



Overview of Electric System Safety Program, Ratemaking, and Southern California Wind Event

Before the Assembly Utilities and Commerce Committee and
the Joint Legislative Committee on Emergency Management

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Overview of California Overhead Line Safety

- 1911 – State legislature enacted laws to regulate construction and maintenance of poles and overhead lines.
- 1915 – The Commission assigned to oversee overhead line safety.
- 1922 – The Commission issued General Order 64, titled *Rules For Overhead Electric Line Construction*.
- 1997 – The Commission issued General Order 165, titled *Inspection Cycles for Electric Distribution Facilities*.
- 1998 – The Commission issued General Order 166 titled *Standards for Operation, Reliability, and Safety During Emergencies and Disasters*





Utility Responsibilities

- All utilities are required to design, construct and maintain their facilities in accordance with General Order 95.
- Electric utilities are required to inspect their entire service territory every 3 to 5 years.
- All companies are required to schedule and correct problems, based upon the hazards of the violation and location.
- General Order 166 requires utilities to have in place Emergency Plans to deal with “Measured Events”.





How CPSD Regulates Overhead Line Safety

- CPSD conducts audits of electric and communication utilities on a five year schedule. The audits include a sampling of maintenance records and spot checks in the field.
 - CPSD averages 33 electric audits per year.
 - CPSD averages 13 communication audits per year.
- CPSD conducts incidents investigations of all reportable electric utility incidents. CPSD investigates incident to determine the cause of the incident and if electric and communication facilities meet regulations.
 - CPSD conducts an average of 106 incidents investigations per year.
- CPSD conducts special investigations on an add needed basis. A special investigation may be started based upon an incident investigation, an audit, a formal proceeding or staff recommendation.





The CPUC Uses Three Main Types of Cost Recovery Mechanisms for the Utilities

- General Rate Case (GRC) or test year ratemaking.
- Use of indices, benchmarks, and reasonableness reviews.
- One-way balancing accounts requiring the return of unspent budgets.





General Rate Case (GRC) Ratemaking Is Used For Areas Of Utility Business Where Costs Can Be Predicted With A Fair Degree Of Confidence

- A utility must present detailed evidence regarding how much money it needs to spend to safely and reliably operate its system, including how much money was spent in the past. After a thorough review of the utility's request, the CPUC establishes the authorized level of revenues the utility can collect for the next three future years.
- If the utility actually ends up spending more than its authorized budget, it has to absorb the excess spending. If it ends up spending less, it is allowed to keep the money. The rationale behind this ratemaking is that it provides an incentive to the utility to manage its business more efficiently and cut costs where possible. The efficiency and lower costs can be captured in the next GRC to the benefit of ratepayers.
- Because the utilities are responsible for running their businesses safely and reliably, the CPUC allows them the flexibility within their budgets to spend more or less on a particular project.





Costs Related To A Utility's Ability To Handle Events Such As Windstorms Are Established In The GRCs

