

Public Utilities Commission STATE OF CALIFORNIA

Citation Date: January 23, 2015 **Citation #:** ALJ 274 15-01-002

Safety and Enforcement Division Investigation Report

<u>December 17, 2013 PG&E Transmission Integrity Management Program Audit Finding – Notice of Violation</u>

The Utility had deficiencies in its Transmission Integrity Management Program, did not adequately apply necessary criteria for some integrity assessments, and did not timely implement necessary preventive and mitigative measures; therefore, the Utility violated

Title 49, CFR §§ 192.925(b)(3), 192.935(a), and 192.937(a)(b)

Utility: Pacific Gas & Electric Company (PG&E)

Utility Operating Unit: PG&E's Gas Business Unit

Subject of Report: Audit Finding – PG&E's Risk Management Procedure-09 (RMP-09) for External Corrosion Direct Assessment (ECDA) does not have any provisions to require direct examinations of all immediate indications identified as part of performing the first time ECDA.

PG&E grouped immediate adjacent indications for first time assessments and did not directly examine all immediate indications discovered as a result of indirect assessments for the first time ECDA.

PG&E neither created Long Term Integrity Management Program (LTIMP) reports in a timely manner nor did it timely implement necessary preventive and mitigative (P&M) measures identified as a result of its assessments.

Additionally, PG&E did not have any timeframes in its Risk Management Procedure (RMP)-17 to create an LTIMP and to complete the implementation of P&M measures following assessments.

Moreover, PG&E did not have complete procedures on how to perform Continual Evaluation for the annual Baseline Assessments and did not begin the Continual Evaluation process for most of its transmission pipeline system following integrity assessments.

Audit Title: General Order 112-E Audit of PG&E's Transmission Integrity Management

Program

Date of Audit: August 27-31, 2012 and from September 10-14, 2012

SED Investigator: Banu Acimis

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Summary:

- 1. Title 49, CFR §192.925 What are the requirements for using External Corrosion Direct Assessment (ECDA)? (Probable Violation # 4 in SED's audit letter)
 - (a) Definition. ECDA is a four-step process that combines preassessment, indirect inspection, direct examination, and post assessment to evaluate the threat of external corrosion to the integrity of a pipeline.
 - (b) General requirements. An operator that uses direct assessment to assess the threat of external corrosion must follow the requirements in this section, in ASME/ANSI B31.8S (incorporated by reference, see §192.7), section 6.4, and in NACE SP0502-2008 (incorporated by reference, see §192.7). An operator must develop and implement a direct assessment plan that has procedures addressing preassessment, indirect examination, direct examination, and post-assessment. If the ECDA detects pipeline coating damage, the operator must also integrate the data from the ECDA with other information from the data integration (§192.917(b)) to evaluate the covered segment for the threat of third party damage, and to address the threat as required by §192.917(e)(1).
 - (3) Direct examination. In addition to the requirements in ASME/ANSI B31.8S section 6.4 and NACE SP0502-2008, section 5, the plan's procedures for direct examination of indications from the indirect examination must include—
 - (i) Provisions for applying more restrictive criteria when conducting ECDA for the first time on a covered segment;
 - Section 5.9.1.2 of NACE RP0502-2002 states "When ECDA is applied for the first time, the pipeline operator should not downgrade any indications that were originally placed in the immediate or scheduled priority category to a lower priority category."
 - Section 5.2 Prioritization of NACE RP0502-2002 states in part:
 - "5.2.1 The pipeline operator shall establish criteria for prioritizing the need for direct examination of each indication found during the Indirect Inspection Step.
 - 5.2.1.1 Prioritization, as used in this standard, is the process of estimating the need for direct examination of each indication based on the likelihood of current corrosion activity plus the extent and severity of prior corrosion."

The California Public Utilities Commission's (CPUC) Safety and Enforcement Division (SED) audit letter stated the following:

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"SED noted that for the first time ECDA, PG&E reclassifies some of the immediate indications found as a result of indirect assessment based on some of its direct examinations. The NACE standard states that all immediate indications should be excavated if found as a result of indirect examination when ECDA is applied for the first time. If it is a first time ECDA, PG&E cannot use a sample of the immediate indications as a basis for reclassifying all the remaining immediate indications without conducting a direct examination of all identified immediate indications.

