June 3, 2013

Chairman Deborah A.P. Hersman
Vice Chairman Christopher A. Hart
Member Mark R. Rosekind, PhD
Member Robert L. Sumwalt
Member Earl F. Weener, PhD

National Transportation Safety Board
Headquarters
490 L'Enfant Plaza, SW
Washington, DC 20594

Honorable Chairman, Vice Chairman, and Members:

This letter serves as an update on the progress the California Public Utilities Commission (CPUC) has made in addressing Safety Recommendations P-10-5 and P-10-6, which the National Transportation Safety Board (NTSB) issued to the CPUC on January 2, 2011, and Safety Recommendations P-11-22 and P-11-23, which the NTSB issued to the CPUC on September 26, 2011, as a result of its investigation of the September 9, 2010, Pacific Gas and Electric Company (PG&E) natural gas pipeline rupture that occurred in a residential area in the City of San Bruno, California.

As noted in our May 7, 2012, letter to the NTSB, the CPUC outlined four major goals in successfully implementing the NTSB recommendations. These goals are at the core of the CPUC’s gas pipeline safety program and its commitment to protect the public and to promote gas pipeline safety throughout California:

- Ensure the safety of existing natural gas pipeline infrastructure
- Upgrade and replace existing natural gas pipeline infrastructure to improve safety
- Reform the CPUC to make safety its first priority
- Instill safety culture in the natural gas pipeline operators we oversee

Californians deserve safe, reliable utility services at reasonable rates. This is the core mission of the CPUC. In the two and a half years since the tragic PG&E pipeline rupture the CPUC has made numerous improvements in safety rules, safety inspections, and safety enforcement.

This letter provides a summary of not only the CPUC’s actions related to the NTSB’s recommendations, but also of key activities of the CPUC’s ambitious, two-pronged approach to meeting its safety goals: taking immediate actions to make California safer; and embarking on
long-term changes to the internal safety culture at the CPUC and instilling a safety culture in the utility companies and other industries the CPUC regulates.

**NTSB Recommendation P-10-5**

*Develop an implementation schedule for the requirements of Safety Recommendation P-10-2 (Urgent) to Pacific Gas and Electric Company (PG&E) and ensure, through adequate oversight, that PG&E has aggressively and diligently searched documents and records relating to pipeline system components, such as pipe segments, valves, fittings, and weld seams, for PG&E natural gas transmission lines in class 3 and class 4 locations and class 1 and class 2 high consequence area [HCA] that have not had a maximum allowable operating pressure [MAOP] established through prior hydrostatic testing as outlines in Safety Recommendation P-10-2 (Urgent) to PG&E. These records should be traceable, verifiable and complete; should meet your regulatory intent and requirements; and should have been considered in determining maximum allowable operating pressures for PG&E pipelines.*

In response to NTSB Recommendation P-10-5, by letter dated January 3, 2011, the CPUC directed PG&E to conduct the necessary records search. As of March 2013, PG&E has completed MAOP validation activities on HCA pipeline and on non-HCA pipeline, as noted in the following table. PG&E expects to complete its MAOP validation activities this year. CPUC staff continues to monitor the records search and review the records for pipelines that PG&E has subsequently requested to increase pressure.

**PG&E MAOP Validation Pipeline Miles as of March 2013**

<table>
<thead>
<tr>
<th>Completed (HCA)</th>
<th>Completed (Non-HCA)</th>
<th>Remaining</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>6,944</td>
<td>2,088</td>
<td>4,856</td>
<td>255</td>
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</tbody>
</table>

**NTSB Recommendation P-10-6**

*If such a document and records search cannot be satisfactorily completed, provide oversight to any spike and hydrostatic tests that Pacific Gas and Electric Company is required to perform according to Safety Recommendation P-10-4.*

To ensure the safety and reliability of gas pipeline systems in California, the CPUC has adopted several of the most stringent pipeline safety rules in the nation. Driving these rules is the CPUC’s commitment to eliminate the grandfathering of historical pressure levels by requiring jurisdictional operators to hydrostatically test or replace their pipelines. Specifically, CPUC Decision 11-06-017 directed all California natural gas transmission operators to develop and file for CPUC consideration implementation plans for comprehensive pressure testing, also known as Pipeline Safety Enhancement Plans (PSEP), to achieve the goal of orderly and cost effectively replacing or testing all natural gas transmission pipelines that have not been pressure tested. As of March 2013, PG&E has hydrostatically tested 340 miles and verified strength test records for 90 miles of pipeline. In addition, PG&E has replaced approximately 40 miles of pipeline. To ensure that PG&E properly hydrotests its pipelines, pursuant to NTSB Safety Recommendation P-10-4, the CPUC has engaged a consultant to assist it in its oversight responsibility of PG&E’s...
hydrotesting. The CPUC staff will continue its oversight of PG&E’s hydrotesting and the other operators as they continue hydrotesting and pipeline replacement efforts proposed in their PSEPs.

