From: Singh, Sumeet

Sent: 11/15/2011 7:01:36 AM

To: 'sunil.shori@cpuc.ca.gov' (sunil.shori@cpuc.ca.gov)

Cc: Medina, Joe A (/O=PG&E/OU=CORPORATE/CN=RECIPIENTS/CN=JAMN);

Horner, Trina (/O=PG&E/OU=CORPORATE/CN=RECIPIENTS/CN=TNHC); Ramaiya, Shilpa R (/o=PG&E/ou=Corporate/cn=Recipients/cn=SRRd); Redacte

Redacted Campbell, Ben (NRD) (/O=PG&E/OU=CORPORATE/CN=RECIPIENTS/CN=BCC3): Redacted

Redacted , Redacted

Redacted ; Malkin, Joseph M

(Law) (/O=PG&E/OU=Corporate/cn=Recipients/cn=J4M0)

Bcc:

Subject: RE: Q&A for CPUC - Saturday 11-12-11

Sunil,

We are working on drafting a detailed response; however, you may have been reviewing an older version of the MAOP report for GCUST7013. The analysis that you have performed below is precisely the reason we performed an excavation for this short in beginning November and identified the seam type to be ERW which changes the JEF and SMYS values. The updated PFL and MAOP report was included in the 11/7 e-mail to the CPSD.

Sumeet

From: Shori, Sunil [mailto:sunil.shori@cpuc.ca.gov] Sent: Monday, November 14, 2011 11:51 PM

To: Singh, Sumeet

Cc: Redacted Ramaiya, Shilpa R; Horner, Trina; Medina, Joe A; Malkin, Joseph M (Law);

Redacted Campbell, Ben (NRD); Redacted

Subject: RE: Q&A for CPUC - Saturday 11-12-11

Sumeet.

At 365 psig, the following short at GCUST7013, installed in 1945, would operate at approximately 37% SMYS:

0+05.3 1+46.3 Pipe 1945 4.500 0.1480 1 25000 1 N/A Unknown 4 inch or less 0.6 710 N/A N/A N/A 396 1 40.1% Y R 396

This segment would appear to require a pressure test for an MOP of 365 psig.

Also, for DREG4192, even with the year of installation unknown, assumptions are being made as to the WT and SMYS for the pipe. How is that possible?

Thanks, Sumeet.

Sunil

From: Singh, Sumeet [mailto:S1St@pge.com]

Sent: Mon 11/14/2011 10:00 PM

To: Shori, Sunil

Cc: Redacted Ramaiya, Shilpa R; Horner, Trina; Medina, Joe A; Malkin, Joseph M (Law); Redacted ; Campbell, Ben (NRD); Redacted

Subject: Re: Q&A for CPUC - Saturday 11-12-11

Sunil,

The reason this segment was not pressure tested was because it is operating below 20% SMYS at 365 psig which was the established threshold for performing pressure tests for the shorts.

We would need to coordinate the test with the customer as this tap provides service to Moffett Field. I would need to work with Ben's team to assess the feasibility of how quickly this test can be performed and provide you with feedback. Thank you.

Sumeet

From: Shori, Sunil [mailto:sunil.shori@cpuc.ca.gov] Sent: Monday, November 14, 2011 09:46 PM

To: Singh, Sumeet

Subject: RE: Q&A for CPUC - Saturday 11-12-11

Sumeet,

Why was PG&E unable to hydro-test this segment when it was inspected on 11/13/2011? What would prevent PG&E from pressure testing GCUST7013 in the near future, and what's the earliest a pressure test could be performed?

Thanks, Sumeet.

Sunil

From: Singh, Sumeet [mailto:S1St@pge.com]

Sent: Mon 11/14/2011 8:08 PM

To: Shori, Sunil

Cc: Ramaiva. Shilna R: "Malkin, Joseph' (jmalkin@orrick.com)'; Horner, Trina; Redacted ; Redacted Medina, Joe A; Peralta, Sara

Subject: RE: Q&A for CPUC - Saturday 11-12-11

Sunil,

Below is a response to the transmission definition question. Please review and let us know if you have any additional questions or concerns. This completes the responses to all outstanding questions.