PG&E must directly examine all immediate indications found as a result of indirect assessment for the first time ECDA unless PG&E has a documented technical justification for not implementing the NACE recommendation."

2. Title 49, CFR §192.935 What additional preventive and mitigative measures must an operator take? (Probable Violation # 5 in SED's audit letter)

(a) General requirements. An operator must take additional measures beyond those already required by Part 192 to prevent a pipeline failure and to mitigate the consequences of a pipeline failure in a high consequence area. An operator must base the additional measures on the threats the operator has identified to each pipeline segment. (See §192.917) An operator must conduct, in accordance with one of the risk assessment approaches in ASME/ANSI B31.8S (incorporated by reference, see §192.7), section 5, a risk analysis of its pipeline to identify additional measures to protect the high consequence area and enhance public safety. Such additional measures include, but are not limited to, installing Automatic Shut-off Valves or Remote Control Valves, installing computerized monitoring and leak detection systems, replacing pipe segments with pipe of heavier wall thickness, providing additional training to personnel on response procedures, conducting drills with local emergency responders and implementing additional inspection and maintenance programs.

SED's audit finding stated the following:

"PG&E established its procedure RMP-17, LTIMP to identify acceptable preventive and mitigative (P&M) measures for pipeline segments. The LTIMP provides details about how to perform a continual evaluation on PG&E's covered segments of pipeline. PG&E may also use the procedure as a basis for selection of P&M measures on selected non-covered segments with similar characteristics and threat susceptibility.

RMP-17 states that "The LTIMP process includes conducting a review following an integrity assessment, identifying P&M measures, and performing continual evaluations. The integrity assessment review integrates data and develops P&M measures based on threats identified for each pipe segment."

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Section 6.4 Communication Findings of RMP 17, states "The LTIMP Engineer shall communicate findings from this process to the relevant groups. All re-assessment determinations shall be communicated to the Risk Group and the group performing the assessment. Where P&M measures have been identified, the groups responsible for implementing the measures shall be notified. Where updates and/or changes are needed to GIS, the Mapping Group shall be notified. Additional information regarding communication of findings is provided in Section 9."

Section 9, Documentation and Communication of RMP-17 states "Communications shall be conducted as often as necessary to ensure that appropriate individuals have current information about the pipeline system. Communications shall take place periodically and as often as necessary to communicate significant changes in the pipeline's integrity. Items requiring immediate action or compliance related concerns shall be communicated to the responsible work group by the LTIMP Engineer and appropriately documented."

1. SED reviewed several LTIMP reports and found that PG&E did not generate many of them in a timely manner.

For example, PG&E did not create the LTIMP for L-109-2003 until 2009. Since PG&E conducted the baseline assessment for this project in 2003, it was due for a reassessment in 2010. In fact, the LTIMP for this project established the reassessment interval to be five years since some segments were operating at greater than 50% SMYS. SED also noted that since PG&E generated the LTIMP for L-109-2003 six years after it performed its assessment, PG&E completed re-assessments of some of the segments of L-109 before it addressed all of the mitigative and preventive measures that it identified in the LTIMP.

Additionally, PG&E identified in the LTIMP one high priority P&M measure affecting four stations. One of the stations had a monitoring point installed, but there were no records available for review during the audit indicating how PG&E addressed the other stations. The other two lower priority P&M measures which involved inadequate cathodic protection (CP) levels had no records indicating that PG&E engaged in corrective action to address the non-compliance. PG&E representatives indicated that these would be included in the next self-report notification update.

SED noted that since PG&E did not create the LTIMP reports in a timely manner after it completed the assessments, PG&E might have not addressed and promptly communicated to the responsible work groups some P&M measures for implementation.

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Section 9.2 of RMP-17 requires that if PG&E cannot complete the work within the given time frame, the Project Lead shall provide justification for the extension and ensure the integrity of the pipeline will not be compromised.

PG&E created the LTIMP for L-109-2003 six years after the assessment was completed. During the audit, SED also discovered that the work was not competed. SED did not find any documentation for why PG&E generated the LTIMP for L-109-2003 six years after the assessment and why it did not complete the LTIMP work.

PG&E should have created the LTIMP for L-109-2003 soon after it completed its baseline assessment to identify any additional P&M measures. PG&E should also have implemented necessary P&M measures for the segments or justified the delay in the process of implementing remedial actions.

During the audit, PG&E provided a copy of its LTIMP summary report which shows all pending LTIMP reports along with P&M work activity measures identified as a result of integrity management assessments.

