

**PACIFIC GAS AND ELECTRIC COMPANY
PSEP Update
Application 13-10-017
Data Response**

PG&E Data Request No.:	ORA_004-07		
PG&E File Name:	PSEP-Update_DR_ORA_004-Q07		
Request Date:	February 13, 2014	Requester DR No.:	ORA 4
Date Sent:	February 28, 2014	Requesting Party:	Office of Ratepayer Advocates
PG&E Witness:	Sumeet Singh	Requester:	Tom Roberts/Alaine James

SUBJECT: PWC QUALITY ASSURANCE: PIPELINE PROGRAM DATA VALIDATION PROCESS

QUESTION 7

Table 3-1 of PG&E's Testimony provides the "defective definition" for each QA test performed by PwC.

- a) How were these thresholds determined generally, i.e what objectives drove determination of a successful vs. a defective project?
- b) Provide any risk analyses, other analyses, or other data used to determine the defective definitions.
- c) For definitions using a ">5%" criteria, why was 5% selected rather than 3% or 6%?
- d) For definitions using a ">\$1,000" criteria, why was \$1,000 selected rather than \$500 or \$3,000?
- e) For definitions using a ">\$1,000" criteria, how did PwC determine the impact of the data defect in terms of dollars?
- f) For QA4, how does using a ">\$1,000" criteria indicate an acceptable level of risk-reduction? What is this based on? How is the \$1000 threshold related to eliminating DT outcomes based on inaccurate data?

ANSWER 7

- a) The purpose of the PSEP update was to use MAOP PFL data to re-run the deterministic threat model outlined in the Implementation Plan Pipeline Program Decision Tree (Decision Tree). PG&E based defective definitions for QA tests on the impact that a defect could have on the outcome of the Decision Tree and PSEP Project scoping process.
- b) None applicable.
- c) The 5% threshold was a starting point to generate the initial sample for testing. During the design of the QA testing process, initial observations during test design indicated that a defect rate of <5% could be expected, based on a very small trial

test. In order to generate a larger, more conservative sample size for the first round of formal testing, the team chose 5% as the initial criteria. This generated a larger test sample than selecting 3% would have. Subsequent tests could reduce the threshold to the observed defective rate, or keep the 5% threshold in place.

- d) PG&E implemented the \$1,000 threshold for “defective” because it set a very tight tolerance for assessing the impact of defects on a project. The PSEP RR needs to change by \$47,000 to have a rate impact that shows up in the 5th decimal place for both core and noncore customers (assuming that the change is in the Local Transmission PSEP RRQ). The rates in PG&E’s tariff only go to 5 decimal places. Given this, a \$1,000 defect is immaterial to the final cost of the program because it is 1/47 of what it would take to have an impact on the PSEP RR. Again, this sets a very tight threshold for the impact of a discovered error.
- e) The PwC QA testing team did not make any determinations as to any dollar impacts from data defects. The PG&E PSEP team reviewed the observations, confirmed if they were in fact defects, and then calculated any potential dollar impact variances based primarily on a potential change to Decision Tree outcome or a change in project footage.
- f) Here is an example of how the \$1,000 threshold can serve as tight tolerance for consistent data migration, data validation, and Decision Tree outcomes: If a certain data field in a PSEP Project file were found to be inconsistent with the PFL data, then that data field in the PSEP Project file would be updated with the correct PFL information. Once updated with the correct PFL information, that PSEP Project file would be re-run through the Decision Tree to determine if the Decision Tree outcome (with the correct data) is different than the Decision Tree outcome of the original (incorrect data). If the corrected data changes the Decision Tree outcome, then that new outcome would trigger a cost change of greater than \$1,000 (likely much more). Using the \$1,000 dollar threshold sets a tight tolerance for the impact of a defect in the data that changes the Decision Tree outcome. If the correction of an error changed a project from Replace to Test, it would have triggered a large cost change. If a footage error were discovered, it would have likely triggered a cost impact greater than \$1,000 when corrected. The implementation of a QA test for each step in the process (where data moves or is interpreted) reduces the risk of inaccurate Decision Tree outcomes. The \$1,000 dollar threshold is a reporting mechanism used to establish a common threshold for reporting the impact of observed defects, and was intended to be a very conservative threshold.