[redacted]
Pipeline Safety and Risk Mitigation Manager
1775 Sampson Ave, ML8064
Corona, CA 92879
[redacted]

July 27, 2022

Mr. Mahmoud (Steve) Intably, P.E.,
Program and Project Supervisor, Gas Safety and Reliability Branch,
Safety and Enforcement Division,
California Public Utilities Commission,
320 W. Fourth Street, Suite 500
Los Angeles, CA 90013

Dear Mr. Intably:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission (CPUC) submitted the following Notice of Probable Violations (NOPV) for the DOT (#1303844) reportable incident investigation that occurred on April 29, 2021, at [redacted] Santa Monica, CA.

Below is the Southern California Gas Company's (SoCalGas's) written response.

Please contact [redacted] at [redacted] if you have any questions or need additional information.

Sincerely,

[redacted]

[redacted]
Pipeline Safety and Risk Mitigation Manager

CC:
[redacted], SoCalGas
Terence Eng, SED
Kan-Wai Tong, SED
Gordon Kuo, SED
Claudia Almengor, SED

2021 SoCalGas DOT#1303844 Incident Investigation Response

Violation:

G.O. 112-F, Reference Title 49 CFR, Part 192, §192.747(a)

[redacted] Santa Monica, CA

SED's investigation found that SoCalGas developed and implemented an ad-hoc isolation plan with non-emergency valves at the time of the incident instead of following its established emergency plan, e.g., using emergency (necessary for the safe operation of a distribution system) valves, to isolate the incident area expecting to minimize the number of the service interruptions. One of the non-emergency valves failed to close resulting in continuing gas flow in the 16-inch Distribution Steel Main, gas released into the atmosphere for approximately 39 hours 40 minutes, estimated cost of gas released was $149,898 (24,983 mcf), and service interruption of approximately 57 hours 15 minutes.

In addition, SED investigation found that SoCalGas should have designated / identified these non-emergency valves as emergency valves; failure to properly identify the non-emergency valves necessary for the safe operation of the system resulted in the large amount of gas released into the atmosphere and a lengthy service interruption.

Therefore, SED finds SoCalGas in violation of GO 112-F, Reference Title 49 CFR, Part 192, Section §192.747(a) for failure to check and service these valves at interval 15 months, but at least once each calendar year.

SoCalGas Response:

SoCalGas disagrees that there was a violation of GO112-F, Reference Title 49 CFR, Part 192, Section §192.747(a) for failure to check and service these valves at an interval of 15 months, but at least once each calendar year. SoCalGas's Gas Standard 184.16, *Distribution Valves - Operation, Maintenance, and Inspection*, governs the guidelines and requirements for operation, maintenance, and inspection of Distribution valves. Four of the valves used in the response plan for this incident were designated critical valves, which means they are on maintenance plans, and are checked and serviced at intervals of 15 months, but at least once each calendar year. SoCalGas's criteria for critical valves can be found in Gas Standard 184.16:

"*Open valves considered necessary for the safe operation of the distribution system. Examples may include but are not limited to:*

- *Sectionalizing valves in supply lines.*
- *"Shut-off" valves upstream and downstream of regulator stations. This may be completed as part of the Regulator Station Inspection.*
- *Isolation area valves.*
- *Bridge approach valves.*
- *Valves on DOT identified transmission pipelines that might be required during an emergency.*
- *All other valves, as determined by Region Engineering to be critical to the safe operation of the distribution system.*"

The other valves used in this incident were deemed "non-critical" valves. Per Gas Standard 184.16, section 1.4, inspections of "non-critical" valves are not mandatory for compliance purposes and are discretionary. Creation of an inspection order is not required for "non-critical" valves and is at the discretion of the region.

