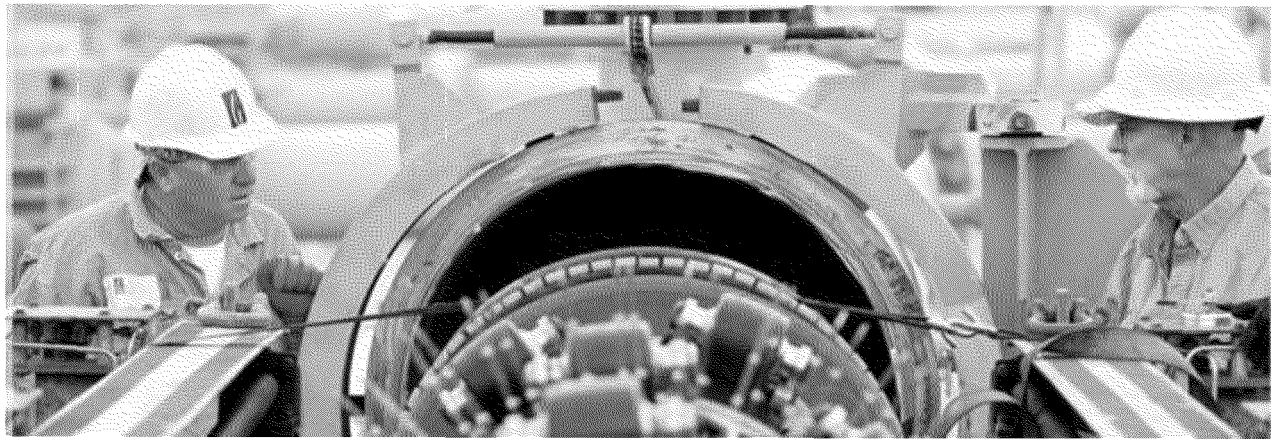


# SoCalGas & SDG&E

## Pipeline Safety Enhancement Plan

October 6, 2011



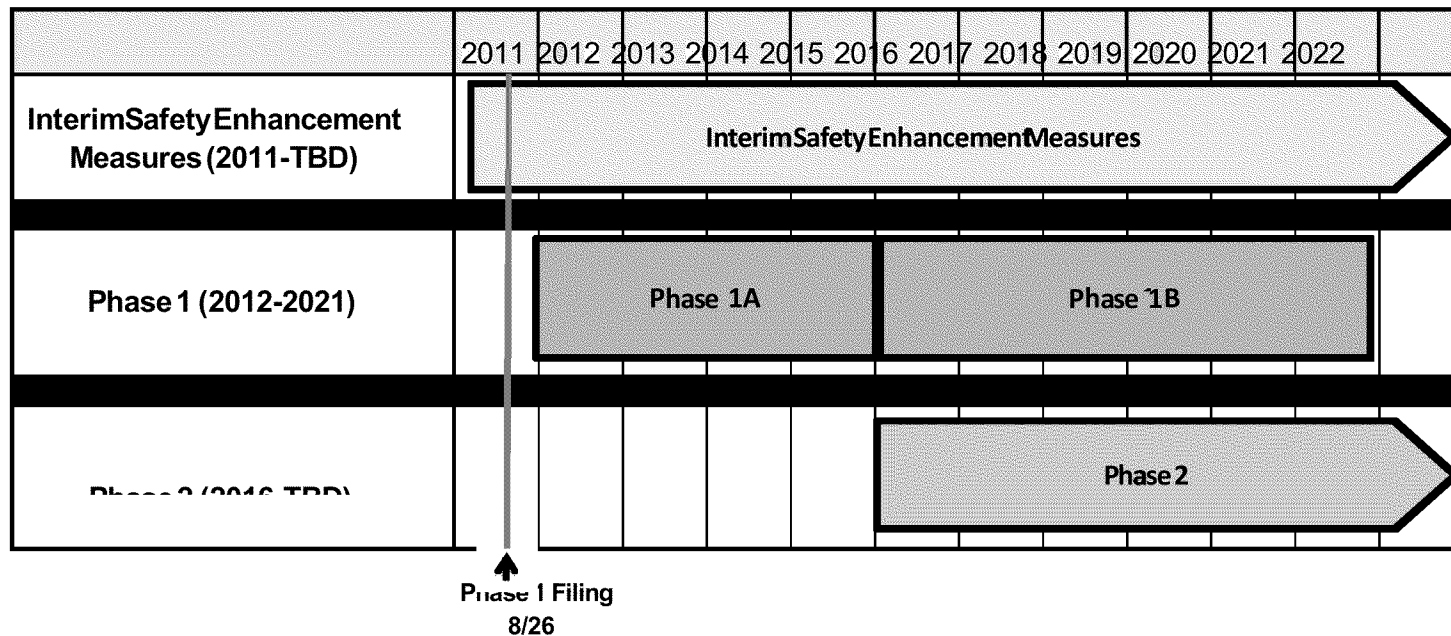
# PSEP Accomplishes Four Overarching Objectives

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- 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

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## 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

# Decision to Test or Replace Assessed Involves Numerous Factors

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- 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 pigable
  - 5) Whether the line was constructed using pre-1946 construction techniques

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

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## Proposed Criteria

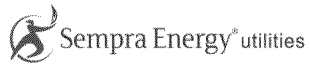
- All Pipelines  $\geq 20$ " diameter
- Pipelines 12" - 20" diameter with  $\geq 30\%$  SMYS
- Spacing  $\sim 8$  miles (average isolation spacing will be about 6 miles)
- Shorter spacing intervals where known geological threats are present

## Other Considerations

- Response time
- Outage management
- Backflow control



# Proposed Phase 1A Implementation Plan



<b>SoCalGas</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Total</b>
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
<b>SDG&amp;E</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Total</b>
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

# Summary of Projected Direct Costs of Implementing Phase 1A of the PSEP

## PSEP Phase 1A Direct Costs (\$ Millions)

	2011	2012-2015		Total
	O&M	Capital	O&M	
<b>SoCalGas</b>	6	1,184	256	1,446
<b>SDG&amp;E</b>	1	229	7	237
<b>Total</b>	7	1,413	263	1,683





# Potential Execution Challenges and Risks May Increase Costs or Delay Implementation

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- 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

# Gas Safety Surcharge to Implement Plan

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## 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

# Estimated Bill and Rate Impacts for Phase 1A

- 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 A	SDG&E B	SCG C	SDG&E D	SCG E	SDG&E F	SCG G	SDG&E H
<b>Monthly PSEP Surcharge (\$/mo)</b> Avg .Residential Bill	\$39.08	\$38.76	\$1.65	\$2.31	\$2.82	\$2.83	7.2%	7.3%
<b>Volumetric PSEP Surcharge (\$/th)</b> 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%