conduct agreements on a timely basis, and failure to consult with a PRG for a bilateral contract that exceeded three months.

Energy Public Purpose Programs Examinations

The CPUC completed four financial, management, and regulatory compliance examinations of PG&E, SDG&E, SCE, and SCG's 2010 energy efficiency public purpose programs. The authorized energy efficiency budget for the four utilities combined was approximately \$1 billion in 2010. The CPUC found that, among other things, improper expenditures were charged to the energy efficiency program; adequate documentation was not maintained to support recorded expenditures; costs were misclassified, and there were accounting and reporting inconsistencies.

In addition, the CPUC completed four financial, management and regulatory compliance examinations on PG&E, SCE, SCG and SDG&E's 2009 and 2010 Energy Savings Assistance (ESA) program. The authorized ESA budget for the four utilities combined for the period was approximately \$551 million. The CPUC found that, among other things, the utilities failed to demonstrate compliance with the CPUC's directives and with their internal accounting controls and Policy and Procedures Manuals; there was inadequate documentation to support recorded expenditure costs were misallocated and misclassified; and inaccurate information was reported in the annual reports filed with the CPUC.

Review of PG&E's User Fees Payments

The CPUC conducted a review of PG&E's July 1, 2004, through June 30, 2011, User Fee payments after PG&E notified the CPUC about potential errors in its calculations of the User Fees that it previously remitted to the CPUC. The CPUC is currently conducting a legal analysis regarding the errors and expects a determination on issues in 2013.



COMMUNICATIONS

BASIC SERVICE DEFINITION

On Dec. 20, 2012, the CPUC revised the definition of basic service (D.12-12-038). The revision and update is intended to ensure that minimum service standards apply to basic service regardless of the technology deployed or the territory covered. With the new definition, the CPUC's goal is to ensure that diverse customer and communications needs are met across technology platforms.



408 AREA CODE CHANGE

On October 20, 2012, the first all services overlay was introduced in Northern California. The introduction of the new 669 area code to the 408 region and subsequent implementation of 10-digit dialing was preceded by an 18 month process and public information campaign to ensure that residents were able to weigh in on their preferences and understood what and when they needed to make changes in dialing their phones.

CALIFORNIA ADVANCED SERVICES FUND – BROADBAND DEPLOYMENT

The California Advanced Services Fund (CASF), designed to promote broadband deployment, access, and adoption in unserved and underserved areas, was enhanced in a February 2012 CPUC decision that adopted CASF changes required by Senate Bill (SB) 1040. SB1040 expanded the size and scope of the CASF by \$125 million to \$225 million. The additional funds are to be allocated as follows: \$100 million to the Broadband Infrastructure Grant Account, \$15 million to the Broadband Infrastructure Revolving Loan Account, and \$10 million to the Rural and Urban Regional Broadband Consortia Account.

Other key provisions of the February 2012 CASF decision include increasing the maximum size of a grant award to 70 percent matching of project costs for unserved areas and 60 percent for underserved areas; requiring applicants to increase advertised broadband speeds to speeds of 6 mbps download and 1.5 mbps upload; requiring applicants to submit marketing plans; creating a revolving loan program to provide limited supplemental financing to projects also applying for CASF grant funding; and specifying application deadlines for the CASF Broadband Infrastructure Grant Program.

Approved in 2012 were seven more CASF consortia grants totaling approximately \$1 million, bringing the total to 14 consortia groups working to advance broadband deployment, access, and adoption in California unserved and underserved areas

In October 2012, the CPUC initiated a proceeding on whether or not to allow non-telephone company participation in CASF infrastructure grants and loans. Since eligibility requirements are currently defined by statute, any changes will require legislative action.

Broadband Availability Map

Using a combination of broadband availability and broadband subscription data, the CPUC has been able to calculate and analyze broadband penetration levels at the Census Tract level. This information is publicly available on the California Broadband Availability Map at www.broadbandmap.ca.gov. The Map functions as a factual guide for decision making by policymakers. For example, this information provides invaluable guidance to public and communitybased organizations working to address the Digital Divide by providing broadband training and community access to connected computers. By pinpointing neighborhoods with low penetration, these groups, including the California recipients of \$121,912,211 in Sustainable Adoption or Public Computer Center grants, are able to concentrate their efforts exactly where the problem exists most.



The Map also informs all aspects of the CASF Infrastructure Grant and Revolving Loan grant process, from application to decision. Using this tool, would-be applicants can easily obtain information required to apply for a grant, such as highlighting grant eligible areas. The Map then provides critical facts about a proposed project area, such as population and demographic data, availability of broadband service, and calculates average speeds for areas that the applicant proposes to serve utilizing CASF funds. The ability to gather this information online greatly assists an applicant's access to information that would be extremely difficult to gather any other way. Challengers to grant applications also use the Map to refute an area's grant eligibility. Finally, the CPUC can use the Map to evaluate grant applications and determine whether a particular grant should be awarded.

California Broadband Report

The broadband availability data collected bi-annually by the CPUC to create the Map also includes data on the technology used to provide broadband service and the location of certain broadband infrastructure for all broadband providers in California.

Using this data, the CPUC in conjunction with the Center for Economic Development at California State University, Chico produced the June 2011 California Broadband Report. This report summarizes data about overall broadband connections, examines where broadband providers of differing technology types are located throughout the state, describes broadband penetration and adoption throughout the state, and explores the trends that underlie geographic disparities in adoption rates.

Mobile Broadband App

The CPUC is the California recipient of an \$8 million State Broadband Data and Development Grant, awarded by the National Telecommunications and Information Administration under the American Recovery and Reinvestment Act (ARRA). This ARRA grant funds certain broadband mapping and planning projects through October 2014.

One ARRA-funded project was the creation of a mobile app that can be used to measure the mobile broadband speed a



user actually experiences. The app will be made available to the public by the end of 2012. In addition, the ARRA grant provides for the CPUC to perform field tests at six month intervals to measure service quality in urban, rural areas and on tribal lands. In May 2012, the CPUC launched its first drive test to study mobile broadband quality across the state. Testers drove more than 35,000 miles to take measurements at 1,200 locations (34 percent urban areas, 11 percent tribal lands, and 55 percent rural areas). These results will help determine the areas of the state that are "unserved" or "underserved" by mobile broadband service (and thus eligible for CASF Infrastructure Grants), and will provide facts that are valuable for policy formation, such as the extent to which mobile broadband service is becoming an adequate substitute to wired service. This effort also provides a consumer guide to help mobile data customers choose among providers.

VIDEO FRANCHISING

California's Digital Infrastructure and Video Competition Act of 2006 shifted cable franchising from the local to the state level, and the CPUC was designated as the state entity to issue the new state video franchises.

In 2012, the CPUC issued five new video franchises and processed 31 amendments to existing franchises. AT&T and Verizon now offer video service to almost 6.4 million households, about six times the number in 2007. About 76 percent of California households (9.7 million) can now choose from two or more video service providers.

WIRELESS OPTION FOR DDTP

In January 2012, the CPUC approved operational and program design changes to the Deaf and Disabled Telecommunications Program (DDTP)/California Telephone Access Program (CTAP) to include wireless devices such as cellphones and smartphones. Two devices were approved this year for the program — the Jitterbug cell phone from GreatCall and a smartphone device from Sprint. Jitterbug is designed to serve customers who are blind, low vision, hard of hearing, mobility, or cognitively disabled. The smartphone is for customers who are deaf, severely hard of hearing, or speech disabled. Distribution of the Jitterbug and smartphone device through the DDTP/CTAP began in late 2012.

Multi-Line Telephone Systems E911

The CPUC has addressed a gap in public safety communications regarding enhanced 911 caller location information for phone stations served by multi-line telephone systems (MLTS). These multi-line entities such as office complexes, government entities, schools and hospitals, are often unaware that exact call station location information may not be reaching the 9-1-1 call taker. The CPUC's proceeding resulted in a decision requiring carriers to conduct outreach to MLTS customers to make them aware of their E911 options, and to distribute a customer PBX 9-1-1 Advisory Brochure containing specific information. The decision also requires that carriers post this information on their websites along with a link to the CPUC's CalPhoneInfo website and specifically to the PBX 9-1-1 Advisory therein.

Telecommunication Audits

California LifeLine

The CPUC contracted for a comprehensive compliance audit of the California LifeLine Program. The audit addressed the following six telecommunications carriers' fiscal year 2009-2010 California LifeLine claims totaling \$7,443,138. The audit found that four of the carriers need to refund \$344,372, ranging from 5.2 percent to 7.8 percent of their claims.

