

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE  
STATE OF CALIFORNIA

ADMINISTRATIVE LAW JUDGE MARIBETH A. BUSHEY, presiding

Order Instituting Rulemaking on the Commission's Own Motion to Adopt New Safety and Reliability Regulations for Natural Gas Transmission and Distribution Pipelines and Related Ratemaking Mechanisms.

} EVIDENTIARY HEARING

} Rulemaking  
11-02-019

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PUBLIC UTILITIES COMMISSION, STATE OF CALIFORNIA  
SAN FRANCISCO, CALIFORNIA

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STATEMENTS

MR. RUBENS

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1 SAN FRANCISCO, CALIFORNIA

2 NOVEMBER 20, 2013 - 9:05 A.M.

3 \* \* \* \* \*

4 ADMINISTRATIVE LAW JUDGE BUSHEY: The  
5 Commission will come to order.

6 This is the time and place set for  
7 the evidentiary hearing in Order Instituting  
8 Rulemaking on the Commission's Own Motion to  
9 Adopt New Safety and Reliability Regulations  
10 for Transmission and Distribution Pipelines  
11 and Related Ratemaking Mechanisms. This is  
12 Rulemaking 11-02-019.

13 Good morning. I'm Administrative  
14 Law Judge Maribeth Bushey, the assigned  
15 administrative law judge to this proceeding.  
16 I am expecting the assigned commissioner  
17 Commissioner Florio for part of the hearing  
18 today. He will be in and out. He had some  
19 unavoidable conflicts.

20 We will begin today with a summary  
21 from the parties regarding a workshop that  
22 was held yesterday. I'd like to hear what  
23 issues were resolved in the workshop and more  
24 importantly what issues remain to be resolved  
25 today in the cross-examination.

26 Shall we begin, I guess with the  
27 parties as opposed to the Applicant PG&E, or  
28 Mr. Malkin, would you like to begin with a

1 status report?

2 MR. MALKIN: We're happy to have Mr.  
3 Singh do that. As you know, I was not there.

4 ALJ BUSHEY: That's right.

5 MR. MALKIN: But Mr. Singh was. And we  
6 also at least believe that the minutes that  
7 we circulated last night are an accurate  
8 reflection of what occurred. And I guess  
9 we'll hear from the parties whether there's  
10 any disagreement about that. But I would  
11 suggest we begin with Mr. Singh giving an  
12 oral report.

13 ALJ BUSHEY: Okay.

14 MS. PAULL: ORA does not find the  
15 minutes completely accurate, and Mr. Roberts  
16 can explain how. Mr. Roberts can --

17 ALJ BUSHEY: All right. The minutes  
18 are not in the record. So let's start with  
19 Mr. Singh's explanation of what he thought  
20 happened yesterday, and then to the extent  
21 the other parties disagree with his  
22 explanation, we can then address those  
23 disagreements.

24 So Mr. Singh, do you want to just  
25 come forward to the counsel table here so  
26 that you can be heard.

27 MR. SINGH: Good morning, your Honor.  
28 Good morning all. In terms of the workshop

1 yesterday, there were two main objectives of  
2 the workshop that we covered. The first  
3 objective was to provide additional  
4 explanation of the RCP hydrotest report  
5 results. And the second was provide  
6 assurance that the entire length of Line 147  
7 including all the shorts operating at or  
8 above 20 percent SMYS were tested.

9 We had Mr. Larry Decker, who is the  
10 executive engineer from RCP, on the call the  
11 first two to two and a half hours. Mr.  
12 Decker walked the parties through  
13 specifically Test 43 B, which was subject to  
14 questioning the day before as part of our  
15 hearing process. The questions that he  
16 addressed and specifically discussed was why  
17 the actual pressure volume plot deviated from  
18 the predicted curve. He also talked about  
19 why there was a jig in the line at about 600  
20 pounds of pressure. He explained that to all  
21 the parties. His discussion is accurately  
22 summarized from my perspective in the minutes  
23 that were sent out yesterday.

24 Mr. Decker also apologized on behalf  
25 of RCP regarding the data errors that were  
26 included which led to quite a bit of  
27 confusion in the hearing room the day before.  
28 He also confirmed that that error and that

1 section of the report was irrelevant when it  
2 came to establishing the MAOP of the line,  
3 given that there was no yielding as a result  
4 of that specific hydrotest that was  
5 performed.

6 The next objective that was  
7 discussed was did we strength test all of  
8 Line 147 and the shorts operating at or above  
9 20 percent SMYS. We had PG&E's engineering  
10 team walk the parties through an in-depth  
11 review of the shorts, the pipeline features  
12 list for the main line and the shorts, the  
13 strength test pressure reports, all  
14 associated as-built drawings.

15 And at the conclusion of the review  
16 we, specifically, myself, Mr. Johnson, asked  
17 Mr. Roberts from ORA if we had confirmed that  
18 PG&E demonstrated that all of Line 147  
19 including all the shorts operating at or  
20 above 20 percent SMYS have been strength  
21 tested. And his response was affirmative.

22 MS. PAULL: And Mr. Roberts will need  
23 to respond to that, have an opportunity to  
24 respond to that.

25 ALJ BUSHEY: Ms. Paull, I would be  
26 pleased to call on him in turn. Is it okay  
27 if I run the sequence of events here.

28 Thank you, Mr. Singh. We'll next

1 hear from ORA.

2 MR. ROBERTS: So I do believe that the  
3 minutes are -- pretty such describe what  
4 happened. And I would say that with regard  
5 to the RCP report I think through the course  
6 of the meeting we determined or we agreed  
7 that those curves do not show yielding. So  
8 they -- so we don't have a concern. We still  
9 have a concern with the fact that it took  
10 three revisions of that report to get it  
11 right. So we still have a recordkeeping  
12 issue on that. But from a safe operation of  
13 the line, I think ORA was convinced that we  
14 don't have an issue based on the PV curves.

15 The second issue about the  
16 completeness of the testing. I think the  
17 notes are very close to fully accurate. I  
18 think there's a little bit of a semantical  
19 difference in that we were taken through a  
20 guided tour of the main line drawing by  
21 drawing tied back to the PFLs. So we did  
22 look at everything that happened on the main  
23 line. And so I can say that I verified -- I  
24 feel confident that the main line has been  
25 fully tested.

26 With regard to the shorts, we looked  
27 in detail at two shorts, and I was taken  
28 through that and convinced that those shorts,



1 two shorts had been tested. Based on the  
2 course of actions during the day, I believe  
3 that PG&E has tested all the line including  
4 the shorts. I have not tested whether the 20  
5 percent SMYS limitation on shorts that were  
6 not tested is applicable, but I trust that  
7 that -- I don't doubt that that's consistent  
8 with the record, but I have not verified  
9 that.

10 So in summary, I do feel like we can  
11 move forward with the assumption that the  
12 line has been hydrottested to support the 400  
13 psi MAOP that the reports strove to provide.  
14 We do still have an issue with the  
15 recordkeeping in that my testimony raised  
16 inconsistencies within the STPR reports.  
17 Those inconsistencies are still there such  
18 that if somebody wanted to go back and do the  
19 same analysis I did, they would run into the  
20 same road blocks unless they sat down with  
21 PG&E or had access to all of PG&E's records  
22 with some guidance to truly show that. So.

23 ALJ BUSHEY: So in summary.

24 MR. ROBERTS: In summary, we're  
25 comfortable saying that the MAOP of test is  
26 as PG&E has stated, and we're comfortable  
27 going with that. The issues of recordkeeping  
28 are still open. We didn't try to address

1 those yesterday.

2 ALJ BUSHEY: Right. The broader issues  
3 of recordkeeping are within sort of the  
4 substantive component of the Order to Show  
5 Cause. Our focus here immediately is Line  
6 147.

7 MR. ROBERTS: Correct.

8 ALJ BUSHEY: As I understand your  
9 presentation, all of the issues that you have  
10 been -- that the Office of Ratepayer  
11 Advocates has raised regarding the safe  
12 operation of Line 147 have been addressed,  
13 and there are no outstanding issues related  
14 to the safe operation of that line.

15 MR. ROBERTS: That is not correct.

16 ALJ BUSHEY: Okay. Please tell me what  
17 issues remain.

18 MR. ROBERTS: So all we looked at  
19 yesterday was hydrotest reports, the  
20 hydrotesting of the line. So to the degree  
21 that we were able to look at the documents  
22 and confirm that the line had been  
23 hydrotested, I can say that I believe the  
24 line has been hydrotested to the pressure  
25 that PG&E has stated. And so the MAOP of  
26 test is as they've stated.

27 What we did not discuss yesterday  
28 was what the quality control should have

1     been, what the records that were provided to  
2     DRA, how well they support that assertion.  
3     And also there's also we have an issue of  
4     what the other components of determining the  
5     MAOP would be, so for example, the MAOP of  
6     design. We still have open issues with  
7     regard to that that get into interpretation  
8     of the federal regulations, which we agreed  
9     in the meeting yesterday we couldn't go there  
10    in the time we had.

11           And so we focused on the thing we  
12    could do, and we did accomplish that goal,  
13    but there's still an open issue about how you  
14    interpret what's the safe and correct MAOP  
15    for that line. And it's a legal  
16    interpretation issue of the federal code  
17    primarily.

18           ALJ BUSHEY: And this -- okay. Let's  
19    try and put parameters around what -- where  
20    we are. PG&E put forward their hydrotest  
21    results as their demonstration of the safety  
22    of the line. ]

23           You have no objection to their  
24    hydrotest results, correct?

25           MR. ROBERTS: That's correct.

26           ALJ BUSHEY: So their evidentiary  
27    presentation has been made and you do not  
28    dispute, correct?

1           MR. ROBERTS: They have made statements  
2 in the hearings about how one would establish  
3 the MAOP that suggests the MAOP only -- can  
4 be established based only on a hydrotest, and  
5 ORA does agree with that point.

6           ALJ BUSHEY: Right. But I'm just  
7 focusing on the hydrotest.

8           MR. ROBERTS: So when you say  
9 hydrotest, we resolved that yesterday.

10          ALJ BUSHEY: Okay, that's resolved.

11          MR. ROBERTS: Yes.

12          ALJ BUSHEY: Okay. So now, there's  
13 this legal issue regarding the interpretation  
14 of the code.

15          MR. ROBERTS: Correct.

16          ALJ BUSHEY: And tell me exactly what  
17 that legal issue is.

18          MR. ROBERTS: Should I try?

19          MS. PAULL: Either way. If you would  
20 like to.

21          MR. ROBERTS: I think where -- there  
22 are two legal issues. One is with regard to  
23 the SMYS you would apply to an unknown piece  
24 of pipe. That's code section 192.107.

25                 The more fundamental issue --

26          ALJ BUSHEY: Back up. SMYS to an  
27 unknown, that goes back to their -- forgotten  
28 the name of it.

1 MR. ROBERTS: PRUPF.

2 ALJ BUSHEY: Procedure for unknown --

3 MR. MALKIN: Procedure for Resolving  
4 Unknown Features -- Pipeline Features.

5 MS. PAULL: Pipeline Features.

6 MR. MALKIN: PRUPF as it is.

7 ALJ BUSHEY: And PRUPF was part of the  
8 PSEP, not to speak in complete acronyms, but  
9 that was part of the plan put forward two  
10 years ago.

11 MR. MALKIN: Correct.

12 ALJ BUSHEY: And approved by the  
13 Commission last year; correct?

14 MR. MALKIN: Yes. It was actually  
15 I believe approved by the Commission. Not  
16 the specific document but the concept was  
17 approved twice, once in the decision that set  
18 off the formal PSEPs. That decision also  
19 approved PG&E's proposed methodology for  
20 doing the MAOP validation. I --

21 ALJ BUSHEY: And then the general  
22 concept sort of on a conceptual level.

23 MR. MALKIN: Right.

24 ALJ BUSHEY: Then it was brought down  
25 to the detail level as part of the specific  
26 PSEP plan.

27 MR. MALKIN: Correct.

28 ALJ BUSHEY: Okay.

1           MR. ROBERTS: I don't know that I agree  
2 with that. The Ordering Paragraph 4 of  
3 the decision said generically you can use  
4 engineering assumptions on an interim basis.  
5 That's just a paraphrasing.

6           ALJ BUSHEY: I'm familiar with the  
7 language, Mr. Roberts.

8           MR. ROBERTS: What's that?

9           ALJ BUSHEY: I'm familiar with the  
10 language.

11           MR. ROBERTS: Okay. What -- and I know  
12 that the PRUPF was provided in the update  
13 application and it's provided as  
14 nonconfidential in that particular case.  
15 I don't recall that the full PRUPF was  
16 provided with the original PSEP application.  
17 And certainly, the one that they're putting  
18 forward in response to discovery now is  
19 a different document than what they could  
20 have possibly used for the PSEP, the original  
21 PSEP filing.

22           ALJ BUSHEY: Why would it have to be --  
23 they had to have some sort of a protocol for  
24 dealing with the unknowns. Two years ago,  
25 they had to start --

26           MR. ROBERTS: Correct.

27           ALJ BUSHEY: -- with something.

28           MR. ROBERTS: Yes.

1           ALJ BUSHEY: There had to have been  
2 some sort of a protocol. Has it been  
3 updated, is that what happened?

4           MR. ROBERTS: Yes.

5           MR. MALKIN: The testimony on  
6 September 6 was that it was constantly being  
7 updated and improved.

8           ALJ BUSHEY: Okay. So this approach to  
9 the unknowns has been approved at least twice  
10 by the Commission. And sounds like it's up  
11 again and the new details are up again in  
12 the update proceeding.

13          MR. ROBERTS: Correct.

14          ALJ BUSHEY: So that issue has either  
15 been resolved by the Commission or is before  
16 the Commission in the update application.

17          MR. ROBERTS: Could we have a moment,  
18 your Honor?

19          ALJ BUSHEY: Sure. We'll be off the  
20 record.

21                   (Off the record)

22          ALJ BUSHEY: We'll be back on  
23 the record.

24                   Mr. Roberts.

25          MR. ROBERTS: I think what I'm trying  
26 to characterize is that when we look at  
27 the MAOP of the line using the design MAOP,  
28 that use of the PRUPF entails more risk than

1 determining that number using the federal  
2 minimum standard value. So that is the point  
3 I'm trying to make and that DRA -- that ORA  
4 has a concern about it as it's related to  
5 the -- you can't say that one is safe and one  
6 is not. It's more a question of which has  
7 greater risk.

8 And so by using the federal minimum  
9 standard, there is less risk to the people in  
10 San Carlos than if the PRUPF number was used.

11 So from our standpoint, every time  
12 PG&E says we're using very conservative  
13 values, it's difficult to hear that language  
14 when the number they're using results in  
15 a less conservative outcome than if  
16 the federal minimum standard was applied.

17 ALJ BUSHEY: But this isn't anything  
18 that's particular to Line 147.

19 MR. ROBERTS: It is an overarching  
20 issue that does apply to 147.

21 ALJ BUSHEY: It applies to all  
22 the lines that are contested pursuant to  
23 the PSEP.

24 I've forgotten even what that  
25 stands for.

26 MR. MALKIN: Pipeline Safety  
27 Enhancement Plan.

28 ALJ BUSHEY: Pipeline Safety



1 Enhancement Plan.

2 Everything that's been tested  
3 pursuant to the Pipeline Safety Enhancement  
4 Plan has been tested in accord with that  
5 protocol for unknowns.

6 MR. ROBERTS: No. This -- so maybe it  
7 will help if I mention the second legal  
8 argument.

9 ALJ BUSHEY: Okay.

10 MR. ROBERTS: Because I think that  
11 makes it a little more clear.

12 What we've heard, it seems to be  
13 that the perception at PG&E is that we can  
14 establish an MAOP based solely on a hydrotest  
15 outcome and that the design MAOP as provided  
16 in section 192.619 is in some way irrelevant.

17 So that's probably the base issue.  
18 When you -- if one assumes that per the  
19 federal regulation the design MAOP does  
20 matter, then this assumes SMYS value comes  
21 into play because that determines the design  
22 MAOP.

23 So it starts with, does 192.619  
24 apply to all pipe in Line 147 or not? And  
25 then if it does, how do we assign numbers for  
26 unknown pieces of pipe or pipe with very  
27 limited information that we now know to be in  
28 the ground.

1 ALJ BUSHEY: But again both of these  
2 apply to the entire enhancement plan effort.  
3 This is not -- there's nothing specific to  
4 Line 147. So if this one's flawed, then all  
5 the rest of them are flawed; right?

6 MR. ROBERTS: Well, my understanding is  
7 our primary objective in this hearing is to  
8 come out with what the safe MAOP for that  
9 line is. Is that -- I believe I understood  
10 that correctly. That when we're finished  
11 with our hearing we can say yes, the 330 is  
12 safe or no, it is not.

13 And so to do that, we have to have  
14 determined does the design MAOP apply or not.  
15 And if it does, is it correct to use PG&E's  
16 PRUPF value of 33,000 psi as SMYS or is it  
17 more correct to establish a design MAOP which  
18 will drive the MAOP of the line based on  
19 the federal minimum SMYS of 24,000 psi.

20 ALJ BUSHEY: All right. Well, I have  
21 said enough on -- let's go back.

22 Mr. Malkin, what's your position on  
23 this?

24 MR. MALKIN: Well, your Honor, the  
25 Commission's PSEP decision, first one that  
26 your Honor authored, did away with  
27 grandfathering in the following respect.  
28 Under 619(c), the MAOP of Line 147 and all of

1 the other pre-1970 pipelines was established  
2 based on the five-year high operating  
3 pressure from 1965 to 1970. And what  
4 the Commission said was in the absence of  
5 a hydrotest on those grandfathered lines,  
6 we're doing away with grandfathering, you  
7 cannot rely simply on that historical  
8 operating issue; you either have to go out  
9 and validate it through hydrotesting or  
10 replace that pipe.

11 So the whole purpose of  
12 the exercise has been to conduct hydrotests  
13 under modern subpart J standards with an  
14 added spike test on the segments of high  
15 consequence area pipe that had their MAOPs  
16 established solely under the grandfather  
17 clause with no hydrotest.

18 The Commission could have in that  
19 decision but did not say that we're changing  
20 the rules. We're not only saying you can't  
21 establish -- rely solely on the historic  
22 operating pressure, but you can't use that at  
23 all. You have to go back and apply 619(a) as  
24 if there were a brand new pipeline. And  
25 contrary to the way GO 112 has always been  
26 written and federal regulations were always  
27 written, you now have to retroactively apply  
28 those design factors including the section

1 that Mr. Roberts has referred to, section  
2 192.107 which the code says were not  
3 retroactive. PHMSA specifically said it was  
4 not retroactive. The Commission specifically  
5 said was not retroactive. And the Commission  
6 has never changed that. What the Commission  
7 did change was to say you can't rely solely  
8 on historic operating pressure.

9 PG&E, as you've heard, has gone  
10 a step further with respect to Line 147, and  
11 to Mr. Roberts' point, in fact is making that  
12 line operate more conservatively than this  
13 Commission's decision allows. Because you  
14 heard from Mr. Rosenfeld, the hydrotest in  
15 fact validates safe operation at the historic  
16 400 psig.

17 PG&E isn't asking for 400 psig.  
18 PG&E has conservatively applied the design  
19 formula and come up with an MAOP of 330 that  
20 it's asking for.

21 ALJ BUSHEY: Whose design formula?

22 MR. MALKIN: It is the design formula  
23 set forth in the federal code, the part that  
24 wasn't retroactively applied. PG&E has  
25 retroactively applied. But pursuant to  
26 the proposal it made to the Commission, that  
27 the Commission has looked at twice, instead  
28 of arbitrarily picking a 24,000 psig value

1 for those pipe features as to which it does  
2 not have complete verifiable and traceable  
3 records, what PG&E has done is where it has,  
4 for example, with AO Smith pipe, complete  
5 traceable, verifiable historical purchasing  
6 records that established that PG&E purchased  
7 AO Smith pipe to different pipe  
8 specifications, the least of which was 33,000  
9 psi, others of which are 35,000, 42,000.

