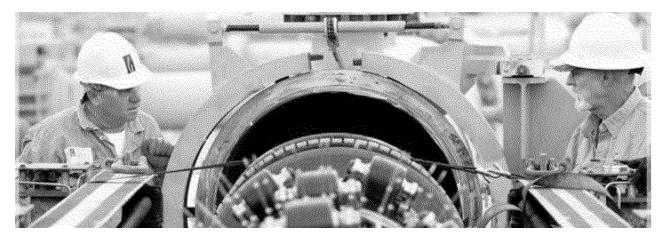


SoCalGas & SDG&E

Pipeline Safety Enhancement Plan

September 16, 2011





PSEP Accomplishes Four Overarching Objectives

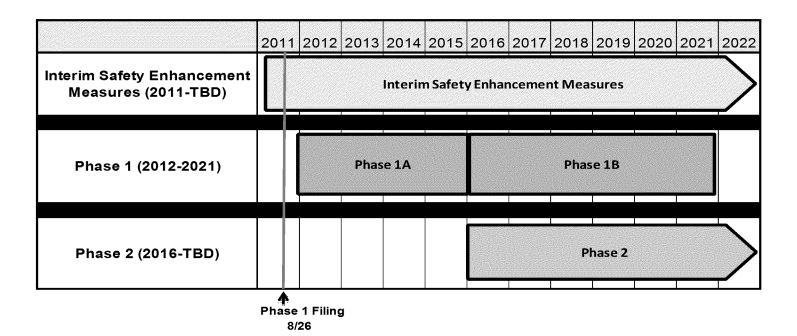
- □ Enhances public safety
- Minimizes customer impacts
- Maximizes the cost effectiveness of infrastructure investments for the benefit of our customers
- Meets the requirements set forth in D.11-06-017 and sets forth a proposed process for meeting all of the Commission's directives



Proposed Pipeline Safety Enhancement Plan is Aggressive

□ Includes all transmission pipelines (approximately 4,000 miles)

- Phase 1 (2011-2021) addresses approximately 950 miles over 10 years
- Phase 2 addresses remainder of system
- □ Phase 1 is divided into two parts (Phase 1A and Phase 1B)
 - Phase 1A (2011-2015) addresses higher priority pipeline segments
 - Phase 1B (2016-2021) addresses replacement of pre-1946 pipelines and longer term replacement projects in populated areas





Proposed Pipeline Safety Enhancement Plan

□ Phase 1 Scope (2011-2021)

- Pressure test (~ 406 miles) and replace (~ 544 miles) pipelines primarily in populated areas that do not have sufficient documentation of strength tested or were installed before 1946 and are not piggable.
- Upgrade 541 existing valves and install 20 new valves to expand remote control and automatic shut off capabilities
- Install approximately 280 miles of fiber optic cable and add methane detection devices at approximately 2,100 locations to allow for enhanced incident detection and damage avoidance
- Development of a fully integrated document management system



□ Our proposed decision-making process takes into account:

- 1) Whether line has been pressure tested
- 2) The length of the pipeline segment
- 3) Whether the segment can be removed from service to pressure test
- 4) Whether the line is piggable
- 5) Whether the line was constructed using pre-1946 construction techniques



Proposed Valve Enhancement Plan Will Enhance Ability to More Quickly Isolate Pipeline Segments

- Proposed Criteria
 - All Pipelines \geq 20" diameter
 - − Pipelines 12" 20" diameter with \ge 30% SMYS
 - Spacing ~ 8 miles (average isolation spacing will be about 6 miles)
 - Shorter spacing intervals where known geological threats are present
- Other Considerations
 - Response time
 - Outage management
 - Backflow control



Proposed Phase 1A Implementation Plan

SoCalGas	2012	2013	2014	2015	Total
Pipeline Replacement (miles)	25	73	74	74	246
Pressure Testing (miles)	73	96	96	96	361
In-Line Inspection (miles)	133	178	178	178	667
Valve Retrofit/Installation (valves)	30	40	51	52	173
SDG&E	2012	2013	2014	2015	Total
Pipeline Replacement (miles)	5	14	15	15	49
Pressure Testing (miles)	<1	<1	<1	<1	1
In-Line Inspection (miles)	-		54		54
Valve Retrofit/Installation (valves)	7	7	8	8	30



PSEP Phase 1A Direct Costs (\$ Millions)

	2011	2012			
	O&M	Capital	O&M	Total	
SoCalGas	6	1,184	256	1,446	
SDG&E	1	229	7	237	
Total	7	1,413	263	1,683	



Potential Execution Challenges and Risks May Increase Costs or Delay Implementation

- Continuity of gas service to customers
 - Pressure testing takes pipelines out of service for 4 6 weeks
 - Risk of test failure requiring further testing or pipeline replacement
 - Operational windows for pressure testing due to winter and summer capacity requirements
- Potential community issues
- Potential permitting delays
 - Environmental: CEQA, land use, water quality
 - Local government permitting and construction requirements
- Availability of material and qualified personnel



□ Funding

- Requesting funding in Gas Safety OIR for Phase 1A (2011 2015)
- Phase 1B (2016 2021) would coincide with SoCalGas and SDG&E's next General Rate Case
- Phase 1B funding and Phase 2 scope, schedule, and funding will be addressed in conjunction with next General Rate Case
- Detailed planning of 2012 construction activities will begin following approval of Memorandum account that was applied for on May 4, 2011

Cost Recovery

- Capital expenditures are rate based with the annual revenue requirement determined in the currently authorized manner
- Revenue requirement and O&M are collected in rates via a gas safety surcharge



Propose to allocate costs to customer classes based on an Equal Percentage of Authorized Margin.

> The following are exemplary rates impacts based on the proposed Phase 1A cost forecast. Standard CARE discount of 20% would apply.

			Incremental Impact of PSEP in Year 2015						
	Current Rates		Default Allocation		Proposed Surcharges		Proposed % Impact		
	SCG	SDG&E	SCG	SDG&E	SCG	SDG&E	SCG	SDG&E	
	Α	В	С	D	E	F	G	Н	
Monthly PSEP Surcharge (\$/mo) Avg .Residential Bill	\$39.08	\$38.76	\$1.65	\$2.31	\$2.82	\$2.83	7.2%	7.3%	
Volumetric PSEP Surcharge (\$/th)									
Core C&I	\$0.31532	\$0.24933	\$0.03542	\$0.04762	\$0.03484	\$0.03484	11.0%	14.0%	
Noncore C&I-D	\$0.07408	\$0.14050	\$0.02761	\$0.02682	\$0.00973	\$0.00978	13.1%	7.0%	
TLS	\$0.02517	\$0.02517	\$0.01471	\$0.01471	\$0.00284	\$0.00286	11.3%	11.4%	