Thank you.

Sumeet

Question: In its filing, PG&E stated it: "Verified that pressure test records exist for all other pipelines and associated components located in HCAs, including shorts operating greater than or equal to 20% Specified Minimum Yield Strength (SMYS)." An operating level of 20% SMYS is one definition of transmission lines; however, another is the supply to a large volume customer not downstream of a distribution center. Has PG&E included such facilities (which maybe under 20% SMYS but still considered transmission) in its pressure test verifications?

Answer: There are 36 shorts that are operating less than 20% SMYS tapped off L101, L147 and L132A without a pressure test. The summary by the type of short is included below. Additionally, the shorts are included in the attachment by segment for your reference as well.

	Summary Lines 101, Description		2A Count
Branch	Branch Route		4
BD	Blowdown		2
DCUST	Distribution Custome	er	11
DREG	District Regulator		9
GCUST	Gas Customer		1
STUB	Stub or short cut-off	pipe	8
Χ	Cross tie		1
Total	3	6	

Based on the definition outlined in RMP-06 for a large volume customer, only one short, GCUST7013, meets the criteria referenced in your question above. A valid pressure test record was not located for this short which consists of 2.375" and 4.5" OD pipe and the highest operating component is the 4.5" OD ERW pipe (18.5% SMYS at 365 psig) for this short. However, a field excavation was performed on 11/13/2011, H-form attached for your reference, to assess the 4.5" OD pipe and no integrity related concerns were identified.

From: Singh, Sumeet

Sent: Monday, November 14, 2011 2:47 PM

To: 'Shori, Sunil'

Cc: Ramaiva. Shilpa R: "Malkin, Joseph' (jmalkin@orrick.com)'; Horner, Trina: Redacted

Redacted Medina, Joe A; Peralta, Sara

Subject: RE: Q&A for CPUC - Saturday 11-12-11

Sunil,

Below is a response to the JEF question. Please review and let us know if you have any additional questions. We are working on preparing the response to the last question. Thank you.

Sumeet

Question: PG&E de-rates the joint efficiency factor (JEF) for SSAW to 0.8 instead of 1.0 as permitted by 49 CFR, Part 192. GCUST7013, reviewed by PG&E on 11/03/2011, applies a joint efficiency factor of 1.0 to a 1945, 4.5-inch OD, ERW pipe. I would believe this is most likely low frequency electric resistance welded (LF-ERW) pipe. I would like to know if PG&E has considered de-rating the joint factor used in the review of GCUST7013, and other instances of LF-ERW pipe used throughout the analysis, to a JEF of 0.8, as it has done for SSAW, and why it has decided to keep the JEF for LF-ERW at 1.0?

Response: The JEF is applied in accordance with PG&E's Standard & Specifications Section A-11 (attached for reference) which includes a 0.8 JEF for SSAW which is more conservative than 49 CFR 192 and 1.0 for all ERW pipe including LF-ERW, consistent with 49 CFR 192 and PG&E's Standard & Specifications. This has been the guidance used for the MAOP validation project. However, PG&E's Integrity Management team is currently reviewing the use of the 0.8 JEF factor for SSAW pipe on a going forward basis.

Additionally, in accordance with the 1988 PHMSA advisory regarding pre-1970 ERW pipe, a minimum pressure test ratio of 1.25 is required for the test to be considered valid even in Class Location 1 and in accordance with the pressure test ratios identified in 49 CFR 192.619 for Class Locations 2, 3 and 4 as part of the MAOP validation project. Also, as you know, LF-ERW pipe is considered to consist of a potential manufacturing threat as part of the Integrity Management Program and is given a higher priority for integrity assessment purposes.

For the 4.5 inch pipe referenced in the question associated with GCUST7013, the field excavation performed on 11/13/2011, H-form attached for your reference, identified no integrity related concerns.

From: Singh, Sumeet

Sent: Monday, November 14, 2011 12:57 PM

To: Shori, Sunil

Cc: Ramaiya, Shilpa R; 'Malkin, Joseph' (jmalkin@orrick.com); Horner, Trina;

Redacted Medina, Joe A

Subject: RE: Q&A for CPUC - Saturday 11-12-11

Sunil,

Below is a response to the OQ question. Please review and let us know if you have any additional questions. We are working on preparing responses to the two remaining questions. Thank you.