Because of the substantial findings, the CPUC directed the consultant to determine in 2013 if the audit findings derived from fiscal years 2009-2010 can be consistently applied to fiscal years 2007-2008, 2008-2009, and 2010-2011 for the four utilities who were found to have material discrepancies in their claims.

California Teleconnect Fund

The CPUC contracted for a compliance audit of the following five telecommunications carriers' fiscal year 2009-2010 CTF claims totaling \$10.8 million. The audit is expected to conclude in mid-2013.

Utility	CTF Claims
U.S. Telepacific Corp.	\$5,570,000
Call Tower, Inc.	\$865,000
TW Telecom of California, LP	\$787,000
Sunesys, LLC.	\$3,537,000
XO Communications Services	\$449,000
Total	\$10,808,000

Utility	Utility Claim Against the California LifeLine Fund	Amount to be Recovered	Percent of Claims
Curatel, LLC	\$3,736,750	\$21,640	5.8%
Kerman Telephone Company	\$396,317	\$2,049	5.2%
MCI Metro Access Transmission Services	\$1,722,927	\$133,071*	7.8%
SureWest Telephone	\$1,177,562	\$0	
SureWest Televideo	\$77,387	\$O	
TGEC Communications Co., LLC	\$332,195	\$187,612	56.5%
Total	\$7,443,138	\$344,372	

*In process



TRANSPORTATION

RAIL TRANSIT SAFETY

The CPUC has safety and security regulatory authority over all rail transit agencies (RTAs) and other fixed guideway systems in California, and works in cooperation with the Federal Transit Administration (FTA) and the RTAs to assure and enhance public safety and security. The CPUC verifies compliance and inspects System Safety and Security Plans of each RTA operator to ensure that these plans meet all state and federal rules and regulations. The CPUC prescribes safety and security requirements for the design, construction, operation, and maintenance of heavy rail transit, light-rail transit, trolleys, funiculars, and automated people mover systems. The CPUC ensures that all rail transit system extensions and new construction projects undergo a safety certification review and approval process prior to beginning operations. The CPUC performs engineering review and oversight, operations and system inspections, comprehensive triennial reviews, and accident investigations.

The CPUC regulates safety and security of the following 12 transit agencies:

- 1. Bay Area Rapid Transit District (BART)
- 2. San Francisco Municipal Transportation Agency (SFMTA)
- 3. Los Angeles County Metropolitan Transportation Authority (LA Metro)
- 4. Sacramento Regional Transit District (SRTD)
- 5. San Diego Trolley Inc. (SDTI)
- 6. Santa Clara Valley Transportation Authority (SCVTA)
- 7. San Francisco International Airport (AirTrain)
- 8. North County Transit District (NCTD) (Sprinter)
- 9. Angel's Flight Railway Company, funicular in Los Angeles
- 10. San Pedro/Port of Los Angeles Red Cars (POLA)

- **11.** Los Angeles Farmer's Market trolley located at the Grove and Americana on Brand trolley, Glendale
- 12. Sacramento County Airport System (SCAS) Automated People Mover System

COMPREHENSIVE TRIENNIAL AUDITS

In 2012, the CPUC conducted comprehensive Triennial Reviews, including both safety and security components, of SFMTA, SDTI, NCTD, and SCAS. The CPUC approved the final audit reports for SRTD and SCVTA to ensure that audit findings and recommendations are addressed through corrective action plans, monitoring, and inspection. The findings indicate the systems and operations are largely in compliance, however findings were made and recommendations were issued in all triennial audits in 2012. In 2013 Triennial Review audits are scheduled for BART, LA Metro, POLA, and AirTrain.

SAFETY AND SECURITY CERTIFICATION

The CPUC requires that transit operators perform safety and security certification of new transit projects and extensions. Safety and Security Certification plans are submitted to the CPUC for review and approval, and operators must submit verification reports at completion of system construction and testing. As the FTA-designated state safety oversight agency, the CPUC works closely with FTA personnel on federally funded projects to assure effective safety oversight on projects they fund.

There are a number of California transit systems undergoing expansion that have projects in various stages of design or construction. New systems in environmental review, design or preconstruction that sought and received safety certification approval during 2012 include the LA Metro Expo Line Phase 2, Regional Connector, Westside Subway, Crenshaw Corridor project, and 3000 Series Vehicle Procurement projects, as well as the BART East Contra Costa project and the SRTD South Sacramento Phase 2 project. System extensions placed into service during 2012 include the SRTD Green Line extension and the LA Metro Expo Line phase 1. Additionally, the BART extension to San Jose and LA Metro Foothills Phase 1 projects are well under construction. Other projects under way include the SDTI Mid-Coast project, BART Oakland Airport extension, and Foothills phase 2 project.

Rail Transit Safety Inspection Program

The CPUC established a transit safety inspection program in 2009 with staff investigators that specialize in transit operations, vehicles, track, and signal/train control. The transit inspection program is unique among State Safety Oversight Agencies in the U.S. It allows the CPUC to examine transit system infrastructure and operations "on the ground," to ensure that safety programs and plans are sufficient and properly implemented, and that system infrastructure is operated and maintained in compliance with the regulations and system safety principles to assure public safety. They also provide additional expertise in accident investigations.

The CPUC transit inspection team has maintained a steady increase of inspections of transit operations and infrastructure over the past four years, increasing inspections at each agency during that time. Inspections rose with a 60 percent increase from 2009 to 2010 and a 40 percent increase from 2010 to 2011. The inspection team increased inspections by more than 25 percent in 2012.

Transit Accident Investigations

Depending upon the circumstances of an accident, the CPUC either directly investigates, or reviews and approves accident investigations and reports conducted by an RTA. The CPUC will investigate directly when appropriate, typically for accidents with significant actual or potential public safety consequences, for accidents receiving specific or unusual public attention, or for those that raise questions as to cause or contributing factors. When a multiagency investigation is appropriate, the CPUC participates in accident investigations with the National Transportation Safety Board, the RTA, the Federal Railroad Administration (on joint/shared rail corridors), Caltrans or local roadway authorities, and local law enforcement or CHP representatives. The CPUC ensures findings and recommendations resulting from accident investigations are addressed by the RTAs with corrective action plans and by monitoring their status and implementation.

Through December 10, 2012, 184 rail transit accidents were reported to the CPUC, resulting in 23 fatalities and 105 injuries on California transit systems in 2012.

Investigation into the Facilities and Practices of SFMTA

In February 2011, the CPUC opened a formal investigation into the facilities and practices of the San Francisco Municipal Transportation Agency (SFMTA). CPUC staff identified repeated safety violations and alleged service and infrastructure deficiencies in SFMTA's light rail systems and requested the CPUC require safety improvements to assure public safety. Staff alleged inadequate and delayed submittal of transit incident reports, failure to submit and follow corrective action plans, inadequate maintenance of track and wayside equipment, and other operational and infrastructure deficiencies.

In 2012, the investigation concluded with a settlement and CPUC approval of an agreement between the CPUC staff and SFMTA that resolves the specific allegations (without SFMTA admitting guilt) and corrects processes and procedures going forward. The agreement resulted in commitments for specific facility replacements, upgrades of some equipment, and administrative and operational changes.

Roadway Worker Protection

In response to investigations into two transit agency roadway worker (transit employee working along the track) fatalities that occurred in 2008, and the absence of specific requirements for an effective transit roadway worker protection program, the CPUC has initiated development of roadway worker protection rules for transit agency personnel. The CPUC staff completed a draft set of rules in 2010, and in 2011 held additional workshops with the public transit agencies and employee groups to refine them. Several more workshops and meetings were held during 2012 resulting in a draft final rule to be adopted in 2013.

FTA Audit of CPUC Rail Transit Safety Program

In March 2012, the Federal Transit Administration (FTA) Office of Safety and Security issued its final report from the audit of the CPUC rail transit safety program conducted in December 2011. The FTA audit was conducted over a one week period and examined the CPUC program in relation to the Title 49 Code of Federal Regulations, Part 659 requirements for State Safety Oversight Agencies. The FTA audit report resulted in three findings and seven recommendations for more effective oversight of the transit agencies under CPUC jurisdiction. The CPUC is resolving those issues with the FTA.

Washington/Flower Street Junction

During 2012, the Exposition Line Metro Construction Authority (Expo Authority) completed the Expo Phase 1 extension and turned the system over to LA Metro for operation. Over the pre-revenue operations and safety certification testing, CPUC staff identified safety issues at the junction point where the Expo Line connected to the Blue Line concerning track alignment into and out of the junction points. Staff identified unusual wear and damage to the junction track components. The line was allowed to open, although with significant operational restrictions, a rigorous testing and inspection program, and ongoing evaluation and investigation of the root cause. After a number of months of exchanges with Expo Authority and LA Metro, and continued degradation of the junction point and rail, the CPUC directed the parties to replace the track at the junction to resolve the design and/or construction defects leading to the problem.

