PG&E Pipeline Safety Enhancement Plan (PSEP) Expedited Application Workshop

Tuesday March 26, 2013

CPUC, San Francisco

Agenda

- Purpose
- MAOP Validation prior to the Application
- Application Showing Information
- Impact on Validation
- Class 1 and 2 pipe
- Q&A

Purpose

Decision 12-12-030 addressing PG&E's PSEP,

- " ….we shall require PG&E to file an expedited application 30 days after the conclusion of its MAOP validation and records search work that includes an updated pipe segment database. The specific showing that PG&E will be required to provide in its application will be considered in a workshop to be held no later than 90 days from the effective date of this decision. We expect this expedited application to be limited in scope, but we believe that an expedited application will be a more appropriate means to review the submitted data than an advice letter." (p.115)

- Ordering Paragraph 11, Pacific Gas and Electric Company must file an application within 30 days after the completion of its Maximum Allowable Operating Pressure validation and records search to present the results of those efforts and update its Implementation Plan authorized revenue requirements and related budgets, consistent with this decision.

Process Prior to Application: MAOP Validation

Validate the MAOP for every gas transmission pipeline segment and component (feature).

- Reviewed in excess of 3.7 million documents to date
- MAOP Validation of all HCA pipeline segments (1,800 miles, Method 1) without prior strength test.
  - began in April 2011 and completed February 2012
- MAOP Validation of all remaining pipelines (4,950 miles)
  - forecast data review complete, April 2013
  - QA and data upload forecast complete, Summer 2013
- Level of effort (in excess of 250K person-days)

Process Prior to Application: MAOP Validation (continued)

- Segment MAOP's and the development of Pipeline Feature Lists (PFLs), data entry, and analysis will be completed April 2013.

- Before the MAOP Validation Project can be deemed "complete," PG&E must take the component level data from the PFLs and integrate the data with PG&E's enhanced GIS (Intrepid), and ensure geospatial alignment at the pipe segment level. PG&E expects to upload the data currently housed in PFLs into Intrepid during May 2013.

- Once the data are uploaded into Intrepid, PG&E plans to conduct a thorough Quality Assurance/Quality Control ("QA/QC") process before the data transfer can be deemed reliable.

- PG&E expects the QA/QC process to be completed June 2013.

Process Prior to Application: MAOP Validation (continued)

- After the MAOP Validation QA/QC is complete, the data must be transferred to the PSEP pipe segment database.

- Pipeline Modernization Decision Trees must be re-run using the updated data, and the results of that must be compared to the scope of work that PG&E forecasted in the original PSEP filing.

- Once PG&E has an updated forecast of capital and expense projects that result from running the new data through the Decision Trees, a new revenue requirement must be developed, and new gas rates must be consistent with the polices within D.12-12-030.

- PG&E expects the process of re-running the Decision Trees and developing new revenue requirements and rates for Phase 1 to require at least one month.

- Estimated Application Date: late August to mid-September 2013.

Validating PSEP Project Scopes

Project Validation is a multi step process. It involves:

- Data validation of pipeline properties from Pipeline Features Lists (PFL's) built by the Records Validation Team.
- PSEP Engineer transfers data from the PFL into the PSEP database.
- Updated pipeline segment Class Location and High Consequence Areas (HCA's) data is imported from GIS into the PSEP database.
- Updated pipeline segment attribute information is run through the PSEP decision tree.
- PSEP Action is input into the database.
- Field verifications of project (limits & location) including a review of existing land rights, permit requirements, construction feasibility, system capacity issues and any other Gas Accord V projects on the pipeline.
- Calculate cost responsibility (ratepayer & shareholder) based on CPUC PSEP Decision.

Application Showing/Information

- Updated PSEP Project Workpapers, Table 3-1 (Capital Expenditures and Expenses by Maintenance Activity Type (MAT)), Table 3-2 (Capital Expenditures by Maintenance Activity Type), Table 3-3 (Expenses by Maintenance Activity)

- Each table will list every PSEP proposed project, length, original cost estimate.

- PG&E will identify the PSEP action for each project following MAOP records validation. (e.g. Test, Replace, Phase 2, No Action)

- PG&E will identify change in project length, if any.

- PG&E will update project cost responsibility (ratepayer & shareholder) based on CPUC PSEP Decision.

- Updated Tables for Revenue Requirements, Cost Allocation and Rates for Phase 1 resulting from validation per CPUC decision.

Application Information (cont'd)

- An updated PSEP database (electronic file) with additional columns that will show validated:

•Pipe Diameter	•Test Date
•Yield Strength	•Test Medium
•Wall Thickness	•Test Duration
•Installation Date	•Test Witness
•Joint Efficiency Factor	•Test Pressure
•Seam Type	•Met Testing Req. at time of install
•Joint Type	•Met 49 CFR, Subpart J Test Req.
•HCA Status	•Met PSEP Criteria
•Class Location	•Decision Tree Outcome
•% SMYS	•Phase Deviation
•Segment Length	•Project Type
	•MAOP for Pipeline

Application Information (cont'd)

- Partial Screen Shot of Validated GIS information.