10 So PG&E, where it doesn't have  
11 a complete verifiable, traceable record for  
12 specific AO Smith pipe conservatively assumes  
13 pursuant to the guidance of the June 2011  
14 decision conservatively assumes the least  
15 value of 33,000.

16 ALJ BUSHEY: Now Mr. Malkin, that  
17 pipeline because of the leak, a portion was  
18 removed and tested. Do we have an actual  
19 number for that, for the tested pipeline so  
20 we know what was really there?

21 MR. MALKIN: The piece that was cut  
22 out?

23 ALJ BUSHEY: Yes.

24 MR. MALKIN: Where the leak was?

25 ALJ BUSHEY: Right.

26 MR. MALKIN: We know several things.  
27 And this was in the Anamet materials.

28 We know it is AO Smith pipe. ]

1           We know that when it was laboratory  
2 tested, the actual yield strength was over  
3 39,000 PSI. And we know that the yield  
4 strength of the weld was over 40,000 PSI,  
5 which as Mr. Singh said on Monday, if you --  
6 if you relied solely on that test result, you  
7 would say a joint efficiency factor of 1 is  
8 justified because the weld material is in  
9 fact slightly stronger than the pipe body.

10           PG&E conservatively didn't use  
11 those test results, and the Federal Code  
12 wouldn't use a one-off test to change  
13 specifications. PG&E conservatively used the  
14 33,000. That's the lowest historical  
15 purchasing record and applied a .8 joint  
16 efficiency factor.

17           ALJ BUSHEY: Let me interrupt you for a  
18 minute, Mr. Malkin. It sounds to me like  
19 PG&E's assumption of 33,000 has been  
20 supported by subsequent evidence that -- that  
21 has been brought forward, and that is that  
22 all of the evidence points to a much higher  
23 number than what PG&E has been using. And  
24 you may need to turn to Mr. Singh for this,  
25 but other than on Line 147, has there been  
26 any instances where PG&E has found A.O. Smith  
27 pipe with less than 33,000?

28           MR. MALKIN: The answer to my knowledge

1 is no. I know PG&E has had Exponent do a  
2 number of burst tests on A.O. Smith pipe,  
3 which I'm not sure if Mr. Singh or  
4 Mr. Harrison is the person with the most  
5 knowledge about that. But my understanding  
6 is those tests have uniformly shown the yield  
7 strength of the A.O. Smith pipe to be above  
8 33,000.

9 ALJ BUSHEY: Greater than 33. Do you  
10 want to confer with your clients for a moment  
11 so that we can have one of them who knows the  
12 answer to that come forward, or could the  
13 person who knows the answer to that just walk  
14 forward?

15 MR. MEYERS: Your Honor can I be heard  
16 for a moment while this gentleman is coming  
17 up.

18 ALJ BUSHEY: Certainly.

19 MR. MEYERS: I know Mr. Malkin is not  
20 testifying, therefore, what he's saying, even  
21 though it's in the record, is not evidence.  
22 However, I heard Mr. Singh yesterday  
23 specifically say that A.O. Smith pipe could  
24 have come from other utilities. He testified  
25 during the record that A.O. Smith pipe may be  
26 A.O. Smith pipe purchased by PG&E, but it  
27 also may be A.O. Smith pipe, quote, "from  
28 other operators."

1           So if Mr. Malkin is saying they're  
2 using PG&E's least specifications of 33,000  
3 PSI, how do we know that that was the least  
4 specifications for pipe that they acquired  
5 from other utilities.

6           ALJ BUSHEY: Let's hold on that  
7 thought, and let's follow-up on the actual  
8 facts that have come forward subsequently.

9           Mr. Malkin, do you have a witness  
10 that is -- that will --

11          MR. MALKIN: Do you want to swear him  
12 early?

13          ALJ BUSHEY: Yes, let's swear him.

14          DAVID HARRISON, called as a witness  
15 by Pacific Gas and Electric Company,  
16 having been sworn, testified as  
17 follows:

18          THE WITNESS: I do.

19          ALJ BUSHEY: Please be seated. State  
20 your full name for the record and spell your  
21 last name.

22          THE WITNESS: My name is David  
23 Harrison. My last name is H-a-r-r-i-s-o-n.

24          ALJ BUSHEY: Okay. Mr. Malkin, we  
25 don't want to get into everything. We just  
26 want a narrow answer to a narrow question.

27          MR. MALKIN: I was going to seek  
28 clarification of that and I appreciate that,  
your Honor.



1 DIRECT EXAMINATION

2 BY MR. MALKIN:

3 Q Mr. Harrison, you've been sitting  
4 here and the specific question to you is are  
5 you familiar with the testing of the yield  
6 strength of A.O. Smith pipe that PG&E has had  
7 performed?

8 A Yes, I am.

9 Q And could you please describe for  
10 us the nature of the tests that have been  
11 done?

12 A There's -- over the years, there's  
13 been a variety of tensile tests,  
14 yield-strength tests performed on A.O. Smith  
15 pipe. There's records -- historical records  
16 in, like, 1968, the 1980s of us doing tests.  
17 We have -- and then we had Exponent burst  
18 test the pipe this last summer. That was 7  
19 to 9 pieces of pipe. I don't remember the  
20 exact numbers. All of those cases, the test  
21 results were all greater than 33,000 --  
22 clearly greater than 33,000.

23 ALJ BUSHEY: That's all we need to know  
24 for the moment, Mr. Harrison. So I'll let  
25 you be excused for the moment.

26 THE WITNESS: Okay.

27 MR. MALKIN: May I respond to  
28 Mr. Meyers' comment?

1           ALJ BUSHEY: Just hang on one second.  
2 I want to get back to Mr. Roberts. So we  
3 have a protocol. They've been following the  
4 protocol. Every factor they've found in  
5 apparently the last 30 years supports the  
6 facts used in the protocol.

7           MR. ROBERTS: Can I respond?

8           ALJ BUSHEY: Sure.

9           MR. ROBERTS: So first of all, we have  
10 certain lengths of pipe in the ground that  
11 PG&E now says are A.O. Smith pipe that PG&E  
12 has also said they can't say where it came  
13 from. So we have this fundamental issue of  
14 long lengths of pipe in the ground where we  
15 don't have documentation saying where it came  
16 from.

17                   In that case, the Federal Code says  
18 you can establish a minimum SMYS based on  
19 tensile testing, but it also provides an  
20 Appendix B, Section 2(d), which provides a  
21 sampling protocol such that -- I'm not  
22 disagreeing that the Anamet report says that  
23 the tensile test of that sample was greater  
24 than 24,000 or greater than 33,000 even.

25                   But what the federal legislation has  
26 acknowledged is that when you don't know  
27 what's in the ground when it's hundreds of  
28 feet of pipe, you can't draw a sample at one

1 location and then carry that one piece of  
2 data to represent the whole length of all the  
3 pipe that they've now classified as A.O.  
4 Smith pipe. And I -- I have a line of cross  
5 for today which asks them specifically about  
6 that protocol and if they followed it. Maybe  
7 the testing they've done over the years has  
8 in some way complied with that, but we  
9 haven't had a chance to ask that question.

10 MS. STROTTMAN: Your Honor, may I  
11 comment, please, on behalf of the City of San  
12 Carlos? It appears to me that the PRUPF if  
13 I'm saying that correctly, results in unknown  
14 pipe characteristics being given less  
15 conservative MAOP values than newer segments.  
16 And it's -- it's our position and -- and I'm  
17 going to cross-examine the witnesses on  
18 this -- that PG&E still doesn't have  
19 traceable, verifiable, and complete records  
20 for every inch of Line 147.

21 We don't know where the A.O. Smith  
22 pipe came from, and it's our stance that the  
23 yield strength should be 24,000 PSI, which is  
24 24 KSI. And we will put forward that  
25 argument in our briefs but I just wanted to  
26 let you know our position.

27 MS. PAULL: Your Honor, I'd like to say  
28 something.

1 ALJ BUSHEY: Ms. Paull?

2 MS. PAULL: Clearly, there's a rather  
3 complicated question of the correct  
4 interpretation of the Federal Regulations of  
5 192.619. ORA thinks that -- based on what  
6 Mr. Malkin said and what PG&E witnesses have  
7 said that they are not interpreting correctly  
8 certain requirements of the regulation. We  
9 would be happy to brief that. Maybe it would  
10 be helpful to you if you could get -- we  
11 could do this quickly, and it would be short.  
12 But we could brief what we think is the  
13 correct interpretation of these regulations  
14 and how they apply in this case.

15 ALJ BUSHEY: But this isn't a new  
16 issue. We've been applying this same  
17 protocol for two years, and it's not just in  
18 a Line 147 issue. If you're right, then  
19 everything in the PSEP is wrong. So it's a  
20 much, much bigger issue than just Line 147,  
21 and that's why it's -- I don't see how we  
22 resolve it in this re-pressurization  
23 proceeding, which is the narrow issue before  
24 us at the moment.

25 Mr. Malkin, do you have a response  
26 to this?

27 MR. MALKIN: Yes, well, I think your  
28 Honor is right. This is the way the

1 Commission has been interpreting it.  
2 Mr. Roberts just I think revealed the -- what  
3 is -- he is not correctly understanding in  
4 the code when he said that the code has a  
5 provision where if you've got some miles or  
6 hundreds of feet of pipe in the ground,  
7 there's a protocol for testing it. That is  
8 exactly wrong.

9           The Code Section 192.107, which is  
10 the pipe design section, applies to new  
11 pipelines. If you look at 192.13, it makes  
12 very clear that those pipe design  
13 requirements apply to new pipelines installed  
14 after a date in March 1971 and to  
15 replacements of pipe installed after a date  
16 in November of 1970. And so they -- they  
17 were never intended by the Department of  
18 Transportation -- Office of Pipeline Safety  
19 at that time -- to apply retroactively to  
20 pipe that was already in the ground.

21           As to pipe that was already in the  
22 ground, it's the grandfather clause, which  
23 this Commission has been wrestling with and  
24 done away with as the sole basis for  
25 establishing an MAOP. For two years, every  
26 gas utility in this state has been proceeding  
27 on the basis of the guidance provided by the  
28 Commission in June of 2011. What PG&E did

1 here, as you've just rightly pointed out, is  
2 no different from what PG&E has done through  
3 out its system and what the other utilities  
4 are doing.

5           Mr. Meyers didn't cite to the actual  
6 transcript of Mr. Singh's testimony, and I  
7 think his notes don't quite have it right.  
8 What Mr. Singh said on Monday is where we  
9 acquired a pipeline from another company --  
10 and as you know, PG&E over the years have  
11 merged with and acquired companies, some of  
12 which own pipelines. Where we acquired  
13 another pipeline, we apply the federal  
14 minimum because we don't know what their  
15 purchasing standards were. Where it is our  
16 pipeline that we designed and we installed,  
17 we know what our minimum purchasing  
18 requirements were, and we apply the historic  
19 minimums.

20           In the case of Line 147, PG&E does  
21 not have complete, verifiable, traceable  
22 records to show which PG&E pipeline this pipe  
23 came from and when. But there is every  
24 indication that it came from Line 101 when  
25 that line was redone. The one thing that  
26 PG&E does know is it came from PG&E's system,  
27 contrary to the inference that Mr. Meyers  
28 drew that somehow this reconditioned pipe may

1 have come from elsewhere. The reconditioning  
2 was always done to pipe that PG&E had in the  
3 ground somewhere else and they had reused.

4           So the -- yes, it is -- it is true  
5 that in terms of what Mr. Roberts is saying,  
6 this is not the most conservative assumption  
7 one could possibly make. The most  
8 conservative thing one could do would be to  
9 shutdown all the pipelines. And that would  
10 eliminate every conceivable risk except for  
11 the risk of what happens to all of us without  
12 natural gas service. And in the scheme of  
13 things where this pipeline has operated  
14 safely at 400 PSI, where it has been tested  
15 to a pressure that justifies and validates  
16 that 400, as you heard from Mr. Rosenfeld,  
17 one of the leading experts in the world, and  
18 the company proposes to operate it only at  
19 330, there is a huge margin of safety.

20           And there is no conflict with the  
21 code. There is no conflict with this  
22 Commission's decisions about how to go about  
23 validating the MAOP and hydro testing lines  
24 that have been historically grandfathered.  
25 And given what you've already heard from the  
26 parties about them now being satisfied, about  
27 the hydro testing, I think as to Line 147 --  
28 putting aside records issues that you may

1 well hear more about and -- let me say  
2 parenthetically PG&E has always from day one  
3 acknowledged it does not have complete,  
4 verifiable, and traceable records of  
5 everything in its system. That's why we do  
6 the hydro testing. And the issue -- as far  
7 as the issue of is this compliant with the  
8 way this Commission has approached and  
9 verified the safety of pipelines and was the  
10 hydro test adequate, I don't think there's  
11 any dispute.

12 MS. PAULL: Your Honor, may I respond?

13 ALJ BUSHEY: Yes, Ms. Paull.

14 MS. PAULL: Mr. Malkin spoke for a long  
15 time. I'm not going to attempt to respond to  
16 everything he said. Just three things.

17 One, the interpretation of the  
18 regulations, it is somewhat complicated. I  
19 think it's much easier to sort it out on the  
20 basis of looking at the text of the  
21 regulations and short written briefs, much  
22 easier than hearing very long narratives  
23 about it. So I again renew our offer for --  
24 to brief this particular issue.

25 The other thing is I want to correct  
26 a misimpression that Mr. Malkin may have  
27 created when he talked about things that  
28 Mr. Roberts was saying about risk.



1 Mr. Roberts was not talking about lowest  
2 possible risk. He was talking about less  
3 risk if you use the values for unknown  
4 pipeline features that are required by the  
5 federal regulations as opposed to the ones  
6 PG&E is using. That is -- was I clear, or do  
7 you need to rephrase that?

8 ALJ BUSHEY: I understand your point.

9 MS. PAULL: Okay. And the final point  
10 is very simple. I think everyone understands  
11 this. But to bring it back to what really  
12 matters, there's the MAOP established by the  
13 hydro test. And that question is now  
14 resolved for this line. There's the design  
15 MAOP. There's questions about how that  
16 should be calculated because of questions of  
17 interpretation of the regulations. And the  
18 assumption -- what assumptions must be used.]

19 The federal regulations, as you  
20 know, require that if you have both the  
21 design MAOP and the hydrotest MAOP, the  
22 operator must use the lower of those values.  
23 And that's not retroactive application of the  
24 regulation. That is applying the regulation  
25 to an MAOP validation being done now. That  
26 is that the current criteria for establishing  
27 design MAOP, those regulations apply to MAOP  
28 validation being done now. And if PG&E

1 thinks otherwise, I think they're mistaken.

2 Again, we can brief this. We'd be  
3 happy to brief it.

4 ALJ BUSHEY: We can brief this. And if  
5 PG&E is mistaken, then the Commission has  
6 been mistaken for two years. And if it's  
7 mistaken, it's not just Line 147 and it's not  
8 just PG&E. It's every natural gas operator  
9 in the state.

10 So if you want to pursue that issue,  
11 it needs to be pursued in the sort of overall  
12 perspective in this proceeding. That's the  
13 place to make that argument and get  
14 everybody -- get every natural gas system  
15 operator's safety enhancement plan revised in  
16 accord with your perspective on the  
17 regulation, because right now all of the  
18 operators are using the rules as adopted by  
19 the Commission over the last two years.

20 MR. ROBERTS: Can I add something. I  
21 believe that the added -- that the  
22 requirements added by the decisions of this  
23 Commission relative to PSEP, that basically  
24 what it did is eliminate the grandfather  
25 clause and required operators to go beyond  
26 the federal standards by doing a Sub J test.

27 The use of engineering assumptions  
28 in that decision is said to be used on an

1 interim basis for the purpose of prioritizing  
2 PSEP work. I don't believe that that  
3 decision in any way attempted to change the  
4 MAOP of existing pipelines either before,  
5 during or after the PSEP-related work. I may  
6 have that wrong, but it doesn't seem in my  
7 mind that we have done the PSEP  
8 implementation wrong or that the Commission  
9 has given the utilities direction to change  
10 the way they calculate the MAOP of record on  
11 their pipelines.

12 So I do agree that it's a bigger  
13 scope than just Line 147 and it has serious  
14 consequences systemwide. It doesn't seem  
15 that it is quite as broad as your Honor has  
16 suggested.

17 MS. STROTTMAN: Your Honor, the City of  
18 San Carlos agrees with Mr. Roberts and Ms.  
19 Paull's statements. Obviously there is a  
20 difference of opinion on this issue, and we  
21 feel like this should be briefed. And I just  
22 wanted to note too and comment on Mr.  
23 Malkin's statement that he said, you know, we  
24 have every indication that the pipe came from  
25 Line 101, but that doesn't mean that they  
26 have traceable, verifiable and complete  
27 records.

28 ALJ BUSHEY: They have better than

1 that. They have it on a yield strength test  
2 that says it's 39,000. Why are you arguing  
3 for 24 when we know as a matter of fact it's  
4 39?

5 MR. ROBERTS: We know as a matter of  
6 fact that at one point in that line that's  
7 what the tensile strength of the piece of  
8 pipe that they pulled out of the ground is.

9 ALJ BUSHEY: There's never been any  
10 other piece in the last 20 years that they  
11 have pulled out of their system that has been  
12 below 33. You have no evidence to support  
13 your assertion.

14 MR. ROBERTS: We have --

15 ALJ BUSHEY: You have regulations that  
16 the Commission has -- we have been at this  
17 for two and a half years now. You know. And  
18 if you want to pursue this, their updated  
19 application is in. I expect it will be  
20 assigned to me. And we'll put it in the  
21 scoping memo, and we can litigate it there  
22 and brief it there.

23 MS. STROTTMAN: But your Honor, what  
24 proof do we have that every single inch of  
25 147 is A.O. Smith pipe? What proof do we  
26 have that they know what's in the ground,  
27 every single inch of Line 147?

28 ALJ BUSHEY: That's why we did the

1 pressure testing, because they don't. We  
2 decided that two and a half years ago. They  
3 don't know. Therefore, we're going to at  
4 great expense hydrotest or replace everything  
5 in the state. That's what we did two and a  
6 half years ago. That's why we have a  
7 hydrotest record right now that supposedly is  
8 good to 400, 400 psi.

9 MS. STROTTMAN: That's fine. But it's  
10 San Carlos's position that that line needs to  
11 be replaced.

12 ALJ BUSHEY: Well, the Commission  
13 approved a PSEP plan last year that  
14 segregated things between replacements and  
15 hydrotesting. And if you want to -- I guess  
16 you can't really relitigate the PSEP.  
17 There's the update proceeding. You can  
18 propose recat -- reprioritizing things. But  
19 to be honest, there are lots of segments of  
20 pipeline in the state that have not been  
21 hydrotested yet. So those are the next up in  
22 priority.

23 MS. PAULL: Your Honor --

24 ALJ BUSHEY: But we can litigate that  
25 in the update proceeding if you want to  
26 change the priorities. But a year ago we set  
27 the priorities, we approved the plan, volumes  
28 of plans. And everything was all laid out in

1 a three-year -- a three-year series of  
2 priorities. This process is well underway,  
3 and if you want to propose changing it, we  
4 have a proceeding to do that, but this isn't  
5 the one.