**NTSB Recommendation P-11-22**

*With assistance from the Pipeline and Hazardous Materials Safety Administration (PHMSA), conduct a comprehensive audit of all aspects of Pacific Gas and Electric Company operations, including control room operations, emergency planning, record-keeping, performance-based risk and integrity management programs, and public awareness programs.*

As we reported in the last update provided on May 7, 2012, the CPUC has been working closely with PHMSA on a series of audits of PG&E’s operations. To date, the CPUC and PHMSA have conducted the following audits:

<table>
<thead>
<tr>
<th>PG&amp;E Audit</th>
<th>Date</th>
</tr>
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<tbody>
<tr>
<td>Public Awareness Plan</td>
<td>November 1-3, 2011</td>
</tr>
<tr>
<td>Operation, Maintenance, and Emergency Plans</td>
<td>February 13-17, 2012</td>
</tr>
<tr>
<td>Operator Qualification Program</td>
<td>October 22-26, 2012</td>
</tr>
<tr>
<td>Control Room Management Program</td>
<td>October 29-November 2, 2012</td>
</tr>
<tr>
<td>Distribution Integrity Management Program</td>
<td>December 10-14, 2012</td>
</tr>
<tr>
<td>North Bay Division</td>
<td>April 8-12, 2013</td>
</tr>
</tbody>
</table>

During the audits, the CPUC placed emphasis on the findings of the NTSB as noted in its report on the San Bruno incident. Specifically, the CPUC extensively reviewed the effectiveness of PG&E’s Public Awareness Plan and TIMP, and noted several deficiencies. CPUC staff is continuing to work with PG&E to correct the various deficiencies identified in the audits. These comprehensive audits have proven to be beneficial to both the CPUC and PHMSA in that they provide regulatory insight by combining the strengths of both regulatory entities into one with the goal of ensuring the safety and reliability of gas pipeline systems.

**NTSB Recommendation P-11-23**

*Require the Pacific Gas and Electric Company to correct all deficiencies identified as a result of the San Bruno, California, accident investigation, as well as any additional deficiencies identified through the comprehensive audit recommended in Safety Recommendation P-11-22, and verify that all corrective actions are completed.*

The CPUC is currently adjudicating three formal investigatory proceedings regarding PG&E’s operations. The first proceeding, opened in February 2011, is considering PG&E’s recordkeeping practices as they relate to its natural gas pipeline systems. The second proceeding, opened in November 2011, is investigating the operations and practices of PG&E regarding natural gas transmission pipelines in locations with high population density. The third
investigation, opened in January 2012, is the CPUC’s investigation and penalty proceeding into
the operations and practices of PG&E to determine violations of Public Utilities Code Section
451, General Order 112-E, and other applicable standards, laws, rules and regulations in
connection with the pipeline rupture in San Bruno.

On May 6, 2013, the CPUC’s Safety and Enforcement Division recommended that the CPUC
impose a total $2.25 billion penalty against PG&E for the three penalty cases. A CPUC decision
is expected in late summer.

I want to assure you that the CPUC will direct PG&E to correct all the deficiencies identified in
its investigatory proceedings, the joint audits conducted with PHMSA, and other CPUC audits
conducted by staff. The CPUC has also opened a Rulemaking focusing on forward-looking rule
revisions to improve natural gas safety for all California operators.

Further Safety Actions
To ensure that the deficiencies on the part of PG&E are corrected and the NTSB Safety
Recommendations are met, in addition to the work cited above, the CPUC has mounted an
extensive effort in improving its Gas Pipeline Safety Program and has made other safety
improvements, including:

- Ordered tens of millions in fines for safety related issues:
  - Citation to PG&E for $16.8 million for failure to conduct pipeline leak surveys
  - Fined to PG&E for $38 million for a natural gas explosion in Rancho Cordova
  - Fine of telecommunications companies for $12 million for the 2007 wildfire in
    Malibu
- Conducted a comprehensive audit of all aspects of PG&E’s gas operations, including
  control room, emergency planning, record-keeping, performance-based risk and integrity
  management programs, and public awareness.
- Conducted 57 gas audits on transmission and distribution units for risk management and
  compliance with CPUC and federal regulations. The CPUC also conducts corporate
  audits for drug and alcohol testing and operator qualification on a system-wide basis for
  each major utility.
- Published a Natural Gas Safety Action Plan (last update April 2013).
- Appointed a new safety leadership team at the CPUC, with the goal of changing the
  culture of safety in the CPUC and the industries we regulate. These appointments include
  a new director of the CPUC’s Safety and Enforcement Division with extensive
  experience in leadership, culture change, and safety; 24 new field inspectors to perform
  safety work; and 16 additional engineers, which includes five engineering specialists to
  oversee the implementation of new gas safety legislation and the pipeline integrity
  management programs of the pipeline operators in California.
- Created a Risk Assessment Section (RAS) with responsibilities including developing a
  new compliance model that sets, monitors, and enforces pipeline safety rules based on
  risk assessment and risk management. As part of the CPUC’s Gas Safety Action Plan,
  RAS is currently developing performance metrics that examine pipeline safety beyond
  the typical realm of pipeline operations and reliability. RAS is examining potential safety
  blind spots and issues that if not adequately addressed may pose a risk to gas pipeline
  safety.
- Ordered all natural gas utilities to develop enhanced safety plans; approved PG&E’s
  2012-2014 Pipeline Safety Enhancement Plan.
• Updated rules and policies around electric utility substation inspection and fire safety prevention.
• Imposed utility reporting requirements to ensure close oversight of safety decisions.
• Ensured that utilities return money not spent on certain projects to ratepayers.
• Inspected more than 500 master-metered mobile home parks per year.
• Conducted investigations for major gas and electric accidents and incidents, as well as rail transit and railroad accidents and incidents, and conducted inspections and audits.
• Worked with the Legislature and the Governor to obtain additional staffing and new tools to focus on safety, including the approval of several critical pieces of legislation.
• Adopted new protections for safety whistleblowers, in accordance with Assembly Bill 705.
• Held Northern California and Southern California Safety Symposia for utilities, local governments, and consumers, as well as a Thought Leaders session on cybersecurity. These events enable outside experts, senior utility executives, and others to share best practices, and are open to the public.
• Improved and streamlined the process for the public to access certain safety related documents received or generated by the CPUC.

Safety Culture Actions
The goal of the CPUC's culture change effort is to transform the agency into a model of safety and accountability that the public can rely on. The result will be that safety milestones and accomplishments—such as those made thus far—will become the norm in the CPUC's regulation, and will endure for future generations. The CPUC has taken a number of steps in the last two and half years to build an internal safety culture. These efforts related to safety culture change have:

• Established a Safety Council to strengthen and support the CPUC's internal and external safety oversight functions. The Safety Council immediately focused its efforts on establishing guidelines and implementing policy changes at the CPUC to drive its cultural approach and commitment to gas pipeline safety. As such, the Safety Council worked with our gas safety experts to establish a high-level comprehensive Gas Safety Action Plan to address the NTSB's recommendations and to promote a change in culture away from the traditional compliance model.
• Ensured that every decision voted on by the Commissioners now includes an analysis of safety implications, including the CPUC's analysis of pending legislation.
• Ensured that every Voting Meeting of the CPUC includes a public presentation by CPUC staff on a safety issue involving the CPUC and the companies it regulates. Since this started in March 2011, presentations have included electric substation audit program, transmission line clearance, underground transformer issues, cast iron pipelines, nuclear power, wind-related outages, railroad inspections, rail transit safety issues, passenger carrier enforcement, and payphone enforcement.
• Ensured that the management team has written safety goals, which they are expected to implement with their team. The CPUC demands safety behavior of all its employees and expects that behavior will form the foundation of a lasting safety culture.

The CPUC looks forward to the continued partnership with the NTSB in its efforts to improve natural gas safety. Please do not hesitate to contact me at (415) 703-3808 /
paul.clanon@cpuc.ca.gov or our Safety and Enforcement Division Director, Brigadier General (CA) Jack Hagan at (415) 703-2349 / emory.hagan@cpuc.ca.gov, if you have additional questions or would like additional information about our gas safety activities.

Sincerely,

[Signature]
Paul Clanon
Executive Director

cc: Steve Klejst, Director of the Office of Railroad, Pipeline and Hazardous Materials Investigations
Paula Sind-Prunier, Chief of Safety Regulations
CPUC Commissioners
Brigadier General (CA) Jack Hagan, Director, CPUC
Liza Malashenko, Deputy Director, Office of Utility Safety and Reliability, CPUC
Michael Robertson, Program Manager, CPUC