# CHAPTER 13

# APPENDIX A

# PG&E'S RESPONSE TO C PSD'S RECOMMENDATION S

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**Recommendation 1: PG&E should revise its pipeline construction and installation procedures and training to ensure that they meet and exceed all legal requirements and industry standards for identifying and correcting pipe deficiencies and strength testing.**

**PG&E's Response 1**: We will be implementing these improvements through the updated training and procedures discussed in my testimony.

**Recommendation 2: PG&E should revise section 2 of RMP-06 to fully and robustly meet the data gathering requirements of 49 CFR Part 192.917(b) and ASME-B31.8S, and to do so without limiting its data-gathering to only that data which is "readily available, verifiable, or easily obtained" by PG&E.**

**PG&E's Response 2**: We agree that our data gathering practices should be reviewed to confirm that they meet or exceed regulatory and industry consensus guidance, and revised if necessary. This recommendation is being implemented through our review of Integrity Management and through Project Mariner (formerly described as the Gas Transmission Asset Management Project (GTAM)) discussed in Chapter 4, section E.

**Recommendation 3: PG&E should perform a complete company-wide record search to ensure its GIS database includes all pipeline leak history, including closed leak, information not already transferred to the GIS.**

**PG&E's Response 3**: We are implementing this recommendation as discussed in Chapter 4, section E.

**Recommendation 4: PG&E should revise its Integrity Management training to ensure that missing data is represented by conservative assumptions, and that those assumptions are supportable, per the requirements of ASME B31.8S.**

**PG&E's Response 4**: We agree that the use of conservative values where actual pipeline data is not available should be consistent with the guidance of ASME

B31.8S. As discussed in section C of Chapter 4, we have used conservative assumptions that reflect the most conservative pipeline specifications for pipe procurement standards in place at the time of the construction project. As discussed in Chapter 5, this practice is consistent with ASME B31.8S guidance.

**Recommendation 5: PG&E should revise section 2 of RMP-06, and related training, to ensure full and robust data verification processes are enacted and implemented.**

**PG&E's Response 5**: We are implementing this recommendation through our review of Integrity Management and Project Mariner discussed in Chapter 4, section E.

**Recommendation 6: PG&E should revise its threat identification and assessment procedures and training, including its Baseline Assessment Plans, to fully incorporate all relevant data for both covered and non-covered segments, including but not limited to potential manufacturing and construction threats, and leak data.**

**PG&E's Response 6**: We are implementing this recommendation through our review of Integrity Management and through Project Mariner discussed in Chapter 4, section E.

**Recommendation 7: PG&E should re-label its system MAOP nomenclature to avoid confusion with the MOP term of art as used by 49 CFR Part 192.917(e)(3).**

**PG&E's Response 7**: We are actively considering this recommendation as part of the review of our standards.

**Recommendation 8: PG&E should permanently cease the self-suspended practice of regularly increasing pipeline pressure above a "system MAOP" to eliminate the need to consider manufacturing and construction threats. In addition, due to PG&E's pressure spiking practice such threats should now be considered by PG&E to be unstable under 49 CFR Part 192.917(e)(3).**

**PG&E's Response 8**: As discussed in the testimony in Chapter 4, section C, we have permanently ceased the practice of increasing pipeline pressure in certain high

consequence area (HCA) pipe segments with identified manufacturing threats to the highest pressure experienced in the five years predating identification of the HCA. On all HCA segments where we had raised pressure on a planned basis above the "system MAOP," PG&E has analyzed the segment to determine the risk of failure from these defects pursuant to 49 CFR 192.917(e)(3). This analysis, called an Engineering Critical Assessment (ECA), evaluates whether latent manufacturing or construction related defects have become unstable and would further require an integrity assessment.

**Recommendation 9: PG&E should revise its threat identification and assessment procedures and training to ensure that HCA pipeline segments that have had their MAOP increased are prioritized for a suitable assessment method (e.g., hydro-testing), per the requirements of 49 CRF Part 192.917(e)(3)-(4).**

**PG&E's Response 9**: We disagree with this recommendation because it is based on an incorrect premise. We did not increase the pipeline MAOP as part of the now-terminated practice of periodically increasing the pressure in certain HCA pipe segments with identified manufacturing threats to the highest pressure experienced during the five years predating identification of the HCA. As discussed in PG&E's response to Recommendation 8, PG&E has conducted an Engineering Critical Assessment to evaluate whether potential latent manufacturing defects have become unstable.