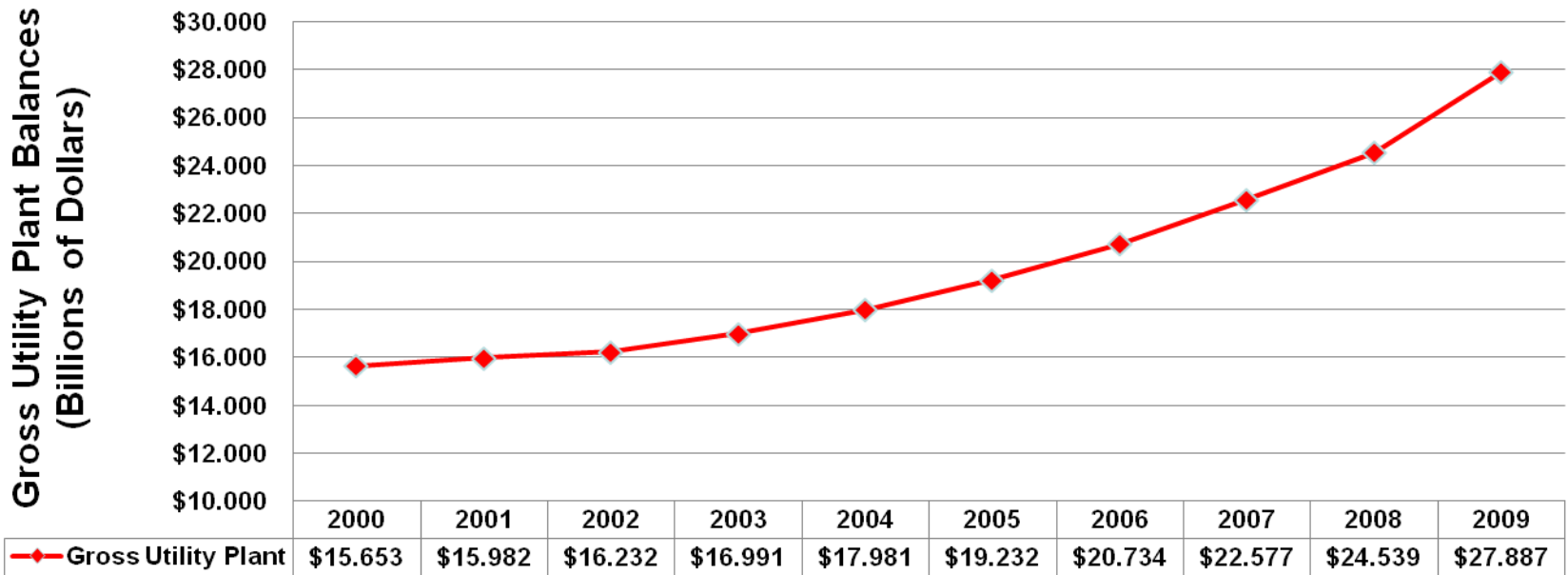
- A utility's ability to successfully handle events such as the heavy windstorms depends, among other things, on the following:
 - How it is investing in its distribution and transmission infrastructure.
 - Whether it is replacing aging poles and distribution lines.
 - If it has sufficient number of trained service restoration crews.
 - How well staffed its call centers are.





