

PACIFIC GAS AND ELECTRIC COMPANY

CHAPTER 13

**ENHANCED FOCUS ON PUBLIC SAFETY AND OPERATIONAL
EXCELLENCE**

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CHAPTER 13
ENHANCED FOCUS ON PUBLIC SAFETY AND OPERATIONAL
EXCELLENCE

A. Introduction

Since the San Bruno accident, PG&E has made, and is continuing to make, significant improvements to increase its focus on public safety and operational excellence. Change does not happen overnight. This testimony provides an overview of our actions to date, and our extensive plans to make improvements within gas operations and across the Company. In Appendix A, we respond to each of CPSD's specific recommendations and explain how we are implementing the recommendation or, if we disagree with it, why it should not be implemented. The improvements that have been, or will be, reviewed by the Commission in pending or upcoming filings are:

- In our currently pending Pipeline Safety Enhancement Plan (PSEP) in R.11-02-019, we have proposed gas transmission pipeline strength testing, pipeline replacement, pipeline retrofitting to accommodate the use of In-Line Inspection (ILI) tools, valve automation, enhancements to the Supervisory Control and Data Acquisition (SCADA) system, pipeline records integration, as well as interim safety enhancement measures to be implemented prior to the strength testing or replacement of pipelines. PSEP was reviewed in hearings during March of this year and has recently been submitted to the Assigned ALJ for a proposed decision later this summer.
- On June 29, we expect to file our Gas Safety Plan pursuant to Senate Bill (SB) 705 and CPUC Decision No. 12-04-10. As required by SB 705, we have developed a plan that is consistent with best practices in the gas industry and with federal pipeline safety statutes.
- In early July, we expect to submit our 2014 General Rate Case (GRC) Notice of Intent (NOI), followed by the 2014 GRC Application later this year. Among other things, the GRC will describe accomplishments and planned improvements to our gas distribution operations. For the first time ever in a GRC, the CPSD will hire third-party experts to perform technical reviews of certain operational plans underlying our forecast – including gas operations – to determine whether they adequately address safety concerns.

1 **B. Gas Operations Foundational Improvements**

2 **1. Organizational Improvements and Staffing Enhancements**

3 After San Bruno, we identified the organization and structure of the gas
4 business as the first key area for improvement. We clarified roles and
5 responsibilities, provided more effective governance, and established an
6 organizational structure that will facilitate process improvements.

7 The first step — taken in 2011 — led to separate divisions for gas and
8 electric operations and designated separate Executive Vice Presidents to lead
9 each business unit. To provide enhanced focus on key parts of operations and
10 in order to achieve clearer roles and responsibilities and to better support our
11 work and safety goals, the new Gas Operations organization was structured
12 around eight distinct functions.

13 The eight functions with corresponding organization names include:

- 14 • Defining the assets and the associated attributes of each (data and records
15 management) – “Asset Knowledge Management.”
- 16 • Defining the safety requirements, standards, and regulations that we follow
17 – “Standards and Policies.”
- 18 • Reviewing the assets to identify their safety condition, degradation threats,
19 and defining actions necessary for continued safe operation (integrity
20 management) – “Public Safety and Integrity Management.”
- 21 • Engineering and designing assets to address safety and improvements –
22 “Project Engineering and Design.”
- 23 • Establishing resource plans and relative priorities - “Investment Planning.”
- 24 • Executing the transmission work in the field efficiently and effectively
25 (performing construction, maintenance activities) – “Transmission.”
- 26 • Executing the distribution work in the field efficiently and effectively
27 (performing construction, maintenance activities) – “Distribution.”
- 28 • Operating the facilities in a safe and reliable manner (monitoring safe
29 system performance and operations and emergency response) – “Gas
30 System Operations.”