Looking Ahead in Transit Safety

In 2013 the CPUC plans to revise and update its General Order (GO) 143-B, to reflect recent regulatory changes, and to add a section to the GO regarding specific requirements and standards for automated people movers. Additionally, risk assessment specialists will be integrated into the rail programs to begin the acquisition and analysis of detailed accident and operations data for identifying risks and areas of potential focus and further investigation and remediation. Also, the CPUC will work with the FTA and other national organizations on the implementation of new federal legislation regarding safety oversight at the national level to complement the existing state programs.

RAILROAD SAFETY

The CPUC's state/federal railroad safety program is the largest in the nation. The CPUC's federally certified inspectors work to protect California communities and railroad employees from unsafe practices on freight and passenger railroads. The CPUC program is certified to enforce Federal Railroad Administration (FRA) regulations, as well as state regulations. The CPUC's federally-certified inspectors promote and enforce rail safety rules and regulations by performing inspections and accident investigations. The CPUC's rail safety staff responsibilities include:

- Inspecting railroads for compliance with state and federal railroad safety laws and regulations;
- Investigating rail accidents and safety related complaints;

- Recommending rail safety improvements to the CPUC and federal government; and,
- Ensuring efficient enforcement of rail safety requirements.



Defective wheel on a train with 38 uninspected cars

The CPUC employs 48 rail safety experts: 36 inspectors with expertise in hazardous materials, motive power, and equipment, operations, signals, and track; along with analysts and support staff. The inspectors also perform overarching risk assessment and risk management to identify and address additional public safety risks. During 2012, rail safety inspectors:

- Performed inspections and drafted 4,587 inspection and follow-up reports to monitor the railroads' compliance and remedial actions;
- Identified 14,622 defects in track, locomotive, rail cars, signals, operating practices, and hazardous materials shipping practices. Each defect presents an accident risk if left uncorrected, and in some cases an immediate accident risk;
- Cited 276 defect violations of FRA regulations, California statutes, and CPUC General Orders;
- Surveyed and inspected 198,286 units;
- Identified and followed through with remedial actions on risk management safety concerns;
- Performed 30 security inspections throughout the state;
- Responded to 21 informal complaints from railroad employees and the general public; and,
- Educated more than 8,948 people through 89 presentations on safety awareness near tracks and trains through Operation Lifesaver.

Safety Culture and Risk Management

The CPUC is enhancing the safety culture of the railroad industry as well as its own safety culture. CPUC inspectors identify, mitigate, and eliminate hazards that go beyond the basic regulations.

The CPUC has developed a new risk management reporting structure to allow its inspectors to capture all possible risks in addition to those identified through the regulatory enforcement required by the FRA, current California statutes, General Orders, and Public Utility Codes.

For example, the CPUC conducted a risk management investigation between April and June 2012. The CPUC's track inspectors found that some newly appointed railroad managers and inspectors lacked knowledge of FRA and CPUC regulations, and also lacked the institutional knowledge required to perform their jobs, train and mentor subordinates, and identify track conditions that could adversely affect safe train transportation. This lack of training and/ or experience was also noted in their knowledge and skills regarding their own railroad procedures, such as rudimentary track deficiency identification and remediation, as well as complex continuously welded rail maintenance procedures and regulatory requirements.

The CPUC collaborated with the respective railroad middle and upper managers to establish more comprehensive personnel training and to prevent new field managers from being placed in safety sensitive positions until a more intensive and thorough training program had been completed by each prospective manager.

The CPUC is continuously improving its understanding of safety culture, system safety planning, high reliability operations, risk management, and other contributions of the applied engineering, organizational, and behavioral sciences.

Focused Inspections

The CPUC conducted a variety of inspections of rail operations and equipment that pose the greatest safety risk, based on inspection data, accident history, and rail traffic density. If corrective actions are recommended by CPUC staff, staff performs a follow-up to determine whether the recommended corrections were made.

During an unannounced inspection of extended haul trains at the Union Pacific Commerce Intermodal Facility, CPUC inspectors identified a defective wheel on an outbound train. When inquiring about the reasons for the Union Pacific employees' failure to detect the defect, the inspectors discovered that the employees had neglected to perform pre-departure inspections or air tests, which are required on cars added to extended trains. Defective wheels often result in derailments, hazardous materials spills, and potentially significant public safety risks when derailments occur near populated areas. This instance of non-compliance with federal safety regulations resulted in a recommendation to the FRA to issue 38 civil penalties, at \$2,500 per day, to the railroad.

Keeping Passengers Safe: The Skunk Train



The Sierra Northern Railway of Fort Bragg owns and operates the Skunk Train, which transports thousands of tourists each year between Willits and Fort Bragg. The Skunk Train is also a popular venue for a variety of groups, including weddings, tour groups, company parties, special events, and school groups.



In February, a CPUC track inspector found a broken rail during a routine inspection of the Skunk Train. The remedial

action for this type of defect is to assign a qualified person to visually supervise each operation over the defective rail or apply joint bars to the defect by drilling holes in the rail and installing bolts to hold the joint bars together. The Sierra Northern Railway chose to take the track out of service and replace the rail before any trains passed over the defect. Had the CPUC inspector not detected the track defect, this condition if left uncorrected would likely have resulted in a derailment. Because the Skunk Train primarily transports families and school groups, a derailment could have had tragic consequences.

Ensuring Safe Operations

CPUC Operating Practices (OP) inspectors routinely inspect, observe, and monitor compliance with the requirements of Federal and State regulations for trains moving through areas where railroad work groups are working under the protection of a "Form B Track Bulletin." In order for a train or on-track equipment to proceed safely through a Form B protected work area, the employee responsible for the safety of railroad workers must grant permission via radio communication. As a second line of defense, either a yellow flag (indicating a train may proceed through work limits 2 miles ahead at reduced speed), a yellow/red flag (stop 2 miles ahead short of work limits), or a red flag (stop – await permission to proceed) is placed on either side of the work area to direct train operators to either proceed through the limits or stop and await permission, as authorized.

In August, a CPUC OP inspector discovered that a serious and potentially tragic event had been averted simply by luck and exceptionally quick individual survival reactions. Maintenance of Way (MOW) crews had been repairing a bridge on the BNSF Railway near Merced. The project was estimated to take five days. On the third day of the project, a freight train traveled through the Form B work area at 70 miles per hour without contacting the MOW crew foreman for permission. Although the Form B was completed correctly and noted to be in effect for the full five day work duration, the train operators misread the Form B and believed it to affect rail operations in that vicinity for just one day instead of five. The MOW crew members, not expecting any train traffic at the location and believing their protection was in place, found themselves running or diving off the bridge end abutments as the train sped through their working limits. Fortunately, no one was seriously injured. It was also fortunate that the bridge and track had already been made safe for train passage, as this incident happened towards the end of the work shift.

A CPUC OP inspector investigated the incident and found that various rules had not been followed and that warning flags had been inadvertently knocked down just prior to the incident. Rule infractions included: 1) improper use of radio transmission (49 CFR 220), 2) improper placement of yellow/red and red flags (Calif. Public Utilities code section 7662) 3) unclear instructions on the Form B, not in compliance with the General Code of Operating Rules (GCOR, sections 5.4.3 and 5.4.7), and 4) not thoroughly reading the Track Bulletin itself, per GCOR Rule 15.2.

CPUC staff held multiple meetings with railroad managers and labor, discussed all issues in depth and received an action plan from railroad managers to mitigate such potential risks regarding Form B issuance instructions, flag placement and thorough job briefings by all concerned.

Accident Investigations

CPUC federally certified investigators perform in-depth investigations on all accidents to determine root cause and identify corrective actions needed to safely transport goods, hazardous materials, and the rail-travelling public. Accidents include all derailments; collisions between trains and other trains, motor vehicles, bicyclists, pedestrians, and obstructions; and hazardous materials releases from trains. The CPUC determines the appropriate investigative response based on accident severity criteria, including:

- Impact to the public (evacuations, injuries, fatalities);
- Injuries or fatalities to railroad employees or passengers;
- Environmental impact;
- Impact on commercial transportation (highway closures, commuter interruptions); and,
- Violations of State or Federal railroad safety regulations or operating rules.

Specialized investigators examine evidence at accident sites, including the position of derailed equipment, marks on track or ties, indications of equipment defects, and locomotive event-recorder (black box) tapes. Investigators also interview train crews, analyze recorded radio and/or video transmissions; and observe signal test demonstrations, brake tests, and accident simulations. Once staff identifies a probable cause, they make recommendations to the railroad. Staff determines the railroads' compliance with State and Federal regulations, and recommends enforcement action where applicable.

