

## Colletti Alexandria

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**From:** Cowsert, Christine [REDACTED]  
**Sent:** Friday, June 21, 2019 7:06 PM  
**To:** Colletti Alexandria  
**Subject:** RE: SCADA Alarm Log & Alarm Settings - PLD19MR001

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Hi Alex:

Here are the responses to your questions. Please let me know if we can provide any additional information.

Have a great weekend!

Christine

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**QUESTION 13226.01:** As this was a significant release that continued for a few hours, and there were pressure variations almost a mile away as a result (see ERX trend data below), how can this be the case?

**RESPONSE 13226.01:** PG&E's SCADA alarm psig (pounds per square inch gauge) limits for the ERX sites SF\_SF\_S049 and SF\_SF\_S006 during the February 6, 2019, San Francisco dig-in event were as follows:

### **SF\_SF\_S049**

MOP: 60 PSIG

HIGH-HIGH: 59 PSIG

LOW: 40 PSIG

LOW-LOW: 35 PSIG

### **SF\_SF\_S006**

MOP: 60 PSIG

HIGH-HIGH: 59 PSIG

LOW: 21 PSIG

LOW-LOW: 15 PSIG

These settings should trigger alarms when the system underperforms during high load conditions. Because the settings are designed to identify system underperformance in serving customer load and not to identify dig-ins, PG&E does not expect an alarm to trigger during a dig-in event. PG&E has received some Low or Low-Low alarms during dig-in events, but only if the dig-in occurs in the immediately vicinity of a SCADA monitoring site and if pressure exceeded the High-High or Low limits. These settings are consistent with the design of all PG&E gas distribution SCADA sites. PG&E has determined that the most reliable, timely notifications of dig-ins comes from the public making 911 calls to report an emergency. PG&E is also notified of dig-ins by PG&E employee calls, the public calling the Gas Control Center directly, and social media reports.

PG&E is currently working on applying rate-of-change alarms to the company SCADA system to better identify abnormal pressure fluctuations, however the current focus of the SCADA system is on tracking regulator performance rather than identifying dig-ins.

**QUESTION 13226.02:** Please provide the pressure-variance tolerances/triggers/settings for the HIS that would alert the GDCC.

**RESPONSE 13226.02:** Each SCADA point has unique pressure settings that generate alarms depending on where they are located in the hydraulic independent system (HIS). The alarms are reviewed on an annual basis by PG&E engineers and updated by Gas Control based on that input. During the dig-in event referenced above, had pressure in the San Francisco High Pressure HIS spiked to the High-High alarm (59 psig) or dipped to the Low alarms shown for SF\_SF\_S049 (40 psig) or SF\_SF\_S006 (21 psig), then the ERX site would have alarmed the Gas Distribution Control Center.

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**From:** Colletti Alexandria [REDACTED]  
**Sent:** Thursday, June 06, 2019 8:50 AM  
**To:** Cowsert, Christine [REDACTED]  
**Subject:** SCADA Alarm Log & Alarm Settings - PLD19MR001  
**Importance:** High

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Hello Christine,

In the below response to a document request from Roger, I see that no alarms were received at all during the event in your SCADA system that were related to this event. As this was a significant release that continued for a few hours, and there were pressure variations almost a mile away as a result (see ERX trend data below), how can this be the case? Please provide the pressure-variance tolerances/triggers/settings for the HIS that would alert the GDCC.