1 The second key change for the Gas Operations organization was to put in
2 place a leadership team with extensive industry expertise and to increase the
3 size of the work force where needed to implement the organization's enhanced
4 focus on safety and operational excellence. This required us to identify
5 resource needs and then to recruit and hire trained professionals from
6 throughout the industry to augment the existing workforce. Our existing
7 workforce of gas professionals was joined by people from outside the company
8 with extensive industry experience. A few examples of these include:

- 9 • Executive Vice President of Gas Operations from National Grid.
- 10 • Senior Vice President of Gas Transmission Operations, Engineering and
11 Pipeline Integrity from El Paso Corporation.
- 12 • Vice President of Public Safety and Integrity Management from El Paso
13 Corporation.
- 14 • Vice President of Investment Planning from El Paso Corporation.
- 15 • Vice President of Distribution Maintenance and Construction from National
16 Grid.
- 17 • Senior Director of Gas System Operations from Vista Energy Solutions.
- 18 • Director of Distribution Engineering and Design from Trans Canada.
- 19 • Director of Transmission Operations and Maintenance from PHMSA.
- 20 • Director of Transmission Integrity Management Program from El Paso
21 Corporation.

22 In addition to augmenting the Gas Operations leadership team with these
23 experienced industry experts, our Gas Operations organization has hired more
24 than 300 new employees since January 2011. Through 2014, we expect to hire
25 an additional 1,400 employees.

26 These employees will respond to emergencies, perform leak surveys and
27 leak repairs, replace unreliable pipe, install new infrastructure, perform critical
28 quality assurance and quality control functions, do investment planning work,
29 and handle other functions critical to providing best in class, safe, and reliable
30 natural gas service.

2. Quality and Improvement

We are increasing the focus on quality starting with the recent formation of a dedicated Quality & Improvement (Q&I) department within Gas Operations. The Q&I department is responsible for centralized Quality Control (QC), Quality Assurance (QA), and Work/Human Performance Improvement (W&HPI) activities.

The QC activities include performing random quality verifications through field assessments of completed work. We currently have three fully operational QC programs for Leak Survey, Leak Repair, and Locate and Mark. The program is being expanded to include other work functions such as Work Verification (Re-Dig). Under this program, we will be conducting a post-installation “re-dig” shortly after installation or repair work is completed to verify the work performed on the buried facility is compliant with governing standards and work practices. This effort also includes a quality evaluation of the documentation supporting the field work.

The QA activities include performing quality reviews upstream of completed work to provide assurance of a quality end product. QA reviews include audits of PG&E’s processes and programs.

The W&HPI activities provide an independent review of information, incidents, and events in order to recommend human performance improvements.

3. Training

We are increasing our emphasis on training our employees through the Gas Training Improvement Project. As part of this project we have identified best in class training practices in the industry. With the assistance of a third party consultant, PG&E conducted a comprehensive benchmark study that included phone interviews and site visits with other gas utilities. As a result of the study we are:

- Creating a business process index to align codes and standards with the tasks and roles of employees. This will allow Gas Operations to confirm that it has guidance documents and training for all work performed.
- Developing training and evaluation programs that support all Gas Operations employees throughout their career.

- 1 • Prioritizing training development and delivery for all of Gas Operations,
2 rather than individual departments.
- 3 • Broadening the scope of technology solutions and leveraging curriculum
4 external to PG&E.
- 5 • Creating an end-to-end instructor excellence program that includes
6 recruiting, hiring, and retention; as well as training, observation, and a
7 continuous improvement process.

8 We have identified close to 100 courses that require development or
9 significant expansion from 2012 to 2016. These include training courses for:
10 emergency response (agency, employee, and public); field personnel training;
11 locate and mark; new gas service representative training; operator qualification;
12 In-Line Inspections; supervisor technical training; and valves. Specific courses
13 for areas including, but not limited to, an annual skills refresher, gas emergency
14 response plan, remote control valves, and ultrasonic meters are also part of the
15 Gas Training Improvement Project.

16 As set forth in our 2014 GRC, PG&E is also building a new gas operations
17 training center that will allow the Company to provide technical skills training to
18 maintenance, construction, operations, and engineering employees. This facility
19 will expand our existing hands-on simulation training in areas such as carbon
20 monoxide and leak investigation, “pigging” lines, conducting hydrostatic tests,
21 repair techniques, and system and asset maintenance. Construction of the new
22 facility begins this year and is scheduled to be completed in 2015.