In October, a semi-truck and trailer collided with a southbound Amtrak passenger train (the San Joaquin) as the passenger train was passing through a road crossing near Hanford. The impact caused the Amtrak locomotive and three passenger cars to derail upright. The semi-truck and trailer were extensively damaged. There were no fatalities, but were some minor injuries to two train passengers and the truck driver incurred moderate injuries. The crossing was protected with warning flashers, gates, and bells.

The investigation revealed that the truck driver was approaching the Kansas Avenue grade crossing near Hanford at a rapid rate of speed. Once he realized that the train was going through the crossing in front of him, he attempted to brake and then made a hard right hand turn, flipping the truck rig onto its left side and colliding with the passenger train. The train was in "push mode", meaning that the locomotive was at the rear of the train. The truck struck the train one car ahead of the locomotive. The train had already entered the crossing at the time of impact.

The investigation revealed that all grade crossing protection devices were working as intended. The grade crossing approach warning signs (with illumination) were in place, operating and clearly visible. The incident occurred at 12:20 p.m. when the sun was overhead and not interfering with vehicle driver visibility. Inspectors found no railroad passenger car, locomotive, track, or signal deficiencies, or any other possible causal factors.



Derailed cars where they came to rest

While the accident is still under investigation, initial investigation suggests the truck driver may have lost situational awareness of the warnings and the truck's speed until it was too late to stop.



Damage to passenger car

Citations and Penalties

CPUC staff issued two citations totaling \$60,000 under a recently enacted citation program. The CPUC adopted Resolution ROSB-002 to delegate citation and fine authority to staff for violations of certain state General Orders and PU Codes. Citation revenue is deposited into the State General Fund.

For federal violations, CPUC staff recommends to the FRA to levy civil penalties. Violations are typically \$2,500 per day, per incident. All disciplines have a "Schedule of Civil Penalties" that is used as guidelines. Once a year, each FRA Region holds a violation conference and reviews each violation taken within the region.

CPUC staff participated in the planning and implementation of two Safety Conferences, one in San Francisco and one in Los Angeles. The conferences featured keynote speakers from the National Transportation Safety Board, the Washington Metropolitan Area Transportation Authority, and UC Berkeley's Center for Catastrophic Risk Management. The conference was attended by representatives from all the utilities under the CPUC's safety jurisdiction, and presented state-of-the-art safety culture and risk management principles.

CPUC staff also held a three day safety conference for staff to review regulatory enforcement rules, regulations, practices, and procedures to enhance the skills, knowledge, and abilities of inspection and analytical staff. Staff supervisors and inspectors participated in numerous technical oversight and best practices discussions.

The main focus of this event was to roll out a new risk management plan that will allow staff to document their risk assessment activities, other than be restricted to the standard inspection forms. This program allows inspectors and managers to look beyond the regulations at more complex risk factors and to set in motion activities that will allocate necessary resources and supervisor interaction to seek the best possible risk management solutions.

Federal Rail Safety Improvement Act of 2008 and Positive Train Control

The Federal Rail Safety Improvement Act of 2008 requires the installation of Positive Train Control (PTC) systems on a large proportion of the nation's railroads by December 2015. PTC technology is intended to prevent train-to-train collisions, over-speed derailments, and injuries to railroad workers resulting from unauthorized train movements, as well as unauthorized train movements due to switches left in the wrong position.

During 2012, the CPUC continued to work with the FRA in PTC oversight, including oversight over Class I railroads and commuter railroads in the Los Angeles Basin in their effort to achieve PTC implementation. Metrolink (Southern California Regional Rail Authority) and Union Pacific Railroad (UPRR) voluntarily pledged to implement PTC on UPRR - Metrolink joint operation trackage by the end of 2012. However, UPRR has stated that they will not be able to have full implementation of PTC by the December 2012 date but could have partial implementation of PTC on joint trackage with Metrolink by September 2013.

RAIL SAFETY AND HIGH SPEED RAIL

Following the passage of the California High Speed Rail (HSR) Bond Initiative, CPUC staff began formulating a safety oversight approach that recognizes the reality that there is no railroad in operation in the U.S. that utilizes the

new technologies that will be employed on the California HSR system.

Each derailment, hazardous materials spill, or crossing accident diminishes confidence in the State's ability to protect the public and the environment, and regulate the rail industry. If state rail safety inspectors can effectively mitigate rail accidents and instill a strong safety culture for existing rail carriers, the ability to transition this safety culture to HSR increases exponentially.

Hazardous Materials/Security Inspections

The CPUC investigates accidents and incidents involving the actual and/or threatened release of hazardous materials to determine root cause and identify corrective actions needed to safely transport hazardous materials. The CPUC conducted a variety of activities related to rail transportation of hazardous materials in 2012, including unannounced inspections at various types of facilities that handle hazardous materials, such as shipper facilities, consignees, freight forwarders, intermodal transportation companies, and railroads.

The CPUC conducts annual security reviews on all Class 1 and short line railroads in California. These inspections are required under Public Utility Codes 7665 – 7666 also known as the Local Community Rail Security Act of 2006. These reviews ensure that the two Class 1 and the 32 short line railroads in California provide for the security and safety of local communities and community facilities from the threat of terrorism, through the establishment of a local site specific security plan.

The security plan components include:

- Risk Assessment Plan (7665.2.);
- Infrastructure Protection Program (7665.4.);
- Hazardous Cargo (7665.6.);
- Communication (7665.8.); and,
- Violation Reporting (7666).

Promoting Rail Safety with Public Education

In 2012, CPUC employees continued their participation in volunteer activities for Operation Lifesaver, an international organization committed to reducing the number of grade crossing and trespasser accidents through education, enforcement, and engineering. CPUC employees made presentations to schools and community groups to raise public awareness of safety measures that must be observed near railroad tracks. The CPUC's bilingual presenters ensured that this safety message was communicated to a larger audience. In 2012, Operation Lifesaver-certified presenters from the CPUC educated more than 9,000 people through 89 presentations and events.

RAIL CROSSING SAFETY

The CPUC oversees the safety of railroad crossings in California and evaluates and approves their design, location, terms of installation, operation, maintenance, use, and warning devices. The CPUC currently has safety oversight responsibility for approximately 13,250 crossings, of which 10,000 are at-grade (the rail and road are at the same level). The CPUC's rail crossing responsibilities play a critical role in ensuring the safety of the state's residents, and the CPUC is taking a number of steps to improve rail crossing safety throughout the state.

The CPUC's responsibilities include:

- Performing safety inspections of crossings;
- Enhancing and improving safety at all crossings in the state;
- Analyzing new crossing safety technology;
- Reviewing and processing applications for CPUC authorization to construct new or to alter existing crossings;
- Reviewing and responding to public complaints (e.g., rough or unsafe crossings, noise issues, etc.);
- Administering Highway-Rail Crossing Hazard Elimination Program funds (Section 130 – intended to eliminate hazards at existing public crossings);
- Administering the State's Grade-Separation Fund program;
- Administering the State's Automatic Railroad Crossing Warning Device Maintenance Fund program;
- Administering the CPUC's existing crossing inventory and accidents databases;
- Performing field reviews of crossings;
- Investigating collisions involving trains or light rail transit vehicles at crossings;
- Reviewing environmental impact reports regarding the potential impacts of proposed development projects, such as the High Speed Rail initiative, on crossings and other rail safety-related issues in or near the project areas; and,
- Responding to Notices of Intent and Notices of Establishment for railroad quiet zones.

Rail Crossing Accident Investigations and Evaluations

Rail crossing accidents continue to be a major source of railroad-related casualties in California. However, the numbers have been generally trending downward. In California during 2012, 119 crossing incidents, with 32 fatalities and 39 injuries, were reported to the CPUC and to the FRA. The CPUC identifies problematic crossings and investigates crossing accidents as a way to proactively allocate funding to improve crossing safety.

Highway-Rail Crossing Hazard Elimination

The CPUC jointly administers the approximately \$16 million per year Highway-Rail Crossing Hazard Elimination program with Caltrans. The CPUC is responsible for a number of projects, including an extensive data analysis project aimed at identifying crossings to evaluate for potential safety improvement projects. The CPUC coordinates site evaluation and reviews, and works with all involved parties to develop various improvement projects. Caltrans is responsible for contracting for, administering, and implementing the crossing improvements.

