Summary Document of
Federal Pipeline Safety Legislation, NTSB Recommendations to PG&E, and PG&E Pipeline Safety Enhancement Plan

December 20, 2011

Issue	Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 (H.R. 2845, as passed by Congress)	NTSB Recommendations to PG&E*	PG&E Pipeline Safety Enhancement Plan (Filed 8/26/11 at CPUC**)/Actions Taken at Direction of PUC
Penalties	Fines are increased to $200,000 for each violation and $2.0 million (maximum) for a series of violations; Civil penalties do not apply to enforcement actions.	No language included.	No language included.
Damage Prevention	State one call notification programs must meet the following minimum standards to qualify for a grant: appropriate participation from all underground facility operators (including gov't); appropriate participation from all excavators; flexible and effective enforcement under State law. No exemptions are permitted for municipalities, State agencies or their contractors; Secretary shall conduct a study on 3rd party damage on pipeline safety within 2 years of enactment.	No language included.	No language included.
ASVs/RSVs	Secretary shall require use of ASV/RSVs where economically, technically, and operationally feasible for any transmission pipelines constructed or replaced after the issuance of a final rule containing such requirement. Requires Comptroller General of U.S. to	P-11-27: Expedite the installation of automatic shutoff 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 192.935(c).	Install remote control valves on transmission pipelines in populated areas (class 3, 4 and class 1 and 2 HCAs) and automatic valves where pipelines cross active earthquake faults. Valve spacing as per Federal regulations for manual valves. Enhance PG&E's SCADA system to

	conduct a study to determine ability of transmission operator to respond to hazardous liquid or gas release from a pipeline segment within a HCA. Areas of the study will include location of response personnel, costs, risks and benefits of RSV/ASVs. Results of the study are to be reported to Congress no later than 1 year after the legislation is enacted.		provide operators with tools and training to allow for early detection and quick response to isolate pipe segments, if required.
Excess Flow Valves	Requires DOT to issue a final report on evaluation of the NTSB's recommendation on excess flow valves in applications other than service lines to single family residence. After the final report, and within 2 yrs. of enactment, requires the DOT, if appropriate, to issue regulations requiring the use of EFVs, or equivalent technology, where economically, technically, and operationally feasible on new and entirely replaced distribution branch services, multi-family facilities, and small commercial facilities	No language included.	No language included.
Integrity Management	Requires the DOT to evaluate, within 18 months of enactment: •Whether TIMP requirements, or elements thereof, should be expanded beyond HCAs •If applying TIMP requirements, or elements thereof, to additional areas would mitigate the need for class location requirements The DOT evaluation must include the following factors: •Continuing priority to enhance protections	P-11-24: 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-11-29: 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:	Replace all Class 1 HCA and Class 2-4 pipeline segments with specified manufacturing or fabrication threats operating at high stress levels (≥30% SMYS) that do not have a documented, traceable, verifiable pressure test. Replace additional pipe segments without a strength test as determined by the pipeline condition. Upgrade/replace and inspect with an ILI tool all pipelines operating at 30% SMYS

	for public safety •Importance of reducing risk in HCAs •Incremental costs of applying IM standards to pipelines outside of HCAs where operators are already conducting assessments beyond requirements •The need to do IM assessments and repairs in a manner that is achievable and sustainable that does not disrupt pipeline service •Options for phasing in extension of IM requirements beyond HCAs, including options for decreasing risks to an increasing number of people in proximity to pipelines •Applying repair criteria, such as pressure reductions and requirements for scheduling remediation, beyond HCAs Requires DOT to submit a report based on the evaluation above to Congress within 2 years of enactment regarding: •Expansion of IM requirements beyond HCAs •Whether applying IM requirements, or elements thereof, to additional areas would mitigate the need for class location requirements Requires DOT to issue regulations, not < 1 yr. after report or > 3 yrs. after enactment, if the evaluation finds that IM requirements, or elements thereof, should be expanded beyond HCAs and if applying IM requirements, or elements thereof, to additional areas would mitigate the need for class location requirements.	•a revised risk model to reflect the Pacific Gas and Electric Company's actual recent experience data on leaks, failures, and incidents; •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; •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 •an improved self-assessment that adequately measures whether the program is effectively assessing and evaluating the integrity of each covered pipeline segment. P-11-30: 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 California Public Utilities Commission and the Pipeline and Hazardous Materials Safety Administration.	or greater. All replacement pipelines will fully accommodate ILI. Evaluate new ILI technologies for application on previously "unpiggable" lines as an alternative to retrofits.

