

SoCalGas-32

**Prepared Supplemental Rebuttal Testimony of L. William Abel
(October 26, 2020)**

I.19-06-016

ALJs: Hecht/Poirier

Date Served: March 12, 2021

Order Instituting Investigation on the Commission's Own Motion into the Operations and Practices of Southern California Gas Company with Respect to the Aliso Canyon storage facility and the release of natural gas, and Order to Show Cause Why Southern California Gas Company Should Not Be Sanctioned for Allowing the Uncontrolled Release of Natural Gas from Its Aliso Canyon Storage Facility. (U904G).

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CHAPTER II

PREPARED SUPPLEMENTAL REBUTTAL TESTIMONY OF L. WILLIAM ABEL ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY (U 904 G)

October 26, 2020

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CHAPTER II

**PREPARED SUPPLEMENTAL REBUTTAL TESTIMONY OF L. WILLIAM ABEL ON
BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY (U 904 G)**

I. INTRODUCTION

The purpose of my prepared supplemental rebuttal testimony on behalf of Southern California Gas Company (SoCalGas) is to address Violation 331 alleged in Chapter Eight of the Prepared Sur-Reply Testimony of Margaret Felts on behalf of the California Public Utilities Commission’s (Commission) Safety and Enforcement Division (SED).¹ Ms. Felts alleges, in part, that SoCalGas violated California Public Utilities Code Section 451 (Section 451) by purposely extracting and venting oil into the atmosphere during the SS-25 incident,² and subsequently attempting to cover up facts surrounding this release.³ As further described below, based on my over 40 years of experience in the well control industry, and a review of the records available to SED, it is plain that there was nothing “purposeful” about the release alleged in Violation 331. Instead, the release occurred as a direct and natural result of the well kill attempt implemented by the well control company. Ms. Felts’ arguments to the contrary demonstrate a fundamental misunderstanding of the mechanics of an emergency well control operation.

**II. THE RELEASE OF FLUIDS IS COMMON AND KNOWN TO OCCUR DURING
EMERGENCY WELL CONTROL OPERATIONS**

Ms. Felts’ sur-reply testimony alleges that SoCalGas violated Section 451 by purposely releasing oil into the atmosphere on November 13, 2015, and subsequently attempting to cover

¹ On September 4, 2020, ALJ Poirier granted SoCalGas leave to submit supplemental rebuttal testimony regarding Violation No. 331. In an October 15, 2020 Ruling of ALJs Poirier and Hecht further provided that the “supplemental rebuttal testimony previously due on September 29, 2020, shall be served not later than October 26, 2020. The scope of this testimony remains limited to the issues identified in the September 4, 2020, Administrative Law Judge Ruling.”

² SED Sur-Reply Testimony, Chapter 8 at 1.

³ SED Sur-Reply Testimony, Chapter 8 at 4. SoCalGas addresses Ms. Felts allegation that SoCalGas attempted to cover up this release in the Supplemental Rebuttal Testimony of Glenn La Fevers.

1 up facts surrounding this release.⁴ What Ms. Felts fails to understand is that, during emergency
2 well control operations, releases of kill fluids and other entrained fluids from the well or
3 formation are common and known to occur, especially after kill fluids are pumped into the well.
4 The following explanation of the basic mechanics of a well control operation highlights how
5 such releases occur.

6 The mechanics of a well control operation by top kill requires the well control company
7 to pump into the well bore a volume of kill fluid such that the kill fluid forms a hydrostatic
8 column on top of the gas in the well bore. If a stable hydrostatic column can be achieved, the gas
9 contained in the well is prevented from reaching the failure point and the well is considered
10 killed. However, during a kill attempt, and before a stable hydrostatic column is achieved, the
11 pressurized gas in the well bore, combined with the effects of the pumped kill fluid can, and
12 typically does, discharge some of the pumped kill fluid (along with other entrained fluids from
13 the well or formation) through the leak path. The amount of well fluid that may return to surface
14 during a particular well kill operation depends on a number of factors, including the pumping
15 rate, the depth and geometry of the leak, reservoir parameters, and the geological features of the
16 earth around the well. Thus, whether there is a return to surface, and the extent of any return to
17 surface, is unpredictable.

18 With respect to the top kill operation performed by Boots & Coots on November 13,
19 2015, records reflect that the return of kill fluid to surface was likely the direct result of the
20 second kill attempt. For example, SoCalGas' daily well work report from November 13, 2015
21 states, "[a]fter 693 bbls pumpd, brine, oil and gas flowing from surface cracks."⁵ Similarly,

⁴ SED Sur-Reply Testimony, Chapter 8 at 4. SoCalGas addresses Ms. Felts allegation that SoCalGas attempted to cover up this release in the Supplemental Rebuttal Testimony of Glenn La Fevers.

⁵ SoCalGas Supplemental Rebuttal Testimony, Chapter I (La Fevers), Ex. I-8 at 1.

1 Boots & Coots’ daily report from this date specifically notes “[b]rine, oil, and gas flowing from
2 fissures on pad.”⁶ Notes taken by the representatives from the Division of Oil, Gas and
3 Geothermal Resources (currently known as the California Geologic Energy Management or
4 CalGEM), who were present at Aliso Canyon during the November 13 kill attempt, similarly
5 described that “the well began to blowout to surface,” “[a] large column of gas, aerated mud, and
6 rock formed a geyser around the well head,” and “[m]ud brine also began to flow from around
7 the well head fissures.”⁷ Consistent with what experienced well control companies might expect
8 during an emergency well kill attempt, these notes reflect that during the second kill attempt, the
9 gas pressure in the well, combined with the effects of the pumped kill fluid, likely caused the kill
10 fluid (and other entrained fluids from the well or formation) to follow the flow path of the leak
11 and discharge through the rupture in the production casing. From there, the fluids took the path
12 of least resistance through the formation around the well and reached surface. These notes
13 reflect nothing purposeful about the release of fluids that occurred on November 13, 2015—the
14 release was simply a natural occurrence resulting from the kill attempt. Moreover, considering
15 the over 500 well control operations that I have participated in, I can think of no reason to
16 “purposefully” extract and vent fluids from a leaking well; the very goal of a well kill operation
17 is to control the release of fluids, not to worsen the release. As stated above, releases of fluids to
18 surface are common and known to occur during the course of well control operations.

19 **III. CONCLUSION**

20 As demonstrated herein, Ms. Felts’ allegation that SoCalGas purposefully extracted and
21 vented oil into the atmosphere on November 13, 2015 is not supported by facts or logic. Ms.

⁶ SoCalGas Reply Testimony, Chapter III (Abel), Exhibit III-3. This information is also detailed in Blade Energy Partners’ RCA Report (see, e.g., Main Report at 145; Supplementary Report, Volume 3, SS-25 Transient Well Kill Analysis at 20.)

⁷ SoCalGas Supplemental Rebuttal Testimony, Chapter I (La Fevers), Ex. I-1 at 1.

1 Felts' allegations appear to be informed by a misunderstanding of well kill operations and
2 emergency well control operations.

3 This concludes my prepared supplemental rebuttal testimony.