SCE's Capital Investment In Its Overall Utility Business Has Grown Since 2000

SCE's Gross Utility Plant

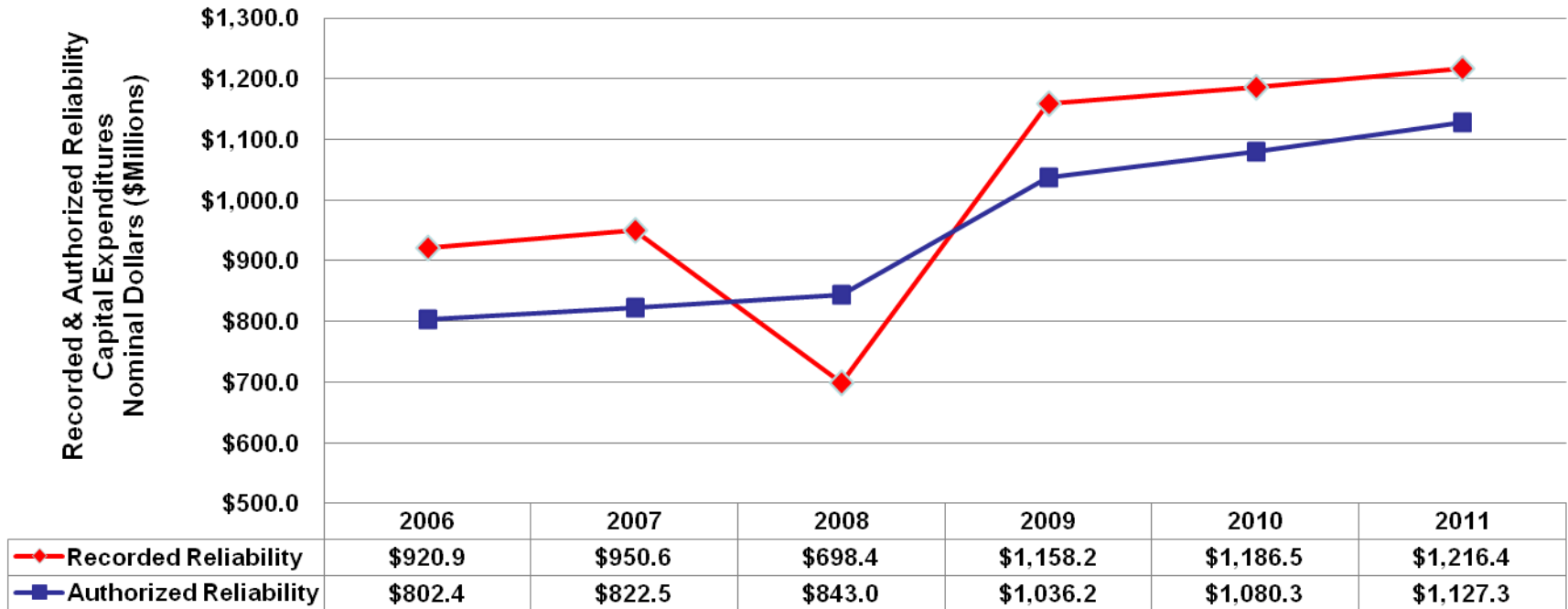


- Over the last 10 years (2000 through 2009), SCE's total capital investment in its electrical system has increased.





SCE's Authorized vs. Recorded Reliability Related Capital Investments (\$Millions)



- Under CPUC rules, SCE is authorized a budget for reliability related investments. Unspent monies are required to be returned.





2011 - Wind Event

- The Commission's role in the 2011 Wind Event is to investigate the evidence, determine what can be learned, identify compliance issues, and determine whether any violations contributed to the severity and duration of the outages.
- The Commission is focusing on the following:
 - Causes of Outages
 - Communications During and After Event
 - Restoration





Outages

Utility	Total Customer Affected	Percent of Total Customers	Average Outage Duration	Utility Poles Involved
SCE	439,000	8.9%	1173 minutes	200+
LADWP	220,000	14.1%	580 minutes	36
GWP	30,500	34.7%	173 minutes	3
PWP	6,330	9.9%	TBD	30





