BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Southern California Gas Company (U 904 G) and San Diego Gas & Electric Company (U 902 G) to Proceed with Phase 2 of their Pipeline Safety Enhancement Plan and Establish Memorandum Accounts to Record Phase 2 Costs.

Application 15-06-013 (Filed June 17, 2015)

SOUTHERN CALIFORNIA GAS COMPANY (U 904 G) AND SAN DIEGO GAS & ELECTRIC COMPANY (U 902 G) RESPONSE TO THE APRIL 5, 2016 ASSIGNED COMMISSIONER'S SCOPING MEMO AND RULING

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Dated: April 29, 2016

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Pursuant to the April 5, 2016 Assigned Commissioner's Scoping Memo and Ruling (Scoping Ruling), Southern California Gas Company (SoCalGas) and San Diego Gas & Electric Company (SDG&E) hereby respond and submit: a description of Pipeline Safety Enhancement Plan (PSEP) and Transmission Integrity Management Program (TIMP) projects where SoCalGas and SDG&E are or are planning to reschedule work as a result of the limited availability of the Aliso Canyon storage facility; the current proposed revised schedule for the completion of those projects; and a safety analysis of the risk to the public and employees caused by this rescheduling, with mitigation measures and a verified statement from SoCalGas' highest ranking gas system professional engineer licensed in the State of California.¹

Rescheduling work is a routine part of operating the natural gas system. SoCalGas and SDG&E operate approximately 3,700 miles of transmission lines throughout their territory. The gas system in this vast territory is a dynamic system, and the companies manage work on their system dynamically as issues arise, so that the schedule is not considered fixed and immovable. Even when a scheduled project is planned, it has an inherent contingency associated with it in

¹ See Scoping Ruling at 5-6.

order to build in operational flexibility should that project date need to be changed. As such, it is a common and reasonable practice for any system operator to adjust project work schedules.² These adjustments are made to maintain system safety, reliability, and otherwise respond to unanticipated circumstances (*e.g.*, permitting delays, delayed receipt of materials, land rights issues, operational needs, etc.). Work schedules are designed to enable work to be completed within compliance timeframes in such a way that allows the System Operator the flexibility to operate the system safely and reliably, while maximizing effectiveness. For the projects addressed in this filing, the PSEP projects will still be completed "as soon as practicable"³ and the TIMP-related in-line inspection (ILI) is being scheduled to begin in June of 2016 and is at no risk of exceeding any applicable integrity inspection compliance dates.

I. BACKGROUND

SoCalGas and SDG&E filed Application (A.) 15-06-013 on June of 2015 as a request for authority to proceed with Phase 2 of PSEP. SoCalGas and SDG&E requested authorization to establish memorandum accounts for planning and engineering Phase 2 projects, recording the costs associated with the Phase 2 pre-construction work, and preparing detailed cost estimates for subsequent review and approval by the Commission. A significant objective of the application was to allow for a smooth transition from Phase 1 to Phase 2 so that the PSEP workforce could remain stable and to avoid a loss of talent and expertise during a dip or halt in PSEP-related

² SoCalGas and SDG&E, as a normal course of business, adjust schedules within the allotted compliance timeframe. This is normally done absent approval by the Commission. Here, SoCalGas and SDG&E understand the Commission to be proposing such adjustments to be approved. Some of the projects have already been rescheduled prior to the ruling. While SoCalGas and SDG&E do not oppose this approach because of these unique circumstances, it would be extremely onerous and unnecessary to require future approvals for any changes to schedule on maintenance projects across the system.

³ See, e.g., D.11-06-017, mimeo., at 19.

work.⁴ This approach would allow SoCalGas and SDG&E to continue to maximize the cost effectiveness of PSEP by having a seamless transition between Phase 1 and Phase 2.

The limited scope of the application was first expanded to address other procedural issues related to both Phase 1 and Phase 2 of PSEP. Primarily, interim rate recovery and the schedule and cost recovery processes for future PSEP work. The Scoping Ruling further expands the scope of the proceeding to address PSEP and TIMP projects which have been "proposed to be deferred" due to the limited availability of the Aliso Canyon storage facility. The expansion of scope has led to delay in resolving the application and has resulted in a slowdown in PSEP activity and delay in the initiation of Phase 2 work.