23 **4. Standards and Procedures**

24 One of the goals in restructuring the organization was to create greater
25 centralized control over standards, procedures, and systems while maintaining
26 decentralized work execution. Gas Operations currently has over 1,000
27 guidance documents that define the standards, work methods, procedures, and
28 specifications that are used across the gas organization. The documents have
29 been developed over a period of many years.

30 We are first concentrating on updating our process for creating standard s,
31 work methods, and procedures with a focus on improving how we get input and
32 feedback from all affected parts of the organization. We are also staffing with
33 subject matter experts who will be primarily focused on creating and

1 documenting consistent standards and procedures for performing work. We are
2 developing one and three-year plans for creating and/or updating gas guidance
3 documents.

4 Some of the key inputs to this plan are improving public and employee
5 safety, incorporating changes due to new codes or regulations, improving
6 performance based on new technology, best practices, or employee
7 suggestions, and incorporating feedback from improved quality
8 assurance/quality control processes or other audits.

9 Finally, we are developing new methods for training and communication and
10 will be employing technology to improve the delivery and availability of current
11 procedures for employees using a mobile electronic document delivery system.

12 **5. Employee Engagement and Feedback**

13 Letting employees know that their ideas and opinions count is an important
14 step in improving safety and operational performance. Our Gas Operations
15 officers have led the effort to solicit employee feedback and make employees
16 feel comfortable sharing their feedback. At the outset of his job with PG&E, the
17 new Executive Vice President, Nick Stavropoulos, met with field employees to
18 find out from them what they think PG&E is doing well and what they think could
19 be done better. Those meetings continue to this day. Mr. Stavropoulos expects
20 all of us on his leadership team to solicit and act on employee feedback as part
21 of ongoing operations. Gathering information from the bottom-up allows us to
22 make improvements to our gas operations -- from updating technical policy
23 documents to targeting investment to further reduce risk.

24 All efforts to improve processes, procedures, tools, or policies will
25 incorporate employee engagement and feedback. The following are several
26 examples of ways we have used or will use employee feedback:

- 27 • Selection of new tablet computers that are tailored to gas employees.
- 28 • Selection of new gas crew trucks by employees who use them extensively
29 today.
- 30 • Training curriculum and training facility benchmarking was performed by a
31 team of management and union represented employees.

- 1 • The Q&I organization is creating a web based application through which
2 employees can share their ideas about operational issues that will be
3 tracked and reviewed.

4 **C. Gas Safety Work Accomplishments And Future Plans**

5 In the prior section, I described the foundational improvements for Gas
6 Operations. Those improvements – organizational changes, staffing, quality
7 and improvement, training, procedures as well as the solicitation of employee
8 feedback – are not an end in themselves. They will help us improve our
9 performance of the work necessary to operate the gas system safely.

10 We have already taken action to improve, as illustrated in the most recent
11 status report provided to the NTSB on May 23, 2012. This report is attached as
12 Appendix B. (The attachments to the report are included in a separate exhibit
13 volume.) This status report detailed the actions we have taken, and will
14 continue to take, to assure public safety remains the Company’s highest priority
15 in the operation of our natural gas transmission system. It also reflects the
16 many fundamental changes to the operations and management practices made
17 throughout the gas organization.

18 Other witnesses in this proceeding describe specific improvements that
19 respond to operational issues raised in the CPSD Report:

- 20 • Integrity Management (Chapter 4, section E).
21 • Milpitas Station (Chapter 8, section F).
22 • Work Clearances (Chapter 8, section F).
23 • SCADA and System Monitoring (Chapter 8, section F).
24 • Toxicology Testimony (Chapter 8, section F).
25 • 911 Notification, Emergency Response, and Public Awareness Programs
26 (Chapter 10, section B).