In incidents like these, per Gas Standard 183.01 – *Shutdown Procedures and Isolation Area Establishment for Distribution Pipeline Facilities*, SoCalGas will look at all available options to control gas or isolate an area, including critical valves, non-critical valves, pressure control fittings, and squeezing pipe. In this case, a combination of all four control methods were used in the incident response plan. Similar to pressure control fittings, non-critical valves may be utilized to isolate a local area, but they do not require annual inspections. In addition, in PHMSA interpretation PI-03-0102, it is stated:

"*Mere operation of a particular valve during an emergency does not automatically elevate it to "Key Valve" status within the meaning of § 192.747. Many valves may be shut during an emergency, including designated "Key Valves," valves on service lines, valves at the meter assembly, and even some mainline valves not designated as "Key Valves." Not all of these valves, upon investigation, would necessarily be shown to be "necessary for the safe operation of the system."*"

The question to be addressed is whether a particular valve is necessary on an ongoing basis to safely operate the distribution system. This question must be addressed on a case-by-case basis by the distribution company and its regulatory agencies. Therefore, a "gas valve used to control blowing or escaping natural gas at an accident site" does not automatically become a "Key Valve."'

In alignment with this interpretation, SoCalGas reviews its non-critical valves on a case-by-case basis and has determined that the non-critical valves utilized in this incident do not need to be designated as critical valves. In addition, two new 16-inch pressure control fittings were installed as part of this incident, so there are additional control points available if needed in the future.

Regarding SED's statements about SoCalGas not using an established emergency plan, SoCalGas and specifically Distribution Engineering, followed company operations Gas Standard 183.01 to plan, coordinate, and provide proper notification during the emergency shutdowns of Distribution pipelines for this incident. Per Gas Standard 183.01, section 1.3, *Distribution Engineering selects an emergency shutdown plan that both meets the needs of each situation and targets safe and practical facility restoration to minimize hazards to life or property*. In addition, Gas Standard 183.01, section 5.2.2.1, Table 1 sets forth the criteria used to determine the appropriate mitigation method to respond to an incident. Per Gas Standard 183.01 criteria, valves may be used when squeezing is inappropriate or when there is difficulty in accessing an incident site. Furthermore, isolation area valves may be implemented when the number of incidents exceeds the Company's ability to mitigate the incident locally. The [redacted] Santa Monica incident did not exceed the Company's ability to mitigate the incident locally, and the local Distribution Engineering and District management personnel determined a local incident response plan was the safest and the most practical facility restoration to minimize hazards to life or property.

CONTROL METHOD	CRITERIA
Closing of Valves and/or Pressure Control Fittings	• May be used to shutdown small sections of the system • May be utilized when squeezing is inappropriate or when there is difficulty in accessing an incident site • Shutdown of a supply line should be performed with sectionalizing valves installed on the supply line
Shutdown of an Isolation Area	• May be performed in the event of multiple line breaks • May be implemented when the number of incidents exceeds the Company's ability to mitigate an incident locally • May be implemented when the affected area is approaching the size of the isolation area
Shutdown of a Pressure District	• Can be used to shutdown a small pressure district with less than 25,000 customers and limited feeds • Is used to shutdown a large pressure district (more than 25,000 customers) only when maintaining safety warrants the wide-scale disruption of service to customers

Deviating from the local incident response plan would have created a deviation from following the Gas Standard 183.01 practice to mitigate the incident locally. In addition, SoCalGas requested that SCE de-energize the overhead electric lines and regularly monitored the area around the damage for hazards to public, employee, and pipeline safety; therefore, it was decided that developing a much smaller incident response plan was warranted.

The implementation of an isolation area shutdown plan would have required the use of 35 isolation valves and would have interrupted service to approximately 25,000 meters within the isolation area and had the potential to impact even more meters outside of the isolation area due to low pressures caused by the closed valves. These impacted customers would have included more than 200 critical customers, such as hospitals and healthcare facilities. In addition, the service interruption time to these 25,000 plus customers would have been significantly longer than the local incident response plan. For example, if 300 employees had been dedicated to shutting down all customer meters prior to reintroducing gas into the system, and then restoring all the customers afterwards, we estimate it would have taken more than ten days to complete all the restores. By using the local incident response plan, SoCalGas was able to limit the impact to only 243 meters, with zero critical customers impacted. In addition, these customers were not interrupted for 57 hours and 15 minutes since they still had gas service when the pipeline was initially damaged. The actual gas service interruption time is estimated to be closer to one day.

SoCalGas acknowledges that the length of time that gas was blowing was longer than typical incidents. To address this, SoCalGas has taken some steps to improve the control time for similar incidents, such as training and qualifying employees to handle 16-inch pressure control fittings in-house, rather than relying on contractor resources to operate them.