6 MS. PAULL: Your Honor, I'd like to  
7 make you aware of some information that has  
8 been produced in this proceeding but not  
9 offered into evidence. Possibly Mr. Harrison  
10 would be able to speak to it. It's evidence  
11 that -- well, as you -- once the company  
12 found out what pipe it did have in the  
13 ground, that cha -- under the PSEP decision  
14 tree it may very well have been prioritized  
15 for replacement rather than testing. And  
16 this was a question that was discussed among  
17 the engineers. It's a discussion in some  
18 e-mails that, you know, have been produced.

19 Possibly Mr. Harrison could speak to  
20 this, and it was one of -- I remember that  
21 was one of the questions he raised. Now that  
22 we know what's in the ground, now that we  
23 know it has a joint -- a different kind of  
24 seam and a lower joint efficiency, and I  
25 don't remember about the SMYS, but now we  
26 know that it has -- it's a different sort of  
27 pipe, would it be prioritized under the PSEP  
28 for replacement rather than testing.

1           And there's at least one examination  
2 under oath with one of the engineers who  
3 works on the PSEP proceeding, has  
4 responsibilities for the PSEP plan, said yes,  
5 it would have been -- it would have been  
6 prioritized as replace rather than test.

7           Maybe people think that doesn't  
8 matter because it's been tested now.  
9 Apparently that's what that engineer -- I'm  
10 thinking of Mr. Manegold, who was one of the  
11 engineers examined under oath by Mr. Shori.  
12 Maybe engineers feel, well, it was tested.  
13 So now it doesn't have to be replaced. But  
14 had they had correct information, it looks  
15 like it would have been replaced rather than  
16 tested. So maybe this really does matter.

17           ALJ BUSHEY: Well, Ms. Paull, yes, this  
18 does matter. That's why we're all here. But  
19 we can't go back in time. If they would have  
20 known then what they know now, the decision  
21 tree would have led to a different result.  
22 But it's not then. It's now. And in between  
23 those two times at great expenses and great  
24 inconvenience the line was pressure tested.

25           Now the information is available.  
26 We've fundamentally changed the equation.  
27 Now we have a piece of pipeline that has been  
28 hydrottested and will come out in a very

1 different place in the decision tree because  
2 it's been hydrotested.

3 MS. PAULL: Yes.

4 ALJ BUSHEY: So that -- we have to work  
5 with what we know now. And what we know now  
6 based on every -- every expert who has looked  
7 at this agrees that this line is safe to  
8 operate up to 400 pounds per square inch.  
9 So.

10 MS. STROTTMAN: I'm sorry to interrupt,  
11 but our expert, Dr. Stevick, did not testify  
12 to that.

13 ALJ BUSHEY: Okay.

14 MS. STROTTMAN: So I just wanted to  
15 highlight that.

16 ALJ BUSHEY: Okay. So it sounds like  
17 ORA's objections go to the protocol for the  
18 entire PSEP plan, which we can take up in the  
19 broader proceeding.

20 MR. ROBERTS: I just received a note  
21 that somebody looked -- one of our team  
22 looked back at the decision and clarified  
23 that the MAO -- excuse me -- the MAOP  
24 decisions -- I'm assuming that's the  
25 decisions to raise MAOP on these lines -- did  
26 not address the interpretation of federal  
27 regulations and that PG&E's what we think  
28 mistaken interpretation of that code is being



1 raised here for the first time. So.

2 ALJ BUSHEY: Absolutely. The  
3 repressurization decisions would not have  
4 looked at that. They would look at the  
5 supporting evidence which was specified in a  
6 decision in 2011. We set it out, and it was  
7 basically hydrotest results. That's what we  
8 said. Bring us hydrotest results, and we  
9 will authorize repressurization. They  
10 brought us hydrotest results two years ago.  
11 Authorized repressurization. They came back  
12 with corrected ones now, and they're  
13 requesting reauthorization to 330.

14 That's where we are. We're in a  
15 very narrow review of a very narrow question  
16 with a very specific evidentiary requirement.  
17 And to the extent you want to challenge the  
18 way, the protocol for the PSEP, that is  
19 something that should be addressed in the  
20 update application if you don't like the  
21 interpretation there, because it goes -- it's  
22 not just to Line 147. It's everything  
23 throughout the state.

24 MS. BONE: Your Honor, if the  
25 Commission is using an incorrect protocol to  
26 set MAOP that is not consistent with federal  
27 regulations, that is an issue that needs to  
28 be addressed here when you decide to set the

1 next MAOP for Line 147. It cannot be  
2 ignored. It would be legal error to ignore  
3 the fact that we have an improper application  
4 of the federal code to calculate the MAOP.

5 MAOP is not just based on hydrotest  
6 records. You take the Subpart J record, and  
7 you run it through the requirements of 619,  
8 and you look at the design MAOP as well. And  
9 that section is the one that determines what  
10 MAOP does. You cannot ignore that section to  
11 set MAOP. And that is what appears to be  
12 happening here.

13 ALJ BUSHEY: If it's happening here,  
14 then it's happened throughout this  
15 proceeding. I don't agree that it is  
16 happening here.

17 But we need to get started. We've  
18 spent an hour on this now. And it appears  
19 that there are no factual disputes. If there  
20 are any disputes, they're legal disputes.

21 MS. BONE: That's not correct, your  
22 Honor. There are a number of factual  
23 disputes.

24 MS. STROTTMAN: And I agree with Ms.  
25 Bone.

26 ALJ BUSHEY: Okay. What are the  
27 factual disputes? Let's get down to that.

28 MS. BONE: PG&E's showing in this case

1 to support the 330 MAOP is not complete. It  
2 has not made that showing. It has not  
3 provided data.

4 ALJ BUSHEY: Ms. Bone, that's argument.  
5 Give me a disputed issue of material fact.

6 MS. BONE: The material fact is that  
7 Exhibits A and B do not contain data to  
8 support PG&E's assertion that every foot of  
9 Line 147 has been tested.

10 ALJ BUSHEY: Mr. Roberts, this is your  
11 counsel.

12 MR. ROBERTS: That's correct.

13 MS. PAULL: Traci Bone is co-counsel  
14 for ORA.

15 ALJ BUSHEY: Right. I understand that.  
16 But didn't you just tell us at the beginning.

17 MS. PAULL: What Ms. Bone was saying is  
18 that the safety certification doesn't -- she  
19 wasn't saying that the line has not been  
20 tested. We now know -- we now much more  
21 confident that it's been tested. What she  
22 was saying is that you couldn't tell that  
23 from the safety certification, which is  
24 PG&E's evidentiary support for its pressure  
25 restoration request.

26 ALJ BUSHEY: So what do you want them  
27 to do? Do you want them to put more  
28 information in the record?

1 MS. PAULL: Their safety certification  
2 to the Commission should, number one, be in  
3 the records because a key piece of evidence,  
4 and number two, when reviewing it one should  
5 be able to determine that's the factual  
6 confirmation of what PG&E executives are  
7 saying. PG&E executives are testifying and  
8 saying things. The information in that  
9 safety certification, you're supposed to be  
10 able to confirm what they're saying in there.

11 So if that doesn't -- if they don't  
12 match, something is wrong with PG&E's  
13 showing. I think that is the point that Ms.  
14 Bone was trying to make.

15 MS. BONE: That is exactly the point.  
16 This Commission, as we reminded in opening  
17 statements, has an obligation to look at the  
18 evidence on the record, and that the evidence  
19 should support its decisions. And in order  
20 for PG&E to sit here and assert that Line 147  
21 has been tested, every foot of it, they  
22 should have data to back that up. The NTSB  
23 recognized this.

24 ALJ BUSHEY: Okay. Stop. Mr. Roberts.

25 MR. ROBERTS: Yes.

26 ALJ BUSHEY: Didn't you tell me that on  
27 the record that as part of the workshop you  
28 walked through this and that you were

1 satisfied that every foot has been pressure  
2 tested?

3 MR. ROBERTS: I clar -- so PG&E in  
4 their workshop statement said that we have --  
5 that we have certified the entire line has  
6 been tested. What I said is that in my  
7 opinion after that workshop that I believe  
8 that the line was hydrottested.

9 I still stand by my testimony which  
10 says that Appendix A to their October 11th  
11 filing, which, as Ms. Bone said, is the  
12 evidence that I thought I needed to look at  
13 and analyze to determine the validity of  
14 their statement, this still does not support  
15 the assertion that every inch of pipe has  
16 been tested.

17 On the one hand, I now -- I believe  
18 the line was hydrottested. There is no  
19 evidence in the record that it has been. So  
20 that's the difference. We had a workshop  
21 where I think all the experts that were there  
22 for parties concurred that we don't  
23 believe -- that we believe that the MAOP of  
24 test is correct, that that is a different  
25 thing from saying that PG&E has in this -- in  
26 response to this OSC provided the evidence to  
27 support that. And I did raise that point at  
28 the end of the workshop yesterday as well.

1 ALJ BUSHEY: Okay. This isn't an OSC.  
2 So there's no dispute about the fact. The  
3 only dispute is about what's been presented,  
4 that they haven't presented the correct paper  
5 to the Commission?

6 MS. PAULL: No, your Honor. They  
7 haven't met their burden of show -- of  
8 demonstrating that they have correctly  
9 calculated the MAOP that they are requesting.  
10 It's PG&E's burden to produce that evidence.

11 You will recall the NTSB, when the  
12 NTSB in their accident report on San Bruno,  
13 they said, they had a number of findings  
14 where they said, PG&E says X, but our  
15 investigation when we look at the data does  
16 not confirm that.

17 ALJ BUSHEY: What does that have to do  
18 with --

19 MS. PAULL: That the safety  
20 certification should -- is the key piece of  
21 evidence to support the restoration of the  
22 pressure of the line.

23 ALJ BUSHEY: Right. I understand that.  
24 But Mr. Roberts has met with them and gone  
25 over their information, and he factually  
26 agrees that they have done it. The only  
27 dispute I'm hearing is that somehow there's  
28 some pieces of missing paperwork to make that

1 demonstration. Is that what --

2 MS. PAULL: No.

3 ALJ BUSHEY: That's not a disputed  
4 issue of material fact.

5 MS. PAULL: No. There is a dispute, as  
6 you know, your Honor, about how to correctly  
7 calculate the design MAOP. That is one  
8 dispute.

9 ALJ BUSHEY: That is a legal issue.  
10 I'm looking for a disputed issue of material  
11 fact. I want a fact that PG&E has asserted  
12 that ORA asserts a different fact, actual  
13 fact in the real word.

14 MS. PAULL: Well, our assertion is that  
15 the showing they have made in their safety  
16 certification is not sufficient to support  
17 their request.

18 MR. ROBERTS: I can add another one. I  
19 believe it is a -- I believe this is a fact  
20 that you're looking for. PG&E is asserting  
21 that they can determine the SMYS of the line  
22 based on the sample that Anamet tested. I  
23 think it's a factual dispute whether that one  
24 piece of evidence can stand to represent the  
25 entirety of all the A.O. Smith pipe in Line  
26 147 and other unknown -- other pieces of pipe  
27 which their PFL says are unknown.

28 So in essence, in the safety

1 certification in the hearings we have seen I  
2 believe two test reports, one within the  
3 section where 109 leaked, and the other where  
4 they tied in between two hydrotests. We have  
5 two data points that --

6           So it's a statistical issue. When  
7 they can't provide complete traceable records  
8 of what's in the ground, then we have to  
9 somehow ascertain what's in the ground. And  
10 the common engineering practice is if  
11 something is unknown you sample with a  
12 formula that allows you to say that a finding  
13 in one point can be applied to the general  
14 population. And the federal standards  
15 actually account for that if you want to  
16 establish a SMYS based on tensile testing.

17           So I think it is a factual dispute  
18 whether the Anamet report, or I believe it's  
19 reports, can be used to establish a SMYS that  
20 is -- that accurately represents the unknown  
21 pipe in Line 147.

22           ALJ BUSHEY: But you've now come in a  
23 full circle back to the protocol for the  
24 unknowns. We have a protocol for dealing  
25 with that. And do you have any assertion  
26 that PG&E is not complying with that protocol  
27 that the Commission has adopted over two  
28 years ago?



1           MR. ROBERTS: I can -- a factual  
2 dispute that the document they provided to us  
3 is dated October -- October of 2013. The  
4 PRUPF that was provided to us as evidence was  
5 not the PRUPF that led to the PSEP filing.

6           They had a protocol. The Commission  
7 adopted a very broad definition of the use of  
8 engineering assumptions. That is not the  
9 same thing as, in my mind, the Commission  
10 taking a document which had been approved by  
11 PG&E management and saying, yes, we agree  
12 that you can use this on an interim basis to  
13 establish characteristics for unknown pieces  
14 of pipe.

15           PG&E has been modifying that  
16 process. And I think evolution is a good  
17 idea, but you do need to start from someplace  
18 solid and change.

19           But I guess my central point was  
20 that protocol itself, the one that they  
21 provided in this venue, was not directly  
22 approved by this Commission and your Honor in  
23 the decisions relevant to the PSEP.

24           ALJ BUSHEY: Okay. So other than legal  
25 argument about the unknown protocol, I  
26 still -- what disputed --

27           MR. ROBERTS: I'm sorry.

28           ALJ BUSHEY: -- issue of material fact

1 is there?

2 MR. ROBERTS: A separate related issue  
3 is that if -- so we do have the PRUPF, and we  
4 can now look at it because it was provided  
5 non-confidentially in the new PSEP  
6 application.

7 We have evidence that it was -- that  
8 PG&E's own process was not applied correctly  
9 for Segments 107 and -- I'm sorry -- 108 and  
10 Segment 108.7.

11 So setting aside what the federal  
12 government says to do, it appears that PG&E  
13 did not correctly apply their own process,  
14 which is something we saw many times in the  
15 PSEP application.

16 ALJ BUSHEY: In what way?

17 MR. ROBERTS: My testimony went into a  
18 lot of detail about where PG&E's decision  
19 tree was not followed in determining the  
20 mitigation that was performed on individual  
21 pipelines, pipeline segments.

22 ALJ BUSHEY: Decision tree.

23 MR. ROBERTS: I'm going back in time to  
24 the PSEP. What I'm saying here --

25 ALJ BUSHEY: I need you to get  
26 focused --

27 MR. ROBERTS: Right.

28 ALJ BUSHEY: -- on Line 147 and the

1 specific evidentiary requirements for  
2 repressurization authorization. It's very  
3 simple, and it amounts to a hydrotest.

4 As I hear ORA's position, they, ORA  
5 has agreed with PG&E that the line has been  
6 hydrotested. Is that an accurate statement  
7 of your position?

8 MR. ROBERTS: ORA does agree that the  
9 line was hydrotested.

10 ALJ BUSHEY: Okay.

11 MR. ROBERTS: Complete, completely.

12 ALJ BUSHEY: And that consistent with  
13 Subpart J, the Maximum Allowable Operating  
14 Pressure of that line is 400 pounds per  
15 square inch.

16 MR. ROBERTS: No. The determination of  
17 an MAOP based on a test pressure determined  
18 by Subpart L, I believe, which is 192.619.  
19 So Part J just says how you do a hydrotest.

20 ALJ BUSHEY: Sorry. Okay. So in any  
21 event, based on the hydrotest results, does  
22 ORA dispute that PG&E has provided hydrotest  
23 results to support their request for a 330  
24 pounds per square inch MAOP?

25 MR. ROBERTS: Based on the workshop  
26 yesterday, not on anything PG&E provided in  
27 response to our extensive discovery process,  
28 we are now -- I personally believe, and I

1 think my view represents ORA's position, that  
2 Line 147 was hydrotested consistent with  
3 Subpart J to support an MAOP of test of 330  
4 psi.

5 ALJ BUSHEY: Thank you.

6 MS. STROTTMAN: So your Honor, then is  
7 it your position then that the hydrotest is  
8 the end-all-be-all for this determination?

9 ALJ BUSHEY: It's not. My position is  
10 the position of the Commission in the  
11 decision setting forth the requirements for a  
12 repressurization authorization. There are  
13 specific supporting information that the --  
14 that PG&E must present. The essence of that  
15 is hydrotest results.

16 MS. STROTTMAN: Because I mean the City  
17 of San Carlos has a lot of issues. I mean we  
18 don't believe that the line even needs to be  
19 operated as a transmission line. We believe  
20 that PG&E's arguments that the upcoming  
21 winter season requires them to raise the  
22 MAOP, which is a reason why this proceeding  
23 in our opinion has been rushed. And there  
24 are several other issues that we have  
25 relating to PG&E's operational practices that  
26 relate to Line 147. So that's why I'm  
27 asking, is hydrotesting, if that's all the  
28 information you need, then this is the end of

1 the story? Is this --

2 ALJ BUSHEY: The Commission wrote the  
3 specifics for the story in Decision  
4 11-09-006. That's where it specified what  
5 PG&E needs to show to repressurize a line.  
6 It's very specific. It's very narrow. And  
7 the process is expedited. It's been that way  
8 for two years.

9 MS. PAULL: But your Honor, there's a  
10 requirement that is ongoing that I'm sure you  
11 know that PG&E be in compliance with all  
12 safety requirements, state and federal.

13 ALJ BUSHEY: And if you think that  
14 they're not, then you should file a complaint  
15 or we should take the issue up in the broader  
16 rulemaking. The narrow issue in front of us  
17 today is Line 147 and whether PG&E has met  
18 the requirements of Decision 11-09-006.  
19 That's all.

20 MS. PAULL: Does that decision only  
21 require hydrotesting, nothing more? I don't  
22 have it in front of me. That's the only  
23 reason I'm asking.

24 ALJ BUSHEY: It requires a safety  
25 certification. It requires the concurrence  
26 of SED. There's a list of supporting  
27 information that is required. It's very  
28 specific, very well laid out, if I do say so

1 myself, and we've applied it at least five or  
2 six times. That's what's required. And once  
3 they've met that, those requirements, then  
4 the decision is issued in fairly straight  
5 order.

6 So why don't we take a break, allow  
7 the parties to confer amongst themselves, and  
8 we'll reconvene in 10 minutes.

9 We'll be off the record.

10 (Recess taken) ]

11 ALJ BUSHEY: We'll be back on  
12 the record.

13 While we were off the record,  
14 I distributed copies of Decision 11-09-006  
15 that sets out the procedures and substantive  
16 requirements for a repressurization  
17 proceeding such as this one. I've directed  
18 the parties' attention to Ordering  
19 Paragraph 4 which sets forth the showing that  
20 PG&E must make.

21 The parties have been reviewing  
22 Ordering Paragraph 4, and it would assist us  
23 in setting the schedule for cross-examination  
24 if the parties would indicate which of these  
25 items that they believe that PG&E has not  
26 presented.

27 We'll start with ORA.

28 MS. PAULL: Your Honor, I'd just like

1 to note first that this is an Order to Show  
2 Cause proceeding, not a pressure restoration  
3 proceeding.

4 ALJ BUSHEY: No, it's not. This is not  
5 an Order to Show Cause proceeding. This  
6 component is a pressure restorization  
7 proceeding. The Order to Show Cause on the  
8 first part of that, the PDs are pending  
9 before the Commission. The substantive part  
10 of that we have cross-examination to do on.  
11 Today, the issue in front of the Commission  
12 is to restore pressure on Line 147.

13 MS. PAULL: Yes, I understand.

14 So we, ORA has already put on the  
15 record or, rather, will put on the record  
16 when you would like to move into evidence  
17 Mr. Roberts' testimony which explains in  
18 great detail the deficiencies in the safety  
19 certification and other information that PG&E  
20 has presented. Errors and so forth --

21 ALJ BUSHEY: Right.

22 MS. PAULL: -- which PG&E has  
23 acknowledged some of them on the record,  
24 I believe.

25 ALJ BUSHEY: Acknowledged and  
26 corrected.

27 Ms. Paull, Ordering Paragraph 4  
28 sets out A through G. I'm sorry, A through

1 H. Which of these components is it ORA's  
2 position that PG&E has not presented?

3 MR. ROBERTS: I would say that D, the  
4 Complete Pressure Test Results. If this  
5 Ordering Paragraph is intending that  
6 the complete pressure test results be part of  
7 the showing, I think we would say that that  
8 is not in the record because of the issues we  
9 raise with Exhibit A.