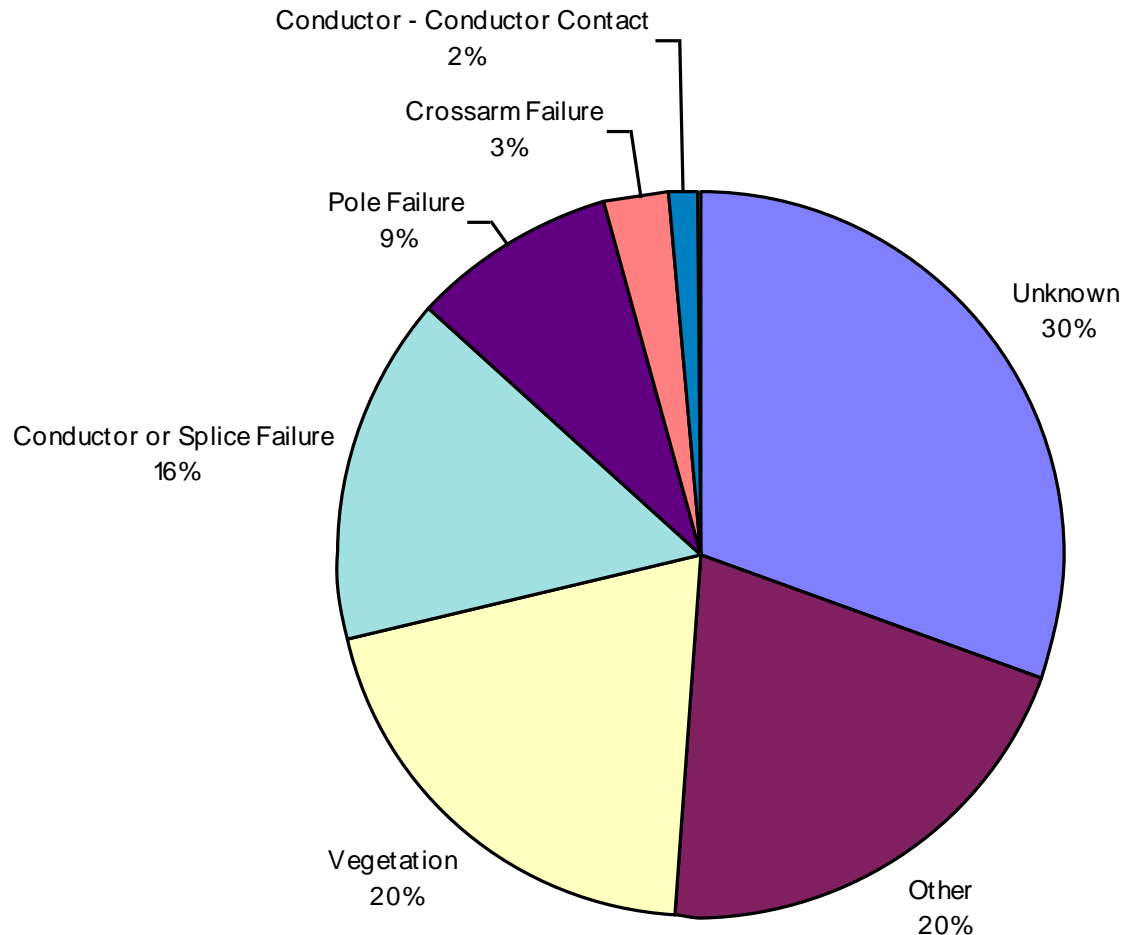
SCE - Outages

- The San Gabriel Valley was the hardest hit area of SCE's service territory. A total of 205,000 SCE customers in the San Gabriel Valley lost power during the wind event.
- In total 439,000 SCE customers lost power during the wind event. This represents 8.9% of SCE's total customers.
- The maximum number of SCE customers that were simultaneously without power was 226,000. This represents 4.6% of SCE's total customers.





Causes of SCE Outages During the Wind Event





Communications During Event and After Event

- SCE utilized Twitter, SCE's website, and telephone systems to communicate with customers during the wind event.
- PWP utilized Facebook, PWP's website, and telephone systems to communicate with customers during the wind event.
- LADWP utilized Twitter and telephone systems to communicate with customers during the wind event.





SCE - Communications

During Event and After Event

- Governments
 - SCE's Local Public Affairs contact for cities in the San Gabriel Valley retired the day before the Wind Event
 - Dedicated phone line for Governments did not provide much more information than General Public Line
- General Public
 - General public reported 4,000 “downed lines”
 - SCE underestimated the time needed to restore power
 - Only 13.8% of Medical Baseline Customers and Critical Care Customers were signed up to receive Automatic Outage Communications from SCE





Restoration Resources

<u>Company</u>	<u>Requested Mutual Aid</u>	<u>Provided Mutual Aid</u>	<u>Utilized Contractors</u>
SCE	No	No	Yes
PWP	Yes	No	Yes
LADWP	No	Yes	Yes
GWP	No	Yes	Yes