Evaluating Crossing Applications and Modification Requests

Over the years, the CPUC has seen an increase in the number of new crossing applications and modification requests it receives. Primary factors driving the increase are 1) The implementation of the 2006 Bond Act; 2) The availability of American Recovery and Reinvestment Act funds; 3) Transit system expansions and line extensions; and 4) Specific local and regional transportation initiatives approved by voters, all of which fund many current transportation projects. In 2012, 11 applications for new or modified crossings were filed with the CPUC and 190 public highway-rail crossing modification cases (GO88 Applications) were opened involving more than 200 crossings.

Rail Corridor Safety Enhancement Program

The CPUC continues to develop and refine its rail corridor safety enhancement program. When development projects are proposed along rail corridors, the CPUC provides indepth technical analysis of environmental review documents under CEQA and makes efforts to eliminate or mitigate any potential rail safety impacts generated by the proposed development. Reviewing rail crossing impacts while development projects are still in the planning stages allows the CPUC to be proactive in seeking corrective measures for crossings and rail corridors, rather than reactive after an incident has occurred.

Highway-Rail Grade Crossing Action Plan

California was identified in the Rail Safety Improvement Act of 2008 as one of the 10 states with the most grade crossing collisions in the prior three years. As such, California was required to develop an action plan to identify specific solutions for improving safety at crossings. Due to its jurisdiction over railroad and rail transit crossings within California, the CPUC took the lead in developing the resulting action plan. The plan outlines the current state of rail crossing safety in California and the federal, state, and local agency roles and responsibilities relating to improving safety. The action plan outlines the significant investments made by the state to construct grade separation structures as a way to eliminate existing crossings and to improve existing at-grade crossings to eliminate hazards. It also outlines several new strategies to improve crossing safety. The CPUC submitted the action plan to the FRA for comment, made revisions, and will adopt a final plan in early 2013.

Significant Rail Crossing Cases

A number of crossing cases came before the CPUC in 2012 that are of particular note:

- Doran Street Crossing, Los Angeles The CPUC identified safety concerns and requested closure or improvements. The case has resulted in a settlement agreement to improve the adjacent crossing, and once completed, to modify the Doran crossing to mitigate the risks there.
- San Clemente Trail Pedestrian Crossings Wayside Horn Project - The city is requesting approval to install wayside horns at seven pedestrian crossings along their coastal trail in order to have the locomotive mounted train horns silenced. BNSF and Amtrak object and claim the CPUC has no such authority or jurisdiction. The CPUC ruled that it does have jurisdiction.
- City of Davis Pedestrian Crossing Request The city filed a request to place a pedestrian at-grade crossing to the Olive Drive neighborhood off of its Amtrak/ Capital Corridor station platform. CPUC staff, Union Pacific Railroad, and the Capitol Corridor Joint Powers Board protested the application. The CPUC will issue a decision in 2013.

Crossing Traffic Signal Preemption Studies

The CPUC has partnered with the railroads in reviews of all railroad crossings in California of the Union Pacific Railroad and BNSF Railway Company that have traffic signal preemption systems. The project is funded by the railroads and the reviews are intended to respond to the Safety Alert Notice issued by the FRA, recommending annual joint inspections of preempted crossings with the railroad, the roadway authority, and the oversight agency. CPUC staff, roadway authorities, railroad personnel, along with their expert preemption consultant, have conducted and documented the reviews. The field reviews have identified a number of deficiencies and made numerous adjustments to the traffic signal phase timing to improve the situation. The project will carry on in 2013 and other major rail operators are expected to participate. The goal is to evaluate all preempted crossings in California, and then set up a system to assure ongoing inspection and evaluation.

Looking Ahead In Crossing Safety

In 2013 the CPUC's goal is to undertake a revision of its General Order (GO) 75-D and 88-B to update and add clarification. Additionally, CPUC staff will draft and propose legislation to clarify the CPUC's role and specific requirements for silencing train horns at private and pedestrianonly crossings, which are not subject to the FRA quiet zone rules. Additionally, CPUC staff will continue partnering with the railroads in California to evaluate preempted crossings, and pursue the other activities outlined in its Crossing Safety Action Plan.

HOUSEHOLD GOODS CARRIERS AND PASSENGER CARRIERS

The CPUC is responsible for issuing operating permits and certificates to companies (often called "carriers") that transport passengers for compensation, such as limousine operators, charter-bus companies, and airport shuttle services, and to moving companies, also known as "household goods carriers." The CPUC also enforces the licensing and other regulatory requirements applying to carriers' operations.

Licensing Activity

The CPUC licenses for-hire passenger carriers and household goods carriers, and also registers not-for-compensation private carriers of passengers. See tables and charts below for selected core activities relating to passenger carriers and moving companies reported over a 12-month period.

Passenger Carriers* - Licensing Activity Count

	12/1/11 - 11/30/12	12/1/10 - 11/30/11	% Change
New Applications	1,704	1,347	27%
Renewals	1,488	1,558	-4%
Refiled Applications	202	237	-15%
Transfer Applications	47	31	52%
Suspended	4,420	4,190	5%
Suspensions Reinstated	3,685	3,423	8%
Revoked	806	933	-14%

*Passenger Carriers include passenger stage corporations and charter-party carriers

Moving Companies* - Licensing Activity Count

	12/1/11 - 11/30/12	12/1/10 - 11/30/11	% Change
New Applications	132	97	36%
Refiled Applications	12	18	-33%
Transfer Applications	15	11	36%
Authorities Suspended	613	682	-10%
Reinstated from Suspension	545	571	-5%
Authorities Revoked	167	184	-9%

* Moving Companies are also known as Household Goods Carriers

Electronic Insurance Filing

Licensed carriers are required to maintain evidence of one or more types of insurance on file with the CPUC. The CPUC receives many thousands of insurance-related paper documents per year, and reports that the volume of filings received has steadily grown as the number of licensed charter-party carriers (the largest class of carriers) has increased. As of December 20, 2012, the number of charter-party carriers has increased to 7,373, which is nearly double the number holding a license in 2004. Charter-party carriers currently represents the largest category of active carriers (excluding for-hire vessels and air carriers).

During the 4th quarter of 2012, the CPUC adopted Resolution TL-19105, which authorized the CPUC to implement electronic filing (e-filing) of insurance certificates, notices of cancellation, and reinstatement of insurance. This allows insurers to electronically file all liability, workers' compensation, and cargo insurance required by the CPUC.

The newly designed web-based electronic insurance filing system is currently being tested with a small number of volunteer insurers and brokers. This "live" testing will conclude in early 2013, at which time e-filing will be available to all authorized insurers and brokers. In the project's last phase, later in 2013, use of e-filing will become mandatory for all insurers and brokers, eliminating the thousands of paper insurance certificates the CPUC must now receive and process manually each year, while improving efficiency and accuracy and cost savings for the benefit of the carriers and the public.

ACTIVE CARRIERS

As of December 20, 2012, the CPUC has authority over 10,216 active and suspended carriers (not including for-hire vessels and air carriers), of which 7,373 are charter-party carriers, 261 are passenger stage corporations, 1,083 are moving companies, and 1,495 are private carriers.

Passenger Carrier Enforcement

The CPUC regularly conducts passenger carrier vehicle inspections at airports and other locations where passenger carriers frequently operate. It also responds to requests for assistance from local authorities to help address special situations or problems involving passenger carrier operations that arise.

In 2012, the CPUC conducted inspections at San Francisco International Airport, Long Beach Airport, John Wayne Airport, San Diego International Airport, and Los Angeles World Airport. The CPUC also conducted vehicle inspections at Disneyland, Modesto X-Fest, Golden Gate Park and Fisherman's Wharf, Hollywood sightseeing areas, and Yosemite National Park. CPUC staff once again joined with city and university police departments to address the problems of underage drinking on "party buses" and limousines operating in San Diego. In 2013, the CPUC and other law enforcement entities will have help curtailing underage drinking on all regulated for hire transportation with the passage of AB 45. This new legislation, which was passed in 2012, will among others things, require chaperones to be present on all chartered trips where there are minors and alcohol present.

In 2012, new businesses such as Lyft, Sidecar, and Uber have presented the CPUC, which regulates charter-party carriers, with a situation not encountered before: the use of mobile communications and social networks to connect individuals wishing to offer and receive convenient, sometimes shared, transportation.

The CPUC has a responsibility for determining whether and how public safety might be affected by these new businesses. In 2012, the CPUC opened a proceeding to protect public safety and encourage innovation in the transportation of passengers over public highways for compensation.

The CPUC will examine the consumer protection and safety implications of the new methods for arranging transportation services; whether and how the new transportation business models differ from longstanding forms of ridesharing; and the new transportation business models' potential impact on insurance and transportation access. This proceeding will allow the CPUC to evaluate any public safety risks, and to ensure that the safety of the public is not compromised in the operation of these new business models.