27 Our record-keeping improvements are discussed in Chapter 1.D of our
28 Records OII (I.11-02-016) testimony, which is being filed at the same time as
29 this response.

30 While the details of our actions and plans are contained in these other
31 sources, the following provides highlights of some of our actions since the San
32 Bruno accident:

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1. Transmission Pipeline Pressure Reductions

- Implemented 38 primary pipeline pressure reductions affecting 1,001 miles of transmission pipe – approximately 15% of all transmission mileage.
- Restored an additional 20 primary pressure reductions affecting 1,400 miles of transmission pipe that were previously implemented.

2. Transmission Pipeline Integrity Verification

- Completed an accelerated direct assessment survey of our gas transmission lines in San Bruno. (Also surveyed the distribution system in the neighborhood affected by the accident.)
- Completed an accelerated leak survey of our entire gas transmission system.
- Validated the MAOP on more than 2,088 miles of transmission pipeline including all pipelines running through urban, populated areas known as High Consequence Areas (HCAs) as of January 31, 2012; validated 1,559 miles of non-HCA pipelines through May 2012.
- Retrieved and scanned more than 3 million paper documents going back more than 50 years.

3. Strength Testing and Verification of Strength Test Pressure Records of Transmission Pipeline

- Strength tested or verified strength test pressure records on 262.5 miles through May 2012.

4. Valve Automation (PSEP)

- Automated a total of 37 valves on the transmission system through May 2012.

5. Pipeline Replacement and Repair

- Retrofitted nearly 172 miles of transmission pipeline to accommodate in-line inspection equipment in 2011.
- Completed 97 capital distribution projects, including the replacement of 33 miles of distribution main and 8,720 service lines in 2011.

1 **6. Ongoing Monitoring of Gas System**

- 2 • Conducted monthly aerial “reliability” patrols of the interstate pipeline system
3 that carries gas supplies into California from the Oregon and Arizona
4 borders.
- 5 • Increased HCA pipeline segment patrols to bi-monthly.
- 6 • Repaired our above ground Grade 3 leaks on the distribution system within
7 15 months.
- 8 • Moved from repair of Grade 2 leaks on the distribution system from 18
9 months to 15 months.

10 **7. Public Outreach and Communication**

- 11 • Created public web pages with detailed gas system and safety information,
12 including the location of gas transmission lines.
- 13 • Mailed letters to more than two million homes and businesses located within
14 2,000 feet of a PG&E gas transmission pipeline, which included a gas safety
15 pamphlet.
- 16 • Enhanced educational outreach to first responders.
- 17 • Provided pipeline maps including pipeline diameter, pipeline pressure
18 and updated valve information.
- 19 • Hosted in-class training sessions.
- 20 • Developed a dedicated online portal, giving first responders real time
21 access to valuable pipeline data, including pipeline location pressure
22 and other component level information, portions of our Gas Emergency
23 Response Plan, and key PG&E contact information.

24 **8. Technology Upgrades**

- 25 • Became the first utility in the world to use Picarro’s car-mounted natural gas
26 leak detection device, which is more sensitive than traditional instruments.
- 27 • Rolled out advanced leak detection instrument called Detecto Pak-Infrared
28 that uses infrared technology to pinpoint methane gas without false alarms
29 from other gases. This technology can detect and grade leaks at the same
30 time.

- 1 • Rolled out handheld tablet computers to make real time data and pipeline
2 maps instantly accessible to field personnel.

3 The efforts and initiatives I have discussed along with those addressed in
4 the other referenced testimony demonstrate our commitment to safety and
5 operational excellence and show that we are making progress in achieving
6 those goals.

7 **D. Publicly Available Specification 55**

8 A key element of Gas Operations' long-term gas plan is the development of
9 a long term asset management plan. Gas Operations is pursuing a best
10 practice asset management certification offered by the British Standards
11 Institute under its Publicly Available Specification (PAS) 55. PAS 55, first
12 published in 2004, was developed in consultation with a number of asset
13 management experts and organizations. PAS 55 is designed for large scale
14 asset systems — like utilities, railroads, and airports — that are intended to
15 perform into perpetuity. The certification process includes an initial readiness
16 assessment, a certification audit and a recurring annual recertification audit, all
17 conducted by a recognized accreditation firm.