10 MS. PAULL: Exhibit A of the safety  
11 certification. It's the first of two parts  
12 of the safety certification.

13 ALJ BUSHEY: I'm trying to understand  
14 this.

15 So is it your position that they  
16 have not been done or that they are not --  
17 "they" being the pressure tests, is it your  
18 position that the pressure tests have not  
19 been done or simply that they have not  
20 included all of the records?

21 MR. ROBERTS: I'm addressing the  
22 completeness part of D. So --

23 ALJ BUSHEY: So it's a documentation  
24 problem?

25 MR. ROBERTS: Correct.

26 ALJ BUSHEY: And what documentation not  
27 part of appendix A would you like to have as  
28 part of appendix A?



1           MR. ROBERTS: First, the appendix A  
2 would remove information that's contradictory  
3 that was raised -- that was highlighted in my  
4 testimony. And based on our workshop  
5 yesterday of what the outcome was is that  
6 what correctly documents the test are  
7 as-built drawings. So in some way, the STPR  
8 package as I believe it's referred to should  
9 accurately provide drawings that show where  
10 the tests were performed so that you can  
11 determine the segments that were tested.

12           ALJ BUSHEY: But it's your position  
13 that they were tested, it's just a matter of  
14 the proper documentation not having been  
15 presented.

16           MR. ROBERTS: Correct.

17           ALJ BUSHEY: Okay. So a post-decision  
18 compliance requirement that they provide  
19 that?

20                     Actually, appendix A isn't part of  
21 the record, is it?

22           MS. PAULL: Your Honor.

23           MR. MALKIN: No. It's not, your Honor.

24           MS. PAULL: We, ORA feels strongly that  
25 it should be part of the record. And  
26 the confidentiality concerns really can be  
27 easily resolved. We think it's a key piece  
28 of evidence and it needs to be in the record.

1 And it has to be corrected -- either  
2 uncorrected or corrected, that's to be  
3 decided, but I don't see how the Commission  
4 can -- the Commission's record will be  
5 incomplete without it.

6 ALJ BUSHEY: Mr. Malkin, this is the  
7 documentation that we have not --  
8 specifically decided not to include in  
9 the record in all of our past pressure  
10 restorations?

11 MR. MALKIN: That is correct, your  
12 Honor.

13 ALJ BUSHEY: And the information has  
14 been provided to the parties for their  
15 inspection and clarification questions on,  
16 but not included in the record?

17 MR. MALKIN: That is correct.  
18 The materials were not filed, so they're not  
19 part of the record.

20 ALJ BUSHEY: Is it a fair statement  
21 that -- and you might need to confer with  
22 your clients because I know you weren't there  
23 yesterday at the workshop. But yesterday's  
24 workshop, would that have provided the same  
25 level of inspection and clarification as has  
26 been offered in the previous pressure  
27 restoration proceedings?

28 MR. MALKIN: Yes. At least, if not

1 substantially beyond.

2 That workshop was specifically held  
3 in PG&E's offices in Walnut Creek in order to  
4 have all documentation available as  
5 necessary.

6 ALJ BUSHEY: Okay. So then it would be  
7 accurate to say that the procedural  
8 availability of information for parties in  
9 this proceeding has at least been as high as  
10 in the Commission's previous pressure  
11 restoration proceedings.

12 MR. MALKIN: That is correct. With  
13 respect to the inspection in all of  
14 the proceedings, the procedure has been  
15 inspection but not copying and --

16 ALJ BUSHEY: Thank you.

17 MR. MALKIN: So certainly consistent  
18 with that.

19 ALJ BUSHEY: So the documentation  
20 availability has been at least as high in  
21 this pressure restoration as has been in  
22 the previous five or six.

23 Is there any other component of  
24 this list that you believe PG&E has not  
25 provided?

26 MS. BONE: Your Honor --

27 MR. MEYERS: Are you addressing that to  
28 all parties --

1 ALJ BUSHEY: Yeah. I'm starting with  
2 ORA. But let's finish with ORA.

3 MS. BONE: What's concerning about this  
4 list is it actually has a very significant  
5 omission which is the issue that we're  
6 raising here today, which is that PG&E is not  
7 required to show how it calculates the MAOP  
8 based on the pressure test readings  
9 consistent with 192.619. And that is  
10 the problem that we have with PG&E's showing  
11 today, or one of them. And that is what is  
12 missing from this decision and is a very  
13 significant error.

14 ALJ BUSHEY: This decision was issued  
15 on September 8 of 2011.

16 MS. BONE: That may be. And what it  
17 sadly means is that the Commission has been  
18 doing this wrong for the last two years.

19 ALJ BUSHEY: Well, that is the process  
20 that the Commission has engaged in. This is  
21 the Commission's decision. And until it's  
22 changed, it's the decision that I need to  
23 apply in this proceeding.

24 MS. BONE: I understand that that's  
25 your position, that's it's not an issue here,  
26 that the Commission has not complied --  
27 insured that PG&E's MAOP calculation complies  
28 with federal regulations. We understand that

1 that is your position, that we should not  
2 explore that issue here.

3 ALJ BUSHEY: Right. It is -- the  
4 Commission issued a decision two years ago.  
5 There's a list of things that are required  
6 for PG&E to present and we are -- and I'm  
7 bound to apply this decision until the  
8 Commission changes it.

9 MS. BONE: So --

10 ALJ BUSHEY: So here we have  
11 the decision. This is the evidentiary  
12 presentation they need to make. Is there any  
13 portion of this evidentiary presentation that  
14 it is ORA's position has not been presented  
15 by PG&E?

16 (No response)

17 ALJ BUSHEY: Hearing none, then I'll  
18 move on to the next parties.

19 MS. PAULL: I'd just like to note that  
20 the question about whether the entire line  
21 was tested was answered at the workshop  
22 yesterday, that's when that question got  
23 answered to the satisfaction of the parties.

24 ALJ BUSHEY: But as we sit here today  
25 the parties, or at least ORA is satisfied?

26 MS. PAULL: Yes.

27 ALJ BUSHEY: I'd like to hear from  
28 the other parties now.

1 MS. PAULL: Yes.

2 ALJ BUSHEY: Okay, San Carlos.

3 Ms. Strottman.

4 MS. STROTTMAN: Thank you, your Honor.

5 I just wanted to clarify first of  
6 all, so this not an Order to Show Cause  
7 proceeding. It's an adjudicatory proceeding.  
8 So does that mean that there is not a ban on  
9 ex parte communications?

10 ALJ BUSHEY: That is correct. It is  
11 a rulemaking proceeding though, so there is  
12 an ex parte rule that applies.

13 MS. STROTTMAN: Yes. Yes. But it  
14 doesn't ban the City of San Carlos from  
15 making ex parte visits with commissioners,  
16 correct?

17 ALJ BUSHEY: In compliance with --

18 MS. STROTTMAN: Yes.

19 ALJ BUSHEY: -- with the regulations --

20 MS. STROTTMAN: Under the rules.

21 ALJ BUSHEY: -- covering those, yes.

22 MS. STROTTMAN: Thank you.

23 Your Honor, the City of San Carlos,  
24 we would want to -- we are requesting based  
25 on due process bases to cross-examine  
26 the witnesses on section C which is the  
27 reason for the MAOP rejection. And then  
28 subsection C, that says in the professional

1 judgment of the engineering officer that the  
2 system is safe to operate at the proper or at  
3 the proposed MAOP, as I stated earlier,  
4 the City of San Carlos has cross-examination  
5 questions relating to whether the line has to  
6 operate as a transmission line. We wanted to  
7 ask Mr. Johnson and Mr. Singh some questions  
8 about the weather demands issues.

9 And we have an e-mail that we would  
10 like to present to Mr. Singh and Mr. Johnson  
11 that states that this Line 147 issue is  
12 a serious issue. It was serious to PG&E and  
13 that they considered it a near hit from  
14 a safety perspective. And I would like  
15 the opportunity to cross-examine  
16 the witnesses on this particular e-mail  
17 because it seems now that PG&E's changing  
18 course and doesn't think that the safety  
19 implications for Line 147 are as serious that  
20 they initially thought they were.

21 ALJ BUSHEY: Okay, so the safety  
22 implications go to the safety certification.

23 MS. STROTTMAN: Yes.

24 ALJ BUSHEY: So that makes sense.  
25 I'm lost on the weather, though.

26 MS. STROTTMAN: Your Honor, I recall  
27 from the -- I think it was the October 21st  
28 prehearing conference, PG&E said that they

1 needed to increase the operating pressure due  
2 to weather demands because they had projects  
3 in 2014 that needed to be completed. And  
4 I'd just like the opportunity to  
5 cross-examine them on that issue.

6 And then the last one is whether  
7 the line can be operated at the distribution  
8 line versus a transmission line.

9 And I know Mr. Rubens would like to  
10 make some comments to you as well, your  
11 Honor, if that's permissible. The city  
12 attorney for San Carlos.

13 ALJ BUSHEY: I guess the weather goes  
14 to sub F, the proposed MAOP.

15 MS. STROTTMAN: Yes.

16 ALJ BUSHEY: Okay. All right. Okay,  
17 that makes sense.

18 All right, Mr. Meyers.

19 MR. MEYERS: Thank you, your Honor.

20 Did you want to allow Mr. Rubens to  
21 make a comment?

22 ALJ BUSHEY: Oh. Right now?

23 MR. MEYERS: Ahead of me.

24 MS. STROTTMAN: Yes, please.

25 MR. RUBENS: I can comment later.

26 ALJ BUSHEY: I'm just trying to get  
27 organized as to what is at issue here.

28 MS. STROTTMAN: Okay. Thank you, your



1 Honor.

2 MR. MEYERS: Thank you, your Honor.

3 ALJ BUSHEY: You've made a good  
4 presentation. I understand what's at issue  
5 there.

6 Okay, Mr. Meyers.

7 MR. MEYERS: From the perspective of  
8 San Bruno, we have extensive cross-  
9 examination of these witnesses relative to  
10 the overall issues encompassed in your  
11 original OSC order. I recognize as we sit  
12 here today that we're not going to get into  
13 that. And so if we are then permitted  
14 the opportunity to bring these witnesses back  
15 and cross-examine these witnesses relative to  
16 the issues raised by your original OSC order  
17 with the exception of the repressurization,  
18 then we will -- we have substantially reduced  
19 our cross-examination.

20 We do have some questions of these  
21 witnesses relative to the same things that  
22 Ms. Strottman indicated concerning  
23 the subpart c of paragraph G as well as  
24 paragraph C and E, I believe. Same sort of  
25 questions that Ms. Strottman has, but from  
26 a different perspective.

27 ALJ BUSHEY: You said sub paragraph E  
28 about MAOP validation?

1           MR. MEYERS: No, I'm sorry. I was  
2 wrong. It's F.

3           ALJ BUSHEY: F. Okay.

4           MR. MEYERS: My apologies.

5           ALJ BUSHEY: So C, F and, G sub c.

6           MR. MEYERS: Correct.

7           ALJ BUSHEY: Those are --

8           MR. MEYERS: Just one thing further,  
9 your Honor.

10                   The issues implicated in  
11 the restoration of pressure here have to do  
12 with the adequacy, veracity of PG&E's records  
13 for their pipeline.

14                   And I recognize that in the  
15 Commission's decision that the hydrostatic  
16 testing of the line is sufficient evidence to  
17 justify an MAOP that they're requesting  
18 subject to the legal issues that ORA has  
19 presented before your Honor this morning.

20                   But those records issues go to  
21 the larger issue relative to the OSC. And  
22 I don't want to be in a position of not being  
23 able to discuss and cross-examine these  
24 witnesses prospectively on the records  
25 discrepancies with respect to Line 147 as  
26 a part of the overall issue of their  
27 recordkeeping and their obligations under  
28 both the Commission's rulings and the NTSB

1 findings to maintain adequate, accurate,  
2 verifiable and traceable records.

3 So I just want to make that  
4 statement for the record.

5 ALJ BUSHEY: Right. As a component or  
6 as an example --

7 MR. MEYERS: Correct.

8 ALJ BUSHEY: -- of inadequate  
9 recordkeeping.

10 MR. MEYERS: Correct.

11 ALJ BUSHEY: Okay.

12 MR. MEYERS: Thank you.

13 MR. LONG: Your Honor, could I just say  
14 I'm completely in the same situation as  
15 Mr. Meyers just articulated for the City  
16 of San Bruno. We have questions of Mr. Singh  
17 and Mr. Johnson and also for Mr. Harrison,  
18 but they go to the larger issues of  
19 the accuracy of PG&E's records and related to  
20 OSC issues, not the Line 147 issues.

21 ALJ BUSHEY: Right. Good. It sounds  
22 like we're getting focused.

23 Oh, Mr. Gruen. I'm sorry.

24 MR. GRUEN: Your Honor, SED Advocacy  
25 has a couple of points.

26 Under Ordering Paragraph 4,  
27 subpart D, if there are any complete pressure  
28 test results -- we believe that PG&E has

1 marked the current pressure tests as  
2 confidential and so if those are to come into  
3 the record, and we believe they should, we  
4 would ask that PG&E redact those and provide  
5 a version that's available for the record.

6 ALJ BUSHEY: That's not how we've done  
7 it in the past. These records because of  
8 their -- the size of them and the information  
9 that they contain have been available for  
10 inspection by the parties and discussions  
11 with PG&E. And as we've made clear here,  
12 there's been substantial additional  
13 clarification from PG&E regarding those  
14 records.

15 So I don't anticipate taking  
16 a different procedural step here than we have  
17 in the past with the other pressure  
18 restoration proceedings.

19 MR. GRUEN: Understood, your Honor.

20 ALJ BUSHEY: So --

21 MR. GRUEN: In that case, one other  
22 point which is a line of cross. On paragraph  
23 4 sub G and then section c, sub-subsection c  
24 which we have some questions for Mr. Harrison  
25 that would go to whether the professional  
26 judgment of the engineering officer  
27 considered some of his input in certifying  
28 the system as safe to operate.

1 ALJ BUSHEY: Well, I don't know how --  
2 if I'm recalling correctly, Mr. Johnson is  
3 the certifying officer.

4 MR. GRUEN: I understand.

5 ALJ BUSHEY: So you're going to have to  
6 ask Mr. Johnson about certification because  
7 he's the one who did it.

8 MR. GRUEN: Well --

9 ALJ BUSHEY: You can't ask Mr. Harrison  
10 what Mr. Johnson was thinking.

11 MR. GRUEN: If Mr. Johnson is familiar  
12 with the documents that were provided by  
13 Mr. Harrison. And I can lay foundation with  
14 him. I'm happy to do that.

15 ALJ BUSHEY: That's entirely reasonable  
16 cross-examination of Mr. Johnson.

17 MR. GRUEN: Understood. We can do  
18 that, your Honor.

19 ALJ BUSHEY: All right. So it sounds  
20 like we have three subparts C, F, G, and G  
21 sub c, to focus on our cross-examination of  
22 the witnesses; okay?

23 And the witnesses that we want to  
24 cross-examine are Mr. Johnson and Mr. Singh;  
25 correct?

26 MR. GRUEN: Yes, your Honor.

27 ALJ BUSHEY: All right, let's get to  
28 that.

1           Mr. Malkin, could you call your  
2 witnesses, please?

3           MR. MALKIN: Yes. PG&E recalls Kirk  
4 Johnson and Sumeet Singh.

5           KIRK JOHNSON and SUMEET SINGH,  
6 recalled as witnesses by Pacific Gas  
7 and Electric Company, having been  
8 previously sworn, testified as follows:

9           ALJ BUSHEY: I'll remind you both that  
10 you remain under oath.

11          WITNESS JOHNSON: Okay.

12          ALJ BUSHEY: Please be seated.

13                 And we will begin, let's turn it  
14 around and begin with Ms. Strottman for  
15 San Carlos.

16          MS. STROTTMAN: Thank you. Thank you,  
17 your Honor.

18                         CROSS-EXAMINATION

19 BY MS. STROTTMAN:

20           Q Good morning, Mr. Singh and  
21 Mr. Johnson. I'm Britt Strottman.  
22 I represent the City of San Carlos.

23           WITNESS SINGH: Good morning.

24           Q So, I know we don't want to go into  
25 a lot of detail about hydrostatic testing  
26 since we've -- since Judge Bushey has  
27 somewhat seems to have decided that issue.  
28 Well, not decided. But it seems like we've

1 discussed it morning.

2 But I only have a few questions  
3 about hydrotesting, your Honor, if that's  
4 okay.

5 ALJ BUSHEY: Ms. Strottman, I can't  
6 decide things. Only the Commission can  
7 decide things.

8 MS. STROTTMAN: Okay.

9 ALJ BUSHEY: So if you have factual  
10 evidence that you would like to elicit from  
11 these witnesses, I suggest that you do that.

12 MS. STROTTMAN: Thank you.

13 Q So Mr. Johnson or Mr. Singh, are  
14 you aware of any situation where a pipe has  
15 failed notwithstanding the fact that the pipe  
16 had been hydrostatically tested?

17 WITNESS JOHNSON: A I'm sorry. Would  
18 you repeat the question.

19 Are you talking about PG&E's  
20 system?

21 Q Yes.

22 A Would you repeat the question?

23 Q Yes.

24 A Has failed. Failed being what?

25 Q I don't know. Exploded. Leaked.  
26 Let's say exploded. Are you aware of any  
27 situation where a pipe has exploded  
28 notwithstanding the fact that the pipe had

1     been hydrostatically tested?

2             A     I am -- I can't think at this point  
3     in time, of any time in my career where I've  
4     seen a pipeline hydrostatically tested and  
5     then rupture after the fact. Not to my  
6     recollection.

7             WITNESS SINGH:   A   Same for myself as  
8     well.

9             Q     And what about when you -- when  
10    PG&E hydrostatically tested a pipe, did --  
11    are you aware of any situation where the pipe  
12    had ruptured when you hydrostatically tested  
13    it?

14            WITNESS JOHNSON:   A   Yes. We've had  
15    pipeline ruptures as part of our hydrostatic  
16    test program as part of the PSEP program.

17            Q     And can you give me a ballpark  
18    figure about how many pipelines are ruptured?

19            A     I believe -- and I believe it's in  
20    documents somewhere. I believe there's been  
21    seven. Subject to check, I believe there's  
22    been seven ruptures associated with the PSEP  
23    hydrostatic testing.

24            Q     And subject to check, what time  
25    period would that include?

26            A     The beginning of PSEP till today.

27            Q     Okay. Now, I wanted to ask you  
28    about the records for Line 147. As you



1 testify today under oath, can you testify  
2 that you have traceable, verifiable, and  
3 complete records for every length -- inch of  
4 Line 147?

5 A No. I don't believe we testified  
6 that we have traceable, verifiable, and  
7 complete records for everything on Line 147.

8 Q No. I'm sorry. I didn't mean  
9 to -- I didn't mean to ask that. I'm just  
10 saying as you're under oath today, would you  
11 under oath today, can you testify as to  
12 whether you have traceable, verifiable, and  
13 complete records for every inch of Line 147?

