

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

SAFETY AND ENFORCEMENT DIVISION
UTILITIES SAFETY BRANCH

RESOLUTION SU-42
Date: May 22, 1996

R E S O L U T I O N

RESOLUTION SU-42, ORDER DIRECTING SOUTHERN CALIFORNIA GAS COMPANY TO ADOPT MEASURES TO REDUCE REGULATOR MALFUNCTION INCIDENTS DUE TO DEBRIS IN THE PIPELINE SYSTEM.

SUMMARY

1. On October 5, 1995, Southern California Gas Company (SoCal Gas) experienced a gas overpressure incident in the Palm Desert service area. The incident caused gas pipelines to break and release gas to the atmosphere and resulted in customer service interruptions.
2. The Utilities Safety Branch (USB) staff investigated the incident to find its causes and recommended measures to minimize recurrence. The findings are summarized in an Investigation Report that was produced by the USB in February of 1996.
3. This resolution directs SoCal Gas to adopt the USB Investigation Report's recommendations.

BACKGROUND

1. Section 315 of the Public Utilities Code grants authority to the Commission to investigate utility accidents.
2. At 1003 hours on Thursday, October 5, 1995, two regulators failed at SoCal Gas' Palm Desert Greens regulator station in the City of Palm Desert. As a result of the failure, gas overpressure occurred within distribution pipes at various locations in the Palm Desert District of the Inland Empire Region. There was no fire or property damage, and no personal injury.
3. USB staff investigated the incident, and found that the two regulators failed when their diaphragms were damaged as a result of debris in the pipeline.

DISCUSSION

1. Movement of Debris (sand, dirt, slag and metal shavings) in the gas stream increases when gas flow patterns change. Debris moving at a high velocity causes damage to regulator diaphragms and other internal parts resulting in overpressurization.

2. The installation of filters and/or screens upstream of regulator stations reduces the risk of regulator damage caused by debris.

3. SoCal Gas construction procedures do not require the installation of permanent filters upstream of all regulator stations.

4. Other gas operators in California, such as Pacific Gas and Electric and San Diego Gas and Electric, utilize filters and/or screens upstream of their regulators as a means of protection for their regulator stations.

5. The USB Investigation Report of SoCal Gas' Palm Desert incident recommends installation of filters and/or screens upstream of regulator stations, as well as other measures to minimize recurrence of this type of incident.

FINDINGS

1. Implementation of the recommendations in the USB Investigation Report will significantly reduce the risk of future regulator stations' failures due to debris in the pipelines.

2. The recommendations are cost-effective, and are in the best interest of the general public.

3. Other gas operators in California have already implemented similar measures to protect their regulator stations from debris.

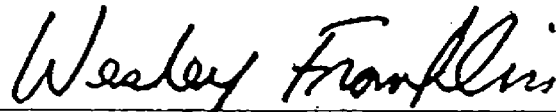
4. SoCal Gas concurs with the recommendations in the Investigation Report, and has already begun implementing some of them.

THEREFORE, IT IS ORDERED THAT:

SoCal Gas shall:

1. Install filters and/or screens upstream of all new regulator stations.
2. Install filters and/or screens upstream of all existing regulator stations where there are reasons to suspect the presence of debris in the pipeline.
3. Install filters and/or screens downstream of all new major pipeline projects.
4. Review and modify construction practices and procedures to insure internal cleanliness of new pipelines.
5. Review and modify design practices related to the connection of existing dead-end pipelines to insure that the downstream pipeline systems are free from debris.
6. Perform leak surveys, on an annual basis, in the effected service areas for the next three years, and provide annual reports of the surveys' findings to the USB.
7. This resolution is effective today.

I hereby certify that this Resolution was adopted by the Public Utilities Commission at its regular meeting on May 22, 1996. The following Commissioners approved it:



WESLEY M. FRANKLIN
Executive Director

DANIEL Wm. FESSLER
JESSIE J. KNIGHT, Jr.
HENRY M. DUQUE
JOSIAH L. NEPPER
Commissioners

President P. Gregory Conlon, being necessarily absent, did not participate.