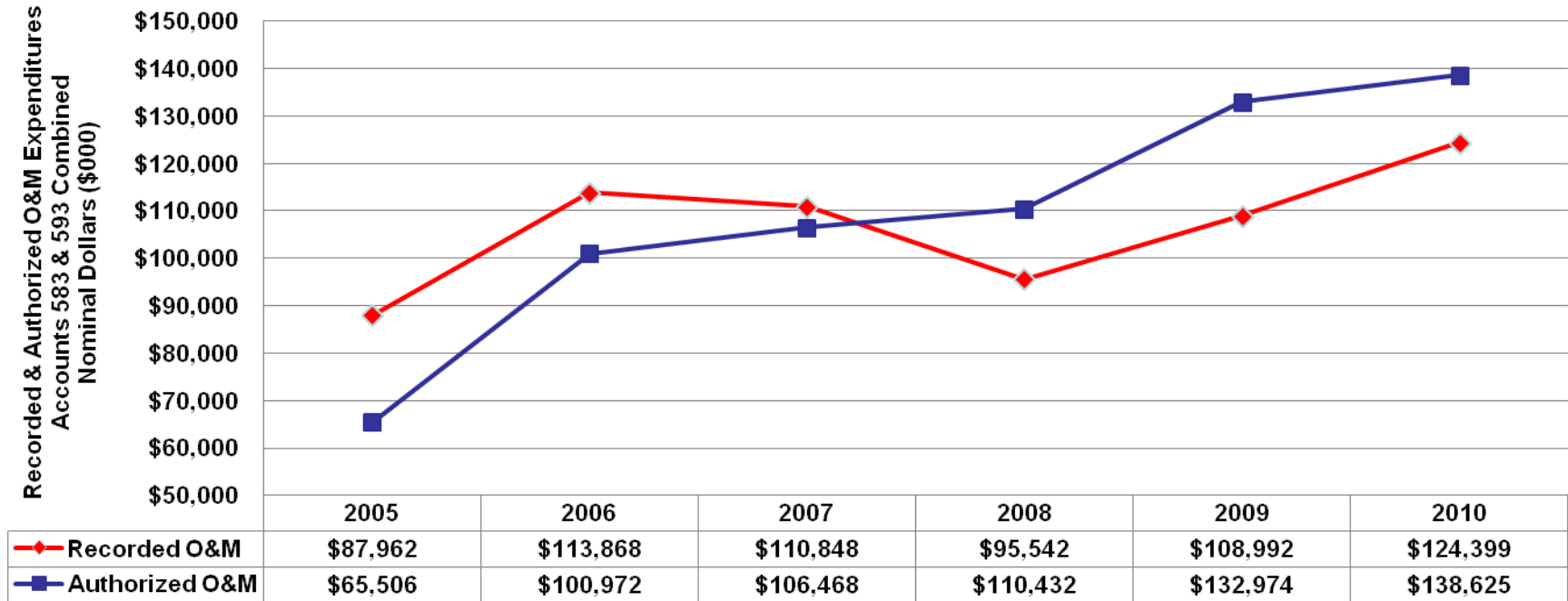
CPSD's Preliminary Findings

- Preliminary calculations indicate that 13.4% of the SCE poles involved were overloaded, in violation of General Order 95, Rule 44.3.
- Portions of SCE's Emergency Plan contain antiquated CPUC contact information.
- SCE did not preserve all evidence as required by General Order 95, Rule 19.
- General Order 166 does not include requirements for regional "Measured Events", and it probably should.