As can be seen from Table 1, as of September 2012, PG&E had a total of approximately 610 pending LTIMP projects. PG&E categorized approximately one third of these (229) as Priority 1 projects. This summary report also indicated that PG&E generated more than one third of all its pending LTIMP projects (258) for the assessments conducted prior to 2006 and based approximately 50% (116) of the pending Priority 1 projects on the inspections it conducted prior to 2006.

Table 1- PG&E's Pending LTIMP Projects

Year	Priority 1	Priority 2	Priority 3	Total
2002	1	1	9	10
2003	7	ı	10	17
2004	33	ı	41	74
2005	75	68	14	157
2006-2007	109	38	189	336
2008	3	ı	12	15
2011	1	-	-	1
Total	229	106	275	610

SED noted that as of September 2012, PG&E has only completed 17% of LTIMPs based on its 2004 baseline assessment mileage. It appears that since PG&E generated LTIMPs

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several years after the completion of integrity assessments, by the time PG&E started implementing the P&M measures, in some cases, covered segments were due for a reassessment.

SED determined that PG&E RMP-17 neither specifies any timeframe to create an LTIMP after PG&E completes an assessment nor does it require an allowed time interval to complete the implementation of P&M measures.

Therefore, PG&E must establish provisions in its RMP-17 for not only creating LTIMP reports but also implementing P&M measures with specific timeframes after conducting integrity assessments.

2. SED also determined that PG&E does not have an effective method of providing the Risk Management group with the results of the LTIMPs. For example, if an LTIMP discovery indicates a shallow depth pipe, it may increase the likelihood of a TPD risk score for the particular covered segment. Therefore, PG&E must provide the knowledge learned from LTIMP analysis to the other IM groups not only to revise the associated risk factors but also recalculate the reassessment interval of covered segment accurately if necessary.

On July 24, 2012, PG&E submitted a self-identified non-compliance issue to the Commission involving a missed seven-year integrity reassessment for covered segments on a transmission pipeline in Yolo County which was a violation of Title 49, CFR, § 192.939 (a). PG&E scheduled an integrity reassessment of approximately 5.22 miles of four covered segments on Line 172A by May 24, 2012; however, PG&E failed to conduct the reassessments by the due date. PG&E's analysis determined that it would complete the reassessment work for the four covered segments by August 31, 2012.

PG&E must clear its LTIMP backlog and establish procedures for implementing its LTIMP process in a timely manner.

SED has concluded that PG&E must do the following:

- ➤ PG&E must initiate the LTIMP process immediately after it completes the assessments to ensure timely implementation of P&M measures.
- ➤ PG&E must prioritize the P&M measures and schedule the highest priority ones for implementation promptly for each assessed segment and record them in the database.
- ➤ PG&E's IM group must improve its communication with PG&E's other departments in order to take remedial actions in a timely manner.

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- ➤ PG&E must improve its LTIMP database to track the progress of projects and completed work and to update the status of each project.
- ➤ PG&E's LTIMP team must provide documentation for project time extensions in order to justify the need for the extension and to ensure that it would not affect the integrity of the pipeline adversely."
- 3. Title 49, CFR, §192.937 What is a continual process of evaluation and assessment to maintain a pipeline's integrity? (Probable Violation # 6 in SED's audit letter)
 - (a) General. After completing the baseline integrity assessment of a covered segment, an operator must continue to assess the line pipe of that segment at the intervals specified in §192.939 and periodically evaluate the integrity of each covered pipeline segment as provided in paragraph (b) of this section. An operator must reassess a covered segment on which a prior assessment is credited as a baseline under §192.921(e) by no later than December 17, 2009. An operator must reassess a covered segment on which a baseline assessment is conducted during the baseline period specified in §192.921(d) by no later than seven years after the baseline assessment of that covered segment unless the evaluation under paragraph (b) of this section indicates earlier reassessment.
 - (b) Evaluation. An operator must conduct a periodic evaluation as frequently as needed to assure the integrity of each covered segment. The periodic evaluation must be based on a data integration and risk assessment of the entire pipeline as specified in §192.917. For plastic transmission pipelines, the periodic evaluation is based on the threat analysis specified in 192.917(d). For all other transmission pipelines, the evaluation must consider the past and present integrity assessment results, data integration and risk assessment information (§192.917), and decisions about remediation (§192.933) and additional preventive and mitigative actions (§192.935). An operator must use the results from this evaluation to identify the threats specific to each covered segment and the risk represented by these threats.