Sumeet

Question: What OQ reviews and/or OQ QA/QC has PG&E performed to confirm that all covered tasks included in, and applicable to, work done as part of the restoration request, are being performed by individuals OQ'd on the covered tasks?

Answer: All contractors to PG&E that perform OQ covered tasks and sub-tasks are required to have an OQ program to qualify their employees prior to starting work on any PG&E project. The PG&E project manager receives Completed Qualification Reports from contractors stating their employees' qualifications prior to the start of any work. Attached is an example of such a report submitted by the contractor performing excavations for a crew member for the MAOP validation project.

PG&E employees working on OQ covered tasks are qualified by PG&E prior to the performance of such tasks on a job. In addition to the actual OQ task training and evaluation, we perform an annual training with the employees reviewing the Operator Qualification program which covers responsibilities of the employees and the company to maintain our Operator Qualification program. We also maintain our OQ employee task data base to track the covered tasks for the respective employees.

Attached is the list of OQ Tasks and sub-tasks.

From: Singh, Sumeet

Sent: Monday, November 14, 2011 11:59 AM

To: Shori, Sunil

Cc: Medina, Joe A; Redacted

Subject: RE: Q&A for CPUC - Saturday 11-12-11

Sunil.

No later than end of day today. The responses will be provided as they become available.

Sumeet

From: Shori, Sunil [mailto:sunil.shori@cpuc.ca.gov] **Sent:** Monday, November 14, 2011 11:57 AM

To: Singh, Sumeet

Subject: RE: Q&A for CPUC - Saturday 11-12-11

Sumeet,

Any idea when we can expect PG&E's response to the three questions? As you know, we are working to prepare our response related to tomorrow's PG&E filing.

Thanks, Sumeet.
Sunil
From: Singh, Sumeet [mailto:S1St@pge.com] Sent: Monday, November 14, 2011 10:21 AM To: Shori, Sunil Cc: Medina, Joe A Subject: RE: Q&A for CPUC - Saturday 11-12-11
Sunil,
I will review and provide you with a response. Thank you.
Sumeet
From: Shori, Sunil [mailto:sunil.shori@cpuc.ca.gov] Sent: Monday, November 14, 2011 9:49 AM To: Singh, Sumeet Subject: FW: Q&A for CPUC - Saturday 11-12-11 Sumeet,
I just got an e-mail reply indicating that Joe is at jury duty today.
Sunil

From: Shori, Sunil

Sent: Monday, November 14, 2011 9:47 AM

To: Medina, Joe A

Subject: RE: Q&A for CPUC - Saturday 11-12-11

Joe,

This is a third question stemming from last night's review:

PG&E de-rates the joint efficiency factor (JEF) for SSAW to 0.8 instead of 1.0 as permitted by 49 CFR, Part 192. GCUST7013, reviewed by PG&E on 11/03/2011, applies a joint efficiency factor of 1.0 to a 1945, 4.5-inch OD, ERW pipe. I would believe this is most likely low frequency electric resistance welded (LF-ERW) pipe. I would like to know if PG&E has considered de-rating the joint factor used in the review of GCUST7013, and other instances of LF-ERW pipe used throughout the analysis, to a JEF of 0.8, as it has done for SSAW, and why it has decided to keep the JEF for LF-ERW at 1.0?

Thanks, Joe.

