From:	Doll, Laura
Sent:	12/16/2013 2:34:53 PM
To:	Turner, Brian (Brian.Turner@cpuc.ca.gov)
Cc:	Cherry, Brian K (/O=PG&E/OU=CORPORATE/CN=RECIPIENTS/CN=BKC7); elizaveta.malashenko@cpuc.ca.gov (elizaveta.malashenko@cpuc.ca.gov); Christopher, Melvin J. (GSO) (/O=PG&E/OU=Corporate/cn=Recipients/cn=M6CE)
Bcc:	
Subject:	FW: Response to Brian Turner

Brian

Here is our response to the questions you raised this weekend about Line 147. Sorry for the delay!

Let us know if you need more information.

Thanks

Laura

From: Christopher, Melvin J. (GSO)
Sent: Monday, December 16, 2013 2:27 PM

Good afternoon Brian,

I am glad to respond to your questions regarding the operation of L-147 during the recent cold weather. In addition, I want to describe the importance of L-147 as a transmission cross tie in the Peninsula local transmission network which is the original purpose of the line.

Your first question relates to the performance of L-147 during the recent cold snap. PG&E has operated L-147 as a distribution feeder main at pressures not to exceed 125 psig, consistent with ALJ Bushey's October 20, 2013 Order. In this operating configuration, the sole function of L-147 is to deliver gas to San Carlos and Redwood City at pressures sufficient to supply the 4 distribution regulator stations connected to the line – it serves no other function at this time. The good news is that, during the recent cold weather, the 4 district regulator stations

connected to L-147 were adequately supplied to meet the demands in San Carlos and Redwood City. However, even though PG&E had record send out during this period, the temperatures were not unusually cold in the San Francisco Peninsula. The coldest temperatures occurred on December 9. On that day, temperatures from San Jose to San Francisco were not significantly above PG&E's Cold Winter Day design criteria (CWD). CWD is a significant standard for non-core customers because it is the temperature at which the possibility of curtailment exists for those customers. For San Carlos and Redwood City, there is only one small non-core customer so we expected to have no difficulty meeting these demands in these communities.

In your second question you are essentially asking if we can project future performance based on recent experience. While we are continuously monitoring the performance of the line and are modelling expectations, this is a brand new operating mode for us. Demand in San Carlos and Redwood City is a function of weather. While we anticipate that the current configuration of L-147 will support a higher load in the distribution system, it is untested. It is important to understand, however, that the question of reliability in this operating configuration during cold weather extends well beyond San Carlos and Redwood City. In fact, this operating configuration creates risk of curtailment for non-core customers and, in extreme circumstances, it creates risk for core outages on the Peninsula. Operating as a DFM removes L-147 from its intended purpose as a cross tie in the Peninsula local transmission system. As a cross tie, L-147 balances load between the parallel transmission lines 101, 109, and 132. In this service, the Peninsula transmission lines have some redundancy in the event that one of the lines is taken out of service. Service interruptions can happen at any time – a dig in or regulator malfunctions are 2 examples of such unpredictable interruptions. If, for example, a segment of L-101 was taken out of service unexpectedly without L-147 operating as a cross tie, thousands or even tens of thousands of customers could lose gas service. In the worst case, under high demands, losing a segment of L-101 could lead to the loss of core and non-core customers throughout the Peninsula, including in San Francisco. In this instance, the communities of San Carlos and Redwood City would still have gas service but many thousands of customers in the Peninsula would not which is not the intended result of this operating configuration.

While ALJ Bushey's Order recognizes that there are conditions under which PG&E should operate L-147 at prior transmission pressures, increasing the pressure on the system requires manual operations that take time to implement. By the time crews can be dispatched, respond to the site, and operate the valves needed to raise L-147 pressures, pressures on the Peninsula could reach levels leading to the customer outages described above.

Since reducing the pressure on L-147 so it doesn't exceed 125 psig, PG&E has had to put on hold safety projects on the Peninsula. The commissioning and placing into service the new automated valves at Commercial Road station was scheduled and put on hold. In addition, next year's plans to perform in line inspections on L-147 and L-101 are now questionable and future

pipeline replacement work on Peninsula transmission lines could be in jeopardy.

It is my view, as the person responsible for the real time operations of the system, that operating L-147 as a DFM creates more risk than operating it at its previous transmission pressures.

Sincerely,

Mel Christopher

Sr. Director, Gas System Operations