SED's audit finding stated the following:

"PG&E's procedure, RMP-17, LTIMP, Section 7-Continual Evaluation, 7.1-Continual Evaluation Frequency requires "Continual integrity assessment and evaluation as a part of its IMP. Periodic evaluations shall be conducted on an annual basis, within a period not to exceed 15 months. The evaluations shall review leak history, incident notifications, and event reporting information.

Evaluations shall also be conducted in response to the events identified below:

• A failure occurs on the pipeline

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- Significant third party damage
- An event such as an earthquake or landslide that may impact the pipeline
- Knowledge or opinion of SME

A periodic evaluation may also be prompted based on the occurrence of additional events, as determined necessary by the LTIMP Engineer."

SED did not find any documentation to verify that PG&E has performed continual evaluation for establishing reassessment methods and schedules by considering all information relevant and required to determining risk associated with pipeline operations in HCAs as required by CFR, §192.937(b). SED noted, at the time of the audit that PG&E recently developed a Continual Evaluation Form; however, PG&E had not implemented the form for usage.

PG&E must consider the same set of data on a periodic basis and analyze changes and trends that would indicate the need for additional integrity assessments. Additionally, SED determined that PG&E does not base prioritization of P&M measures identified in its LTIMP on risk factors, but on upcoming reassessment intervals.

PG&E must prioritize and implement P&M measures identified in the LTIMPs based on their risk score and complete all remedial actions before the next reassessment of the covered segments.

On June 5, 2012, PG&E notified the Commission about self-identified non-compliances involving inadequate CP levels which it did not promptly address on transmission pipelines in its system. During the audit, SED reviewed the list of non-compliances and noted that 87 out of 180 locations in PG&E's current LTIMP reports as pending Priority 1 cases to be mitigated in order to resolve the CP level deficiencies.

SED determined that there is a disconnect between the district CP personnel, corrosion department, LTIMP teams, and ECDA Teams that has resulted in a delay in the implementation of P&M measures for certain CP systems.

PG&E must improve its procedure for continual evaluation in Section 7 of RMP-17, by providing additional specificity to improve the clarity and repeatability of the process. Additionally, PG&E must improve the procedure by adding robustness and missing pieces of information to meet the requirements of CFR, §192.937(b).

During the audit, it was unclear to SED what events and data PG&E needed to complete its "Continual Evaluation Form". PG&E needs to clearly define in its procedures that process for filling-out this form.

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PG&E must also expand RMP-17, Section 7.2, Data Integration, since this subject is not adequately addressed in either RMP-17 or the Continual Evaluation Form to meet the requirements of CFR, §192.917(a) and (b).

PG&E must also include a review of Risk Assessment Information in the process to meet the requirements of CFR, §192.917(c)."

Findings:

The staff of the SED, Gas Safety and Reliability Branch (GSRB) conducted a General Order 112-E audit of PG&E's Transmission Integrity Management Program from August 27 through 31, 2012 and from September 10 through 14, 2012. A representative from the Pipeline and Hazardous Materials Safety Administration (PHMSA) also participated in this audit.

The audit consisted of a review of PG&E's Transmission Integrity Management Program, Risk Management Procedures (RMPs), Risk Management Instructions (RMIs), and related records for their adequacy. No field inspections were performed as a part of this audit.

On December 17, 2013, SED staff notified PG&E of its audit findings, consisting of eight violations of the code of federal regulations and five areas of concern. Of the eight violations, SED determined that PG&E's corrective action plans were acceptable for five, and the violations did not create any hazardous conditions for the public and utility employees. SED may review the implementation of the corrective actions addressing those five violations during future inspections. However, Violations #4, #5, and #6 of the audit letter, which are violations of Title 49, CFR §§192.925(b)(3), 192.935(a), and 192.937(a)(b) respectively, are considered to have serious public safety implications.

On February 18, 2014 PG&E responded to Violation #4 of the SED audit report and stated the following:

"As discussed by Sumeet Singh and Mike Robertson on Friday, February 14, 2014, PG&E agrees with this violation, and will revise RMP-09 to require direct examinations of all immediate indications identified as part of performing the first time ECDA. Historically, PG&E has applied the "adjacent indications" methodology as outlined in Section 7.3.1 of RMP-09, and grouped immediate adjacent indications. Within these groups, PG&E excavated the most severe indication, and then applied these results to reclassify the group.