18 The standard requires that we develop a strategic plan for the organization
19 and then systematically, and in a coordinated fashion, execute that plan by
20 optimally and sustainably managing our risks, assets and asset system, asset
21 performance, and expenditures over a defined life cycle. The standard assures
22 alignment between Gas Operations' strategic plan, our gas asset management
23 policy, standards, objectives, and work plans.

24 Gas Operations is pursuing PAS 55 certification as an objective validation
25 that our gas system is on the right path to becoming one of the safest systems
26 in the United States. PAS 55 requires asset owners to take a disciplined
27 approach to developing and achieving strategic objectives. Very simply, it will
28 validate that we have established a replicable process for planning our work,
29 executing against the plan, identifying issues, and adopting a formal approach
30 to continuous improvement, installing new assets, using them, maintaining
31 them, and/or renewing and retiring them. The end result will be transparent and
32 sustainable investment decisions that reduce risk and optimize asset health

1 whether we are creating or acquiring, using, maintaining, or renewing/retiring
2 assets.

3 Further, the ongoing audit and recertification requirements provide an
4 independent assessment that is not only standard-based but based on the
5 performance that PAS 55 certification auditors observe at many high-performing
6 international companies. A parallel to this level of independent assessment can
7 be found in the nuclear industry through the Institute of Nuclear Power
8 Operations (INPO). The gas system will benefit greatly from an independent
9 and industry-based review of our asset management system on a regular basis.

10 A team of people from around the world is working to convert PAS 55 to
11 International Standard of Operation (ISO) 55001. It will likely be approved by
12 the ISO in March 2014. In that event, Gas Operations would seek ISO 55001
13 certification and strive to become the first ISO 55001 certified gas corporation in
14 the United States, joining such international utilities as E.ON (Germany), EDF
15 (France), Essent (Netherlands) and Western Power Distribution (U.K.), all
16 currently PAS 55 certified.

17 **E. Company-Wide Improvements**

18 PG&E has reinforced and complemented the specific gas operations
19 improvements discussed above with company-wide actions focused on safety
20 and operational excellence

21 Since the San Bruno accident, PG&E has elected to its Board of Directors,
22 Fred J. Fowler, a 40-year gas industry veteran. In his long career, Mr. Fowler
23 has had experience working at companies with extensive gas asset holdings.

24 PG&E's Board of Directors has established the Nuclear, Operations, and
25 Safety Committee to provide oversight of PG&E's safety (public and employee),
26 compliance, and risk management policies and practices (including integrity
27 management for gas operations). The Board of Directors also has expanded
28 the role of the existing Risk Policy Committee. The Committee's scope has
29 been expanded to consider public safety, reviewing key operational risks (i.e.,
30 those that result from the execution of the Company's business functions,
31 arising from the people, assets, technology and processes within the lines of
32 business (LOB) and that require a coordinated mitigation approach), risk
33 response strategies, mitigation options, and the overall progress of risk
34 management activities.

1 The Board has also named as Chairman and Chief Executive Officer of
2 PG&E Corporation, Tony Earley, a respected utility industry veteran, who most
3 recently headed up DTE Energy. At PG&E, Mr. Earley has established the
4 Chairman’s Safety Review Committee to reinforce the role of safety in all
5 aspects of our operations and relationships with customers, the public,
6 employees and suppliers. The Chairman’s Safety Review Committee will review
7 the Company’s overall safety strategy and its implementation. This Committee
8 is responsible for promoting a culture that embraces and advances safety in all
9 aspects of the Company’s operations and its relationships with employees,
10 customers, suppliers, and other external stakeholders. The Committee will
11 achieve this purpose by providing a forum in which significant public and
12 employee safety incidents, lessons learned, and associated corrective actions
13 can be discussed.