Raising Awareness with Other Agencies

The CPUC conducts outreach to public agencies and other organizations to inform them of the CPUC's carrier enforcement and consumer protection programs. The CPUC believes this greatly increases the effectiveness of the programs. In some cases the activities may result in the formation of a special task force with other agencies to work jointly on issues of mutual concern. Those receiving program presentations from the CPUC in 2012 included the Indian Casinos, Orange County Taxi Administration, Greater California Livery Association, San Francisco and San Diego International Airports, and the California Highway Patrol.

Household Goods Carrier Enforcement

Moving companies that operate without a permit or that engage in abusive consumer practices such as holding goods hostage or charging exorbitant, unjustified rates are subject to criminal prosecution. In 2012, the legislature passed AB 2118 to recognize the need to continue to protect consumers and to provide effective deterrents to carriers who violate the law. Effective January 1, 2013, among other things, the bill requires every household goods carrier to have a prominent link on its website that directs consumers to the CPUC's website regarding moving and consumer rights and protections. Additionally, the bill increases the penalties for operating or advertising without a permit, and makes it a violation of law to falsify permit status, membership in an association, or business location. Also, current law is amended to make it abundantly clear that one who arranges the transportation of used household goods as a "broker" is subject to the Act. Heretofore, some persons have attempted to skirt the law by claiming to be an unregulated broker and therefore not subject to household goods carrier permit requirements.

The CPUC is the only state agency empowered to enforce these consumer protections.



WATER

he CPUC is responsible for ensuring that California's investor-owned water utilities deliver clean, safe, and reliable water to their customers at reasonable rates. There are 120 investor-owned water utilities and 14 investorowned wastewater utilities under the CPUC's jurisdiction providing water service to about 16 percent of California's residents. Approximately 95 percent of that total is served by 10 large water utilities—each serving more than 10,000 connections. Annual water and wastewater revenues under the CPUC's regulation total \$1.4 billion.

WATER ACTION PLAN AND OVERVIEW

The CPUC's policy objectives for the regulation of investorowned water utilities are set forth in its Water Action Plan (WAP). Originally adopted in 2005, and updated in 2010, the WAP highlights the actions that the CPUC considers in order to implement these objectives. The WAP is a forward looking plan that describes the regulatory future that the CPUC wants to achieve for the water utilities and lays out the steps needed to get there. The CPUC enforces its orders and rules to correct utility non-compliance and abuse through investigations, fines, and similar enforcement tools.

The CPUC's objectives in regulating water utilities rest on four key principles 1) Safe, high quality water, 2) Highly reliable water supplies, 3) Efficient use of water, and 4) Reasonable rates and viable utilities. The goal is to implement regulatory best practices for water, while placing water conservation at the top of the loading order as the best, lowest-cost supply source.

Pursuing the objectives adopted in the WAP, the CPUC substantially revised how it regulates the water utilities. The CPUC decoupled sales from revenues, instituted tiered rate structures, and updated water conservation rules and water service standards. Water utility conservation budgets have increased multiple times. A schedule has been established for rate review filings, low income ratepayer assistance programs are in place, and examinations on the use of recycled water and balanced rates are underway.

To balance competing interests with the practical realities of supply, the CPUC is cognizant of the necessity to: 1) Remain flexible and adaptable to changes in supply, 2) Work closely with sister agencies, the legislature, and other regulatory bodies, 3) Learn from the experiences of public agencies, other states, and other countries about such issues as public exchanges, private partnerships, and conservation, 4) Stay abreast of technological discoveries and advances, and 5) Educate the consuming public about the true value of water and the consequences of declining water availability.

The CPUC proactively participates in water matters at the state level by monitoring and taking positions on legislation. The CPUC participates in a number of statewide water committees, either as a member or to monitor developments, including the: 1) State Agency Water Plan Steering Committee, 2) Water Plan Groundwater Committee, 3) Water Technology Advisory Committee, 4) State Water Sustainability Committee, and 5) Standardized Water Usage Reporting Committee.

In 2013, highlights in water utility regulation for the CPUC includes: 1) Examining the role of single tariff pricing in water rates, 2) Completing an investigation on the potential of recycled water to augment potable supply, 3) Addressing a request to build a desalination plant in the Monterey area, 4) Implementing new legislation, 5) Following through with enforcement and compliance activities, and 6) Expanding and improving the auditing of all utilities and certain CPUC programs.

LEGISLATION

Several legislative bills were signed into law including the Human Right to Water law (AB 685 - Eng), the Lucas D. Hernandez Mobile Home Park Resident Protection Act (AB 1830 - Perez), disaster and emergency preparedness plans (AB 1650 - Portantino), and affiliate transaction reporting, audits for water utilities with more than 2,000 service connections, and customer notification (SB 1364 – Huff).

AB 685 establishes statewide policy that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption. The CPUC's regulatory policies have long been aligned with the policy directives set forth by AB 685, and have been clearly set forth in the WAP since 2005 when the WAP was first adopted. The WAP's four key principles — safe, high quality water, reliable supplies, and efficient use and reasonable rates — form the foundation of the CPUC's regulatory water policy.

Mobile home parks that provide water service only to their tenants from water supplies it owns are subject to CPUC jurisdiction when a complaint is filed alleging unfair rates or inadequate service. AB 1830 expands the CPUC's authority to reimburse mobile home park tenants, both past and current, when rates charged for water are found to be unjust or unreasonable. In addition, the bill requires that mobile home park owners notify their tenants about their right to file a complaint with the CPUC.

MONTEREY WATER SUPPLY

The Monterey District of California American Water Company (Cal-Am) is currently served by scarce water resources from the Carmel River and the Seaside Groundwater Basin. Under a 2009 Cease and Desist Order from the State Water Resources Control Board, Cal-Am will lose 70 percent of its present water supply from the Carmel River at the end of 2016.

Water Supply Project

In 2010, as a solution to Cal-Am's loss of Carmel River supply, the CPUC approved a settlement agreement for Cal-Am to participate in a Regional Desalination Project with local government agency partners. Disputes arose among the parties to the settlement. In July, following attempts by the CPUC to mediate the dispute among the project partners, the CPUC concluded that it was not reasonable for Cal-Am to pursue the Regional Desalination Project.

In April, Cal-Am requested authorization to construct facilities associated with the Monterey Peninsula Water Supply Project in lieu of the Regional Desalination Project. The key component of the Monterey Peninsula Water Supply Project is a desalination plant with a capacity of up to 9 million gallons per day. The estimated total capital cost for a project with this capacity is \$367 million. This includes \$260 million for the desalination plant facilities and \$107 million in upgrades to Cal-Am's pipe, pumping, and storage facilities necessary to receive and distribute water from the desalination plant. The annual operating and maintenance expense for the desalination plant is estimated at nearly \$13 million.

Monterey County has an ordinance that, among other things, purports to govern the issuance, suspension and revocation of permits for the construction and operation of desalination treatment facilities in Monterey County. In October, the CPUC determined that the ordinance is in conflict with California law and is preempted in its entirety by the CPUC's authority over its regulated utilities.

The CPUC is currently reviewing Cal-Am's Monterey Peninsula Water Supply Project under the mandates of the California Environmental Quality Act and Public Utilities Code Section 1001 for issuance of a Certificate of Public Convenience and Necessity to construct and operate the components of this project. A CPUC decision on this matter is expected in late 2013 or early 2014.

Carmel River Reroute and San Clemente Dam Removal

Following extensive hearings and public comment, the CPUC authorized \$49 million for Cal-Am's share of the estimated construction costs to fund a re-routing of the Carmel River and the removal of the San Clemente Dam. In addition, the CPUC authorized \$28.9 million in costs incurred or to be incurred by Cal-Am for: 1) Pursuing buttressing the existing San Clemente Dam structure over the past decade to satisfy the California Department of Water Resources seismic safety concerns; 2) Interim dam safety and environmental costs during removal of the San Clemente Dam; and 3) Mitigation costs for 10 years following removal of the San Clemente Dam.

RECYCLED WATER

The CPUC is developing a comprehensive policy framework to increase and promote the development, production, and use of recycled water for approved non-potable and potable reuse by its water utilities with more than 2,000 service connections and comparably-sized sewer utilities (IOWSU). The goal is to reduce the barriers to collaboration between wholesalers and retail recycled water purveyors, and to facilitate the cost-effective use of recycled water where it is or can be made available. The policy framework will consider the most recent state policy and legislation for the production, delivery, and use of recycled water, as well as interagency coordination and collaboration for the implementation of these policies with the California Department of Public Health, California Department of Water and Resources, State Water Resource Control Board, and Regional Water Quality Control Boards.

