

At the direction of ALJ Bushey in R.11-02-019, PG&E, SED, and the parties convened at PG&E's offices in Walnut Creek to hold a workshop on issues raised in the November 18, 2013 evidentiary hearing.

### **Parties in Attendance**

Parties in attendance for all or part of the workshop included PG&E (Kirk Johnson, Sumeet Singh, Ben Campbell, Joe Medina, and Alex Vallejo, with Bruce Smith, [Redacted] and Steve Garber attending via telephone), PG&E contractors [Redacted] of RCP, and [Redacted] and [Redacted] from GTS, SED (Sunil Shori, Maria Solis, and Carolina Contreras, as well as Liza Malashenko via telephone), SED Advocacy consultant Margaret Felts, the Office of Ratepayer Advocates (Tracy Bone, Tom Roberts, John MacEntire, and Nathaniel Skinner, as well as Pearlie Sabino via telephone), TURN (Tom Long, via telephone), the City of San Carlos (Jay Walter, Greg Rubens, and Britt Strottman), Michael J. Rosenfeld of Kiefner and Associates, and David Xu and Dave Rondinone (via telephone) from Berkeley Engineering and Research.

### **Workshop Objectives**

The main objectives of the workshop were to cover two topics raised during the 11/18/13 hearing: (1) provide additional explanation of the RCP hydrotest report results, including data issues identified by SED and the parties; and (2) provide assurance that the entire length of Line 147, including all pipeline shorts operating at or above 20% SMYS, have been hydrotested. The parties also attempted to cover issues proposed in an agenda circulated by Tom Roberts just prior to the workshop. The workshop was a question and answer format, with opportunity to review PG&E records that are the subject of questions raised by parties.

### **RCP Hydrotest Report Results**

The workshop began with a discussion of the RCP test report, specifically the pressure volume plot for test 43-B. As explained by [Redacted] of RCP, this plot shows the pressure and volume of water in a pipeline during the hydrostatic spike process. In this particular test, the actual curve did not follow the "predicted" curve, and also has a "jig" in the line at approximately 600 pounds of pressure. [Redacted] stated that this pressure volume plot indicates the presence of air in the pipeline. As the pressure increases, the air is absorbed into the water, and the curve "bends to the left." The "jig" in the line occurred because the hydrotest operator did not initially provide sufficient water to conduct the hydrotest. During the wait for additional water, the temperature of the pipe (both above and below ground) increased. As a result, the pressure inside the pipe increased without any increase in water volume.

ORA and San Carlos questioned whether the RCP report could identify a leak on Line 147 during the hydrotest. As explained by PG&E and RCP, the pressure volume plot is created during the spike test, which is intended to confirm the integrity of the pipe. In contrast to the spike test, the following 7.5 hour "hold" test is designed to confirm that the pipe is not bleeding pressure, which would indicate a leak. In the case of the hydrotest of Line 147, segment 109, there was no pressure loss that would signify the presence of a leak. As stated in the test log the pressure remained constant at 687 psig.

The discussion then turned to the significance of RCP test report data errors. After considerable discussion, the parties came to the consensus that the data value that was erroneously reported in the original RCP test report supporting the 2011 pressure restoration is irrelevant to the 2011 hydrotest on Line 147. RCP apologized for the confusion caused by their error, but underscored that this value is significant only if there is evidence of pipe yielding, which was not the case on this test. As stated by SED, PG&E did not test Line 147 to the yield pressure, nor was any yielding observed during the hydrotest. [Redacted] of RCP confirmed that the 2011 hydrotest of Line 147 was a good test, that the pipeline was not tested to yield and did not in fact yield. SED stated that PG&E's use of RCP to certify its test results exceeds the practices of other natural gas operators. RCP further described its role as an independent entity that certifies the validity of the pressure test, with authority to stop the test at any time, and that they provide these services for approximately 1/3 of the pipelines in the country.

The parties briefly discussed PG&E's past use of Bureau Veritas (BV) to perform third party test certification. As explained by Ben Campbell, PG&E retained BV in 2011 to provide independent quality control and quality assurance relating to PG&E's hydrotest practices and procedures. However, PG&E subsequently discontinued its contract with BV.

The parties briefly discussed whether the leak on Line 147, segment 109 could have been caused by the 2011 hydrotest. As explained by Michael Rosenfeld of Kiefner and Associates, there are multiple scenarios that could have led to the leak. Given the very small size of the leak, it is possible that the leak could have gone undetected during the hydrotest. In the alternative, the hydrotest could have weakened oxide scale introduced into the pipe during the reconditioning process. The leak was not detected during the prior annual leak survey. SED reiterated that it was not uncommon for a small leak to go undetected during a hydrotest.

### **Strength Testing of All of Line 147 and Shorts Operating at or Above 20% SMYS**

PG&E and the parties, in particular ORA, conducted an in-depth review of Line 147 to determine whether PG&E's records show that all of Line 147, and all shorts on Line 147 that operate at or above 20% SMYS, have been strength tested.

PG&E and the parties reviewed, in detail, the pipeline features list, strength test pressure reports, and associated as-built drawings to confirm that all of Line 147 and all its shorts operating above 20% SMYS have been strength tested.

At the conclusion of the pipeline review, ORA confirmed that PG&E had demonstrated that Line 147, including all shorts operating above 20% SMYS, have been strength tested.