II. THE COMMISSION SHOULD EXPEDITIOUSLY RESOLVE ISSUES WHERE THE RECORD IS COMPLETE AND THE ISSUES HAVE BEEN SUBMITTED FOR COMMISSION ACTION

SoCalGas and SDG&E do not oppose further expanding the scope of this proceeding. The schedule provided to resolve these new issues, however, unnecessarily delays Phase 2 of PSEP and results in continued uncertainty regarding the PSEP schedule and procedural plan. The Scoping Ruling recognizes that the record is complete in two parts of this proceeding – the Phase 2 memorandum account and Energy Division's proposal regarding the filing schedule and interim rate recovery. Both of these issues are wholly separate from the new issue regarding projects rescheduled as a result of the limited availability of the Aliso Canyon storage facility. SoCalGas and SDG&E herby request that the Commission bifurcate the proceeding and resolve the issues where the record is complete and the issues have been submitted for Commission

⁴As discussed below, this objective has not been met and there will be a delay to PSEP-related work as a result of the delay in the issuance of a decision in this proceeding.

action $(A.15-06-013 - Phase 1)^5$ separate and apart from the issues submitted today and not scheduled to be completed until mid-July of this year (A.15-06-013 - Phase 2).⁶ This will provide certainty with respect to the PSEP schedule, will enable SoCalGas and SDG&E to begin the planning and engineering design work necessary to initiate Phase 2 of PSEP, and create a separate phase of the proceeding to focus on scheduling impacts resulting from the limited availability of the Aliso Canyon storage facility.

III. THE SCOPE OF PSEP AND TIMP PROJECTS PLANNED TO BE RESCHEDULED IS LIMITED

The below list of PSEP and TIMP projects are proposed to be or have been rescheduled due to the limited availability of the Aliso Canyon storage facility. Project schedules are dynamic, and this list is a current snapshot of the 2016 PSEP and TIMP rescheduling occurring because of the limited availability of the Aliso Canyon storage facility, and the currently expected revised construction start date.⁷ These are not projects at risk of being completed beyond a required compliance timeframe and SoCalGas and SDG&E continue to explore options to address these projects before the revised construction start date.

⁵ Scoping Ruling at 8 ("The record for addressing the issues of the memorandum accounts, procedural plan and interim rate recovery in this proceeding consists of the application, Staff Proposal, all comments, and the final Staff Proposal. This record is submitted for consideration of the Commission in resolving these issues.")

⁶ Scoping Ruling at 6.

⁷ The projects listed below are those that have been directly impacted by the limited availability of the Aliso Canyon storage facility. Other projects may have been indirectly impacted; rescheduling one project may result in other construction and logistical difficulties such as vendor availability, pipeline availability, or other operational constraints.

Program	Project	Original Construction Start Date	Revised Construction Start Date
PSEP	Line 225 Hydrotest	4/8/2016	4/1/2017
PSEP	Line 404 (Section 9) Hydrotest	5/2/2016	6/13/2016
PSEP	Line 404-406 (Somis Street) Replacement	7/29/2016	5/1/2017
PSEP	Line 406 (Section 3) Hydrotest	4/11/2016	6/13/2016
PSEP	La Goleta Storage Facility Hydrotest	8/1/2016	8/1/2017
PSEP	Line 127 Replacement ⁸	*	*
TIMP	Line 3000 East ILI Reassessment	2/22/2016	6/13/2016

The above projects represent a small fraction of the work SoCalGas and SDG&E engage in on an ongoing basis. SoCalGas and SDG&E operate thousands of miles of transmission pipe and engage in extensive maintenance and construction activity to safely and reliably operate the system. For example, in 2015 SoCalGas and SDG&E planned and completed over 160 transmission and storage pipeline projects that included PSEP and TIMP projects, as well as projects funded through the General Rate Case. SoCalGas and SDG&E also executed multiple unplanned projects, required for the continued safe operation of the pipeline system. All of this work results in outages that must be planned, coordinated, and scheduled in a detailed manner so that system reliability is maintained. As a result, SoCalGas and SDG&E's planned project list necessarily changes and evolves over time.

As such, as prudent operators SoCalGas and SDG&E include in scheduled work a scheduling contingency – i.e. extra time – to enable SoCalGas and SDG&E to reschedule the work should it need to for a variety of reasons in order to maintain operational flexibility. As a

⁸ SoCalGas and SDG&E are planning to accelerate the replacement of Line 127 – a 15-foot section of transmission pipeline located inside the La Goleta Storage field as part of the La Goleta Storage Facility Hydrotest. Accelerating this Phase 1B replacement work will allow SoCalGas and SDG&E to realize operating and cost efficiencies by performing the work during the same shut-in of the La Goleta storage facility and by the same personnel already onsite for planned hydrotest.

result, SoCalGas and SDG&E are able to adjust schedules as needed. Here, SoCalGas and SDG&E are planning to reschedule 4 projects and have already rescheduled 3 projects.