The CPUC's recycled water policy framework will address issues associated with: 1) Recycled water planning; 2) Cost allocation of recycled water projects between customers, IOWSUs, and public agencies; 3) Rate design structures for recycled water, customer incentives and funding of infrastructure by customers; 4) Inter-agency coordination to address inter- and intra-regional situations where competing beneficial uses exist in adjudicated water basins where the IOUWSU operate; 5) Environmental matters; and 6) Accountability and recycled water goals.

The CPUC is evaluating processes to streamline the review of select categories of recycled water projects and is considering establishing minimum criteria for reviewing recycled water project proposals, including an expedited review process for small scale, uncomplicated recycled water project proposals. The CPUC anticipates deciding these matters by the summer of 2013.

Assistance for Water Low Income Customers

In 2012, the CPUC's low income water assistance programs experienced a vast increase in customer participation. As of October, approximately 221,940 residential water customers participated in the assistance programs offered by the 10 large water utilities, an estimated 88 percent increase in just two years.

The CPUC's new auto-enrollment program is almost entirely responsible for the increased participation. The CPUC requires that large water and energy utilities mutually exchange data on participating low income customers and enroll the other utility's participating customers after those customers have been given the opportunity to opt out. Considering that the energy utilities report their CARE capture upwards of 90 percent of the eligible low income households they serve, the data sharing requirement has enabled the water utilities to benefit from the energy utilities' more extensive outreach efforts.

Looking ahead, the CPUC will concentrate its efforts in achieving greater synergies among the regulated assistance programs, identifying streamlining opportunities within the water programs, monitoring the impact conservation measures may have on the low income community, in particular large households, and exploring program modifications where necessary, all the while continuing to balance the cost-implications of this ratepayer-funded program as it continues to grow.

SINGLE TARIFF PRICING

The CPUC is considering establishing new guidelines for the consolidation of water districts or some variation of a high-cost fund within the multi-district water utilities as a means to advance the CPUC's Water Action Plan objective of setting rates that balance investment, conservation, and affordability. In support of this effort, the CPUC conducted two workshops to examine different types of consolidation mechanisms and variants of high cost funds, as well as developing a framework for identifying appropriate tools and mechanisms that may be considered in water utilities' rate proceedings for addressing customer affordability. The CPUC will provide guidance on this matter in 2013.

WATER AND SEWER ENFORCEMENT

The CPUC takes actions to enforce its orders and to protect the customers of the water and sewer utilities it regulates.

Violations of Procurement Policies

Golden State Water Company implemented a 2011 settlement with the CPUC, which mitigates the impact of irregularities at Golden State Water in its capital procurement practices. Per the terms of the settlement agreement, Golden State Water Company began refunding \$9.5 million to its customers over the next one to three years and reduced all future rates by a \$2.5 million reduction to its plant used to set rates.

Petitions for Receivership

The CPUC may seek to replace a utility operator in extreme cases of poor utility operation and service. This process requires that the CPUC petition the Superior Court of the State of California for the appointment of a receiver.

- In February, Golden Hills Sanitation Company (GHSC) informed its customers that it would no longer provide sewer service. Immediately, the CPUC imposed a Temporary Restraining Order prohibiting GHSC from abandoning sewer service until the CPUC could recommend and the Superior Court in Kern County could appoint a receiver. The Superior Court in Kern County appointed a receiver on March 29, 2012.
- Following unsuccessful attempts to facilitate a voluntary sale of Yermo Water Company from its current owner to the Yermo Community Service District, the CPUC petitioned the Superior Court in San Bernardino County to seek the appointment of a receiver for Yermo Water Company. The CPUC sought the appointment of a receiver after finding that the current owner has consistently violated CPUC and California Department of Public Health orders. The CPUC determined that the current owner is unable or unwilling to adequately serve Yermo Water Company's customers and that the inadequate level of water service

provided by Yermo Water Company has a potential adverse effect on public health and safety.

• The CPUC is considering whether to petition for the appointment of a receiver for Live Oak Springs Water Company, a subsidiary of Live Oak Holding. The owner of the water company entered into a loan agreement where the assets of the utility were pledged without authorization from the CPUC. The owner defaulted on the loan and the bank petitioned the Superior Court in the County of San Diego, to among other things, foreclose on the water company and appoint a receiver. The court granted the relief sought.

Safe Drinking Water Bond Act/Safe Drinking Water State Revolving Fund Loans

The CPUC authorizes small water utilities that have trouble obtaining financing for necessary plant improvements to enter into Safe Drinking Water Bond Act/State Revolving Fund low-interest rate loans. The CPUC requires that the rates dedicated to pay back these loans be deposited into a trust account. The CPUC reviewed 28 existing SDWBA/ SDWSRF trust accounts to assess utility compliance with collecting and remitting customer funds dedicated for the loan repayments. In addition to reviewing the trust accounts, the CPUC is closely monitoring two utilities that have been delinquent in their loan payments.

The CPUC determined that four of the utilities had over-collected rates dedicated for the loans and six of these four utilities' trust accounts had excess funds. The CPUC requires the refunding of excess funds by crediting the customers' bills, thereby providing economic and financial relief to customers and ensuring customer equity. In November, one utility completed refunding its customers excess funds of \$251,338. The CPUC directed the three other utilities to submit filings to refund excess funds of over \$947,000. The CPUC is working closely with our sister agencies to facilitate the refunds.

To avoid the future over-collection of funds in the trust accounts, the CPUC required two other utilities to terminate the special rates because the trust accounts had accumulated enough funds to fully pay off the remaining loan balances and required another utility to reduce its surcharge rates to reflect lower than anticipated loan payments.

AUDITS OF SMALL WATER UTILITIES

Some of the small water companies that the CPUC regulates may not be very knowledgeable or have the resources to correctly summarize their accounting information into the annual reports they submit to the CPUC. The accuracy of these reports is essential for the CPUC to properly regulate these utilities. The CPUC chooses to audit a selection of these companies each year to verify the reliability of their accounting records to correctly compile financial information into the annual reports. The CPUC completed four of these comprehensive financial audits and is in the process of conducting four more, which it will finish in 2013. As a result, these four companies are now in compliance with the CPUC's reporting requirements and will be able to properly submit their reports in the future.

WATER QUALITY MONITORING

The CPUC requires its staff to research and report on water quality issues at least once every three years for each of the 10 large water utilities. Each water quality report addresses any non-compliance with the federal and state safe drinking water standards and provides specific findings and conclusions on utility requests associated with water quality. The report also advises and makes recommendations regarding any capital improvements necessary to maintain water quality in the future. Water quality reports were presented on Park Water Company, San Jose Water Company, Great Oaks Water Company, and California Water Service Company.

The CPUC continues to closely monitor water quality and compliance with water quality standards set forth by the Environmental Protection Agency and California Department of Public Health. The CPUC is awaiting the adoption of drinking water standards for Hexavalent Chromium 6 and Perchlorate. Hexavalent Chromium 6 is a naturally occurring element that is found in groundwater basins and is also widely used in industrial processes. Perchlorate is used in solid propellant for rockets and can affect growth and development and normal metabolism and mental function in adults.

RATE AND COMPLIANCE REQUESTS

Water and sewer compliance requests cover a wide range of complex issues including rate increases, the sale and transfers of property, plant additions, loans, special cost tracking accounts, and low income programs. The CPUC processed 292 water utility compliance requests including 159 for the 10 largest water utilities. An additional 37 water and sewer utility compliance requests are pending action. For 13 of the smaller utilities that requested rate increases, the CPUC evaluated whether the utilities should be afforded interim rate relief while awaiting a decision on their rate requests. The CPUC found that the majority of those utilities were financially stable and didn't need interim rate relief. The CPUC evaluated and approved \$2 million in new debt to be used for water system improvements or to refinance existing and future short-term debt where the proceeds were or will be used to finance any costs associated with water construction improvements.



DIVISION OF RATEPAYER ADVOCATES

he Division of Ratepayer Advocates (DRA) is the independent consumer advocate within the California Public Utilities Commission (CPUC) that advocates solely on behalf of investor owned utility ratepayers. As the only state entity charged with this responsibility, DRA plays a critical role in ensuring that the customers of California's energy, water, and telecommunications utilities are represented at the CPUC and in other forums that affect consumers' utility bills and services, and the reliability and safety of those services.