14 Mr. Earley also established the Chairman’s Ethics Council, a cross-
15 functional group of employees and leaders focused on promoting ethical
16 behavior throughout PG&E. The group includes union-represented employees
17 and union leadership. The Council explores the role that business ethics plays
18 in our operations and in our relationships with employees, customers, and all
19 other stakeholders. Included among the Council’s responsibilities is “[e]nsuring
20 the availability of the effective mechanisms for employees and others to report
21 any ethical issues or concerns....” The discussions at the first few meetings of
22 the Council have emphasized the significance of ensuring that employees are
23 encouraged to raise safety issues.

24 PG&E has designated a Senior Vice President, Desmond Bell, as the new
25 lead safety officer, and hired a new Senior Director of Safety, Linda Limberg.
26 Ms. Limberg has 30 years of experience with safety programs in the industry. In
27 his new position, Mr. Bell is responsible for establishing a common safety
28 strategy and direction for the various lines of business. He chairs an Executive
29 Safety Steering Committee, which includes Ms. Limberg and top leadership
30 from each business unit. Both the Chairman’s Safety Review Committee and

1 the Executive Safety Steering Committee include membership and participation
2 from labor union leadership.¹

3 This more visible and focused company safety leadership has already
4 implemented the following:

- 5 • PG&E has established a Supervisor Leadership program that trains
6 supervisors to work with their employees to build a trust-based safety
7 climate. This program will enhance supervisors' personal skills by providing
8 practice in the areas of effective communication, feedback, and coaching,
9 and by reinforcing leadership expectations and key behaviors. The program
10 is a three-week course conducted over the course of three months and
11 includes a Putting Safety First module. By the end of 2012, nearly 500
12 supervisors are expected to have completed this course. PG&E is
13 preparing similar training for managers (to begin in late 2012) and for crew
14 leads (to be launched in 2013).
- 15 • PG&E has set an overall goal of achieving first-quartile performance in
16 public and employee safety by the end of 2014. To measure progress,
17 PG&E has identified seven leading metrics related to gas emergency
18 response, gas leak repair, the INPO Index Composite Score, incidents of
19 wires down, 911 Emergency response to electric hazards, lost workday case
20 rate, and preventable motor vehicle injuries. Five of these seven are related
21 to public safety and two of the five are related to gas public safety:
 - 22 • the Gas Emergency Response metric measures percentage of arrivals
23 within one hour and within 30 minutes of receiving an immediate
24 response gas emergency order.
 - 25 • the Leak Repair Performance metric tracks Grade 2 leaks repaired.
26 PG&E is reducing its schedule from 18 months to 15 months, but is
27 striving to repair in 2012 all Grade 2 leaks found prior to January 1,
28 2012.
- 29 • We have revised our performance goals and rewards compensation (known
30 as the Short-Term Incentive Plan – STIP) for employees. Safety is now the

¹ PG&E has also engaged former National Transportation Safety Board Chairman Jim Hall to review our safety initiatives and culture and to advise us on ways to improve.

1 single largest factor, with the seven performance goals mentioned above
2 representing 40 percent of the total. The remaining two factors of customer
3 satisfaction (including reliability) and financials are each worth 30 percent.

- 4 • In addition to the two gas public safety metrics (i.e., gas emergency
5 response and gas leak repair) that are used to evaluate our employee
6 incentives, we are also evaluating Locate and Mark Dig-Ins per 1000
7 Underground Service Alert Tags. In 2011, we targeted and achieved a 10%
8 reduction. We are targeting an additional 15% in 2012 and 2013.