For PSEP, SoCalGas and SDG&E are planning to or have already rescheduled 6 projects that total approximately 4.5 miles of pipe. To put that in perspective, Phase 1A of PSEP alone is anticipated to include 175 miles of hydrotest and replacement work and, at this time, SoCalGas and SDG&E have spent hundreds of millions of dollars and completed construction on over 100 miles of pipe. The PSEP pressure tests have validated the safety of existing lines. The PSEP replacements have enhanced system safety by installing new pipelines, manufactured and installed in compliance with modern standards for safety. And, although there is no compliance date mandated by the Commission or California Public Utilities Code Section 958, SoCalGas and SDG&E continue their efforts to complete PSEP "as soon as practicable."⁹

For TIMP, SoCalGas and SDG&E are not proposing to reschedule any project beyond a compliance date. The lone TIMP project impacted by the limited availability of the Aliso Canyon storage facility – the Line 3000 East ILI Reassessment – is located in remote, non-High Consequence Areas, and is being inspected as part of ongoing TIMP program mitigative measures. The Line 3000 East Reassessment date is established to be no later than October 22, 2017. SoCalGas had originally schedule to perform the ILI in February of 2016. At this time, SoCalGas plans to perform an ILI of Line 3000 East in June of 2016, a schedule shift of 4 months.

For each of the above projects SoCalGas and SDG&E have prepared safety analysis (Attachment A). The safety analysis includes:

• Descriptions of the projects proposed to be rescheduled.

⁹ See, e.g., D.11-06-017, mimeo., at 19.

- Review of pipeline segment operating and maintenance history.
- Review of integrity assessment records.
- Review of prior PSEP pressure testing of related pipeline segments.
- Consideration of mitigation measures.

Additionally, SoCalGas and SDG&E requested analysis from Michael J. Rosenfeld of Kiefner and Associates, Inc. that addresses the reasonableness of rescheduling projects (Attachment B). Finally, SoCalGas and SDG&E have attached a verified statement from Douglas M. Schneider, Vice President - Gas Engineering & System Integrity, which verifies that the proposed rescheduling is justified (Attachment C).

IV. EARLIER COMMUNICATIONS WITH COMMISSION STAFF

The Scoping Ruling indicates that the Director of the Commission's Safety and Enforcement Division (SED) informed President Picker of the potential need to defer certain transmission pipeline projects to maintain reliable energy supplies in the Los Angeles basin while the Aliso Canyon storage facility has limited availability.¹⁰

In the months prior to today's filing, SoCalGas and SDG&E responded to SED inquiries in an effort to provide SED with information on all construction projects planned for 2016 and 2017 that could be impacted by Aliso Canyon-related gas delivery constraints. These projects were not solely related to PSEP and TIMP. And these communications were based on a forecast of what could happen as a result of the then unknown impacts (e.g., operational constraints) of Aliso Canyon storage facility unavailability.

At this time, the projects discussed above are the only PSEP and TIMP projects SoCalGas and SDG&E have identified as needing to be rescheduled in 2016 as a result of the

¹⁰ Scoping Ruling at 5.

limited availability of the Aliso Canyon storage facility.¹¹

V. CONCLUSION

Consistent with industry practice, SoCalGas and SDG&E routinely schedule and reschedule pipeline work based on operational and maintenance data, system requirements, permitting requirements, and other factors. Rescheduling operations and maintenance work is a common industry practice,¹² and occurs regularly on SoCalGas and SDG&E's over 3,700 mile transmission system. Here, SoCalGas and SDG&E have rescheduled 3 projects and are planning to reschedule 4 additional projects. The Commission should find this rescheduling reasonable.

Additionally, to enable PSEP work to proceed as soon as practicable, the Commission should resolve issues where the record is complete and issues have been submitted for Commission action: the Phase 2 memorandum account and Energy Division's proposal regarding the filing schedule and interim rate recovery. This will provide greater certainty on how Phase 1 should proceed and enable Phase 2 work to begin.

Respectfully submitted,

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Dated: April 29, 2016

¹¹ For the purpose of creating this analysis, SoCalGas and SDG&E have conservatively assumed the Aliso Canyon storage facility will be operational in 2017 and therefore have limited the analysis to PSEP and TIMP projects that were scheduled for 2016.

¹² See Attachment B.(Rescheduling PSEP and IM Activity)

Attachment A

Safety Analysis for Pipelines Projects Rescheduled Due to the Limited Availability of the Aliso Canyon Storage Field

1.0 PURPOSE

Conduct a safety analysis of Pipeline Safety Enhancement Plan (PSEP) and Transmission Integrity Management Program (TIMP) pipeline projects that are to be rescheduled in response to the limited availability of the Aliso Canyon storage field. Compliance with applicable pipeline safety regulations will not be compromised as a result of the revised schedule.