**Recommendation 10: PG&E should revise its threat identification and assessment procedures and training to ensure that cyclic fatigue and other loading conditions are incorporated into their segment specific threat assessments and risk ranking algorithm, and that threats that can be exacerbated by cyclic fatigue are assumed to exist per the requirements of 49 CRF Part 192.917(b).**

**PG&E's Response 10**: We are implementing this recommendation as discussed in the testimony in Chapter 4, section E.

**Recommendation 11: PG&E should revise its risk ranking algorithm to ensure that PG&E's weighting factors in its risk ranking algorithm more accurately**

**reflect PG&E's actual operating experience along with generally reflected industry experience.**

**PG&E's Response 11**: We are implementing this recommendation as discussed in the testimony in Chapter 4, section E.

**Recommendation 12: PG&E should revise its threat identification and assessment procedures and training to ensure that PG&E's weighing of factors in its risk ranking algorithm and the input of data into that algorithm corrects the various systemic issues identified in the NTSB report and the CPSD/PHMSA 2011 Risk Assessment Audit.**

**PG&E's Response 12**: We are implementing this recommendation as discussed in the testimony in Chapter 4, section E.

**Recommendation 13: PG&E should revise its threat identification and assessment procedures and training to ensure that the proper assessment method is being used to address a pipeline's actual and potential threats.**

**PG&E's Response 13**: We are implementing this recommendation as discussed in the testimony in Chapter 4, section E.

**Recommendation 14: PG&E should make revisions to its equipment retention policy to ensure that integrity of equipment, wiring and documentation and identification of electrical components does not deteriorate to unsafe conditions such as occurred at the Milpitas Terminal, described herein. If PG&E does not have an applicable equipment retention policy then it should formulate one.**

**PG&E's Response 14**: We are implementing this recommendation within our Project Mariner as discussed in the Pipeline Safety Enhancement Plan submitted in proceeding 11-02-01. As discussed in Chapter 8, section E.1, we do not agree with the characterization of the Milpitas Terminal equipment underlying this recommendation.

**Recommendation 15: PG&E should revise its SCADA system to reduce the occurrence of "glitches" and anomalies in the control system that**

**desensitizes operators to the presence of alarms and other inconsistent information.**

**PG&E's Response 15**: We are implementing this recommendation as discussed in the testimony in Chapter 8, section F.2.

**Recommendation 16: PG&E should reevaluate SCADA alarm criteria with the goal of reducing unnecessary alarm messages.**

**PG&E's Response 16**: We are implementing this recommendation as discussed in the testimony in Chapter 8, section F.2.

**Recommendation 17: PG&E should revise its control systems, including SCADA, to ensure that all relevant information, including redundant pressure sensors, is considered.**

**PG&E's Response 17**: We agree that our SCADA system should make available all relevant information, and are implementing this recommendation as discussed in the testimony in Chapter 8, section F.2. PG&E does not agree that redundant information is necessarily relevant as discussed in Chapter 8, section E.6 and Chapter 9.

**Recommendation 18: PG&E should install more pressure sensors and have them closely spaced and use the additional information to incorporate leak or rupture recognition algorithms in its SCADA system.**

**PG&E's Response 18**: We have installed and continue to install additional SCADA monitoring and control devices and capability, as discussed in the testimony in Chapter 8, section F.2. As discussed in the testimony in Chapter 9, we do not agree with this recommendation to the extent it involves computational pipeline monitoring software.

**Recommendation 19: PG&E should program its PLCs to recognize that negative pressure values are erroneous and require intervention to prevent valves from fully opening.**

**PG&E's Response 19**: As discussed in Chapter 8, section C.2 and E.8, we do not consider programming the PLC to disregard pressure information (even though it is likely invalid) a prudent practice. The redundant pneumatic pressure limiting system

(at Milpitas Terminal) is the appropriate countermeasure to situations in which regulator valves open unintentionally.

**Recommendation 20: PG&E should replace the three pressure controllers which malfunctioned on September 9, 2010.**

**PG&E's Response 20**: As discussed in Chapter 8, section E.9, we are implementing enhanced functionality to the PLCs at Milpitas Terminal, which will render the valve controllers unnecessary, at which point all valve controllers will be removed.