	The regulation, if any, issued by DOT would: •Expand IM system requirements, or elements thereof, beyond HCAs; and •Remove redundant class location requirements for gas transmission pipeline facilities regulated under an IM program Confirms requirements for periodic IM assessments at a minimum of once every 7 calendar years. DOT may extend assessment an additional 6 months if operator submits written notice with sufficient justification Requires the Comptroller General of the US to evaluate and report to congress within 2 yrs. of enactment: •Whether risk based reassessment intervals are more effective for managing risks of pipelines in HCAs than the 7 yr. reassessment interval •Number of anomalies detected in baseline assessments compared to reassessments •Progress made in implementing recommendations in GAO Report 06-945 and current relevance of recommendations not yet implemented		
Public Education	Secretary must maintain a national map of all designated HCAs in which pipelines are required meet IM safety regulations. Secretary shall develop and implement a program promoting greater awareness of the National Pipeline Mapping System to State and local 1st responders.	P-11-31: Develop, and incorporate into your public awareness program, written performance measurements and guidelines for evaluating the plan and for continuous program improvement.	See note below. (Note: PG&E is working to satisfy NTSB recommendations and will submit an update on 12/22/11, in which this recommendation will be addressed.)

	Secretary shall (after consultation w/ owners/operators) issue guidance to owners and operators of pipeline facilities on importance of providing system-specific information to state and local emergency response agencies. Secretary shall maintain current response plans of all owner/operators of a pipeline facility.		
Cast Iron Pipe	By Dec. 31, 2012, the Secretary must survey operator's plans for management and replacement of cast iron pipe, and follow up to this survey every 2 years thereafter; Secretary must provide status report to Congress by Dec. 31, 2013	No language included.	No language included. (Note: PG&E is expected to have all cast iron in its system replaced by the end of 2014.)
Leak Detection (Hazardous liquids only)	Requires Secretary to submit a report on leak detection systems used by operators of hazardous liquid pipelines and transportation- related flow lines that includes analysis of technical limitations to detect ruptures and small leaks. Asserts congressional authority over leak detection systems of hazardous liquid pipeline facilities, while allowing the DOT Secretary to proceed with rulemakings after certain requirements have been met or if public safety is an issue.	P-11-26: 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.	No language included. (Note: PG&E is working to satisfy NTSB recommendations and will submit an update on 12/22/11, in which this recommendation will be addressed.)
Incident Notification	Requires DOT to revise regulations under 49 CFR, 191.5, not later than 18 mos. after enactment, to establish time limits for telephonic or electronic notice of accident and incidents to DOT and the National Response Center (NRC)	P-11-3: Require your control room operators to notify, immediately and directly, the 911 emergency call center(s) for the communities and jurisdictions in which your transmission and/or distribution pipelines are located, when a possible	**See notes below (Note; PG&E already has taken steps to address these recommendations and wil be submitting an update on 12/22/11, in which these recommendation will be addressed.)

	In revising the regulations DOT will, at a minimum: •Establish time limits for notification at the earliest practicable moment, not later than 1 hour, following confirmed discovery •Review procedures of pipeline owners and operators and NRC to provide coordinated notification to all state and local emergency response officials, including 911 centers, and revise those procedures as appropriate •Require owners and operators to revise their initial notice to DOT and NRC, within 48 hours of the accident or incident to the extent practicable, with an estimate of the amount of product released, the number of fatalities and injuries if any, and any other information deemed appropriate by DOT. Based on this information, the NRC will be required to update the initial report, rather than issue a new report	rupture of any pipeline is indicated. P-11-25: 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 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. 4)	
Pipeline Data Collection	Allows Secretary to gather geospatial and technical data, including design and material specifications with advanced operator notice.	P-10-2 (Urgent): Aggressively and diligently search for all as-built drawings, alignment sheets, and specifications, and all design, construction, inspection, testing, maintenance, and other related records, including those records in locations controlled by personnel or firms other than Pacific Gas and Electric Company, relating to pipeline system components, such as pipe segments, valves, fittings, and weld seams for Pacific Gas and Electric Company natural gas transmission lines in class 3 and class 4 locations and class 1 and class 2 high consequence areas that	PG&E is modernizing its data management systems and procedures to ensure data is comprehensive, accessible and traceable. Data will contain all pipeline pressure tests and pipeline features necessary to calculate MAOP of pipelines. PG&E is focusing on lines in class 3 and class 4 locations and class 1 and class 2 high consequence areas first, and then will move to the remainder of its system.

		have not had a maximum allowable operating pressure established through prior hydrostatic testing. These records should be traceable, verifiable, and complete.	
Cost Recovery for Design Review* **	Allows DOT to recover the costs associated with design safety reviews, including construction inspections and oversight, in connection with the construction, expansion, or operation of a gas pipeline facility or LNG facility with design and construction costs at least $2.5 billion. DOT must prescribe a fee structure and assessment methodology based on costs to perform the reviews Requires the project applicant to notify DOT and provide design specifications, construction plans, procedures and related materials at least 120 days prior to commencement of construction. DOT will make best efforts to provide written comments, feedback, and guidance on the project within 90 days of receiving materials from applicant No additional DOT authority to require applicant to obtain permits prior to design and construction Establishes Pipe Safety Design Review Fund in the Treasury Requires DOT to issue guidance, within 1 year of enactment, to clarify “new or novel	No language included.	See notes below