2.0 BACKGROUND

The California Public Utilities Commission (CPUC) issued a Scoping Memo and Ruling (Ruling) on April 5, 2016 requesting additional information on pipeline maintenance projects scheduled to be performed as part of the PSEP and TIMP. The Ruling requires that Southern California Gas Company (SoCalGas) and San Diego Gas & Electric Company (SDG&E) file an explanation of the PSEP and TIMP projects to be rescheduled due to the limited availability of the Aliso Canyon storage field. The Ruling requires SoCalGas and SDG&E include a "comprehensive description of projects (with pipeline or pipeline segment numbers) proposed to be deferred, the revised schedule for completion, and a complete safety analysis of the risk to the public and employees caused by this delay, with mitigation measures and including a verified statement from its highest ranking gas system professional engineer licensed in the State of California attesting that, on balance, maintaining system reliability justifies the proposed delay."¹

The PSEP and TIMP projects to be rescheduled are located within the SoCalGas service territory. At this time, the limited availability of the Aliso Canyon storage field does not impact PSEP and TIMP projects planned within the SDG&E service territory. Compliance with CPUC General Order 112-E/F and Title 49 CFR Part 192 is maintained with the new schedule. Projects are planned, coordinated, and actively managed. Schedules include contingencies and are planned to be completed within timeframes or "windows" prior to

¹ Ruling at 5-6.

compliance dates.² The rescheduling of projects within these windows is a routine activity and performed in response to numerous factors including permitting, weather, in-line inspection tool availability, operational considerations, and contractor availability. The changes in schedule in response to the limited availability of Aliso Canyon storage field are being managed in the same manner as other operational constraints; the limited availability of Aliso Canyon is just one example of numerous activities that must be taken into account during project scheduling.

² Maintenance and inspection work is typically required to be completed in a compliance window. Title 49 CFR Part 192 often provides compliance "windows" in terms of a certain number of inspections per month(s), or year(s), with an interval not to exceed so many months. For example, an inspection may be required at least once per calendar year, with intervals not exceeding 15 months. The frequency of inspection has been established in the regulations to identify abnormal operating conditions in accordance with the safety risk posed. For TIMP, a seven year reassessment interval is typically established based on previous inspection results and resulting remediation activities. Recently the Pipeline and Hazardous Safety Administration (PHMSA) expanded the reassessment interval to be anytime in the calendar year that the reassessment is due, rather than precise 7 year inspection, adding approximately 11 months to complete reassessments that were previously inspected in January. (*See* PHMSA FAQ-41, published 2/22/2016, available at <u>https://primis.phmsa.dot.gov/gasimp/faqs.htm</u>).

3.0 SAFETY ANALYSIS REVIEW ELEMENTS

To complete the safety analysis of the rescheduled projects, pipeline information pertaining to pipeline operating and maintenance history was gathered and reviewed. Analysis of the information gathered either confirms that pipeline performance is satisfactory or indicates additional actions should be considered. SoCalGas reviewed maintenance records to conduct a safety analysis for the PSEP and TIMP-related projects that have been or are planned to be rescheduled as a result of the limited availability of the Aliso Canyon storage field. The elements considered in the analysis include pipeline:

- (1) patrol history;
- (2) leak survey history;
- (3) incident history;
- (4) records of documented safety related conditions; and
- (5) cathodic protection history.

These five (5) elements are universal indicators of the safety condition of a natural gas pipeline and form the basis for confirming the integrity of a system. Maintenance records for each element were reviewed for the prior 12-month period of operation beginning April 2015. Additionally, where available, additional integrity data was also considered as part of the safety analysis, as described below in Section 4.0. The flowchart depicted in Appendix A provides an overview of the safety analysis performed and two possible outcomes. The type of data and information gathered for each element is provided in the following subparagraphs. This data was gathered and reviewed for each project to be rescheduled (see Appendix B for a summary of the results of the safety analysis and Appendix C for a description of the rescheduled projects).

3.1 Patrol History

Transmission Pipeline patrols are required per 49 CFR 192.705. Patrol records document observations of significant physical movement or potential external loading along the asset's right-of-way. Evidence of recent third party activity, indications of landslides, flooding, or other external forces are examples of safety observations that are documented during pipeline patrols.

3.2 Leak Survey History

Transmission Pipeline Leakage Surveys are required per 49 CFR 192.706.³ Leak surveys are used to identify leak indications that affect the integrity or operation of the pipeline. The survey records provide indications of possible leakage sources such as unreported third party damage or time-dependent threats such as corrosion. Confirmed leakage on a transmission pipeline is addressed and may be an indication of the condition of the pipeline.