**Recommendation 21: PG&E should review its work clearance process to ensure that abnormal operating conditions that may arise during the course of work are anticipated and responses to those conditions are detailed. Additionally, PG&E should create a "method of procedures" covering the transfer and commission of electrical loads from one Uninterruptable Power Supply to another. This plan should cover possible scenarios and contingency plans to mitigate any abnormal operating conditions that may arise.**

**PG&E's Response 21**: We are implementing this recommendation as discussed in the testimony in Chapter 8, sections F.1 and F.3.

**Recommendation 22: PG&E should revisit its Work Clearance procedures and training to ensure that future work will not be authorized unless: all forms and fields therein are comprehensively and accurately populated; and, the gas technician has prepared the work clearance him/herself or has intimate knowledge of the work clearance. Additionally, work should not commence until such time as the operator and technician have reviewed the work clearance and have confirmed that both have intimate knowledge of the items detailed in the work clearance form. Lastly, PG&E must ensure that proper records showing the specific steps taken, when taken, and by whom, are retained.**

**PG&E's Response 22**: We are implementing this recommendation as discussed in the testimony in Chapter 8, section F.3.

**Recommendation 23: Training – PG&E should provide training to Gas Service Representatives to recognize the differences between fires of low-pressure natural gas, high-pressure natural gas, gasoline fuel, or jet fuel.**

**PG&E's Response 23**: We are implementing this recommendation as discussed in the testimony in Chapter 10, section B.

**Recommendation 24: Internal coordination – PG&E should revise its procedures to outline each individual Dispatch and Control Room employee's roles, responsibility, and lines of communication required to be made in the event of an emergency either during or outside normal working hours. This should include assigning specific geographical monitoring responsibilities for Control Room employees.**

**PG&E's Response 24**: We are implementing this recommendation as discussed in the testimony in Chapter 10, section B.

**Recommendation 25: External coordination – CPSD agrees with NTSB recommendation P-11-2, which requests that PHMSA issue guidance to operators of natural gas transmission and distribution pipelines and hazardous liquid pipelines regarding the importance of control room operators immediately and directly notifying the 911 emergency call center(s) for the communities and jurisdiction in which those pipelines are located when a possible rupture of any pipeline is indicated. CPSD further recommends that prior to such PHMSA guidance PG&E should revise their own procedures to allow for the immediate and direct notification of 911 emergency call centers when a possible pipeline rupture is indicated.**

**PG&E's Response 25**: We are implementing this recommendation as discussed in the testimony in Chapter 10, section B, and as discussed in PG&E's May 23, 2012 letter to the NTSB, attached as Appendix B to my testimony.

**Recommendation 26: Decision making authority – PG&E should revise its emergency procedures to clarify emergency response responsibilities, especially in regards to authorizing valve shut offs. PG&E policies should not just delegate authority to act but also detail obligations to act.**

**PG&E's Response 26**: We are implementing this recommendation as discussed in the testimony in Chapter 10, section B.

**Recommendation 27: RCV/ASV – PG&E should perform a study to provide Gas Control with a means of determining and isolating the location of a rupture remotely by installing RCVs, ASVs, and appropriately spaced pressure and flow transmitters on critical transmission line infrastructure and implement the results.**

**PG&E's Response 27**: We are implementing this recommendation as discussed in the testimony in Chapter 8, section F.2.

**Recommendation 28: Response time – PG&E should review required response times in other utility service territories nationwide and devise appropriate response time requirements to ensure that its Emergency Plan results in a "prompt and effective" response to emergencies. PG&E shall report its analysis and conclusions to the Commission for review.**

**PG&E's Response 28**: We are implementing the first sentence of this recommendation as discussed in Chapter 10, section B. We need additional information regarding the parameters desired by the CPSD to implement the second sentence of the recommendation.

**Recommendation 29: Emergency Plan Revision – Currently a maintenance supervisor annually reviews SCADA alarm responses and makes revisions as necessary. This process needs to be formalized to ensure a robust feedback loop such that new information is fully analyzed and necessary changes to PG&E's Emergency Plan and/or other procedures are implemented with a subsequent review of made changes to ensure they are adequate.**

**PG&E's Response 29**: We are implementing this recommendation as discussed in Chapter 10, section B.

**Recommendation 30: Public Awareness – CPSD agrees with NTSB recommendation P-11-1, which requests PHMSA issue guidance to operators of natural gas transmission and distribution pipelines and hazardous liquid pipelines regarding the importance of sharing system-specific information,**

**including pipe diameter, operating pressure, product transported, and potential impact radius, about their pipeline systems with the emergency response agencies of the communities and jurisdiction in which those pipelines are located. CPSD further recommends that prior to such PHMSA action PG&E undertake a review of its public awareness and outreach programs to ensure that system-specific information is appropriately disseminated.**