Moving forward, PG&E will no longer group immediate adjacent indications. For first time assessments, PG&E will treat each immediate indication uniquely, and perform

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direct examinations accordingly. PG&E will undertake an effort to review historical locations where immediate adjacent indications have been grouped, and use a risk based approach to evaluate these locations, and take any necessary actions."

SED determined that Violation #4 of the 2012 PG&E TIMP audit report was previously documented as a result of CPUC's 2010 TIMP audit, Item # D.04.a; therefore, Violation #4 is a repeat violation.

CPUC's 2010 TIMP audit report, Enclosure #4, dated October 21, 2010 stated the following:

"...In PG&E RMP-09, Section 5.3.3.1, Table 5.3.1 states that PG&E is conducting just one addition dig if there was an immediate and schedule found and not the addition two digs for the first time through as required in NACE RP0502, Section 5.10.2.2.2 and PG&E RMP-09, Section 5.3.3.1. Example in PG&E RMP-09 shows how PG&E interprets NACE RP0502, Section 5.10.2.2.2.

In PG&E RMP-09, Section 5.3.2.1, it states in part that PG&E does reprioritize even imdigs after sampling "some" immediate indications. PG&E is not following NACE RP05 requirement to dig ALL immediate indications and to not reprioritize indications the firs ECDA is applied to a given segment. PG&E presented a white paper that essentially con "should" from the NACE RP0502 documents as a suggestion and not requirement..."

In its 2010 TIMP audit response Attachment A, Enclosure 5, dated December 16, 2010, PG&E stated the following:

"..Regarding the additional digs when conducting ECDA for the first time, it has been PG&E's practice to perform the additional two digs when ECDA is used for the first time on a pipeline. Nevertheless, RMP-09, Section 5.3.3.1, Table 5.3.1 will be revised to add clarity around PG&E's compliance with the direct examination requirements of NACE RP0502 in the next revision of this procedure.

Regarding the re-prioritization of "immediates", please see PG&E's response to Item No. 27."

"PG&E meets the requirements of NACE RP0502-2002, Section 5.9 and 49 CFR §192.925(b)(3)(iv).

As explained in the "MEMO TO FILE", NACE RP0502 Section 5.8.4.2 states " ...For initial ECDA applications, the pipeline operator should not downgrade any classification or prioritization criteria". NACE RP0502 also indicates "the term should

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is used to state something considered good and is recommended but is not mandatory". As stated above in response to item 25, PG&E applies reprioritization in accordance with NACE RP0502 on the basis of pipe condition.

NACE RP0502 Section 5.10.2.1 states "All indications that are prioritized as immediate require direct examination". PG&E does plan to dig all indications that are prioritized as Immediates. This plan is updated based on evidence received through the Direct Examination phase where the actual pipe condition is determined and the prioritization of the indication is verified. Since Immediate indications are not necessarily Immediate conditions, the excavation of the indication determines if an immediate condition exists on the pipe. The Immediate Indications are excavated in priority based on likelihood of corrosion and, if during these excavations, the pipe does not reflect an Immediate condition, then the excavation plan is altered and reprioritization is performed on the basis of pipe condition which may reprioritize to scheduled indications. PG&E believes this process fully complies with NACE RP0502 Section 5.10.2.1.1 which states "The need to conduct direct examinations of indications that are reprioritized from immediate to scheduled may follow the guidelines for scheduled indications."

NACE RP0502 does not define "initial ECDA" or "the first time ECDA is used". Since the concept is not clearly defined within the RP document, per PG&E's Risk Management Procedure-09 "Procedure for External Corrosion Direct Assessment" (RMP-09), PG&E has defined "first time" as "the first time the ECDA methodology is used to assess the integrity of all or part of N-seg (numbered segment)."

SED determined that PG&E should have corrected Violation #4, after CPUC had identified it and brought to PG&E's attention in the 2010 TIMP audit letter.