Sunil

From: Shori, Sunil

Sent: Sun 11/13/2011 2:47 PM

To: Medina, Joe A

Subject: RE: Q&A for CPUC - Saturday 11-12-11

Joe,

Thanks, for the earlier responses. I have two more questions

In its filing, PG&E stated that it: "Verified that pressure test records exist for all other pipelines and associated components located in HCAs, including shorts operating greater than or equal to 20% of Specified Minimum Yield Strength (SMYS)." An operating level of 20% of SMYS is one definition of transmission lines; however, another is the supply to a large volume customer not downstream of a

considered transmission) in its pressure test verifications? A second question is what OQ reviews and/or OQ QA/QC has PG&E performed to confirm that all covered tasks included in, and applicable to, work done as part of the restoration request, are being performed by individuals OQ'd on the covered tasks? Thanks, Joe. Sunil **From:** Medina, Joe A [mailto:JAMn@pge.com] **Sent:** Sun 11/13/2011 10:49 AM To: Shori, Sunil Cc: Ramaiya, Shilpa R; 'Malkin, Joseph' (jmalkin@orrick.com); Horner, Trina; Singh, Sumeet; Redacted Redacted Medina, Joe A Subject: FW: Q&A for CPUC - Saturday 11-12-11 Sunil Here is the answer to question number 4 that I mentioned in my previous e-mail message that I would get back to you on. 4. On L-101, segment 155.3 you say that the features that were tested for 4 hours account for 3.8 feet of the job. How were the other sections of pipe on that job tested?

Answer: Job 185586 installed 24" and 20" pipe. In the PFL, this is depicted in segments 155 and 155.3. At the time of the installation 2728 feet of 24" diameter pipe was tested for 8.1 hours on 6-7-1977. In addition, approximately 9 feet of 20" diameter pipe (including the 24"x20" reducer) was tested for 4.1 hours on 6-9-1977. Today, 2264.7 feet of the 24" and 3.8 feet of the 20" remain in

operation. This is depicted in the PFL.

distribution center. Has PG&E included such facilities (which may be under 20% SMYS but still

I will be out and about today, but if you have any further questions, do not hesitate to call or send me an e-mail message.		
Regards,		
Joe Medina		
Manager		
Technical Advisory Team		
MAOP Validation Project		
jamn@pge.com		
925.324.6461		
Go Green!		
Do not print this e-mail unless it is extremely necessary.		
Email communication may contain privileged or confidential information proprietary to Pacific Gas and Electric Co If you have received this communication in error, we ask that you advise the sender by reply e-mail and immediately delete the message and any attachments without copying or disclosing the contents.		
From: Medina, Joe A		
Sent: Sunday, November 13, 2011 9:52 AM		
To: 'Sunil.shori@cpuc.ca.gov' Cc: Ramaiya, Shilpa R; 'Malkin, Joseph' (jmalkin@orrick.com); Horner, Trina; Singh, Sumeet; Redacted		
Redacted ; Medina, Joe A		
Subject: Q&A for CPUC - Saturday 11-12-11		

Sunil
Here are answers to your questions that we discussed on the phone Saturday evening:
1. At the L-132A and 147 taps off of L-101 is there any regulation?
Answer: L-132A taps interconnects with L-101 at Redacted Station. Redacted
2. How is it understood when assumptions are used in the MAOP validation?
Answer: On the MAOP Validation Report, a superscript of 1 indicates that a Historical Procurement Practice or Sound Engineering Analysis (AKA assumption) was used. Below is a sample from an MAOP Validation Report and also a snap of the legend on the report.
3. When a pipeline is operating one-class-out, how is this indicated on the MAOP Validation Report?
Answer: If a pipeline has been tested in place for a period of >= 8 hours, then a line can operate one-class-out (e.g. operating in a class 3 location up to 60% SMYS). The calculations are performed in

accordance with 192.611 (snap below). This 192.611 pressure is indicated in the MAOP per Design column of the MAOP Validation Report with a superscript of A. Below is a snap of an example.		
4. On L-101, segment 155.3 you say that the features that were tested for 4 hours account for 3.8 feet of the job. How were the other sections of pipe on that job tested?		
Answer: This will take me more research and I will get back to you shortly.		
I believe that I captured your questions accurately. If I did not, please let me know.		
Thanks,		
Joe Medina		
Manager		
Technical Advisory Team		
MAOP Validation Project		
jamn@pge.com		
925.324.6461		
Go Green!		
Do not print this e-mail unless it is extremely necessary.		

Email communication may contain privileged or confidential information proprietary to Pacific Gas and Electric Co.. If you have received this communication in error, we ask that you advise the sender by reply e-mail and immediately delete the message and any attachments without copying or disclosing the contents.