	A	B	C	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DZ	EA	EB	EC	ED	EE	EF
1				ion (DV) Of GIS Data																
2	OBJE	ROUTE	SEGME	DVChg_	OD_PFL	INS_JOB_	YR_INSTA	FOOTA	CL/	JNTE	GIRTH	LONGSEAM_R	JOINT_TY	SMYS_F	MOP	W_THI(	DV_TEST_	TEST_PRE	MEDIUM_	TEST_DUR_
117	1115	108	162.2		16.000	38100	1/1/1930	90	3	0.8	Unknoi	AOS	BellSpigot	33000	490	0.2500	No Test	No Test	No Test	No Test
118	1116	108	162.3		16.000	38100	1/1/1930	5	3	0.8	Unknoi	AOS	BBCR	33000	490	0.2500	5/28/1970	925	W	21
119	1117	108	162.4		16.000	38100	1/1/1930	4	3	0.8	Unknoi	AOS	BBCR	33000	490	0.2500	5/28/1970	925	W	21
120	1118	108	162.6		16.000	38100	1/1/1930	180	3	0.8	Unknoi	AOS	BBCR	33000	490	0.2500	5/28/1970	925	W	21
121	1119	108	163		16.000	38100	1/1/1930	1776	3	0.8	Unknoi	AOS	BBCR	33000	490	0.2500	5/28/1970	925	W	21
122	1120	108	163.2		16.000	174114	2/1/1970	55	3	1	Unknoi	UNK	Unknown	42000	490	0.2500	5/28/1970	925	W	21
123	1121	108	163.3		16.000	174114	2/1/1970	33	3	1	Unknoi	UNK	Unknown	42000	490	0.2500	5/28/1970	925	W	21
124	1122	108	163.6		16.000	38100	1/1/1930	211	3	0.8	Unknoi	AOS	BBCR	33000	490	0.2500	5/28/1970	925	W	21
125	1123	108	164		16.000	38100	1/1/1930	1025	3	0.8	Unknoi	AOS	BBCR	33000	490	0.2500	5/28/1970	925	W	21
126	1124	108	164.3		16.000	174114	2/11/1970	116	3	1	Unknoi	ERW	Unknown	30000	490	0.2500	5/28/1970	925	W	21
127	1125	108	165		16.000	119743	8/24/1952	310	3	1	Unknoi	ERW	Unknown	30000	490	0.2500	5/28/1970	925	W	21
128	1126	108	165.1		16.000	38100	1/1/1930	1416	3	0.8	Unknoi	AOS	BBCR	33000	490	0.2500	5/28/1970	925	W	21
129	1127	108	165.2		16.000	38100	1/1/1930	77	3	0.8	Unknoi	AOS	BBCR	33000	490	0.2500	5/28/1970	925	W	21
130	1128	108	165.3		16.000	4597217	6/25/1987	357	3	1	Unknoi	ERW	Unknown	42000	490	0.3750	6/24/1987	1250	W	8.3
131	1129	108	166		16.000	4597217	6/25/1987		3	1	Unknoi	ERW	Unknown	42000	490	0.3750	6/24/1987	1250	W	8.3
132	1130	108	166.3		16.000	4597217	6/25/1987	5547	3	1	Unknoi	ERW	Unknown	42000	490	0.3750	6/24/1987	1250	W	8.3
133	1131	108	167		16.000	4597217	6/25/1987	1913	2	1	Unknoi	ERW	Unknown	42000	490	0.3750	6/24/1987	1250	W	8.3
134	1132	108	167.1		16.000	30604391	9/29/2008	29	2	1	Unknoi	SMLS	Unknown	35000	490	0.3750	9/8/2008	1100	W	8.3

Application Information (cont'd)

- Updated data will resolve data in the "MAOPrec430" data field (complete, incomplete, partial and blank).

- Updated database will include test date, test pressure, test duration, test media, installation date.

- Given the millions of documents involved in the MAOP determination process, copies of detailed documentation confirming pipe specs and pressure tests will not be included. Instead, stakeholders will be provided access to the Records database to view these documents onsite.

- Segments that have dropped out of Phase 1 due to records validation will be noted.

- A description of "Other, High Priority Projects" that were not identified in the original filing but may be done in Phase 1, if any.

Impact of Validation on Phase 1

Per D.12-12-030, to the extent that validation impacts work proposed in Phase 1, then it will be described in the Application. Some examples include:

- The gap between segments to be tested is short (less than 1 mile for hydrotest and there are no other complicating issues).

- The affected segments are adjacent to phase 1 work, and addressing other adjacent untested segments is economical at this time.

- The pipeline is to be retired so all segments within the section to be retired are affected.

- The boundaries of a pressure test may be extended to avoid impacting an environmentally sensitive area.

Impact of Validation on Phase 1

Decision 12-12-030 addressing PG&E's PSEP

- "Accordingly, the general rule is that pipeline segments in Class 1 or 2 locations will not be included in Phase 1. We recognize exceptions to this general rule where, for sound engineering or economic reasons, pipeline segments not located in the priority locations should nevertheless be included in Phase 1. Pipeline segments adjacent to priority locations logically fit within such exceptions. Thus, we find that to the extent a pipeline segment is located in a Class 1 or 2 area but is adjacent to Class 3 or 4 locations, PG&E properly included the Class 1 or 2 segments in Phase 1...." (p.67)

Class 1 & 2 Pipe

How has PG&E addressed Class 1 & 2 pipe segments in response to the CPUC Decision?

- PG&E will review the pipeline replacement and strength testing projects for any projects which consisted entirely of Class 1 and 2 non-HCA pipe in Phase 1. Projects will be reviewed and removed, as appropriate, through Application.

- Engineering judgment and Phase deviation codes in the PSEP database to define which Class 1, Class 2 pipe segments and segments with prior test records get included within a project scope.

- Project Examples.

Questions?