3.3 Incident History

Pipeline records were also reviewed for any occurrence of an "incident" per 49 CFR 191.3, which states as follows:

- (1) An event that involves a release of gas from a pipeline, or of liquefied natural gas (LNG), liquefied petroleum gas, refrigerant gas, or gas from an LNG facility, and that results in one or more of the following consequences:
 - (a). Death, or personal injury necessitating in-patient hospitalization;
 - (b). Estimated property damage of \$50,000 or more, including loss to the operator and others, or both, but excluding cost of gas lost;
 - (c). Unintentional estimated gas loss of three million cubic feet or more;

³ General Order 112-F, section 143.1 has requirements that are in addition to the requirements of 49 CFR 192.706. Implementation of the new General Order 112-F requirements are in process to be completed in 2017, as required by CPUC Decision 15-06-044.

- (2) An event that results in an emergency shutdown of an LNG facility. Activation of an emergency shutdown system for reasons other than an actual emergency does not constitute an incident.
- (3) An event that is significant in the judgment of the operator, even though it did not meet the criteria of paragraphs 1 or 2 of this definition.

3.4 Safety Related Conditions

Pipeline records were reviewed for safety related conditions as set forth in 49 CFR 191.23. A safety related condition has exceeded a critical safety level and has a direct impact on the pipeline's ability to operate at its prescribed maximum allowable operating pressure (MAOP). The following are examples of safety related conditions:

- (1) In the case of a pipeline (other than a LNG facility) that operates at a hoop stress of 20 percent or more of its specified minimum yield strength, general corrosion that has reduced the wall thickness to less than that required for the maximum allowable operating pressure, and localized corrosion pitting to a degree where leakage might result.
- (2) Unintended movement or abnormal loading by environmental causes, such as an earthquake, landslide, or flood, that impairs the serviceability of a pipeline or the structural integrity or reliability of an LNG facility that contains, controls, or processes gas or LNG.
- (3) Any crack or other material defect that impairs the structural integrity or reliability of an LNG facility that contains, controls, or processes gas or LNG.
- (4) Any material defect or physical damage that impairs the serviceability of a pipeline that operates at a hoop stress of 20 percent or more of its specified minimum yield strength.

- (5) Any malfunction or operating error that causes the pressure of a pipeline or LNG facility that contains or processes gas or LNG to rise above its maximum allowable operating pressure (or working pressure for LNG facilities) plus the build-up allowed for operation of pressure limiting or control devices.
- (6) A leak in a pipeline or LNG facility that contains or processes gas or LNG that constitutes an emergency.
- (7) Inner tank leakage, ineffective insulation, or frost heave that impairs the structural integrity of an LNG storage tank.
- (8) Any safety-related condition that could lead to an imminent hazard and causes (either directly or indirectly by remedial action of the operator), for purposes other than abandonment, a 20 percent or more reduction in operating pressure or shutdown of operation of a pipeline or an LNG facility that contains or processes gas or LNG.

3.5 Cathodic Protection History

Cathodic Protection of Transmission pipelines is required per 49 CFR Part 192, subpart I. Cathodic protection is a preventative method for mitigating corrosion on a buried pipeline by applying an electrical current to the surface of the structure. Inadequate cathodic protection may lead to increased corrosion activity. Corrosion control records provide indications of the effectiveness of the cathodic protection system.

4.0 ADDITIONAL DATA EVALUATION WHEN AVAILABLE

In addition to the five elements listed in Section 3.0, additional evaluation was conducted as part of this safety analysis where records were available from either:

- 1. Integrity assessments, such as those produced from an In-Line Inspection (ILI) or Direct Assessment (DA), or
- 2. Prior PSEP pressure tests on related pipeline segments.

When available, the most recent assessment records were reviewed to confirm that the reassessment or inspection schedule of a pipeline remained unchanged in accordance with provisions in 49 CFR 192.937. In alignment with the State's and CPUC's goal to have gas transmission pipelines accessible to ILI devices, SoCalGas and SDG&E have and continue to retrofit and in-line inspect transmission pipelines. ILI data is available for Pipelines 127, 225, 404, 406, and 3000 East and was reviewed as part of the safety analysis.

Additionally, pressure testing conducted as part of PSEP provides information on the condition of segments of pipe similar to those identified in the listing of rescheduled projects. Here, similar sections of Lines 404 and 406 were successfully pressure tested in 2014 and 2015.

5.0 RESULTS

5.1 **PSEP Project Safety Assessments**

The results of the safety analysis for the PSEP-related projects (Line 127 Replacement, Line 225 Hydrotest, Line 404 Hydrotest, Line 406 Hydrotest, Line 404-406 Replacement, and the La Goleta Storage Facility Hydrotest) are tabulated in Appendix B. The results show that within the past 12 months there were no observations of safety concerns from patrol records, leaks, incidents, safety related conditions, or out of compliance cathodic protection measurements. Additionally, no integrity concerns were identified as part of the evaluation from either (1) the most recent ILI conducted for Pipelines 127, 225, 404, and 406; or (2) the review of pressure test data for similar sections of Pipelines 404 and 406.