Inspections And Maintenance Of Overhead Distribution Lines And Poles, As Well As Vegetation Management, Are Critical To The Avoidance Of Windstorm Outages



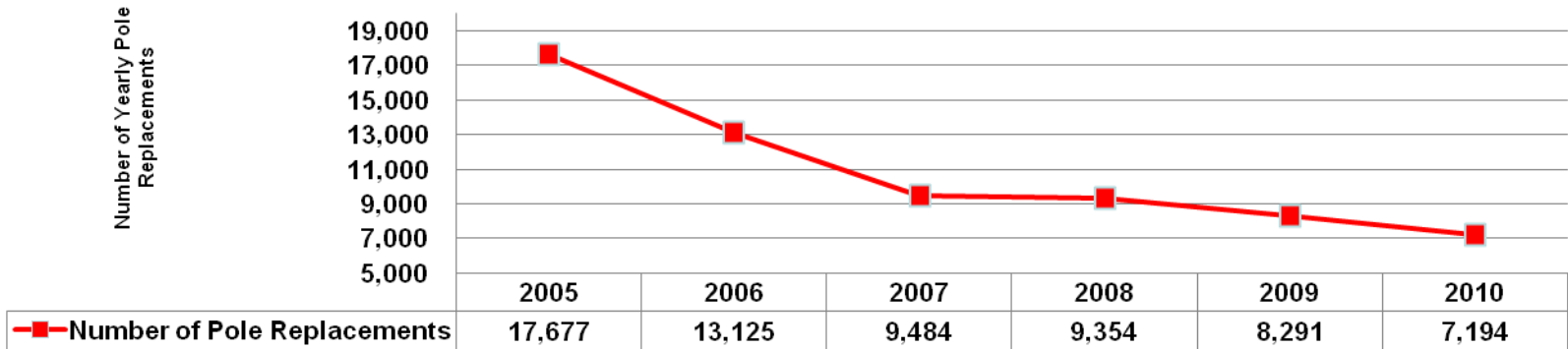
- SCE's actual recorded expenses for operating and maintaining its overhead distribution system have recently been below what was authorized.