About DRA

In 1984, the CPUC created DRA, formerly known as the "Public Staff Division," in a reorganization plan to more efficiently use staff resources. In 1996, SB 960 (Chapter 856, Statutes of 1996) renamed the Division the "Office of Ratepayer Advocates" (ORA), and while keeping the ratepayer advocacy function within the CPUC for mutually beneficial purposes, made it independent with respect to policy, advocacy, and budget. SB 960 made the DRA Director a gubernatorial appointee subject to Senate confirmation. In 1997, the CPUC implemented its reorganization plan, "Vision 2000," which significantly diminished the staff of ORA, but the ratepayer advocacy responsibilities and workload remained the same. In 2005, SB 608 (Chapter 440, Statutes of 2005) renamed ORA as DRA - the Division of Ratepayer Advocates - and strengthened the division by providing it with autonomy over its budget and staffing resources and authorizing the appointment of a full-time Chief Counsel.

DRA has a staff of 137 professionals consisting of engineers, economists, scientists, and auditors with expertise in regulatory issues related to the electricity, natural gas, water, and telecommunications industries in California. DRA's staff of experts performs detailed review and analyses of regulatory

policy issues and utility proposals for funding that total in the tens of billions of dollars. DRA determines whether utility requests are in the interest of the ratepayers who fund utility activities through their utility bills. DRA also supports environmental policies that benefit customers and seeks to ensure that utility actions comport with CPUC rules, and California environmental laws and policy goals. In 2012, DRA participated in 176 CPUC proceedings and filed more than 600 pleadings to aid the CPUC in developing the record from which Commissioners formulated their final decisions. DRA lobbied decision-makers on behalf of ratepayers nearly 250 times in 2012 to ensure that the consumer perspective was heard. DRA's \$27,535,000 budget represents a small fraction of ratepayer's investment compared with the nearly \$4 billion in savings DRA's work was instrumental in achieving for Californians in the form of lower utility rates and avoided rate increases. For every dollar customers spent on DRA in 2012, they saved approximately \$153 across their utility bills. Although DRA is not solely responsible for this savings, as the largest utility customer advocate in California, it was instrumental in achieving this level of savings. Additionally, DRA influenced the outcome of numerous CPUC policies, decisions, and state legislation that impacted utility bills and services.

An electronic version of the report, as well as more detailed highlights of DRA's 2012 advocacy efforts can be found at www.dra.ca.gov/AR2012.aspx.

ENERGY

DRA represents the residential and small business customers of California's investor owned energy utilities, most notably Pacific Gas and Electric Company (PG&E), Southern California Edison Company (Edison), San Diego Gas & Electric Company (SDG&E), and Southern California Gas Company (SoCalGas). DRA also represents the customers of California's smaller investor owned utilities. Investor-owned utilities serve approximately 80 percent of all California's energy customers. DRA evaluates utilities' and other stakeholders' proposals, as well as legislative bills, for both electricity and natural gas in the areas of Customer Rates, Procurement, Renewables, Transmission and Distribution, Demand-side Resources, and Consumer Protection. In 2012, DRA reviewed utility requests for revenue increases and programs that totaled more than \$35 billion statewide. DRA's advocacy efforts aided in saving ratepayers nearly \$3.7 billion.



DRA's 2012 activities focused on achieving California's progressive energy goals in the most affordable manner for residential and small business customers. DRA worked on rate cases in 2012 for the four largest utilities. DRA efforts led to saving Edison customers \$2.3 billion and cutting rates for its residential customers in half compared to Edison's proposal. DRA showed that SDG&E did not need any of its \$1.8 billion revenue increase request and that SoCalGas revenues should be decreased by \$50 million compared with the utility's \$2 billion increase request. DRA has begun to review PG&E's latest General Rate Case (GRC) revenue request of \$2.2 billion which would take effect in 2014. In the wake of the San Bruno explosion, DRA closely examined PG&E's \$2.2 billion request to upgrade its natural gas transmission pipeline system for enhanced safety, recommending shareholders, not customers, should pay most of the costs due to PG&E's mismanagement. DRA also examined proposed safety upgrades to SDG&E's and SoCalGas' pipeline systems and recommended that shareholders should pay for the majority of the upgrades to pipelines to bring their systems up to current safety standards. DRA's efforts to reduce utility requests for the rate at which they can earn a profit resulted in reduced returns on equity for the four largest energy utilities that will save customers \$320 million. With the January 2012 shutdown of the San Onofre Nuclear Generating Station, DRA proactively advocated that the CPUC should remove the monthly cost of \$54 million from customer rates since that facility is providing them with no service.

DRA advocated for rate design improvements including renewal of PG&E's Peak-Time Rebate program in time for summer 2013 and Economic Development Rates to support businesses at-risk of leaving the state. DRA supports Timeof-Use rates to encourage customers to reduce energy use via price signals, yet opposes defaulting customers to Critical Peak Pricing because it is difficult to understand and can lead to rate shock.

DRA supports California's climate change goals and key strategies to reduce GHG emissions. DRA's participation was influential in persuading the CPUC to return the majority of Cap and Trade auction revenues to residential and small business customers to off-set indirect cost increases they may face as a result of the program. In January 2012, DRA issued the Renewable Jungle intended to aid policymakers and renewable developers in understanding the numerous complex and innovative renewable programs in California.

DRA was instrumental in providing technical support for the Governor's 12,000 megawatt distributed generation renewable energy goal. DRA's analysis was used to shape the legislative dialogue on how to improve expansion of renewable energy while minimizing cost to ratepayers. DRA also advocated for community based renewable energy programs. DRA was successful in preserving sensible low-income program enrollment policies for customers and keeping program administration costs low. Additionally, DRA aided in affecting low-income energy efficiency programs so that they achieve greater energy savings and help to lower customer bills. DRA also persuaded the CPUC to require that all utilities apply best practices in order to keep utility service disconnections low.

WATER

DRA represents 1.3 million customers of investor owned Class A water utilities (more than 10,000 service connections) & Class B water utilities (more than 5,000 service connections), serving approximately 6 million people in the state



of California. The CPUC has regulatory jurisdiction over approximately 20 percent of all of California's urban water usage customers. DRA scrutinizes water utility requests for additional revenues that will increase customer bills. DRA advocates on behalf of water ratepayers in CPUC proceedings and participates in statewide planning processes at the Department of Water Resources and Water-Energy Team of the California Action Team. DRA's efforts on Water issues are primarily two-fold: 1) Review and analyze water utility General Rate Cases (GRCs), which determine the amount of revenues a water utility may collect and that in turn will impact a customer's bill; and 2) Develop water policy positions which shape rules and water industry programs.

In 2012, DRA worked on 5 general rate cases and 6 cost of capital proceedings in which water utilities requested to increase their revenues by nearly \$167 million. DRA negotiated more than \$44 million in reduced revenue requests for water customers, which will result in an averaging monthly savings of \$6.00 per customer. DRA achieved CPUC adoption of its settlement with the Class A water companies that lowered their return on equity from 10.2% to 9.99%, saving customers \$7.5 million annually. In its efforts to protect Cal Am customers, DRA sought a rehearing on the CPUC's decision to allow Cal Am to profit, at customers' expense, from the San Clemente Dam after it is removed from service, costing customers \$148 million over a 20-year period. DRA also sought to protect water customers by influencing pivotal policies such as development of an improved long-term, reliable water solution for the Monterey Peninsula and shaping polices that may result in water rate consolidation for California's regulated water customers in the coming years.

COMMUNICATIONS POLICY

DRA represents the interests of customers for both wireline and wireless telephone service, as well as to ensure that all customers have equal access to broadband services at reasonable costs. DRA's advocacy efforts in 2012 focused on affordability, consumer protection, and service quality.

DRA successfully advocated to modernize the CPUC's definition of "Basic Service" in order to provide greater flexibility and to accommodate new technologies that can better serve customers' communication needs. Additionally, DRA proposed a comprehensive set of reforms for ensuring Service Quality, including measurement standards and new reporting requirements on the length of time to repair service outages.



DRA's advocacy sought to balance access to telecommunications services for all Californians with the required cost to all customers who subsidize reducing rate disparities between urban and rural customers. DRA advocated for reforms to increase efficiencies and reduce the size of the California High Cost Fund A which subsidizes small rural phone companies. DRA also advocated to increase LifeLine program subscription rates, and remove barriers to enrollment, while also working to ensure cost-effective program implementation and program accountability.

DRA's efforts in 2012 resulted in key customer protections including: a substantial rate freeze and other customer benefits due to the Surewest Telephone/Consolidated merger; requirements that carriers must post performance bonds to operate in California; and rules that require utilities to be transparent and report corporate compensation and donations.

DRA supported broadband programs that emphasize adoption goals as well as deployment efforts. Accordingly, DRA promoted greater transparency and accountability in the California Advanced Services Fund subsidies in reaching unserved and underserved areas in California.