Thank you,  
Alex

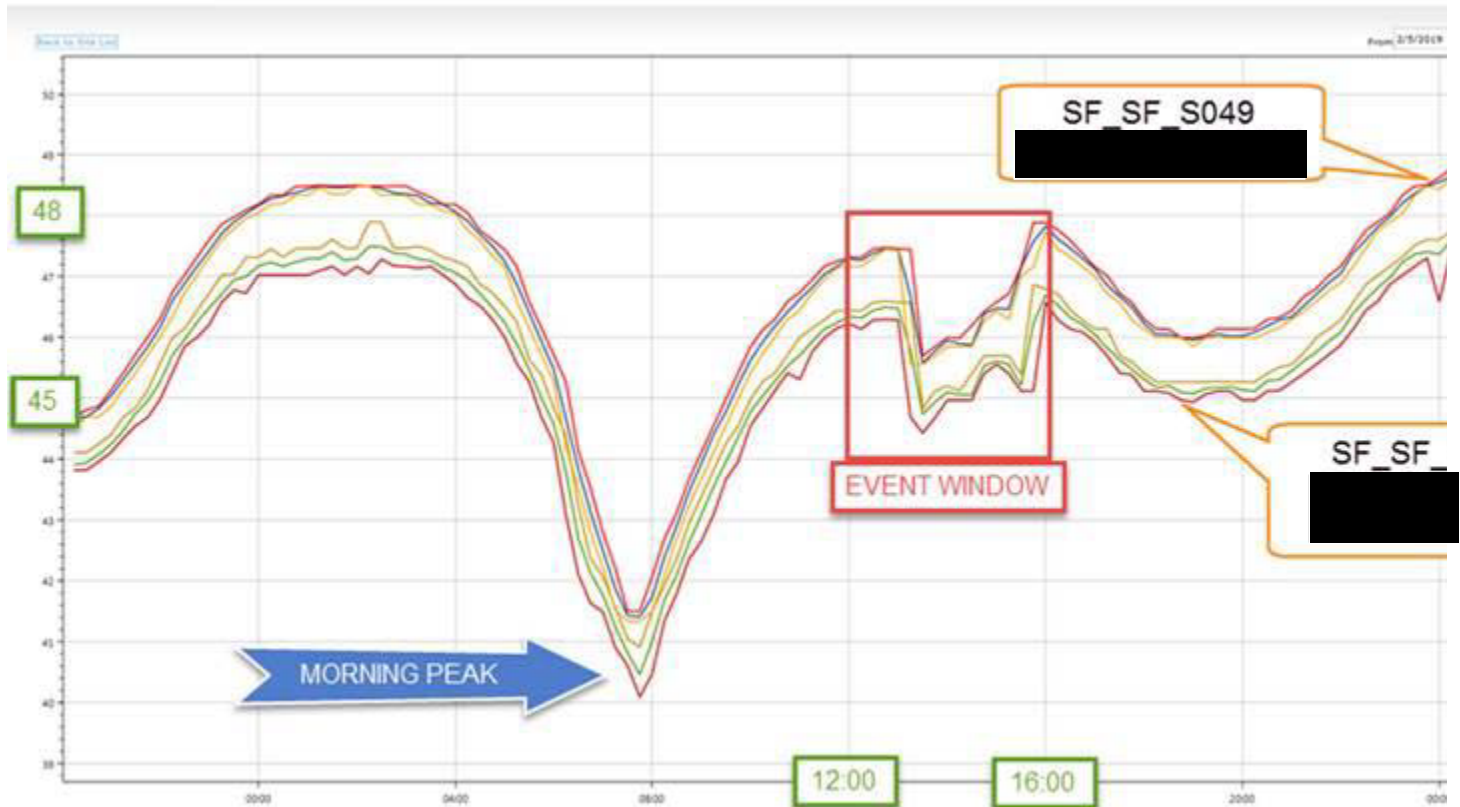
**QUESTION 12851.07:** Scada system basic information; total staff, center location (city), controller on duty at the time, alarm event log for accident and a statement of the capabilities (monitoring vs. controlling).

**RESPONSE 12851.07:** PG&E's Gas Control Center at Bishop Ranch located in San Ramon features the dual asset SCADA system, Telvent. The Distribution SCADA system is comprised of 3,218 data points, 2,037 of which are providing live data to Gas Control via remote terminal units (RTU), and 1,181 ERX points that call in once a day to update, and again when a Hi-Hi, MOP or Lo-Lo alarm triggers the device to cry out. ERX trend data can be pulled from PI which is a redundant SCADA system typically used for in depth analysis and not active monitoring. The Distribution system is capable of monitoring the system only and provides no means of control to Gas Distribution Control Center (GDCC) Operators.

On a typical weekday, the GDCC is staffed with Leadership (Supervisors and Managers), Senior Distribution Gas System Operators, Planning Engineers, Communications Specialists, Clearance Coordinators. Additionally, the Gas Transmission Control Center (GTCC) is staffed with Supervisors, Gas System Coordinators, Gas System Operators, and Clearance Coordinators.

At the time of the dig-in at Geary and Parker, the Senior Distribution Gas System Operator on staff was Christina Rogers.

Note, there is no alarm event log associated with the third-party dig-in at Geary and Parker because pressure in the hydraulic independent system (HIS) never reached levels that would send an alarm to the GDCC.



**Alex C. Colletti**

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