

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



October 23, 2019

GI-2019-07-SEM40-10

Rodger Schwecke, Senior Vice President
Southern California Gas Company
Gas Operations and System Integrity
555 W 5th Street, GT21C3
Los Angeles, CA 90013

RE: SED Closure Letter for the General Order (G.O.) 112-F Inspection of Southern California Gas Company's and San Diego Gas and Electric Company's Control Room Management Program

Dear Mr. Schwecke:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission reviewed Southern California Gas Company's and San Diego Gas & Electric Company's response letter dated October 9, 2019 for the findings identified during the G.O. 112-F Inspection of the Control Room Management Program. Herein, the two companies are referred to jointly as "the operator". This inspection of the operator's Control Room Management Program (Inspection Unit) was conducted from July 23-25, 2019. Please note that the date of the inspection on the initial inspection letter was incorrect.

A summary of the inspection findings documented by the SED, the operator's response to the findings, and SED's evaluation of the operator's response for each finding is outlined in SED's summary of inspection findings.

This letter serves as the official closure of the 2019 Control Room Management Inspection.

Thank you for your cooperation in this inspection. If you have any questions, please contact Michelle Wei at (213) 620-2780 or by e-mail at miw@cpuc.ca.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Matthewson Epuna", written over a circular stamp or seal.

Matthewson Epuna
Program and Project Supervisor
Gas Safety & Reliability Branch
Safety and Enforcement Division

CC: Troy Bauer, SCG
Kan Wai Tong, GSRB/SED
Claudia Almengor, GSRB/SED

Summary of Inspection Findings 2019 Control Room Management Inspection

Dates of Inspection: July 23-25, 2019

Operator: SCG and SDG&E

Operator IDs: 18484 (primary) 18112

Inspection Systems: Control Room Management Program

Assets (Unit IDs): GI-2019-07-SEM-40-10 (88388 88389)

System Type: GT

Inspection Name: Sempra CRM

Lead Inspector: Michelle Wei

Operator Representative: Alex Hughes, Pipeline Safety and Compliance

Unsatisfactory Results

No Preliminary Findings.

Concerns

A. CRM, SCADA, and Leak Detection : Fatigue Management (CR.CRMFM)

Question Text Are all scheduled periods of time off at least one hour longer than 8 hours plus commute time or is there a documented technical basis to show that shift lengths and schedule rotations are adequate to provide controllers off-duty time sufficient to achieve 8 hours of continuous sleep?

References 192.631(d)(1)

Assets Covered GI-2019-07-SEM-40-10 (Sempra CRM)

Issue Summary One controller has a 1.5-2 hour commute which would not allow him 8 hours of continuous sleep plus some personal time as recommended in this question. This issue was discussed with SCG and SDG&E and SED was made aware that that controller has been trained and is well aware of his limits and has used available resources in the past in order to prevent fatigue. SED has discussed this issue with PHMSA and agrees that this controller may be able balance the long commute and long work hours. However, SED recommends that SCG and SDG&E make two changes to the control room practices. First, that in the future SCG and SDG&E require that a newly hired controller does not live more than approximately an hour away from the control room. Second, and more importantly, that SCG and SDG&E require controllers to document fatigue countermeasures when they are used. This is not to say that every time a controller stands up or gets coffee they need to record it, but any time they are using any of the fatigue countermeasures to actively combat sleep they should make a record of when and what they did. In the future this will allow the operator to determine if their fatigue mitigation training is effective and being implemented and also to evaluate specific cases like these to see if the long commute has an effect on the controller's ability to perform his tasks adequately.

Operator's Response:

In response to the SED recommendation to require that new controllers not live more than one hour away from the control room, SoCalGas alternatively proposes that a formal notification be provided to prospective new controllers where they will be required to acknowledge and meet SoCalGas' Control Room fatigue mitigation plan requirements. SoCalGas will also enhance its fatigue mitigation program to mitigate the SED concern.

SoCalGas recognizes the benefit of including in our Control Room Management Plan the policy to make applicants who are applying for a controller position aware of the 49 CFR Part 192.631 Control Room Management Fatigue Mitigation requirements prior to their employment at SoCalGas' Gas Control department. These prospective controllers will be formally notified of the requirements of 49 CFR 192.631 (d) Fatigue Mitigation along with the applicable sections of PHMSA's Control Room Management FAQ's 01/16/2018 and SoCalGas' obligation to meet those requirements prior to employment. Prospective controllers will be required to acknowledge they can meet these requirements. This notification process will be added to the SoCalGas Control Room Management Plan.

However, a requirement to only hire controllers that live no more than one hour from the SoCalGas Control Room provides potential ambiguity for employees given the complexity of the local area traffic patterns. Making prescribed firm geographic one-hour boundaries is unnecessary since it is feasible for controllers to make alternative living arrangements to limit the commute time and achieve rest while they are on their off-duty period, prior to starting a shift.

SoCalGas Controllers are responsible to come to work fit for duty and are educated on fatigue mitigation strategies and how off duty activities contribute to fatigue. SoCalGas has established shift lengths and schedule rotations that provide controllers off-duty time to achieve eight hours of continuous sleep. Controllers work a 12-hour shift which provides them off-duty time sufficient to achieve eight hours of continuous sleep between shifts. Controllers are able to decline shifts should they feel they have not obtained sufficient off-duty sleep to perform their job. SoCalGas's control room environment, shift rotation strategies, personnel assignments, and training / education programs are fatigue countermeasures and are all components of Gas Control's Fatigue Mitigation Plan. Fatigue Mitigation Program Metrics in the SoCalGas Control Room Management Plan identify key factors to monitor the effectiveness of its program.

In response to the SED recommendation to record fatigue mitigation activities, SoCalGas will implement further means of monitoring the effectiveness of its program by recording and reviewing fatigue mitigation measures taken by controllers. This will be accomplished by establishing a process and implementing a system where controllers can record fatigue mitigation measures taken during their shift. These items will be added to the SoCalGas Control Room Management Plan.

SED's Conclusion:

SED has reviewed the Operator's response and accepts the proposed corrective actions. SED acknowledges that the proposed corrective actions if implemented as indicated in the Operator's response will sufficiently address the aforementioned concern. However, SED may review the implementation of these stated corrective actions during future inspections.

B. CRM, SCADA, and Leak Detection : Training (CR.CRMTRAIN)

Question Text Do records indicate that training exercises were adequate and involved at least one qualified controller?

References 192.631(h)(6)

Assets Covered GI-2019-07-SEM-40-10 (Semptra CRM)

Issue Summary Team training exercises are intended to have a focus on practicing effective communication while in a stressful situation. These exercises are to include all parties that would reasonably be expected to collaborate with control room personnel during an abnormal operating condition. SED has reviewed the training records provided by the operator and believes that it addresses emergency response, but do not sufficiently cover or exercise effective communication strategies. Please respond with how the control room group intends to address the requirements of this code section going forward.

Operator's Response:

SoCalGas agrees with the SED's recommendation. SoCalGas will update its Control Room Management Plan to require annual training that addresses effective communication strategies and additional exercises that are sufficiently complex to challenge the team's collective decision-making skills which will satisfy the team training exercise requirement.

SED's Conclusion:

SED has reviewed the Operator's response and accepts the proposed corrective actions. SED acknowledges that the proposed corrective actions if implemented as indicated in the Operator's response will sufficiently address the aforementioned concern. SED will review the implementation of these stated corrective actions during future inspections.