In its response letter dated February 18, 2014, PG&E responded to Violation #5 of SED's 2012 TIMP audit report and stated the following:

"PG&E agrees with the SED finding and recognizes that many of the Post Integrity Assessment Reports (formerly known as LTIMP reports) were not created in a timely manner after the completion of an integrity assessment and may have not promptly addressed and implemented identified P&M measures. Furthermore, there were no provisions in RMP-17 to establish timeframes for completing the Post Assessment Reports and to implement P&M measures. Currently RMP-17 is the process of being revised and is currently scheduled to be completed before July 1, 2014. The new revision will incorporate the following:

• Timeframes to complete the Post Integrity Assessment Reports and to identify any

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additional P&M once an integrity assessment is complete. PG&E is currently suggesting no later than 180 days to complete both tasks once all the information that is required from the integrity assessment is received.

- Process flows to show how the P&M is to be identified based on threat level changes and increased risk, assigned using a work management database that is available to the different responsible work groups, prioritized based on the risk score, and monitored from inception to completion.
- Established provisions within the procedure in the event that a project cannot be completed in a timely manner and a time extension is needed. Documentation will be provided to ensure that this time extension will not affect the integrity of the pipeline.
- Process flow that will show how the information discovered through the Post Integrity Assessment Report will be communicated to risk management to update the risk score associated with that pipeline segment.

During the 2012 audit, PG&E verbally communicated to the SED that the back log of Post Integrity Assessment Reports would be completed by the end of September 2013. This objective was not accomplished since a majority of the 2013 year was used to improve our Continual Evaluation (CE) process to align with §192.937(b). Furthermore, RMP-17 revisions were started to provide detail and guidance on how the new process will be implemented. This process outlines how PG&E will implement periodic continual evaluations for the annual Baseline Assessment, following an integrity assessment (and documented in a post Integrity Assessment Report), or as a result of an event that could potentially change the re-assessment method, re-assessment interval, or require additional P&M.

PG&E is drafting these changes and the new CE process has not yet been implemented. Although the CE process was revamped to make the program better, it prohibited PG&E from completing the reports in a timely manner. In the 2012 Audit Letter, the CPUC references outstanding Post Integrity Assessment Reports (LTIMP Reports). PG&E has developed a plan to complete 50% of the Post Integrity Assessment Reports by the end of April 2014, and complete the remaining reports by the end of 2014. This aggressive schedule was determined by prioritizing the assessments first by the greatest total risk score and then by associated routes.

Additionally, PG&E will work with industry experts, Kiefner and Associates, to build a robust program that identifies P&M measures, and provide guidelines for how to measure the effectiveness of these measures. PG&E is developing a consistent and comprehensive way to monitor these P&M measures. PG&E will conduct a risk based

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evaluation for outstanding mitigation items, and incorporate completed P&M activities into the overall risk calculation for a given segment.

Several of these items have been incorporated and prioritized in existing maintenance and corrective programs within Corrosion Engineering. The TIMP group is working with Corrosion Engineering to ensure that all P&M measures identified through the Continual Evaluation process are traceable."

In its response to Violation #6 of the SED audit report, PG&E stated the following:

"PG&E agrees with the SED finding that the continual evaluation section in RMP-17 does not provide enough specificity to improve the clarity and repeatability of the process. Nor does it provide information regarding the data sources and events needed to fill out the "Continual Evaluation Form", as well as failure to fully meet the requirements of §192.917. Revisions to RMP-17 are being drafted and are pending implementation, as stated in NOV #5. The revisions will address the following items:

- Data sources to be reviewed for each of the events that can trigger the Continual Evaluation process.
- Process to fill out the "Continual Evaluation Form" that will incorporate the threat identification performed by risk management and any changes that may have come about due to the event, a list of the data sources used to evaluate the integrity of the pipeline for the Continual Evaluation event, and adjustments to the risk score based on what was discovered.
- Timeframes for completing the Continual Evaluation Form and assigning P&M measures

As stated in NOV-5, the CE process will establish timeframes for completing the evaluation, assigning measures, documenting the review and basis for these measures, and ensuring the measures are implemented in a timely fashion. The CE will be subject to the same P&M measures review and Communication Plan identified in NOV-5."

Recommendations:

It is imperative that PG&E operate its gas systems in compliance with GO 112-E and in a manner that promotes and safeguards the health and safety of the public. Therefore, PG&E must have an adequate and complete Transmission Integrity Management Program and it must follow its program and related procedures to ensure the integrity of its transmission pipeline as per Title 49, CFR, Subpart O, Gas Transmission Pipeline

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Integrity Management requirements.

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