Additionally, as part of the PSEP interim safety measures ordered in D.11-06-017,⁴ SoCalGas implemented bi-monthly leak surveys and patrols. These additional leak surveys and patrols will continue until the line segments are addressed as part of PSEP. Per our standard practice, maintenance and inspection activities will continue and will be monitored to identify any change in condition that could impact the safety of the pipeline.

These findings indicate that the PSEP projects to be rescheduled due to the limited availability of the Aliso Canyon storage field are being operated in compliance with safety code requirements and are safe to operate until the rescheduled PSEP work is completed.

5.2 TIMP-Related Project Safety Assessment

The results of the safety analysis for Pipeline 3000 East show no reported incidents, no safety related conditions, and no out of compliance cathodic protection reads.⁵ The results do show, however, that there were occurrences of leakage within the last 12-month period of operation. In response to the leakage, repairs have been completed.

These leaks were identified after the project had been rescheduled. Efforts are underway to perform the ILI of this pipeline in June of 2016. In addition, mitigation measures have been implemented: (1) the section of pipeline from South Needles compressor station to Newberry compressor station is operating at a maximum pressure of 20% below its MAOP to establish an additional safety margin and (2) SoCalGas has implemented monthly leak surveys and patrols. Line 3000 East is being operated in compliance with safety code requirements and is safe to operate until the ILI and any remediation efforts are completed. Per our standard practice, maintenance and inspection activities will continue and

⁴ D.11-06-017, mimeo., at 31 (Ordering Paragraph 5).

⁵ There were, however, cathodic protection measurements that were out of tolerance. Specifically, one (1) existing rectifier has a depleted anode bed and eight (8) pipe to soil reads were out of tolerance per 2015 read cycle. New anode beds are planned to resolve these low reads.

will be monitored to identify if any change in conditions that could impact the safety of the pipeline and drive additional mitigation measures to address safety.

6.0 CONCLUSIONS

The above safety analyses and results indicate that the pipelines discussed above and scheduled to be the subject of upcoming PSEP and TIMP-related work are being operated and maintained safely. For PSEP, the absence of significant findings validates that rescheduling the projects does not appreciably impact safety. For Line 3000 East, efforts to complete work as soon as possible coupled with interim safety measures (reduced operating pressure and increased frequency of leakage and patrol surveys) supports the reasonableness of the limited rescheduling.

Appendix A

Safety Analysis Overview for Rescheduled PSEP and TIMP Projects



Appendix B

Line Number	From MLV	To MLV	Patrol History (significant findings)	Leaks	Reported Incidents (49 CFR 191.3 defined)	Safety Related Conditions (49 CFR 191.23 defined)	CP out of compliance	Notes
127	GT-NG-044- 002, 003, 127- 0.00-0	1004-3.43-0	NO	NO	NO	NO	NO	N/A
225	225-59.88-0 MLV 8	225-73.76-0, MLV 9A	NO	NO	NO	NO	NO	N/A
404	404-44.59-0 404-20.80-0	404-51.46-0 404-20.80-18	NO	NO	NO	NO	NO	N/A
406	406-44.59-0 406-19.39-0	406-47.14 406-19.39-11	NO	NO	NO	NO	NO	N/A
3000	3000-8.50-0 (S. Needles)	3000-124.59-1 (Newberry)	NO	YES*	NO	NO	NO**	 * Two leaks were identified in March 2016. Leaks were repaired by cylindrical replacement.⁶ ** One existing rectifier has a depleted anode bed and eight pipe to soil reads were out of tolerance, per 2015 read cycle. New anode beds are planned to resolve these low reads.
La Goleta	From various facility injection and withdrawal system valves	 1. GNG-001 Valve FIW-004 2. GNG-004 Valve FIW-002 3. GNG-004 Valve FIW-17 4. Line-247 Valve 247-3 & PV-632 5. Line-257 Valves 257-3 & 257-4 6. ESD Blowdown Stack 	NO	NO	NO	NO	NO	N/A

Results of Safety Analysis Review for Pipelines Rescheduled Because of the Limited Availability of Aliso Canyon

⁶ On April 26, 2016, a leak survey revealed additional potential leakage that is in the process of being investigated.