14 WITNESS SINGH: A Let me take that  
15 question.

16 So we do have traceable,  
17 verifiable, and complete strength test  
18 records, and that was exhibited as part of  
19 the workshop that we conducted yesterday. As  
20 records is a broad categorization, there's  
21 different types of records for the pipelines.  
22 So we do have traceable, verifiable, and  
23 complete strength test records. That was  
24 the objective of yesterday's workshop, which  
25 I believe Mr. Roberts on record has also  
26 concurred to.

27 As it pertains to the pipeline  
28 specifications --

1 Q Yes.

2 A -- we have always claimed as part  
3 of our MAOP validation project we don't, and  
4 don't anticipate to, have traceable,  
5 verifiable, and complete records with  
6 a perfect chain of custody for pipelines that  
7 have been installed over 80, 90, hundred  
8 years ago, which is the reason why we do  
9 strength tests.

10 In fact, that question is specific  
11 to Line 147. For every inch of the line and  
12 every specification of the line, I can't sit  
13 here in front of you and tell you we have  
14 traceable, verifiable, and complete  
15 specification records, but that's the reason  
16 why we have a very successful hydrotest in  
17 accordance with the Commission decision.

18 Q So what percentage of records if  
19 you could tell me for Line 147 you do not  
20 have traceable, verifiable, and complete  
21 records for pipeline specifications?

22 A I do not have that information with  
23 me here. And I --

24 Q What about you, Mr. Johnson.  
25 You're the vice president of gas operations.  
26 Do you know?

27 WITNESS JOHNSON: A In terms of  
28 a percentage, I don't know. You'd have to

1 define what you're measuring.

2 Q Okay. So you have --

3 A We'd have to look at the documents.  
4 And you know, we -- if you're talking about  
5 on a footage basis, we can go back through  
6 those documents and calculate it. I don't  
7 have it as I sit here today.

8 Q But you don't know as a vice  
9 president of gas operations what percentage  
10 of records you have missing for Line 147?

11 A On a percentage basis, no. What  
12 I did review as part of this file is  
13 I reviewed the entire Pipeline Features List,  
14 but I didn't do it on a percentage basis.

15 WITNESS SINGH: A The one thing  
16 I would like to add on to that is I believe  
17 Mr. Roberts on Monday in the -- one of  
18 the DRA's presented the percentage  
19 calculation that ORA did in terms of  
20 the number of assumed specifications. That's  
21 where we're making assumptions in accordance  
22 with the methodology that we put forward.  
23 That was also approved. That's  
24 consistently -- has been consistently applied  
25 not just for Line 147, but all of the lines  
26 as part of the MAOP validation project.

27 Q Okay, thank you.

28 So will you agree that about

1 1300 feet of the pipe was installed in  
2 Line 147 in 1957; is that correct?

3 WITNESS JOHNSON: A I don't know.  
4 We'd have to look at the pipeline features  
5 list on Line 147 to see how much footage was  
6 installed in 1957.

7 Q Well, do you know about how many  
8 feet in Line 147 you can say with absolute  
9 certainty is AO Smith pipe?

10 A Not without going through  
11 the Pipeline Features List in its entirety  
12 and looking through it again.

13 Q But you don't know that --

14 A Not off the top of my head, no.  
15 I don't have it memorized.

16 Q May I refer you to Exhibit I,  
17 please?

18 A We don't have a copy of Exhibit I  
19 up here.

20 ALJ BUSHEY: We'll be off the record.

21 (Off the record)

22 ALJ BUSHEY: We'll be back on the  
23 record.

24 Ms. Strottman.

25 MS. STROTTMAN: Thank you.

26 Q And I understand that Hearing  
27 Exhibit I is not obviously the whole Pipeline  
28 Features List but does that refresh your

1 recollection at all?

2 WITNESS JOHNSON: A Well, as I'm  
3 looking through here, on the back table it  
4 indicates 1327 feet in segment -- which is  
5 Segment 109 of Line 147.

6 Q Okay.

7 A So there is at least 1327 feet or  
8 thereabouts.

9 Q Okay.

10 A Does that answer your question?

11 Q Well, I mean, I just -- my question  
12 related to percentagewise --

13 Or no, no. I'm sorry. Yes, that  
14 does answer my question. Thank you.

15 I'm going to move on to a different  
16 topic.

17 I understand and I don't want to  
18 argue with the two of you about the  
19 interpretation of the federal code, but I do  
20 want to give you a hypothetical relating to  
21 yield strength.

22 So hypothetically speaking, if you  
23 note in the database that the MAOP for  
24 section 109 which is AO Smith pipe is  
25 governed by the calculated design pressure;  
26 is that correct?

27 WITNESS JOHNSON: A I am not following  
28 your hypothetical. This is a hypothetical

1 or --

2 Q Yes. This is a hypothetical.

3 A -- is this a factual?

4 Q This is a hypothetical.

5 A Hypothetically it could be.

6 Q Okay.

7 A But I'm not -- I'm sorry. I'm not  
8 following your question.

9 Q Okay. So I'll just repeat it.

10 So let's say hypothetically  
11 speaking in your database, in PG&E's  
12 database, the MAOP for Section 109 AO Smith  
13 pipe for Line 147 is governed by  
14 the calculated design pressure; is that  
15 correct?

16 A Hypothetical -- is this  
17 a hypothetical question?

18 Q Yes.

19 A Hypothetically it could be.

20 Q That could be correct. Okay.

21 A Hypothetically, yes.

22 Q I'll rephrase. I'll rephrase it.

23 A Okay.

24 Q And this is not -- this is part of  
25 the hypothetical but I do want to ask you  
26 this fact though.

27 Is PG&E policy, it dictates that  
28 the MAOP is the lower of the hydrostatic or

1 hydrotest pressure divided by 1.5 or  
2 the calculated design pressure; is that  
3 correct?

4 A The -- I'm getting a little  
5 confused on hypothetical, but I want to try  
6 to answer the question.

7 Q Okay.

8 A In regards to hydrostatic testing  
9 or pressure testing pipelines, there is  
10 a factor applied in translating that into  
11 an allowable MAOP. 1.5 I believe is the  
12 number you just stated.

13 Q Yes.

14 A That would -- I guess that would be  
15 used on Class 3 pipelines. There's different  
16 factors for different class pipelines.

17 Did I --

18 Q Okay.

19 A I'm not sure I answered your  
20 question, but I'll try to --

21 Q No, that's --

22 A -- answer best I can what I think  
23 you're asking.

24 Q Then would you agree then that  
25 a design pressure -- you're stating PG&E's  
26 position that the design pressure calculation  
27 is based on a minimum yield strength of  
28 33 ksi which is 33,000 psi?

1           A    I'm sorry.  Are you asking  
2 a hypothetical or are you asking a specific  
3 question?

4           Q    I'm sorry.  I'm asking for PG&E's  
5 position.

6           MR. MALKIN:  I'm not sure --

7           THE WITNESS:  I'm not --

8           MR. MALKIN:  -- it's clear what we're  
9 talking about.  Vague.

10          ALJ BUSHEY:  Mr. Malkin, I agree.

11                    We've lost our clarity here,  
12 Ms. Strottman, so let's just focus on --  
13 let's try and take this one step at a time.

14                    I think you're asking factual  
15 questions, not a hypothetical.

16          MS. STROTTMAN:  Yes.  And I'm sorry for  
17 making this confusing.  I was asking  
18 a factual question.

19          Q    I guess what I'm getting to is that  
20 if you change a yield strength from 33 ksi to  
21 24 ksi -- and we don't need to argue about  
22 the interpretation of the federal code -- and  
23 leaving all other factors the same, if you  
24 recalculate the design pressure, does it come  
25 to 240 psi?

26          A    I can't do the math in my head.  
27 I can say if you change the SMYS which is  
28 what --



1 Q Yes.

2 A -- I think you're talking about --

3 Q Yes.

4 A -- in a design calculation and  
5 don't change any other factors, it's going to  
6 change.

7 Q Okay.

8 A So the math is pretty  
9 straightforward. You just have to run  
10 the math.

11 Q Okay, thank you.

12 So I wanted to ask you some  
13 questions about PG&E's position on replacing  
14 Line 147.

15 And your Honor, may I approach?  
16 I only have two exhibits.

17 MR. MALKIN: Your Honor, I'm going to  
18 object to that line of questioning as being  
19 irrelevant to this proceeding.

20 ALJ BUSHEY: Yeah.

21 MS. STROTTMAN: Your Honor, it is  
22 the City of San Carlos' position that whether  
23 PG&E intends to replace the line is relevant  
24 to the proceedings, we want to hear from  
25 these two witnesses what PG&E's position is  
26 on replacing the line. It's important to  
27 city. And they've responded to data requests  
28 on this issue.

1 ALJ BUSHEY: But what portion of  
2 Ordering Paragraph 4 does that go to?

3 MS. STROTTMAN: I'm sorry. I don't  
4 have it in front of me.

5 ALJ BUSHEY: How --

6 MS. STROTTMAN: Well, it goes to  
7 whether in the professional judgment of  
8 the engineering officer, which is  
9 Mr. Johnson, that the system is safe to  
10 operate at the proposed MAOP. If they think  
11 that the line shouldn't be replaced, then  
12 they think it's safe to operate.

13 ALJ BUSHEY: How many questions do you  
14 have on this line?

15 MS. STROTTMAN: Maybe four. I can  
16 narrow it to four.

17 ALJ BUSHEY: All right, let's move  
18 expeditiously through those four questions.

19 MS. STROTTMAN: Okay.

20 ALJ BUSHEY: We'll be off the record.

21 (Off the record) ]

22 ALJ BUSHEY: We'll be back on the  
23 record.

24 While we were off the record,  
25 Ms. Strottman distributed two exhibits.  
26 Exhibit L -- it starts with the PG&E's  
27 response to SED Data Request 003-11.

28 Exhibit M looks to be copies of

1 redacted e-mails. The first one is dated  
2 Saturday, November 17th, 2012, at 1:35 p.m.  
3 That's Exhibit M.

4 Ms. Strottman?

5 (Exhibit No. L was marked for  
6 identification.)

7 (Exhibit No. M was marked for  
8 identification.)

9 MS. STROTTMAN: Thank you.

10 Q Mr. Johnson and Mr. Singh, looking  
11 at Hearing Exhibit L, if you could please  
12 read -- you don't need to read it out loud,  
13 but look at Question 11. It says, Does PG&E  
14 anticipate repair or replacement of the A.O.  
15 Smith pipe?"

16 And then the answer says, "Yes,  
17 PG&E currently intends to replace the Line  
18 147 and Line 101 A.O. Smith pipe that are  
19 limiting the MAOP to 330 psig."

20 Did I read that correctly?

21 WITNESS JOHNSON: A I believe so.

22 Q So Mr. Johnson, what is PG&E's  
23 position on replacing Line 147 in San Carlos?

24 A I think you're referring to the  
25 A.O. Smith pipe specifically?

26 Q Yes.

27 A To my knowledge -- I mean, there's  
28 certainly no reason to replace it due to

1 safety issues. I'm not sure why we'd be  
2 replacing it unless there's some other  
3 driving factor there.

4 Q Then why did you say yes in this  
5 data response that you were going to replace  
6 Line 147 with A.O. Smith pipe?

7 A I would have to talk to the parties  
8 who actually wrote as to why they were  
9 planning on replacing it. I could only  
10 speculate at this point in time. I would  
11 have to make a call to folks as to why. It's  
12 certainly not for safety reasons.

13 Q But you're the vice president of  
14 gas operations and you don't know if Line  
15 147 --

16 A I don't -- I don't know the reason  
17 for this specific segment of pipe. We are  
18 replacing hundreds of miles of pipe, hydro  
19 testing hundreds of miles of pipe. I don't  
20 know every piece of every project we've got  
21 going, certainly not for a future year.

22 Q Would you recommend to upper  
23 management that PG&E replace all A.O. Smith  
24 pipe?

25 A No.

26 Q Why?

27 A Because if the pipe has been tested  
28 and it's safe, there's no reason to replace

1 it. There may be other reasons to replace  
2 it, but it's certainly not for safety  
3 reasons.

4 Q So while you're sitting here, you  
5 don't know -- you wouldn't know, then, when  
6 PG&E plans on replacing Line 147 with A.O.  
7 Smith pipe?

8 A As I sit here today, I -- I don't  
9 know why PG&E would want to replace that  
10 pipe. It's not for safety reasons specific  
11 to the A.O. Smith Pipe Segment 109. So no, I  
12 don't -- I don't know why we would need to  
13 replace that pipe. There may be reasons  
14 beyond my knowledge at this point in time,  
15 plans people have, but I am not aware of it  
16 and certainly not for safety reasons.

17 Q Okay. But, Mr. Johnson, if you  
18 look at Answer 12, which is on the next page,  
19 it says, "Replacement of the A.O. Smith pipe  
20 is required to allow Line 147 and Line 101 to  
21 operate at an MAOP of 365 psig or higher."

22 Did I read that correctly?

23 A Correct.

24 Q So then can you infer that you need  
25 to have better pipe to operate at a higher  
26 pressure of 365 psig?

27 A I -- I can infer that if we need to  
28 raise the pressure to 365 pounds, we need to

1 replace any pipeline segments that do not  
2 allow for operating at that pressure. And  
3 that's what I believe this indicates. There  
4 have been changes made on the system to  
5 accommodate the changes we've done on Line  
6 147, and so we have to go back and ask  
7 ourself do we still need Line 147 to operate  
8 at 365 pounds. These -- these issues move as  
9 decisions are made, so --

10 Q Okay. Now -- now I'm going to take  
11 your attention away from --

12 MR. MALKIN: I believe Mr. Singh wanted  
13 to add something.

14 MS. STROTTMAN: Q Oh, I'm sorry. Go  
15 ahead.

16 WITNESS SINGH: A I just wanted to add  
17 that at 330 pounds, there's no reason to  
18 replace any section of Line 147. As we  
19 talked about previously, we've had a strength  
20 test, a spike test, traceable, verifiable,  
21 and complete strength test records. There's  
22 no reason to replace any section of Line 147  
23 for operating the line at 330 psig. I  
24 believe all of these data responses are  
25 consistent.

26 Q So to that point, what is the  
27 current operating status of Line 147?

28 WITNESS JOHNSON: A Line 147, as I

1 understand it, is -- has got gas piped in it  
2 at approximately or below 125 pounds.

3 Q And it's not in a shut-in status;  
4 correct?

5 A I don't know how you define shut-in  
6 status. It's got gas in it at 125 pounds or  
7 less. But shut-in status -- what do you mean  
8 shut-in status?

9 Q The way that it was described to me  
10 I believe by Mr. Malkin during the  
11 October 21st prehearing conference is that  
12 shut-in status is -- is akin to, like, gas  
13 being trapped inside of a bottle. It's not  
14 being moved. It's not dynamic.

15 A If what you're referring -- let me  
16 explain where I believe Line 147 is today.  
17 The block valves feeding that from the  
18 associated transmission valves Line 101, 109,  
19 Line 132 are closed. And I believe the cap  
20 valves are also closed. I don't know if that  
21 means shut-in status, but I believe that's  
22 the operational condition. I haven't checked  
23 on that in the last week or two, but that's  
24 my understanding where we are.

25 Q So then the four regulator valves  
26 are not open?

27 A I'm not -- I don't know -- I'm not  
28 sure what you mean by four regulator valves.

1           Q    I thought that there were four --  
2 I'm sorry, four distribution valves on Line  
3 147. That's not the case?

4           A    Are you talking about district  
5 regulator stations potentially?

6           Q    Yes, yes, yes. Thank you.

7           A    I believe the district regulator  
8 station valves are closed, but I'd have to  
9 check on -- on how it's operating today. It  
10 doesn't operate above 125 pounds is the  
11 operating restraints we have on it right now.

12          Q    So what -- what are the reasons why  
13 PG&E needs to operate Line 147 as a  
14 transmission line?

15          A    Well, Line 147 is a cross-tie  
16 between the other major transmission lines  
17 feeding the entire city of San Francisco and  
18 everybody from Milpitas north. It is an  
19 integrated system, and it allows us a great  
20 deal of flexibility of operating our system.  
21 It allows us to feed all the customer needs  
22 from Milpitas north, and it's just part of an  
23 overall integrated system.

24                Like any segment on that pipeline  
25 system, things need to be taken out of  
26 service occasionally, and maintenance is done  
27 or construction work is done or tie-ins are  
28 made. And it is one of the integral pieces



1 in making that happen. It is one of the --  
2 it is one of the major cross-ties between  
3 those two pipelines -- between those three  
4 pipelines. Excuse me.

5 MS. STROTTMAN: Your Honor, may I have  
6 a moment, please?

7 ALJ BUSHEY: We'll be off the record.

8 (Off the record)

9 ALJ BUSHEY: We'll be back on the  
10 record.

11 Ms. Strottman?

12 MS. STROTTMAN: Q So for Line 147, I  
13 just want to talk about this -- this weather  
14 and curtailment issue. So if -- and -- and  
15 I'm sorry if I'm a little bit confused by  
16 this. But if the gas is shut in or it's not  
17 moving, how are you -- how are you  
18 transporting gas to customers.

19 WITNESS JOHNSON: A They would be --  
20 if that's the exact condition it's in right  
21 now, they would be fed by other district  
22 regulator stations.

23 Q Where?

24 A I don't have the maps in front of  
25 me. I don't know where the exact other  
26 district regulator stations are for all of  
27 Redwood City and San Carlos.

28 Q And do you recall PG&E's position

1 as to the -- the two exceptions that PG&E  
2 wanted to have in place for raising the  
3 pressure at 125 psig? One was an unforeseen  
4 event, which could be a dig-in, and the  
5 second one would be safety work. Do you  
6 recall that?

7 A I don't know that I -- I recall the  
8 discussions, yes. I don't know the exact  
9 wording behind those but go ahead.

10 Q Okay. What about you, Mr. Singh?

11 WITNESS SINGH: A So same as  
12 Mr. Johnson articulated. I'm aware of those  
13 discussions. I'm aware of what you're  
14 referring to. I don't have the exact words  
15 in front of me of what you're referring to,  
16 but the concept and the discussion, I'm  
17 familiar, yes.

18 Q What is your understanding, then,  
19 as to why the pressure needs to be raised  
20 back to 330 because of weather conditions?

21 A Well, it's as Mr. Johnson  
22 articulated. There's -- Line 147 is a major  
23 cross-tie between the three lines of 109,  
24 132, and 101. And as stated and as I believe  
25 you referenced as well, in the case of a  
26 dig-in and what's that alluding to is there's  
27 a dig-in or safety work that's going on,  
28 which would involve Line 101 -- or have

1 done -- and 132 and 109, which we have a lot  
2 of planned work for next year as well.  
3 Taking those lines and shutting them in  
4 requires us to use Line 147 to insure we can  
5 continue to provide supply and provide gas to  
6 our customers. It's a main part of our  
7 operations and overall operational  
8 flexibility.

9 Q And what projects are you speaking  
10 of?

11 MR. MALKIN: Your Honor, we're getting  
12 -- Ms. Strottman began this line of  
13 questioning saying it went to safety and the  
14 safety certification. We're now getting into  
15 system planning issues. It seems pretty far  
16 afield.

17 ALJ BUSHEY: Ms. Strottman, are we  
18 going to get back to something that's listed  
19 in Ordering Paragraph 4?

20 MS. STROTTMAN: Yes, but, your Honor,  
21 it is relevant as to whether they really need  
22 to operate this line due to weather  
23 conditions. And they stated that they have  
24 -- they needed to do safety work for 2014. I  
25 just have a few questions asking them about  
26 their safety work, and then I'll move on.

27 ALJ BUSHEY: All right.

28 MS. STROTTMAN: Thank you.

1           Q    So what type of safety projects or  
2 work do you have I guess in queue for -- for  
3 2014? Because it appears that that's one of  
4 the reasons why you need to increase the  
5 operating pressure on Line 147.