**PG&E's Response 30**: We are implementing this recommendation as discussed in Chapter 10, section B.

**Recommendation 31: PG&E should use the $39,257,000 in previously authorized rate recovery for pipeline transmission operations and maintenance that it failed to spend since 1997 to fund future pipeline transmission operations and maintenance before it seeks additional ratepayer funds going forward. (Source: Overland Report, page 3-3, Table 3-2) CPSD further recommends that PG&E focuses on modifying its pipelines such that its systems ability to accommodate ILI tools becomes consistent with industry averages.**

**PG&E's Response 31**: This recommendation should be rejected because, as shown by the testimony of Matthew O'Loughlin, PG&E spent more on O&M expenses from 1997 to 2010 than the adopted amounts from the rate cases. This recommendation is also moot because, as explained in my testimony, through September 30, 2012 our shareholders have already spent $683 million in expense on our gas transmission system without any assurance of rate recovery. We are also forecasting that we will spend an additional $100 million in expense through the end of 2012. In addition to these expense dollars, PG&E's shareholders will spend approximately $50 million for capital dollars disallowed under the CPUC's PSEP decision issued on December 20, 2012.

Pursuant to PSEP, we will be either hydrostatically testing, replacing, or verifying pipeline characteristics with complete and verifiable documentation on all pipeline mileage in our gas transmission system. Consistent with the federal regulations, all pipeline that is replaced will be capable of accommodating in-line inspection (ILI) tools.

**Recommendation 32: Regarding PG&E's gas transmission and storage operations, PG&E under spent $95,372,000 for capital expenditures since 1997; PG&E should use these previously authorized ratepayer funds to fund future gas transmission and storage capital expenditures before it seeks additional ratepayer funds going forward. (Source: Overland Report, page 4-2, Table 4-1.)**

**PG&E's Response 32**: This recommendation should be rejected because, as shown by the testimony of Matthew O'Loughlin, PG&E spent more on gas transmission capital expenditures from 1997 to 2010 than the adopted amounts from the rate cases. This recommendation is also moot because, as explained in my testimony, through September 30, 2012 our shareholders have already spent $683 million in expense on our gas transmission system without any assurance of rate recovery. We are also forecasting that we will spend an additional $100 million in expense through the end of 2012. In addition to these expense dollars, PG&E's shareholders will spend approximately $50 million for capital dollars disallowed under the CPUC's PSEP decision issued on December 20, 2012.

**Recommendation 33: PG&E should use the $429,841,000 in revenue collected since 1999 that is above and beyond what it required to earn its authorized return on equity, to fund future gas transmission and storage operations before it seeks additional ratepayer funds going forward. (Source: Overland Report, page 5-2, Table 5-2.)**

**PG&E's Response 33**: This recommendation should be rejected because, as explained in the testimony of Matthew O'Loughlin, from the perspective of the entire utility, there were no "excess" or "surplus" revenues. PG&E's earnings were consistent with the authorized rates of return from 1999 to 2010. As also explained in Mr. O'Loughlin's testimony, this recommendation should be rejected for the additional reason that the $430 million calculated by Overland already incorporates the effect of any purported underspending compared to the adopted amounts. By including separate recommendations (Recommendations 31 and 32) for alleged O&M and capital underspending, CPSD is double-counting the alleged underspending. This recommendation is also moot because, as explained in my testimony, through September 30, 2012, our shareholders have already spent $683 million in expense on our gas transmission system without any assurance of rate

recovery. We are also forecasting that we will spend an additional $100 million in expense through the end of 2012. In addition to these expense dollars, PG&E's shareholders will spend approximately $50 million for capital dollars disallowed under the CPUC's PSEP decision issued on December 20, 2012.

**Recommendation 34: PG&E's "Transformation" strategy and subsequent programs should expressly ensure that safety is a higher priority than shareholder returns and be designed to implement that priority, which may include reinvesting operational savings into infrastructure improvements.**

**PG&E's Response 34**: This recommendation is moot. Business Transformation has not been an active program since 2007. With respect to similar programs in the future, the recommendation is also moot because we have already committed substantial shareholder investments to gas transmission infrastructure improvements as explained in my testimony. There is therefore no need to adopt an express requirement that any savings from operational efficiencies be directly reinvested in infrastructure improvements.