Appendix C

Description of Projects to be Rescheduled Due to the Limited Availability of the Aliso Canyon Storage Facility

Program	Project	Project Description
PSEP	Line 127 Replacement	The Line 127 Replacement is a 0.003 mile replacement of transmission pipeline insi
		Goleta storage field. The section of Line 127 being replaced was installed in 1944.
		rescheduled for August of 2017 and is expected to take approximately
PSEP	Line 225 Hydrotest	The Line 225 Hydrotest is a 3.24 mile hydrotest north of the City of Castaic. The pipe
		predominantly in 1959 and 1967. The hydrotest has been rescheduled for April of 20
		approximately 3 months.
PSEP	Line 404 (Section 9) Hydrotest	The Line 404 (Section 9) Hydrotest is a hydrostatic test of 0.41 miles of pipe throug
		City of Woodland Hills. The test is planned to begin inside SoCalGas' property of Wes
		the intersection of Burbank Blvd. and Manton Ave. The pipe to be tested was installe
		hydrotest has been rescheduled for June of 2016 and is expected to take appr
PSEP		The Line 404-406 (Somis Station) Replacement is a replacement of 0.05 miles of pipe
	Line 404-406 (Somis Street)	in SoCalGas' Somis Pressure Regulating Station in the City of Somis. The sections o
	Replacement	replaced were installed in 1951. The replacement has been rescheduled for May of 2
		approximately 6 months.
PSEP	Line 406 (Section 3) Hydrotest	The Line 406 (Section 3) Hydrotest is a hydrostatic test of 0.43 miles of pipe throug
		City of Woodland Hills. The test is planned to begin in SoCalGas' property of Westsic
		intersection of Burbank Blvd. and Manton Ave. The pipe to be tested was installed
		The hydrotest has been rescheduled for June of 2016 and is expected to take ap
PSEP	La Goleta Storage Facility Hydrotest	The La Goleta Storage Facility Hydrotest is an approximately 0.31 mile hydrotest of
		within the facility. The hydrotest has been rescheduled for August of 2017 and
		approximately 3 months.
TIMP	Line 3000 East ILI Reassessment	Line 3000 East ILI Reassessment is a 116 mile in-line inspection of predominantly 195
		through Class 1 (non-HCA) areas in San Bernardino County, from the Compressor Stat
		Compressor Station near Newberry Springs CA. The in-line inspection has been resch
		2016 and is expected to take approximately 2 months.
1		

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e on Line 404 and Line 406 on Line 404 and 406 being 2017 and is expected to take

gh a residential area in the de Station and end near the in 1949, 1951, and 1952. oproximately 3 months.

multiple storage pipelines nd is expected to take

57 vintage pipe that will run tion South of Needles to the heduled for June and July of

Attachment B

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April 29, 2016

Mr. Douglas Schneider Vice President of Gas Engineering and System Integrity Southern California Gas and San Diego Gas & Electric

Project Number: 0153-1602/07.017984 Re: Rescheduling PSEP and IM Activity

Dear Mr. Schneider:

This letter responds to your request for an opinion as to the significance or effect of rescheduling activities in Southern California Gas (SoCalGas) Pipeline Safety Enhancement Plan (PSEP) or Transmission Integrity Management Plan (TIMP). SoCalGas is rescheduling some pressure testing, integrity assessments, replacements and other pipeline projects that are part of these programs to address operational flexibility needs in its pipeline system as a result of the loss of gas storage capacity. The new schedule will still result in the projects being completed in accordance with regulatory requirements as specified in Title 49 Code of Federal Regulations Part 192 and the California Public Utilities Commission (CPUC) Decision 14-06-007, approving the PSEP.

General safety-related tasks

The scheduling of safety-related work within a flexible time frame or "window" is common for pipeline maintenance, and is necessary to address logistics, resource availability, permitting and other factors. For example, 49 CFR 192.465 – External corrosion control monitoring – requires certain pipelines to be tested once each calendar year, but with intervals not exceeding 15 months. The Operator has some flexibility in meeting this requirement to allow for unplanned circumstances that may interfere with meeting a rigid deadline. The frequency of the testing (once per calendar year) and the maximum interval between tests (15 months) has been set as a reasonable period to identify abnormal operating conditions for external corrosion control monitoring. While identifying an abnormal operating condition sooner rather than later is generally better, the frequency of testing and the "window" to complete the testing has been established in a manner that addresses the risk associated with a delayed test.

The same principle of a flexible window within which to complete a specified task is applied throughout Part 192 to numerous important periodic checks, inspections, and tests of the safety of the pipeline system. These tasks include cathodic protection system monitoring, internal corrosion coupon checks, pipeline patrols, update of operation and maintenance procedures, testing of manual pipeline operations, tests of SCADA system alarm set points, monitoring pipeline controller workloads, tests of pressure regulators, tests of facility remote shutdowns, tests of block valve operation, and other tasks that are specified to occur on a periodic basis. Generally, the specified time windows allow for a flexible time extension of 25% of the specified



interval. Rescheduling of routine operations and maintenance tasks important to safety is a common practice and is contemplated and allowed for in pipeline safety regulations.¹

Transmission integrity management planning

Pipelines inspected using in-line inspection and direct assessment in accordance with transmission integrity management planning (TIMP) use inspection results and remediation efforts to establish the next date for inspection. The inspection can be performed any time prior to that date without an appreciable change in the safety of the pipeline. Moreover, the interval may be extended to be completed within a specified number of calendar years rather than actual years.² A prudent Operator also reviews data to identify any new conditions which would change the inspection schedule. Verifying that it is unnecessary to perform an inspection sooner is a requirement of TIMP regulations. The Management of Change process within the integrity management plan was developed in anticipation of the need to revise planned activities.