6           WITNESS JOHNSON: A Well, in terms of  
7 the work -- and again, I don't have the  
8 entire work list in front of me -- there is  
9 actually work in 2013 that we can't complete  
10 because of our operating flexibility right  
11 now. That includes valve automation. So  
12 there's some valve automation work, and there  
13 is some work scheduled for later this year to  
14 make a segment of Line 132 piggable, which we  
15 are at risk of not being able to do if we  
16 don't have the operating flexibility that we  
17 need to remove that section of pipe from  
18 service to we can change out some segments  
19 there.

20                 For next year on -- on the San  
21 Francisco Peninsula, there is some -- there  
22 is a significant amount of pipeline  
23 replacement work on Line 109. I believe it's  
24 approximately 10 miles worth of work to get  
25 done. So we'll be taking clearances through  
26 out the year to tie that work in. There is  
27 some make-piggable work, if you will, on the  
28 three different transmission lines. And I'm

1 sure there's a laundry list of -- of other  
2 activities happening in the San Francisco  
3 Peninsula. There's a lot of Pipeline Safety  
4 Enhancement Plan work that occurred under  
5 PSEP on the San Francisco Peninsula.

6 Q I appreciate that list, but what  
7 about projects that are queued up ready for  
8 Winter 2014?

9 A Well, all of them are queued up.

10 Q Just for the winter months.

11 A All of the work is queued up to be  
12 done in 2014.

13 Q But what -- what projects -- what  
14 immediate projects does PG&E have that they  
15 need to complete for Winter of 2014?

16 A Well, all the projects have to be  
17 complete by Winter 2014 other wise we can't  
18 serve gas to our customers. Is that --

19 Q Well, I guess I'm just trying to  
20 get at -- yeah, well, it's -- it's Winter  
21 2013, Winter of 2014. I'm asking about what  
22 projects PG&E needs to complete in that time  
23 period as to why they need to increase the  
24 operating pressure on Line 147 to 330?

25 A So -- so the -- it's an integrated  
26 system. And when we take one piece of pipe  
27 out of service, we route gas around. And  
28 this is a major routing point, if you will,

1 between the pipelines. It is a cross-tie.

2 So whenever we take a segment of  
3 pipe out, whether it's on Line 101, Line 132,  
4 Line 109, we reroute gas. And we use our  
5 cross-ties to feed customers from different  
6 directions. The work that I shared with you  
7 is all work that is scheduled to be done in  
8 2013 or if not done in 2013, 2014. And  
9 that's the pipeline replacement work, the  
10 valve automation work, the SCADA work, the  
11 make-piggable work.

12 There is a significant amount of  
13 work for the San Francisco Peninsula, all of  
14 which require clearances, all of which  
15 require taking pipelines segments out of  
16 service, and all of which require us to route  
17 gas to feed different customer needs. And  
18 Line 147 is a significant link in the overall  
19 transmission system in the San Francisco  
20 Peninsula.

21 Q But not all of those projects don't  
22 have to be completed by Winter 2013, 2014;  
23 correct?

24 A When you say, "Don't have to be  
25 completed," they are Pipeline Safety  
26 Enhancement Plan projects which we have  
27 committed to completing. These are all  
28 safety-related projects.

1           Q    That have to be completed by Winter  
2 2014?

3           A    Well, when you say, "have to be  
4 completed by," based on what?

5           Q    Done. You're done. You -- you've  
6 finished everything that you needed to do.  
7 There's nothing else to do.

8           A    Well, there's never a time where  
9 there's nothing else to do. We need to get  
10 -- we have 10 miles of Line 109 that we hope  
11 to replace as part of the Pipeline Safety  
12 Enhancement Plan work that we were planning  
13 on doing in 2014. We want to get all that  
14 work completed, tied in for 2014. It is very  
15 hard to do work in the winter time because  
16 the demands are higher and we can't get  
17 clearances.

18          Q    Okay. I. Just have a few more  
19 questions on this. So what's the highest  
20 demand for gas for PG&E? What time period?

21          A    Well, you have to look at each  
22 segment differently, but for 90-plus percent  
23 of the segments, it's the winter -- the  
24 winter period.

25          Q    And what -- what month -- what time  
26 period?

27          A    It's probably early December  
28 through late January is when you see the

1 coldest weather. It's the shortest days, so  
2 I think it's pretty much common sense that  
3 winter time is colder and the coldest days  
4 happen in the January -- December, January  
5 timeframe.

6 Q And isn't it true that PG&E  
7 discovered the Line 147 issues in October  
8 of 2012; is that correct?

9 A The issues being the leak you're  
10 referring to?

11 Q Yes, yes. I'm sorry, the leak.

12 A I believe it was October 2012.

13 Q And isn't it true that PG&E didn't  
14 inform the CPUC of those issues until March  
15 of 2013?

16 MR. MALKIN: Your Honor --

17 ALJ BUSHEY: Argumentative.

18 MR. MALKIN: We're going into other  
19 issues.

20 MS. STROTTMAN: Your Honor, I would  
21 just like to note that PG&E didn't inform the  
22 Commission nor the parties of these issues of  
23 Line 147 during the highest peak of demand.

24 ALJ BUSHEY: Ms. Strottman, this is all  
25 a matter of -- of record already in this  
26 proceeding. I think it's all laid out in the  
27 order to show cause.

28 MS. STROTTMAN: Okay. Thank you.



1           Q    And I'm sorry. I'm going to go  
2 back to some questions about accuracy in  
3 PG&E's database.

4           So Mr. Johnson, you did confirm  
5 that Segment 109 is about 1320 feet?

6           WITNESS JOHNSON: A Based on the  
7 document that we were looking at earlier.

8           Q    Yeah. I'm sorry. That's document  
9 -- it's Hearing Exhibit I.

10          A    Yes. So based on this -- based on  
11 the exhibit I'm looking at, it states the  
12 length is 1327 feet of Segment 109.

13          Q    Okay. And then I'm going to  
14 finally give you a hypothetical. Assuming  
15 that Segment 109.3, which is adjacent to  
16 Segment 109, is listed as seamless. Would  
17 that raise a red flag to you? Do you think  
18 that that's accurate?

19          A    If I think anything on our system  
20 is inaccurate, it's going to raise a red  
21 flag.

22          Q    But in your mind, if -- if I give  
23 you the hypothetical that in this pipeline  
24 features list you have Section 109, which is  
25 1320 feet and it's A.O. Smith -- and let's  
26 assume that the section immediately adjacent  
27 to it, Section 109.3 is listed as seamless.  
28 Do you think that that's accurate?

1           A    Well, if that's what's listed in  
2 our pipeline features list, I believe it's  
3 accurate to the best of our knowledge.

4           Q    But it wouldn't raise a red flag to  
5 you?

6           A    No.  No, if I -- if we believe it's  
7 accurate and we -- as we've laid out in our  
8 pipeline features list, then no it doesn't  
9 raise a red flag.

10          Q    Okay.  Then I'll give you another  
11 fact in this hypothetical.

12          MR. MALKIN:  I think Mr. Singh --

13          MS. STROTTMAN:  Q   Oh, I'm sorry,  
14 Mr. Singh.

15          WITNESS SINGH:  A   Can I add on to  
16 that?

17          Q    Yes.

18          A    It wouldn't raise a red flag to me  
19 either.  And the reason for that is because  
20 you could have a separate job that was done  
21 for that respective segment that was  
22 installed at some other point.  You have to  
23 look at the actual pipeline and look at the  
24 actual situation.

25                    It's not uncommon where -- and I  
26 think I answered previously that Line 147 was  
27 originally installed in 1947.  And after that  
28 there was work done on the pipeline in '57,

1 in '87, and in 1990. So it's not uncommon to  
2 find different seam types and different  
3 specifications along one length of the  
4 pipeline. It's very common not just within  
5 our system, but in the industry.

6 Q Okay. Where in the industry? Can  
7 you point to me some examples where is that  
8 common in the industry? I mean, I've heard  
9 you say that several times in  
10 cross-examination, but I'm asking you if you  
11 could point to an example.

12 A Based on all the conferences I've  
13 attended, based on my discussions with other  
14 operators, based on my discussions with  
15 industry experts such as Mr. Rosenfeld.

16 Q Okay. So if I added another fact  
17 to this hypothetical -- if this pipe segment,  
18 which is 109.3, which is adjacent  
19 hypothetically to 109, and it's got an  
20 install date of 1947, would that raise a flag  
21 to you that it was listed as seamless?

22 WITNESS JOHNSON: A Not in itself.  
23 You would have to go through the pipeline  
24 features list and look what's on the pipeline  
25 features list. It may show a different job.  
26 It may show a different strength test  
27 pressure report. There could be a lot of  
28 reasons why it changed. Just because it's

1 the same year doesn't mean it wasn't done on  
2 different jobs or something else wasn't  
3 different there.

4 Q Okay. Thank you.

5 WITNESS SINGH: A And it wouldn't be a  
6 surprise to me because there was seamless  
7 pipe made around 1947. We've got a  
8 purchasing record for this. We've actually  
9 in fact done a field inspection on a segment  
10 of Line 147 installed in 1947 that was  
11 seamless. And we actually took a look at a  
12 stream of line manufacturing, which has been  
13 authored by Kiefner and Associates. It talks  
14 about manufacturing practices typically in  
15 the industry of line pipe that was  
16 manufactured. And it wasn't uncommon from my  
17 understanding and we have some in our system.  
18 The fact that it is 1947 seamless pipe does  
19 not raise any questions in my mind.

20 Q Okay. I'm going to ask you some  
21 questions now about safety factor. What --  
22 what is safety factor to you when you're  
23 assuming or calculating a safety factor --  
24 well, I'm sorry. I'll rephrase that. What  
25 does safety factor mean to you?

26 WITNESS JOHNSON: A Well, as a -- as a  
27 generalization, it usually means calculating  
28 some structural issue at its maximum or its

1 -- it's 100 percent strength point and  
2 dividing by a number. And that number would  
3 be your safety factor.

4 Q What factor of safety are you  
5 assuming or calculating for Line 147 after  
6 the hydro tests were conducted?

7 A Well, are we speaking specifically  
8 to Segment 109 or talking about the entire  
9 pipeline now?

10 Q Let's talk about the entire  
11 pipeline.

12 A Well, the safety factors I believe  
13 are probably different depending on the  
14 segment of pipe you're looking at.

15 Q Okay. What's the range?

16 A Okay. Well, we could get the  
17 pipeline features list out. But without  
18 going through that whole document -- do we  
19 have the pipeline features list here? You  
20 can walk through and see each one of them  
21 depending on the -- we have Class 1. So  
22 we're looking at the hydrostatic test and the  
23 test pressures. The lowest one is 607. Had  
24 the highest one is 1440. That's just a quick  
25 review of the pipeline features list, so I  
26 may have missed something in there.

27 Q Okay. If you don't have the  
28 correct pipeline specifications for a

1 particular segment in a line, what type of  
2 safety factor do you have for that issue?

3 A Well, you're -- as we've discussed  
4 here at length is we have a hydrostatic test  
5 pressure. So if it's one-and-a-half times  
6 its normal operating pressure plus a spike  
7 test, it's going to be in the range -- just  
8 on the spike test alone, just on the hydro  
9 test alone, it's -- it's -- you know, it's  
10 the .5 or the .67, depending on how high the  
11 spike went.

12 WITNESS SINGH: A And just to add on  
13 to that, that's at least or greater. And the  
14 reason why I make that statement is because  
15 as part of the test -- and what we reviewed  
16 at length on Monday and yesterday's workshop  
17 was the pressure volume plus. And we did not  
18 see any yielding on the 2011 test, which is a  
19 clear indication that the strength of the  
20 pipe is greater than what we tested. So it's  
21 at least that value if not greater.

22 Q So what -- I guess what I'm getting  
23 it at if you don't have the right records for  
24 a segment -- and records I mean the right  
25 pipeline specs -- that consideration isn't a  
26 factor for you when you're analyzing the  
27 safety factor?

28 WITNESS JOHNSON: A Well, I'm not sure

1 -- I'm not sure what you mean by that  
2 question, but in the simplest terms, we've  
3 pressure tested the pipeline. We pressure  
4 tested it well in excess of its operating  
5 pressures, plus a spike test. So just  
6 hypothetically if the test is at 600 pounds,  
7 we're very comfortable it can operate at  
8 400 pounds. It's just a simple engineering  
9 call.

10 Q I guess what I'm getting at -- so  
11 the hydro test to you is just the platinum  
12 standard? It doesn't matter that you have  
13 the wrong records or the wrong pipe specs for  
14 a segment because you completed your hydro  
15 test?

16 A What I'm saying is -- I think I've  
17 said it's the gold standard. I'm not sure if  
18 platinum is higher or lower.

19 Q I think it's higher.

20 A That is the best standard that we  
21 have today to ensure that a pipeline can  
22 operate safely at the pressure it's at. I  
23 think for most engineers, we're very  
24 comfortable that if I pressure test at  
25 600 pounds hypothetically, operating at  
26 400 pounds doesn't cause me any concern.

27 Mr. Kiefner I think -- excuse me,  
28 Mr. Rosenfeld spoke for an hour-and-a-half,

1 2 hours yesterday, and Mr. Kiefner spoke at  
2 the symposium. And I believe we think that's  
3 a very large, adequate safety --

4 WITNESS SINGH: A The only piece I  
5 would like to add to that is I think there's  
6 a little bit of a source of confusion around  
7 that in terms of the specifications. They  
8 only lowered that value, which is the true  
9 safety margin that's established by the  
10 strength test. Those specifications have  
11 never been used to justify a higher pressure,  
12 and that's again in accordance with  
13 everything we've been doing in the last  
14 couple years as part of our pipeline safety  
15 enhancement.

16 Q I guess what I'm saying is if you  
17 don't know what's in the ground, the fact  
18 that you hydro tested it is good enough?

19 WITNESS JOHNSON: A Well, the fact  
20 that -- if you're absolutely not sure what's  
21 in the ground and you hydro tested and you  
22 check for yield and ensured a safety margin  
23 and there is no yield, you can be assured  
24 you're operating very safely under those  
25 circumstances.

26 Q Okay. I may come back to that, but  
27 I have just a few questions about,  
28 Mr. Johnson -- in your verified statement --



1 I don't know if you have it in front of you?

2 A I do have a copy in front of me.

3 Q It's on page 8.

4 A Okay.

5 Q You stated that "PG&E discovered  
6 human error in MAOP validation records for  
7 one segment of Line 147." And specifically  
8 you stated, "Our MAOP validation  
9 documentation -- "

10 A Can you share with me where you're  
11 at --

12 Q Yes. Sorry. I'm just reading from  
13 my notes. Let me get it.

14 A -- what line you're at?

15 Q Yeah. It's at the bottom of page  
16 8. But the -- the -- on page 6, it's --

17 A Page 6 or page 8?

18 Q Well, on page 6 -- I'm just  
19 directing you to page 6 of your verified  
20 statement, the heading that's underlined  
21 says, "Line 147, Segment 109," and then in  
22 parentheses, "Human Error"?

23 A Correct. Okay.

24 Q And then on page 8, it's at the  
25 last two sentences of the page. It's  
26 actually the last sentence. It says, "We  
27 determined that our engineer had mistakenly  
28 assumed," and then you turn the page to page

1 9, "DSAW pipe -- "

2 A Okay.

3 Q " -- when preparing the PFL in  
4 October of 2011."

5 Does that look correct to you? ]

6 A Well, I mean we've all got the  
7 document. So I didn't actually follow your  
8 word word for word, but the words are there.

9 Q Okay. So an engineer there had  
10 basically made a bad assumption about the  
11 pipeline features of Line 147; is that  
12 correct?

13 A I believe we said he made an error,  
14 yes.

15 Q And you don't have to disclose his  
16 or her name, but how many other pipeline MAOP  
17 validations did this engineer work on? Do  
18 you know?

19 A I don't know.

20 Q Well, wouldn't all of his work be  
21 questioned based on this mistake?

22 WITNESS JOHNSON: Go ahead.

23 WITNESS SINGH: A So let me add on to  
24 that. I don't have the specific number of  
25 features lists that he worked on, but keep in  
26 mind that this is the work that was completed  
27 in October of 2011. And as I testified in my  
28 direct examination at the hearings for the

1 Order to Show Cause for the substance part of  
2 the issues on September 6th of 2013, we  
3 stated that we actually went through and  
4 re-reviewed all of the pipeline features  
5 lists, MAOP reports as part of the  
6 enhancements that we made to the processes  
7 and the MAOP validation process starting in  
8 January and February of 2012.

9 And we also included a independent  
10 audit firm which provided a quality assurance  
11 with the appropriate procedure, and the  
12 procedure is a part of the filing that we  
13 have made for the PSEP updated application,  
14 which I'm also sponsoring. And there's also  
15 clear delineation in terms of as part of that  
16 QA that was done what was the sampling, the  
17 sampling rate, the population, and the  
18 associated error rate for all of that work  
19 that was done as part of the MAOP validation  
20 project. More than happy to entertain the  
21 questions as part of that proceeding.

22 Q Yeah, that's fine. And I don't  
23 believe that that answered my question. I'm  
24 just asking, did you pay any particular  
25 attention to the engineer's validations, MAOP  
26 validations that this particular engineer  
27 worked on where he assumed the wrong value?

28 WITNESS JOHNSON: Well, go ahead. Did

1 you want to answer?

2 WITNESS SINGH: A Couple of things  
3 that we -- what we did is we found the error  
4 in November of 2012, and I believe you're  
5 going to get to this in the next exhibit that  
6 you have handed out, but what we did is we  
7 did a root cause analysis right away to  
8 identify what was the source of the  
9 discrepancy and why did that discrepancy take  
10 place and what are the corrective actions,  
11 and have the work that we have already been  
12 doing in terms of the number of corrective  
13 actions, how many of those have already been  
14 in place and implemented.

15 And the corrective actions that were  
16 identified, a lot of those were already  
17 incorporated as part of the enhancements that  
18 we made to our quality assurance process  
19 starting in January and February of 2012  
20 where we went back and re-reviewed all of the  
21 PFLs and associated MAOP reports during Phase  
22 3 of the project.

23 So I don't have sitting here the  
24 explicit number that this respective engineer  
25 worked on. What I can assure you is that  
26 whatever that number was and whatever work he  
27 did in 2011, that work was re-reviewed as  
28 part of the enhanced quality control and

1 quality assurance process which is  
2 articulated as part of the PSEP updated  
3 application.

4 Q So then you're testifying then that  
5 you essentially double-checked his work?

6 A I believe that's what I stated.

7 Q Okay. Thank you. And I have a few  
8 questions about this. It appears that you  
9 had, PG&E had some sort of additional third  
10 party review for PG&E's MAOP validation;  
11 isn't that correct?

12 A That is what I alluded to earlier  
13 in terms of a independent audit firm that did  
14 the quality assurance testing. It's all part  
15 of the PSEP updated application. There's  
16 several pages of testimony. There's several  
17 additional attachments that outline the QA  
18 procedure. That's all outlined as part of  
19 that application.

20 Q Who is the independent auditor?  
21 Was it the one that you mentioned yesterday?  
22 Was it Bureau Veritas?

23 A No, it was not Bureau Veritas.

24 Q Who was it then?

25 A It's one of the big four auditing  
26 firms.

27 Q Which one?

28 A PricewaterhouseCoopers, PWC.

1 Q And how is this independent auditor  
2 independent? Did the auditor report to you?  
3 Who did the auditor report to?

4 A I'm not sure -- what do you mean by  
5 that question?

6 Q Okay. Well, maybe I'll phrase it a  
7 different way. Who directed the auditor or  
8 who gave directions to the auditor?