**Recommendation 35: PG&E should target retained earnings towards safety improvements before providing dividends, especially if the ROE exceeds the level set in a GRC decision.**

**PG&E's Response 35**: This recommendation should be rejected because (1) there is no basis for adopting a restriction on dividends based on our prior earnings history given that we earned less than the authorized rate of return in more than half of the years under consideration by Overland (see the testimony of Matthew O'Loughlin); and (2) as explained in my testimony, through September 30, 2012 our shareholders have already spent $683 million in expense on our gas transmission system without any assurance of rate recovery. We are also forecasting that we will spend an additional $100 million in expense through the end of 2012. In addition to these expense dollars, PG&E's shareholders will spend approximately $50 million for capital dollars disallowed under the CPUC's PSEP decision issued on December 20, 2012.

This recommendation is also unnecessary because the CPUC itself is actively reviewing safety spending. The CPUC decisions in the 2011 GRC (Decision No. 11-05-18) and the 2011 Gas Accord (Decision No.11- 04-031) proceedings contain

reporting requirements on safety spending. The Commission held a Safety and Ratemaking workshop on January 11, 2012 to evaluate how to integrate safety considerations in the ratemaking process. To further this objective, CPSD will be hiring third-party experts to perform technical reviews of certain operational plans underlying our upcoming GRC forecast.

The CPUC also should not adopt this recommendation because CPSD has not shown that our payment of dividends reduced our investment in our gas transmission system or that it would do so going forward. In fact, our payment of regular and predictable dividends will help ensure our access to the equity markets so that we can raise capital to make investments needed to improve our gas transmission system.

**Recommendation 36: PG&E's incentive plan, and other employee awards programs, should include selection criteria for improved safety performance and training and/or experience in the reliability and safety aspects of gas transmission and distribution. PG&E should ensure that upper management attends gas safety training.**

**PG&E's Response 36**: As explained in my testimony, we have revised our STIP program to make safety performance 40% of the score used to determine the total award.

We endorse the recommendations that our upper management participate in activities that enhance and expand their knowledge of safety.

We are continuing to enhance our gas emergency response training as discussed in Chapter 10, section B. All officers have an opportunity to participate in an annual drill, but we are now expanding the number and types of exercises that we will conduct throughout the year. We will be including exercises in which gas officers will have an opportunity to enhance their knowledge of incident command.

All of our officers participate in an annual safety leadership workshop. Our officers also actively participate in industry organizations such as the American Gas Association, the Interstate Natural Gas Association of America, the Edison Electric Institute, the Nuclear Energy Institute, and the Institute of Nuclear Power Operations, where they learn about best industry practices to enhance safety. Several of our officers have attended the Reactor Technology Course for Utility Executives at the Massachusetts Institute for Technology.

**Recommendation 37: PG&E should not hold joint Company and Corporation Board of Director meetings as the two entities should have different priorities.**

**PG&E's Response 37**: This recommendation should be rejected.

**Recommendation 38: PG&E should examine whether the time and money it spends on public relations and political campaigns distracts it from its core mission of providing safe and reliable gas service.**

**PG&E's Response 38**: While we do not agree with the premise of this recommendation, as I explained in my testimony, we are focusing on enhancing public safety and operational excellence.

**Recommendation 39: PG&E should revisit its Pipeline 2020 program, and subsequent variations thereof, to ensure that its implementation is fully flushed out with specific goals, performance criteria, and identified funding sources.**

**PG&E's Response 39**: This recommendation is moot. The Pipeline 2020 program is no longer an active program. The Pipeline 2020 program has been superseded by our PSEP. As I noted in my testimony, the CPUC has reviewed the detailed information we submitted about PSEP during the course of extensive hearings in March 2012.

**Recommendation 40: PG&E should examine internal communication processes to ensure that all employees are knowledgeable on what is expected of them and their teams.**

**PG&E's Response 40**: We endorse CPSD's recommendation. As discussed in my testimony, we are already undergoing a thorough re-examination of a variety of issues, including job responsibilities. The gas business, in particular, has clarified job responsibilities and priorities.

**Recommendation 41: CPSD agrees with the following NTSB recommendations to PG&E (NTSB Report, pages 130-131):**

**PG&E Response 41**: Our specific responses are below.

**Recommendation 41a: Revise your work clearance procedures to include requirements for identifying the likelihood and consequence of failure associated with the planned work and for developing contingency plans. (P-11-24)**

**PG&E's Response 41a**: We are implementing this recommendation as discussed in Chapter 8, sections F.1. and F.3, and in PG&E's May 23, 2012 response to NTSB Recommendation P-11-24, attached as Appendix B to my testimony.