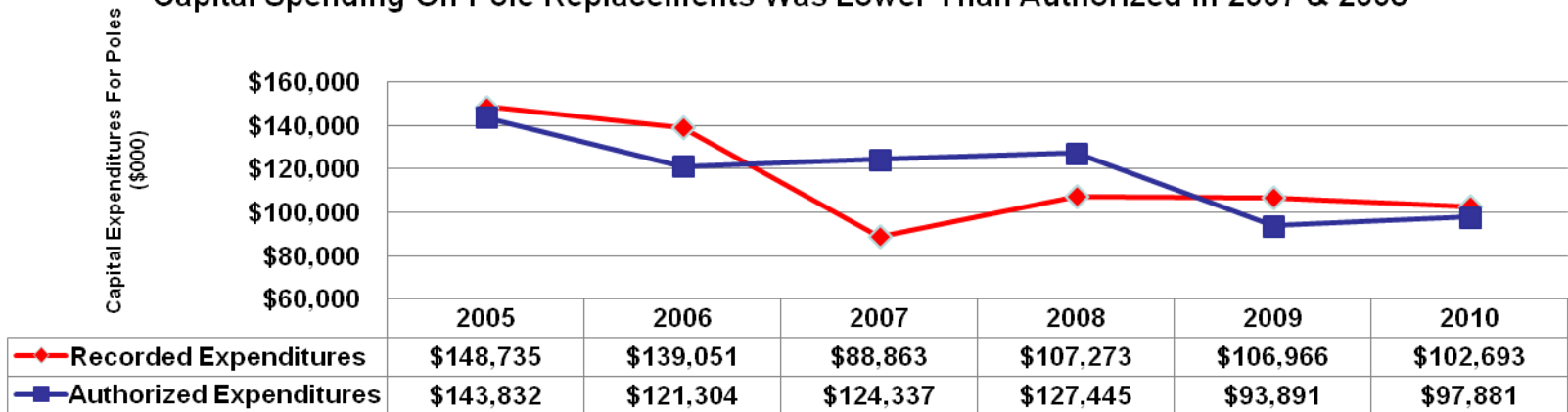


Pole Replacements 2005 - 2010

Number of Pole Replacements Has Decreased In Recent Years



Capital Spending On Pole Replacements Was Lower Than Authorized In 2007 & 2008

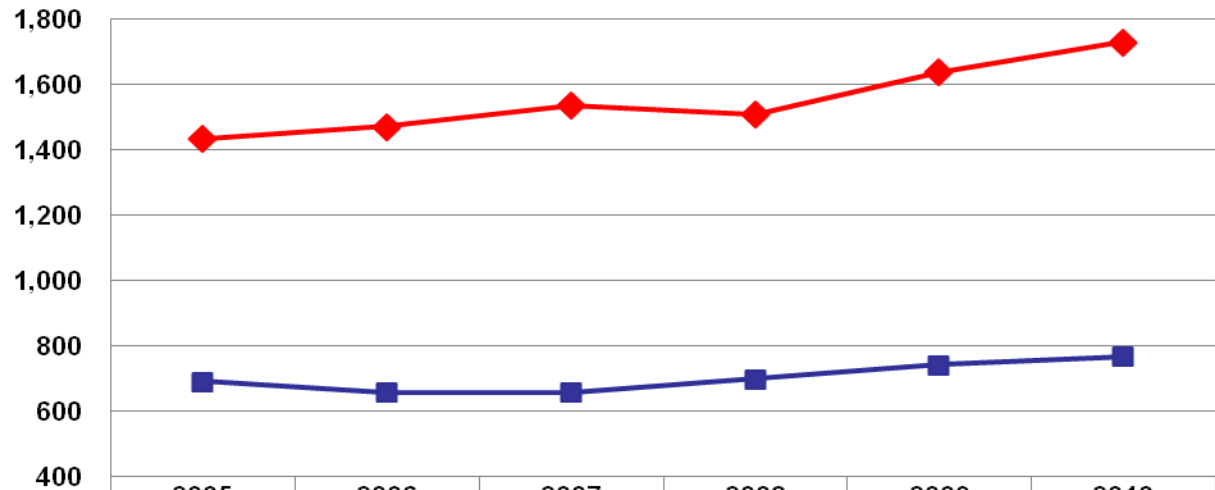




SCE Has Increased Service Restoration Crews And Call Center Staffing Since 2005

Recorded Restoration & Call Center Employees

Recorded Numbers of Employees



	2005	2006	2007	2008	2009	2010
◆ Service Restoration Employees	1,434	1,472	1,536	1,509	1,638	1,730
■ Call Center Employees	691	658	657	699	741	768





Improvements In Ratemaking

- In the wake of the San Bruno tragedy, the CPUC is re-examining its ratemaking with a primary focus on safety.
- In a recent workshop, the CPUC staff presented a Straw Proposal to facilitate discussions on how to improve the ratemaking process. Among other things, the proposal addressed:
 - Accountability – requiring the utility to provide rigorous analysis and justification of requested revenues.
 - Exhibits detailing authorized expenditures from the last GRC vs. actual expenditures.
 - Independent audits of a utility’s reported actual expenditures.
 - Requiring the Chief Operating Officers of each utility, along with other relevant employees, to submit testimony on risk.
 - Assessment of the utility’s physical systems as well as risk tolerance.
 - Independent management audits.





Focus On Safety

- The following quotation from Decision 11-05-018, PG&E's 2011 GRC, exemplifies the CPUC's heightened awareness and increased scrutiny regarding potential safety problems associated with the deferral of capital expenditures.

“While we reaffirm that it is the utility management’s prerogative and responsibility to provide safe and reliable service by reprioritizing and deferring activities as necessary, the Commission must be assured that the process is reasonable. We have concerns in that respect. For instance, despite any financial implications of exceeding authorized cost levels, the utility does have the responsibility to spend what is necessary to ensure safe and reliable service. To the extent a utility uses authorized cost levels as a reason for deferring activities, the Commission must be assured that such deferrals are otherwise reasonable especially with respect to safe and reliable service.”
(Emphasis added.)