9 In addition to these safety initiatives, PG&E has overhauled its existing
10 Enterprise Risk Management program to create an industry leading Operational
11 Risk Management Program. As noted above, a Board-level Committee has
12 been formed to provide oversight of safety, and operational and nuclear risks
13 and associated mitigation activities and the scope of the Risk Policy Committee
14 has been expanded to include public safety and operational risks. To further
15 develop a culture of risk management and actively involve senior management
16 in the process of managing risk, each operational line of business (LOB) has
17 also established its own LOB Risk and Compliance committee, chaired by the
18 LOB's senior executive, responsible for identifying, evaluating, and mitigating
19 risks in the LOB. The LOB Risk and Compliance committees are designed to
20 enable management to actively manage risks and align risk mitigation activities
21 with department goals, operating plans, and resources. Working together, these
22 organizations will increase their evaluation of specific risks facing each aspect of
23 PG&E's operations and the level of investment necessary to mitigate specific
24 risks.

25 Following the redesign of its program, PG&E retained Research Professor
26 Ralph L. Keeney of Duke University, a contributor to the CPUC's Independent
27 Review Panel Report, to verify that the new approach would deliver an industry
28 leading program. Professor Keeney concluded, "[t]he current ORMP
29 [operational risk management program] is designed to lead to being the best-in-
30 class program. With the work to date on creating this program, the Chief Risk
31 and Audit Officer and his team have made important steps necessary to
32 eventually reach this goal."

1 In our upcoming 2014 GRC, we will document how we have identified risk
2 and developed plans, and associated forecasts, to mitigate those risks. For
3 example, Gas Distribution Operations is:

- 4 • Developing a state of the art gas distribution asset management system
5 where complete, detailed, and accurate information about our distribution
6 system will be readily accessible;
- 7 • Building a gas distribution control center that will reduce risk by providing
8 greater visibility and control of the system;
- 9 • Identifying the highest risk distribution main and scheduling it for
10 replacement;
- 11 • Using improved leak survey technologies and increased frequencies to find
12 and repair leaks more quickly; and
- 13 • Using new technologies, improved procedures, and more personnel to
14 respond to gas emergencies more quickly.

15 Finally, we have formed a new department – Information Management
16 Compliance – to strengthen PG&E’s records management and compliance
17 activities. The department, which ultimately reports to the General Counsel, is
18 part of a Company-wide effort to modernize PG&E’s records and records
19 management practices, the goal of which is to improve the retrievability of
20 records, confirm their accuracy, and improve the records management systems
21 themselves to help better manage PG&E’s operations. The department is
22 developing a Company-wide records management policy that promotes
23 accountability, protects vital resources, and assures appropriate retention
24 practices, and is working closely with Information Technology and with the LOBs
25 to implement the policy.

26 **F. Financial Commitment to Safety**

27 Our commitment to safety and operational excellence is backed by a
28 financial commitment to achieving those important goals. While we disagree
29 with Overland Consulting’s conclusions about past spending relative to
30 authorized spending (see the analysis of Matthew O’Loughlin of the Brattle
31 Group), there can be no question that today we are spending what is necessary
32 to enhance our gas system safety.

1 We estimate that since the San Bruno accident and through the end of
2 2012, our shareholders will have spent — without assurance of rate recovery —
3 approximately \$782 million in expense on our gas transmission system for work
4 such as strength testing, validation of the MAOP of pipelines, and integrity
5 management. Through September 30, 2012, our shareholders have absorbed
6 \$683 million in expense directly related to our gas pipeline system, and we
7 forecast that we will have incurred additional expense of approximately \$100
8 million by the end of 2012. Appendix C provides more detail on this expense
9 spending. In addition to these expense dollars, PG&E's shareholders will spend
10 approximately \$50 million for capital dollars disallowed under the CPUC's PSEP
11 decision issued on December 20, 2012. These financial commitments along
12 with the improvements we discuss demonstrate that PG&E is putting safety first.

13 **G. Conclusion**

14 PG&E has been and remains committed to improving safety at all levels in
15 the Company. As this testimony describes, we have made important
16 foundational strides in a wide variety of areas, including bringing in a largely new
17 Gas Operations leadership team, improving training and employee
18 communications, developing key metrics to highlight the importance of safety,
19 and enhancing the focus on work quality. These improvements will help Gas
20 Operations achieve operational excellence in performing the work needed to run
21 a safe and reliable gas system.