9 A I can answer that question, but I'm  
10 not sure how I see it's relevant to this  
11 proceeding, but okay.

12 MR. MALKIN: I'll object that's  
13 irrelevant, your Honor.

14 (Laughter)

15 ALJ BUSHEY: I think I'll overrule both  
16 of you.

17 MS. STROTTMAN: I'm just getting to the  
18 fact that -- I just want to know who directed  
19 PricewaterhouseCoopers to conduct this work.  
20 I mean it doesn't seem like this auditor is  
21 independent, but that's okay. I'll move on  
22 to something else.

23 ALJ BUSHEY: Good.

24 MS. STROTTMAN: Thank you.

25 Q Now I will direct you to the  
26 exhibit -- I'm sorry -- I think it was M?

27 WITNESS JOHNSON: M. Do you have M?

28 Q Do you need a few minutes to review

1 it?

2 WITNESS JOHNSON: A Well, if you want  
3 to share with us what your question is about,  
4 then we can just review. Otherwise this  
5 thing is six, seven pages long.

6 Q Yes. I'll give you some time.

7 WITNESS SINGH: A Did you want me to  
8 go through all the pages?

9 Q If that would make you feel  
10 comfortable asking questions or answering  
11 questions. I just want you to please review  
12 the first page, or I'm going to ask questions  
13 about the first e-mail on the first page.

14 A Okay.

15 Q Which I guess is technically the  
16 last e-mail in the chain.

17 A Okay.

18 WITNESS JOHNSON: A Last e-mail in  
19 the chain.

20 Q Are you ready?

21 WITNESS SINGH: A Yeah, go ahead.

22 Q So looking at Exhibit M, do you  
23 recognize this e-mail?

24 A Now that you've put it in front of  
25 me, I recall this e-mail. I don't see my  
26 name directly being included in from or to,  
27 but I'll take your word that in one of the  
28 redactions it may be -- my name may be in

1 here.

2 Q And what about you, Mr. Johnson, do  
3 you recognize this e-mail?

4 WITNESS JOHNSON: A I don't. I  
5 believe I have seen this e-mail. My name  
6 normally wouldn't be redacted, but in some  
7 capacity I've probably seen the information.

8 Q Okay. And this e-mail, it looks  
9 like it was sent on November 17th, 2012, at  
10 1:35 p.m. And I'm going to direct you to the  
11 first paragraph, last sentence. It says --  
12 and I'm sorry. I'll also just say that it  
13 appears that this e-mail relates to the  
14 issues that are -- or the issues that are at  
15 hand right now during these proceedings. And  
16 it says, "At the executive level this  
17 situation is considered a near hit from a  
18 safety perspective that could have severely  
19 damaged the company's credibility."

20 Do you agree with that statement,  
21 Mr. Johnson?

22 A No, not necessarily.

23 Q Why not?

24 A Well, the term "near hit" is  
25 usually actually considered a safety issue.  
26 So I've never heard it used in near hit in  
27 terms of data or engineering terms. And I'm  
28 not sure that it severely damages the



1 company's credibility. We have been very  
2 clear that we don't know everything about  
3 every record. And so this is one person's  
4 opinion. I don't know that I necessarily  
5 share this opinion.

6 Q So the fact that we're all sitting  
7 here in this proceeding talking about the  
8 same issues, the same issues with wrong  
9 recordkeeping that was a proximate cause at  
10 San Bruno that now occurred in San Carlos is  
11 not something that you think damaged the  
12 company's credibility?

13 MR. MALKIN: Objection, argumentative.

14 ALJ BUSHEY: Sustained.

15 MS. STROTTMAN: Your Honor.

16 ALJ BUSHEY: Ms. Strottman.

17 MS. STROTTMAN: I think it's important  
18 to understand -- I would like to know Mr.  
19 Johnson's opinion. I can rephrase it if  
20 you'd like.

21 ALJ BUSHEY: He's not here to represent  
22 the company's public relations perspective.  
23 He's here having made a safety certification.  
24 Part of that certification is not his  
25 perspective on the company's credibility or  
26 whether it was a near hit.

27 MS. STROTTMAN: But your Honor, I'm  
28 sorry. I just I feel like as a vice

1 president of gas operations he would have an  
2 opinion on whether the situation that  
3 happened in San Carlos hurt the company's  
4 credibility and if in turn he feels  
5 completely comfortable, a hundred percent  
6 comfortable that Line 147 is safe to operate  
7 in San Carlos.

8 ALJ BUSHEY: The second part of your  
9 sentence is absolutely relevant to this  
10 witness's testimony. This witness has not  
11 presented any testimony about the company's  
12 credibility. So let's focus on safety  
13 certification.

14 MS. STROTTMAN: Q So Mr. Johnson, as  
15 we're sitting here today you can testify  
16 under oath that you feel a hundred percent  
17 comfortable that Line 147 is safe to operate?

18 WITNESS JOHNSON: A I believe it's  
19 safe to operate at 330 pounds as we have  
20 requested and as I've stated in my verified  
21 statement.

22 Q And what about you, Mr. Singh?

23 WITNESS SINGH: A I absolutely  
24 support that.

25 MS. STROTTMAN: Your Honor, may I have  
26 a few minutes, or just a minute, please?

27 ALJ BUSHEY: Just one minute.

28 We'll be off the record.

1 (Off the record)

2 ALJ BUSHEY: We'll be back on the  
3 record.

4 Ms. Strottman.

5 MS. STROTTMAN: Thank you.

6 Q I just have one last question. And  
7 I'm not really sure I got an answer or a yes  
8 or no answer to this question.

9 Is it PG&E's position that the MAOP  
10 is the minimum of the hydrotest determined  
11 MAOP and the design MAOP?

12 WITNESS JOHNSON: A Go ahead.

13 WITNESS SINGH: A That's how we've  
14 applied the methodology in the MAOP  
15 validation project.

16 Q So the answer to that is yes?

17 A I'm not finished yet.

18 Q Oh, I'm sorry.

19 A So let me reiterate just so that  
20 I've got a continuous answer in the record.  
21 So that's how we've applied the conservative  
22 methodology as part of the MAOP validation  
23 project. But going back to the decision that  
24 the Commission articulated, stated, ordered  
25 PG&E to do was to validate the MAOP using a  
26 strength test. And in this case for Line 147  
27 that's been shared, discussed at length, and  
28 without a doubt that MAOP that's been

1 validated through that strength test record  
2 for every single foot of that line and all  
3 the shorts operating at or above 20 percent  
4 SMYS is at least 400 psig.

5 Q But did that -- I'm asking for a  
6 yes or no answer. Is it PG&E's position that  
7 the MAOP is the minimum of the hydrotest  
8 determined MAOP and the design MAOP?

9 MR. MALKIN: Your Honor, I'm going to  
10 object. That's asked and answered. The  
11 fact -- Mr. Singh just explained PG&E's  
12 position.

13 ALJ BUSHEY: In great detail. I  
14 believe your question oversimplifies the  
15 actual approach that they're taking.

16 MS. STROTTMAN: Q Okay. Then the  
17 answer would be no then. Is that what you're  
18 saying, Mr. Singh? I'm trying to  
19 understand -- I'm just asking if -- it sounds  
20 like then that's not PG&E's position then  
21 that the MAOP is a minimum of the hydrotest  
22 determined MAOP and the design MAOP?

23 MR. MALKIN: Same objection, your  
24 Honor. Mr. Singh can restate his answer, but  
25 it's in the record.

26 ALJ BUSHEY: That question has been  
27 asked and answered.

28 MS. STROTTMAN: I believe it hasn't,

1 but if you -- that's fine. We'll let the  
2 record stand where it stands.

3 ALJ BUSHEY: Okay. Further questions?

4 MS. STROTTMAN: No, no. Thank you.

5 ALJ BUSHEY: Thank you. And I  
6 understand Mr. Ruben wants to make a  
7 statement at the conclusion of today's  
8 hearings. Is that fair?

9 MR. RUBEN: Yes, your Honor.

10 ALJ BUSHEY: All right. And the other  
11 parties have at least half an hour each,  
12 right?

13 So let's take a lunch break. I have  
14 several things I need to accomplish. So  
15 let's say 1:15 we will resume. So we'll be  
16 adjourned until 1:15.

17 (Whereupon, at the hour of 12:02  
18 p.m., a recess was taken until 1:15  
19 p.m.)

20 \* \* \* \* \*]

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1 AFTERNOON SESSION - 1:20 P.M.

2

3 \* \* \* \* \*

4 SUMEET SINGH and KIRK JOHNSON

5 resumed the stand and testified further as

6 follows:

7

8 ALJ BUSHEY: We'll be back on the

9 record.

10 Cross-examination continuation with

11 Mr. Meyers.

12 MR. MEYERS: Thank you, your Honor.

13 CROSS-EXAMINATION

14 BY MR. MEYERS:

15 Q And Mr. Singh, Mr. Johnson, I'm  
16 Steven Meyers representing the City of San  
17 Bruno. Good afternoon.

18 Mr. Johnson, when you started your  
19 direct examination on Monday in response to a  
20 question by Mr. Malkin you indicated that  
21 your position at PG&E has changed. Could you  
22 refresh my recollection of what your current  
23 title is?

24 WITNESS JOHNSON: A I am responsible  
25 for the project management and program  
26 management of PG&E's gas operations.

27 Q And who took the position that you  
28 previously held?

1           A    Well, it was basically a  
2 restructuring.  So nobody, quote, took my  
3 position.  It's just we moved things around  
4 and organized differently.  So there were  
5 some functions that went just in different  
6 places.

7           Q    For purposes of this particular  
8 proceeding, the repressurization request of  
9 PG&E for Line 147, you are the gentleman at  
10 PG&E that signed the certification under  
11 penalty of perjury that Ordering Paragraph  
12 No. 4 in the decision sets forth as the  
13 criteria that must be produced and shown by  
14 PG&E to justify a repressurization; is that  
15 correct?

16          A    I have a verified statement, and I  
17 signed the safety certificate.  I didn't -- I  
18 don't have a copy of the document you're  
19 referencing right now.  So I can't --

20          Q    But when I refer to the decision of  
21 the Public Utilities Commission, Decision  
22 11-09-006, you're familiar enough with that  
23 decision to answer my question accurately  
24 today that you are the officer to whom the  
25 company requested a verified statement for  
26 submission to CPUC?

27          A    I am the one that signed my  
28 verified statement and the safety certificate

1 for this proceeding.

2 Q And you previously signed such a  
3 verified statement for the original  
4 repressurization decision made by the CPUC  
5 before this current proceeding took place,  
6 correct?

7 A You're referring to the ones for  
8 Line 101 and Line 147 previously? Is that  
9 your question?

10 Q Yes. This proceeding results from  
11 an Order to Show Cause why the previous order  
12 the CPUC issued allowing you to repressurize  
13 various pipelines in the peninsula, why that  
14 shouldn't be rescinded.

15 So you previously signed a  
16 certification under penalty of perjury that  
17 led to the first repressurization following  
18 the Executive Director's decision to lower  
19 pressure; is that correct?

20 A I'm not sure I'm following all of  
21 your question, but I signed the safety  
22 certificate for this proceeding, and I signed  
23 the safety certificate for what I believe was  
24 for, the title was Line 101, Line 147, and I  
25 believe it was Line 132A.

26 Q Thank you. And Mr. Singh, you have  
27 also signed a verified statement on behalf of  
28 PG&E. I think the copy I have is dated



1 September 13th, 2003. And that is your  
2 statement relative to the request of PG&E to  
3 repressurize Line 147; is that correct?

4 WITNESS SINGH: A Is that the  
5 September 13th, 2013 document?

6 Q That's what I said.

7 A The declaration? Yes, it is.

8 Q I just wanted to say that --  
9 preparatory matter to make sure I was asking  
10 the right questions to the right guy.

11 So with respect to Line 147, which  
12 is all we're talking about today given the  
13 guidance from Administrative Law Judge  
14 Bushey, I'm looking at Exhibit I,  
15 cross-examination Exhibit I, I as in India.  
16 This is PG&E data response and attachment  
17 that were submitted by the Office of  
18 Ratepayer Advocates. Do you have that in  
19 front of you?

20 WITNESS JOHNSON: A Is it SED 003 Q  
21 06?

22 Q Yes, sir.

23 A Okay.

24 Q And on the last page, I believe  
25 it's the last page, of that exhibit there was  
26 a chart which is vertical across the page.  
27 That chart purports to represent six segments  
28 of Line 147 and then has various data with

1 respect to the October 2011 as-filed pressure  
2 restoration, and then the next large column  
3 shows updated specifications. Do you see  
4 that, sir?

5 A Yes, we have it in front of us.

6 Q Okay. My questions are going to  
7 relate to that. So in the prior  
8 certification that you, Mr. Johnson, said  
9 that you filed on behalf of PG&E for the  
10 October 2011 pressure restoration  
11 application, the data that was on this  
12 document was the data that PG&E had that it  
13 used as part of its process of validating  
14 MAOP. Is that a fairly accurate statement?

15 A Well, if I understand you  
16 correctly, if you're talking about the  
17 October 2011 section.

18 Q Yes.

19 A As filed for the pressure  
20 restoration?

21 Q Yes.

22 A That's the document?

23 Q Yes.

24 A Yes, that information would have  
25 been in the previous filing.

26 Q Okay. Thank you. Now, if you go  
27 to the next large portion of that spreadsheet  
28 which is entitled Updated Specifications,

1 those are the updated specifications that you  
2 have now submitted as part of your verified  
3 statement in support of the MAOP validation  
4 and repressurization of Line 147? In other  
5 words, these are the corrected -- it's the  
6 corrected information in your database for  
7 this, these segments; is that correct?

8 A The -- I'm sorry. Would you repeat  
9 the question? It is the what now? What was  
10 your question again?

11 Q My question is, in the column,  
12 large column that says "updated  
13 specifications."

14 A Okay.

15 Q There's a list of specifications  
16 starting with design factors, wall thickness,  
17 SMYS, long seam, things of that nature, and  
18 that data is now the corrected data that you  
19 are using for purposes of making your  
20 verified statement to the Commission to  
21 justify the MAOP validation and restoration  
22 of pressure; is that correct?

23 A I think these are situations for  
24 the long seam.

25 Do you want to try to answer that?  
26 You got to go back and make sure it matches.

27 WITNESS SINGH: A I can answer that.  
28 These are the updated specifications as the

1 title states.

2 Q Okay. So now that I have that  
3 clear, I want to ask you a question about  
4 Segment 109, which is the last segment in  
5 that column. And I'm asking this question  
6 because I am cross-examining you with respect  
7 to your safety certification and the  
8 validation of engineering and construction  
9 data that you are using for these  
10 proceedings.

11 You list in this exhibit that you  
12 have just authenticated a wall thickness of  
13 .250, SMYS of 33,000, A.O. Smith SMAW, which  
14 Mr. Rosenfeld testified to yesterday, joint  
15 efficiencies, and MAOP design, MAOP test, and  
16 MAOP of record. Is that correct? You follow  
17 me?

18 A That's what's included in the  
19 table, that's correct.

20 Q And I'm sorry. This is all  
21 preparatory to a question I want to ask you.

22 A No problem.

23 Q So the MAOP of design -- let's  
24 start with MAOP of test. The MAOP of test  
25 would have been the results that you obtained  
26 based upon your hydrostatic testing for that  
27 line, correct?

28 A That is correct. And that number

1 is the same in both columns, both columns  
2 being October 2011 and the updated  
3 specifications.

4 Q Okay. I didn't ask that question,  
5 but thank you for that editorial comment.

6 A My pleasure.

7 Q The MAOP of design to the immediate  
8 left of the MAOP of test, what does that  
9 number represent?

10 A The MAOP of design represents our  
11 conservative methodology and application as  
12 part of the MAOP project to retroactively  
13 apply the design equation for the  
14 specifications as articulated throughout the  
15 conversation we've had today.

16 Q And the MAOP of design that's shown  
17 in that column for Segment 109 and the MAOP  
18 of record are the identical figures 330; is  
19 that correct?

20 A That's correct.

21 Q Okay. So the MAOP is what you're  
22 asking for the Commission to authorize. My  
23 question is simply this. If the MAOP  
24 resulting from a hydrostatic testing, which  
25 is the gold standard in the industry, results  
26 in a figure of 404, why aren't you asking for  
27 a MAOP of record of 400?

28 WITNESS JOHNSON: A We are asking for

1 a very conservative number at this point in  
2 time. But we acknowledge that the MAOP of  
3 test is 404. And in theory we could be  
4 asking for 404. But also as part of the PSEP  
5 program we said we would validate the  
6 existing MAOP, which previously was 400.

7 Q And if you could just, summarily if  
8 you wouldn't mind, explain to me the  
9 conservative factors that you're using that  
10 results in your decision to only ask for 330  
11 and not what your hydrotest shows this pipe  
12 is safe to run at?

13 A Well, all the issues are  
14 conservative factors. So we have talked  
15 about Segment 109 at length here. We've  
16 talked about the fact that the SMYS that  
17 we're using for that line has actually been  
18 tested to be significantly higher than our  
19 conservative assumptions. We have talked  
20 about using a joint factor of .8, which under  
21 the federal guidelines we wouldn't normally  
22 use for calculating hoop stress. So that's  
23 another conservative assumption.

24 WITNESS SINGH: A And the third one  
25 I'd like to add on top of that is the point  
26 that Mr. Malkin made earlier today is the  
27 strength of the weld versus the strength of  
28 the base metal at that specific location

1 where the leak occurred, which we analyzed,  
2 which is part of Segment 109, validated that  
3 joint efficiency factor of 1.0. We still  
4 continue to use the conservative assumptions.

5 Q Mr. Singh, thank you for that. I  
6 don't think that Mr. Malkin is testifying.  
7 So could you please explain in your own words  
8 what you meant by that statement.

9 A Sure. So if you take a look at  
10 the -- one of the Anamet reports, one of the  
11 many documents we filed as part of this  
12 proceeding, it includes the metallurgical  
13 results for the section of the line that was  
14 removed so we could conduct the root cause  
15 analysis of the leak.

16 The metallurgical properties showed  
17 that the minimum yield strength for the base  
18 metal was lower than the minimum yield  
19 strength for the actual weld metal, and the  
20 weld metal is where the seam comes together  
21 for the respective pipe as it's rolled. And  
22 that's a proxy for or an indication where the  
23 weld metal has a greater strength than the  
24 base metal that the joint efficiency factor  
25 does not have to be derated.

26 Q So if I understand your answer,  
27 there is a difference in the yield strength  
28 between the base metal and the actual weld

1 itself, the longitudinal weld?

2 A That's correct. That's what's  
3 stated in the metallurgical report.

4 Q And you're using the most  
5 conservative of those two factors in doing  
6 your verification for line -- for Segment  
7 109?

8 A We are actually not using the  
9 result from the metallurgical analysis, which  
10 is higher than what's used here to do the  
11 calculation. The reason we use 33,000 is the  
12 fact that it's been our historical  
13 procurement practices and we have contracts  
14 that state that the A.O. Smith pipe that we  
15 procure and have procured, minimum value is  
16 33,000 psi. Mr. Harrison, I believe, was  
17 under oath when he did talk about that issue.

18 Q Okay. So just so I can make sure I  
19 understand this. You could come to the  
20 Commission with the information that you  
21 have, the testing that you've done, and in  
22 your engineering opinion you could ask based  
23 upon the hydrotest, which again is the gold  
24 standard we've all been talking about, you  
25 could have asked for an MAOP of 400 psig. Is  
26 that correct? But you chose to employ more  
27 conservative assumption, and that's why  
28 you're asking for less than 400?



1           WITNESS JOHNSON:  A  As I stated  
2 earlier, I believe we have the right to ask  
3 for 400 if we chose to based on everything  
4 we've talked about previously at these  
5 hearings.  And we chose to be very  
6 conservative in all of our assumptions, and  
7 that's why we're only asking for 330.