Pipeline Safety Enhancement Plan

The Pipeline Safety Enhancement Plan (PSEP) implemented by SoCalGas is a California and CPUC-required process for revalidating the Maximum Allowable Operating Pressure (MAOP) of certain natural gas pipelines. These pipelines are operating in accordance with Federal code. PSEP requires these transmission pipelines to either be replaced or be pressure tested. The PSEP application submitted by SoCalGas and San Diego Gas & Electric (SDG&E) specifically recognized that flexibility in scheduling of work was needed.³

SoCalGas and SDG&E are Operating Consistent with Industry Practice

Consistent with industry practice, SoCalGas schedules inspections, pressure testing, and pipe replacements, and these schedules are subject to change based upon operational and maintenance data, system requirements, permitting requirements, and other factors. Should data indicate that there could be an adverse effect from changing the schedule, the Operator takes actions to mitigate the adverse effect, such as reducing the pressure in the pipeline until the inspection or testing can be completed. Absent pipeline-specific data indicating otherwise, there are expected to be no adverse effects of rescheduling planned inspections within an established "window" or completing PSEP pressure testing within several months to a year or more of the initial schedule.

¹ See 49 CFR 192, Paragraphs 192.465(a,b,c,e), 192.477, 192.605(a), 192.631(c)(3,4), 192.631(e)(3,4,5), 192.631(h), 192.705(b), 192.706, 192.706(a,b), 192.721(b)(1,2), 192.723(b)(1,2), 192.731(c), 192.739(a), 192.743(a), 192.745(a), 192.747(a), 192.749(a). ² FAQ-41. Does the requirement that gas pipeline operator establish assessment intervals not to exceed a specified number of years mean calendar years (i.e., pipe assessed in 2004 must be re-assessed during 2011) or actual years? [06/09/2004] [Revised 02/22/2016] Answer: Re-assessments must be conducted in accordance with an operator's procedures for determining the appropriate reassessment interval. Prior to the enactment of the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011, the maximum interval was set using actual years from the date of the previous assessment. Effective January 3, 2012, this was modified such that the maximum interval may be set using the specified number of calendar years. For example, a pipe segment assessed on March 23, 2004 with a seven year interval must be re-assessed before December 31, 2011. (Answer abridged.)

³ December 11, 2011, Amended Pipeline Safety Enhancement Plan of SoCalGas and SDG&E Pursuant to D.14-06-017, Requiring All California Natural Gas Transmission Operators to File a Natural Gas Transmission Pipeline Comprehensive Pressure Testing Implementation Plan, at p. 18, Footnote 31: "Although SoCalGas and SDG&E intend to use this prioritization and sub-prioritization process, the final implementation schedule may change as a result of system conflicts, logistical coordination, and incorporation of information obtained through interim inspections and assessments."



This completes my summary about changing schedules within compliance "windows", rescheduling of PSEP pressure testing, and the effect on safety associated with schedule changes. If you have questions or comments please feel free to contact me.

Sincerely,

My Tomel

Michael J. Rosenfeld, PE Chief Engineer

Approved by

W. By Maris

W. Greg Morris, PE Senior Principal Engineer

MJR:tb



DISCLAIMER

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Attachment C

Verified Statement of Douglas M. Schneider, PE

- I, Douglas M. Schneider, state as follows:
 - I am currently Vice President of Gas Engineering & System Integrity at SoCalGas and SDG&E.
 - I am a registered Professional Engineer with a Master's Degree in Business Administration from California State University, Fullerton, and a Bachelor of Arts degree in Chemistry from Rutgers University.
 - I am currently SoCalGas and SDG&E's highest ranking gas system professional engineer licensed in the State of California (PE# CR1081).
 - 4. I have reviewed the safety analysis in support of rescheduling the identified projects.
 - 5. In my professional judgment, the rescheduling results in no appreciable change to safety and, on balance, maintaining system reliability justifies the rescheduling.

I declare under penalty of perjury that the foregoing is true and correct.

Executed at Los Angeles, California, this 29th day of April 2016.

/s/ Douglas M. Schneider

DOUGLAS M. SCHNEIDER Vice President - Gas Engineering & System Integrity SOUTHERN CALIFORNIA GAS COMPANY SAN DIEGO GAS & ELECTRIC COMPANY