**Recommendation 41b: Establish a comprehensive emergency response procedure for responding to large-scale emergencies on transmission lines; the procedure should (1) identify a single person to assume command and designate specific duties for supervisory NTSB Pipeline Accident Report 131 control and data acquisition staff and all other potentially involved company employees; (2) include the development and use of trouble-shooting protocols and checklists; and (3) include a requirement for periodic tests and/or drills to demonstrate the procedure can be effectively implemented. (P-11-25)**

**PG&E's Response 41b**: We are implementing this recommendation as discussed in Chapter 10, section B, and in PG&E's May 23, 2012 response to NTSB Recommendation P-11-25, attached as Appendix B to my testimony.

**Recommendation 41c: Equip your supervisory control and data acquisition system with tools to assist in recognizing and pinpointing the location of leaks, including line breaks; such tools could include a real-time leak detection system and appropriately spaced flow and pressure transmitters along covered transmission lines. (P-11-26)**

**PG&E's Response 41c**: We are implementing this recommendation as discussed in Chapter 8, section F, and in PG&E's May 23, 2012 response to NTSB Recommendation P-11-26, attached as Appendix B to my testimony.

**Recommendation 41d: Expedite the installation of automatic shutoff valves and remote control valves on transmission lines in high consequence areas and in class 3 and 4 locations, and space them at intervals that consider the factors listed in Title 49 Code of Federal Regulations Part 192.935(c). (P-11-27)**

**PG&E's Response 41d**: We are implementing this recommendation as discussed in the testimony in Chapter 8, section F.2, and in PG&E's May 23, 2012 response to NTSB Recommendation P-11-27, attached as Appendix B to my testimony.

**Recommendation 41e: Revise your postaccident toxicological testing program to ensure that testing is timely and complete. (P-11-28)**

**PG&E's Response 41e**: We are implementing this recommendation as discussed in the testimony in Chapter 8, section F.4, and in PG&E's May 23, 2012 response to NTSB Recommendation P-11-28, attached as Appendix B to my testimony.

**Recommendation 41f: Assess every aspect of your integrity management program, paying particular attention to the areas identified in this investigation, and implement a revised program that includes, at a minimum, (1) a revised risk model to reflect the PG&E Company's actual recent experience data on leaks, failures, and incidents; (2) consideration of all defect and leak data for the life of each pipeline, including its construction, in risk analysis for similar or related segments to ensure that all applicable threats are adequately addressed; (3) a revised risk analysis methodology to ensure that assessment methods are selected for each pipeline segment that address all applicable integrity threats, with particular emphasis on design/material and construction threats; and (4) an improved self-assessment that adequately measures whether the program is effectively assessing and evaluating the integrity of each covered pipeline segment. (P-11-29)**

**PG&E's Response 41f**: See response to Recommendation Nos. 2, 3, 4, 5, 6, 9, 10, 11, 12, and 13, and PG&E's May 23, 2012 response to NTSB Recommendation P-11-29, attached as Appendix B to my testimony. As discussed in the testimony in Chapter 4, section 5, we have embarked on a complete assessment of every aspect of our transmission integrity management program. We have hired a number of consultants recognized and respected in the industry as experts in integrity management to assist in an exhaustive review of its program's policies, procedures, and tools. This review will assure that our integrity management program meets all regulatory requirements, including improving its practices in areas highlighted in the NTSB report and CPSD/PHMSA 2011 Risk Assessment Audit.

**Recommendation 41g: Conduct threat assessments using the revised risk analysis methodology incorporated in your integrity management program, as recommended in Safety Recommendation P-11-29, and report the results of those assessments to the Commission and the Pipeline and Hazardous Materials Safety Administration. (P-11-30)**

**PG&E's Response 41g**: We are implementing this recommendation as discussed in the testimony in Chapter 4, section 5, and in our May 23, 2012 response to NTSB Recommendations P-11-29 and P-11-30, attached as Appendix B to my testimony.

**Recommendation 41h: Develop, and incorporate into your public awareness program, written performance measurements and guidelines for evaluating the plan and for continuous program improvement. (P-11-31)**

**PG&E's Response 41h**: We are implementing this recommendation as discussed in Chapter 10, section B and in PG&E's May 23, 2012 response to NTSB Recommendation P-11-31, attached as Appendix B to my testimony.