	technologies or design"		
Gas and Hazardous Liquid Gathering Lines	Requires Secretary to conduct a review of all existing Federal & State regulations for exemptions for gas and hazardous liquids gathering lines within 2 years of enactment.	No language included.	No language included.
PHMSA Resources	PHMSA is authorized to provide safety training for state and local government personnel.	No language included.	No language included.
Verification of MAOP	Mandates DOT to require owners/operators to conduct, not later than 6 months after enactment, a verification of records related to interstate and intrastate gas transmission lines in class 3 and class 4 locations and class 1 and class 2 HCAs to ensure that the records accurately reflect the physical and operational characteristics of the pipelines and confirm the established MAOP of the pipelines. The verification will include elements as determined by DOT Owners/operators of gas transmission lines, in locations specified above, must identify and submit to DOT, within 18 months of enactment, documentation related to segments for which the records are insufficient to confirm the established MAOP Owners/operators must report exceedances of gas transmission MAOP greater than the allowable buildup of pressure-limiting devices or control devices to DOT and appropriate state agencies within 5 days of occurrence	P-10-3 (Urgent): Use the traceable, verifiable, and complete records located by implementation of Safety Recommendation P-10-2 (Urgent) to determine the valid maximum allowable operating pressure, based on the weakest section of the pipeline or component to ensure safe operation, of Pacific Gas and Electric Company natural gas transmission lines in class 3 and class 4 locations and class 1 and class 2 high consequence areas that have not had a maximum allowable operating pressure established through prior hydrostatic testing. P-10-4: If you are unable to comply with Safety Recommendations P-10-2 (Urgent) and P-10-3 (Urgent) to accurately determine the maximum allowable operating pressure of Pacific Gas and Electric Company natural gas transmission lines in class 3 and class 4 locations and class 1 and class 2 high hydrostatic testing, determine the maximum allowable operating pressure with a spike test followed by a hydrostatic pressure test.	PG&E is modernizing its data management systems and procedures to ensure data is comprehensive, accessible and traceable. Data will contain all pipeline pressure tests and pipeline features necessary to calculate MAOP of pipelines. PG&E is focusing on lines in class 3 and class 4 locations and class 1 and class 2 high consequence areas first, and then will move to the remainder of its system. MAOP for all pipelines established by a pressure test conducted to modern standards or through verification or pressure test records. Support compliance with 49 CFR, Section 191.23, Reporting Safety Related Conditions to OPS/CPUC (MAOP excursions).

	For pipelines with insufficient MAOP records, DOT must: •Require the owner/operator to reconfirm the MAOP as expeditiously as economically possible •Determine what actions are appropriate until the MAOP is confirmed. DOT must take into account potential consequence to public safety and the environment, impacts on pipeline system reliability and deliverability, and other factors , as appropriate Requires DOT to issue regulations, within 18 months of enactment, for conducting tests to confirm the material strength of previously untested gas transmission lines in HCAs that operate at a pressure > 30 % SMYS. DOT must consider safety testing methodologies including pressure testing, and other alternative methods, including ILI, determine by DOT to be of equal or greater effectiveness Requires DOT, in consultation with FERC and State regulators, to establish the timeframes for mandated testing (see above) that account for potential consequences to public safety and the environment and that minimize costs and service disruptions		
Report on Pipeline Projects	Requires the Comptroller General of the US to conduct a comprehensive study on the process of obtaining Federal and State permits for projects to construct pipeline facilities. The study must evaluate how	No language included.	No language included.

	long it takes to issue permits, the relationship between States and Federal Government in issuing permits, and recommendations from States for improving the process. The Comptroller must submit a report on the results of the study within 1 year of enactment		
Seismicity	Pipeline operators are required to consider the issue of seismicity of the area when evaluating threats to pipeline operations.	No language included.	No language included. (PG&E already includes seismicity as a factor in its integrity management program and is prioritizing the installation of ASVs in high seismicity areas)
Toxicological Testing (post accident)	Similar to "Incident Notification" issue – see above	P-11-28: Revise your post accident toxicological testing program to ensure that testing is timely and complete.	No language included.

*NTSB recommendations: http://www.ntsb.gov/doclib/reports/2011/par1101.pdf

**Initiatives listed here reflect only what is in the plan filed at the CPUC. PG&E is pursuing other pipeline safety initiatives not listed in that filing, including but not limited to, efforts such as outreach with 1st responders, customer education initiatives, and testing of new leak detection technologies.

*** Cost Recovery - PG&E is only seeking cost recovery for work performed on pre-1970 pipelines beginning in 2012. PG&E shareholders will absorb the cost of all MAOP validation work performed in 2011 and all MAOP validation work for post-1970 pipelines that do not have a record of prior testing. On December 2, 2011, PG&E submitted supplemental testimony addressing cost allocation and rate design principles that were used in its Pipeline Safety Enhancement Plan.
1. To date, PG&E has mailed more than 2 million letters to homes and businesses located within ~2,000 feet of PG&E gas transmission lines.
2. Working with first responders PG&E has:
-Increased educational and interactive session to meet demand
-Developed contact list for all local first responders to facilitate future communication and notification
-Launched PG&E first responder website portal to provide maps, GIS data, and other information

Updated: 12/20/2011