8           WITNESS SINGH:  A  And I would also  
9 actually like to reinforce that in an  
10 assessment.  It's not just PG&E's position.  
11 One of the leading experts that's been a  
12 witness and the letter that was submitted by  
13 Mr. Rosenfeld on behalf of Kiefner &  
14 Associates also speaks to this issue that the  
15 line has been validated to 400 psig.

16           Q  Some of the reasons for your  
17 conservative assumptions are your  
18 understanding and PG&E's records showing the  
19 type of pipe that you purchased -- let me  
20 rephrase that.

21                   Is the reason that you have  
22 employed a conservative assumption on your  
23 otherwise hydrotested MAOP the fact that you  
24 are aware of other pipeline feature  
25 characteristics which you believe warrant a  
26 more conservative approach to establishing  
27 pressure?

28                           For example, we know that one

1 portion of Line 147 is A.O. Smith pipe. In  
2 yesterday's testimony Mr. Rosenfeld, excuse  
3 me, testified that he didn't know where that  
4 pipe came from, didn't know when it was  
5 reconditioned, how it was reconditioned,  
6 where it was purchased, who purchased it, but  
7 it is A.O. Smith pipe, probably manufactured  
8 before 1930.

9           Would your employment of  
10 conservative assumptions take that into  
11 consideration?

12           WITNESS JOHNSON: A I think you're  
13 referencing, again getting right back to this  
14 PRUPF conversation again. Is that what  
15 you're -- in terms of how we apply our  
16 conservative assumptions? Is that your  
17 question?

18           Q I'm sorry. I'm just asking  
19 where -- what's the source of your desire to  
20 employ more conservative assumptions in  
21 coming before the Commission asking for an  
22 MAOP certification? What is the source of  
23 that reason? Why in your engineering  
24 judgment do you feel it's important as the  
25 chief officer of PG&E to come in with a  
26 certification that is below what the MAOP  
27 would otherwise permit? ]

28           A Well, just as we did in the first

1 request at 365 pounds, we came below because  
2 we agreed to use, and we believe we should be  
3 using, conservative assumptions. We talked  
4 about being conservative in our decision  
5 making, and that is the whole basis of all  
6 the discussion we had earlier today.

7 We said we would calculate MAOPs as  
8 an interim safety measure prior to  
9 hydrostatically testing pipelines. That is  
10 the driver for going through that  
11 calculation. And from our standpoint, we are  
12 trying to be very conservative.

13 Q So the 330 psi is the appropriate  
14 pressure based upon your expert engineering  
15 judgment. Is that correct, Mr. Johnson?

16 A At this point it is the pressure I  
17 am requesting based on everything I've seen,  
18 and it is a conservative number. I believe  
19 we still have the right to ask the 400. I'm  
20 not asking for it at this point in time.

21 Q Okay, let me try a hypothetical.  
22 Hypothetically, if Segment 109 of Line 147  
23 were seamless pipe with a joint efficiency  
24 factor of 1.0, would you still be requesting  
25 an MAOP of 330?

26 A I would have to go back through and  
27 look at any other constraints that might be  
28 on this pipeline, different segments. And

1 what we calculated there, and whether or not  
2 we are sticking with our conservative  
3 assumptions. It might change, it might go  
4 up.

5           You mentioned the seam -- it would  
6 be a seam factor of zero, I mean 1, if it  
7 didn't have a seam, quote, seamless pipe.  
8 But I would want to look through that entire  
9 document again, and I would want to make sure  
10 I understood all of our conservative  
11 assumptions, and I would make my judgment  
12 then.

13           Q So in your engineering opinion,  
14 sir, as you sit here today testifying, the  
15 existence of information regarding a  
16 particular pipe segment does enter into your  
17 decision regarding whether to imply  
18 conservative factors in your overall  
19 engineering judgment. Is that a correct  
20 statement?

21           A Well, I'm not sure I understood. I  
22 looked at all the issues that I mentioned at  
23 the beginning of this in putting together my  
24 judgment in what we are asking for. And  
25 coming into this one, we decided to be, I  
26 decided to be very conservative.

27                   And so I've looked at all the  
28 issues, and one piece of that is looking

1 through the pipeline features list. But it  
2 is also looking through a lot of the other  
3 documents that I mentioned earlier including  
4 the MAOP documents, including the leak  
5 surveys, including the patrols, including  
6 having conversations with Mr. Kiefner,  
7 looking at the shrink test pressure reports.

8           As I stated earlier, we are asking  
9 for 330. I'm very, very, very comfortable  
10 with that number. This pipeline has already  
11 proven itself well over 600 pounds. It can  
12 operate, in my opinion, legally at 400  
13 pounds. I'm asking for 330.

14           Q Earlier today Mr. Malkin, again he  
15 was not testifying, he was offering argument.  
16 It was either on the record or off the  
17 record. I don't recall. He made a statement  
18 to the effect that PG&E employs conservative  
19 assumptions in, again, I think this goes to  
20 the pipeline, the unknown pipeline features  
21 at issue that we talked about yesterday. I  
22 have a very specific question.

23           Mr. Malkin referred to purchasing  
24 records of PG&E and said something to the  
25 effect that PG&E has looked through its  
26 purchasing records and never acquired AO  
27 Smith which had a SMYS of 33,000. I think  
28 that was something he said. I'm not

1 questioning so much Mr. Malkin, the accuracy  
2 of what he is saying, I'm asking you this  
3 question, sir.

4           As the chief engineer of PG&E who  
5 is responsible for this certification, do you  
6 specifically look at things such as when you  
7 have unknown pipeline features, purchasing  
8 records of the company, what type of pipe you  
9 purchased over what period of time when this  
10 particular piece of pipe was installed? And  
11 can you make general assumptions about the  
12 quality of that pipe based upon that  
13 information?

14           A    What I have looked at, I have seen  
15 some of the purchase documents when we  
16 started the MAOP process and we started the  
17 PRUPF discussion on how to put that together.  
18 I saw some of those documentations. I didn't  
19 look at all of them.

20           I do have a lot of conversations  
21 with Mr. Singh, Mr. Harrison, and many other  
22 people doing that work. And so we have had  
23 dialogue about that, but I haven't personally  
24 reviewed each one of those documents.

25           Q    But you would expect the people who  
26 report to you so that you could make a  
27 decision to have reviewed that information?

28           A    Well, in terms of what is in the

1 PRUPF document?

2 Q Yes?

3 A I mean I think that Mr. Singh has  
4 clearly articulated what has gone into those  
5 documents in the past.

6 In terms of wanting to know the  
7 strength, and if we are talking hypothetical  
8 again about AO Smith pipe, if we are still on  
9 that line, we had conversations with  
10 Mr. Harrison. And Mr. Harrison has stated we  
11 have tested this pipe under numerous  
12 circumstances. And each and every time I  
13 believe he stated that the strength was well  
14 above 33,000 psi.

15 This particular test, adding again  
16 to the confidence level, is we tested this  
17 pipe and I believe it came out at 39,000, I  
18 believe it was 300, subject to check. So  
19 that is the kind of -- that is the kind of  
20 discussions I have had in preparing for  
21 signing the document and reviewing all of  
22 the -- all the information that went into  
23 this filing.

24 Q Mr. Singh, you looked like you  
25 wanted to add something to that answer?

26 WITNESS SINGH: A The only thing I  
27 wanted to add is if there is a general  
28 question about the quality of the AO Smith

1 pipe, how it was manufactured, how it was  
2 developed over time, how it was tested over  
3 the mills, I think Mr. Rosenfeld spoke to  
4 that on Monday, Mr. Rosenfeld is still here.  
5 If there is any questions in regards to the  
6 actual strength of the pipe, what type of  
7 testing they did, I believe he testified, and  
8 go back and look at the transcripts. We can  
9 also look at the October 18th letter that  
10 Mr. Kiefner, or Kiefner & Associates, and Mr.  
11 Rosenfeld submitted. In that it states that  
12 AO Smith pipe was one of the higher quality  
13 manufacturers of line pipe during their era.

14 Q Mr. Singh, earlier today Mr. Malkin  
15 objected to a characterization of your  
16 testimony that I made in an off-the-record  
17 comment, I believe. I can't find the portion  
18 of the transcript where you actually said  
19 these words, because we just got the  
20 transcripts this morning. But I believe you  
21 said something to the effect that, with  
22 respect to AO Smith pipe, that that pipe may  
23 have been pipe that was acquired from other  
24 utilities. Do you recall making that  
25 statement?

26 A It would be great if you can point  
27 me to a specific section in my transcript.

28 Q I can't. To your knowledge has



1 PG&E acquired AO Smith pipe from other  
2 utilities?

3 A I think Mr. Harrison would be more  
4 appropriate to answer that question. Because  
5 I haven't looked at every single purchasing  
6 record associated with 6,750 miles  
7 translating to more than 4 million individual  
8 documents. I personally have not reviewed  
9 every single document to be able to make that  
10 statement.

11 The fact that we had a successful  
12 strength test, a spike test, does not concern  
13 me. We monitored to ensure line doesn't  
14 yield, which we also talked about at length.  
15 So it does not concern me that that is weaker  
16 pipe. And if it was weaker pipe, we would  
17 have identified that as part of strength  
18 test. That is why we strength test.

19 Q So I know we've talked about this  
20 quite a bit. But basically what you are  
21 saying, if I interrupt it correctly, while it  
22 is good to find the original records for the  
23 purchase of particular segments of pipe to  
24 validate the information that you have in  
25 your database with that information,  
26 ultimately it is the strength test or the  
27 hydrotest that is the standard by which PG&E  
28 uses to file its verification by you guys

1 under penalty of perjury that the pipeline in  
2 question is -- can be operated at the MAOP?  
3 I mean it is ultimately the strength test,  
4 the hydrotest you are relying on?

5 WITNESS JOHNSON: A So that we are  
6 very clear on this, Line 147 for the segments  
7 that were built before 1970, that is the  
8 information we are using.

9 Q Okay. So isn't it true from an  
10 engineering point of view that all pipeline  
11 features are not validated by a hydrotest?

12 A I'm sorry, your question again?

13 Q Isn't it true from an engineering  
14 perspective that not all features of a  
15 pipeline are actually validated by a  
16 hydrotest?

17 A There are multiple types of tests  
18 that can take place on a pipeline. So  
19 hydrotest is not the only one.

20 Q Would you -- would a hydrotest tell  
21 you the load capabilities of a miter in a  
22 pipeline?

23 A Would it tell you the, I'm sorry,  
24 what capabilities?

25 Q Would a hydrostatic test provide  
26 sufficient information for you to validate  
27 the integrity of a miter bend on a piece of  
28 pipeline? In other words, is hydrotesting

1 the way to test the integrity of a miter  
2 bend?

3 A Well, a hydrotest is a way to test  
4 the integrity of a pipeline to be capable of  
5 holding a pressure that it is operating  
6 under. So, again, 400 pounds hypothetically,  
7 you test the 600, you know that pipeline  
8 system from Point A to Point B is capable of  
9 handling that pressure. That is what a  
10 pressure test or a hydrotest in this case  
11 does.

12 Q I understand that. Thank you for  
13 that.

14 But are there structural elements  
15 in a pipeline such as a miter bend or such as  
16 a bell that -- a bell joint, where a  
17 hydrotest is not the best means of assuring  
18 the integrity of that particular feature,  
19 that you do other testing?

20 A When you refer to "integrity "what  
21 are you representing?

22 Q Integrity of the line to withstand  
23 the pressure that you are operating in?

24 A If you are looking to understand if  
25 the pipeline can hold pressure, you do a  
26 pressure test.

27 Q Did you happen to do any special  
28 tests on miter bends on Line 147?

1           A    "Any special test"?

2           WITNESS SINGH:   A    So in the response  
3   that Mr. Rosenfeld also provided I believe on  
4   Monday, he did mention that we did do a  
5   structural analysis on the open span which  
6   included the miter bend.   I'm not sure if  
7   that is your question.

8           Q    It is my question.   Why did you do  
9   that?

10          WITNESS JOHNSON:   A    Why did we do a  
11   structural?

12          Q    Yeah.

13          A    Well, it is just part of the  
14   overall assessment.   You have a span, right?  
15   It is aboveground.   And so one of the things  
16   you do on spans, you look at the structural  
17   integrity of that span.   You are aboveground.  
18   So you will take a look at that.

19          Q    And Mr. Rosenfeld, I think as  
20   Mr. Singh pointed out, also included it in  
21   his explanation that that included the miter  
22   bend as well?

23          A    Yeah, I would have to reference  
24   back to it.   But if that is what is in  
25   Mr. Kiefner's, or Mr. Rosenfeld's statements,  
26   then that is in his statement.

27          Q    Gentlemen, I'm not trying to trap  
28   you in debating the point here.   But I'm just

1 trying to understand that hydrotesting may be  
2 the gold standard for the circumferential  
3 pressure within a vessel. But it is not the  
4 only test that you do to ensure the integrity  
5 of the pipeline. Is that a correct  
6 statement?

7 A There are other things that you do  
8 to continue to ensure the ongoing  
9 capabilities of the pipeline, leak survey,  
10 controls and inspections, monitoring for  
11 dig-ins, cathodic protection, all those type  
12 of things are the things you do on an ongoing  
13 basis.

14 Q Okay. In your verified statement  
15 before this Commission you are saying that  
16 you've done all those things necessary to  
17 support your conclusions?

18 A I am comfortable that we've done  
19 everything necessary to operate this pipeline  
20 at 330 pounds. I believe that is the essence  
21 of my verified statement.

22 Q Okay. Well, thank you for that.

23 Mr. Johnson, you are familiar with  
24 the Decision 11-09-006 that we've been  
25 referring here today?

26 A I am not familiar with decisions by  
27 decision numbers. Those aren't things I put  
28 to memory.

1           Q   Well, it is the decision adopting  
2 procedures for lifting operating pressure  
3 restrictions. Are you familiar with that  
4 document?

5           A   I have seen it. I don't have it in  
6 front of me. I'm not intimately familiar  
7 with it, no. I've read it, but I don't have  
8 it to memory.

9           Q   Okay. I don't want to offend you,  
10 but you are the guy certifying under this  
11 order. I would think that you would know it.  
12 But that is okay.

13           MR. MALKIN: Your Honor.

14           ALJ BUSHEY: Mr. Meyers, can we focus  
15 on answering questions and leave the  
16 editorial comments behind.

17           MR. MEYERS: Q Mr. Johnson, are you  
18 aware that the City of San Bruno proposed in  
19 this proceeding, and it is referenced in the  
20 decision on page 5, the City of San Bruno  
21 proposed to the PUC that they adopt a remedy  
22 or a requirement that the operating pressure  
23 be validated by independent experts and then  
24 reviewed in a public process by the  
25 Commission?

26           A   I recall reading that in some of  
27 the testimony. I don't remember the exact  
28 words.

1           Q    I think we've referred to the term  
2 as "independent monitor." Have you heard  
3 that term used?

4           A    I have heard the term used, yes. I  
5 have not had any conversations about an  
6 independent monitor.

7           Q    Do you know whether PG&E supports  
8 the concept of an independent monitor to  
9 validate MAOP?

10          A    I don't believe we have any reason  
11 to need an independent monitor to validate  
12 the MAOP. We have the Commission, we have  
13 PHMSA, we have SED as part of the Commission.  
14 We have numerous parties looking over to try  
15 to validate anything that PG&E does.

16          Q    So as the chief engineer for gas  
17 for Pacific Gas and Electric, if Mr. Johns  
18 comes to you and asks you your opinion  
19 whether you recommend that PG&E sign on to a  
20 proposal to have an independent monitor, what  
21 would your recommendation to him be?

22          A    Without understanding what the  
23 independent monitor was really going to do,  
24 if you are -- hypothetically, I'm going to  
25 hypothetically answer that question --

26          Q    Please.

27          A    -- I would say I don't think it is  
28 necessary.

1 Q Thank you.

2 A I think we have plenty of agencies  
3 that have already had the capabilities of  
4 looking at anything we want to do. We have  
5 the CPUC, we have the SED portion of the  
6 CPUC, and we have PHMSA.

7 Q Mr. Johnson, we made a data request  
8 of PG&E that unfortunately has not been  
9 responded to as we sit here today. So I'm  
10 going to ask you a question relevant to that  
11 that bears on this issue of certification.  
12 Mr. Singh, you can please answer this as  
13 well, if you could.

14 Are you aware of any circumstances  
15 with respect to your MAOP validation where  
16 the field information is different than the  
17 records maintained by PG&E concerning that  
18 particular piece of pipe, or whatever it  
19 might be? In other words, are you aware of  
20 any circumstances where PG&E has discovered,  
21 in the course of doing its MAOP validation, a  
22 discrepancy, such as we have here on Line  
23 147, between the data in your system and what  
24 you found out in the field? Are there any  
25 other circumstances like Line 147 that you  
26 are aware of?

27 A Well, I think in respect to Line  
28 147 we found that as part of, as we termed



1 it, a routine leak survey, somebody standing  
2 by. I'm not familiar with any other time  
3 that we have found information in that  
4 manner. I'll let Mr. Singh add to it. But  
5 we do data validation digs to exactly verify  
6 what is in the ground.

7 So the answer would have to be yes,  
8 we have found things that may differ from the  
9 records, and this whole purpose of those digs  
10 is to validate that. That is the purpose of  
11 a validation dig.

12 WITNESS SINGH: A Just to add on to  
13 that, that is part of the MAOP project. That  
14 was one of the things that we were doing. We  
15 were -- performed excavations to identify  
16 specifications. And that is part of the  
17 process and the procedure that we laid out  
18 previously as well. As we do excavations to  
19 perform work on our system, safety-related  
20 work as part of the Pipeline Safety  
21 Enhancement Plan, or any other work, we  
22 validate the information that is in the field  
23 with our records. It is a process,  
24 continuous improvement process.

25 Again, it goes back to the same  
26 aspect that we stated in terms our  
27 methodology back in March 21st of 2011.  
28 Nothing has changed since then.

1           Q    Are you familiar with Line 210C, as  
2 in Charlie, in Vallejo?

3           MR. MALKIN:  Objection, irrelevant.

4           MR. MEYERS:  Your Honor, my question is  
5 going to go to the veracity of the witnesses.  
6 I'm going to ask a question about this  
7 particular line because what was covered with  
8 respect to that.

9           ALJ BUSHEY:  Mr. Meyers, you are going  
10 to impeach the veracity of these witnesses?

11          MR. MEYERS:  I'm going to try.

12          ALJ BUSHEY:  All right.

13          MR. MEYERS:  Q  Are you familiar with  
14 line 210C, as in Charlie, in Vallejo?

15          WITNESS JOHNSON:  A  I am, in general,  
16 familiar with the location of that line.

17          Q  And is it correct that the -- that  
18 PG&E inspected that line and determined that  
19 the line interior walls were less than  
20 expected and has now replaced that line?

21          A  I believe what you are referencing  
22 is we ran a tool, if I understand your  
23 question correctly, we ran an ILI tool  
24 through the line looking for wall thickness,  
25 looking for information on the pipeline,  
26 including external and internal corrosion,  
27 and a multitude of other things, including  
28 dents.

1           And during that ILI pig run, there  
2 was some pipe found to be different than what  
3 was in the records. And that pipeline  
4 segment, I don't recall exactly how long it  
5 was, was replaced in relatively short order,  
6 as I recall. I don't have all the details to  
7 memory, but it was a project our team took  
8 on.

9           Q    Mr. Singh, anything further on  
10 that?

11           WITNESS SINGH:  A  I have nothing else  
12 to add to that. The tool, on just a  
13 clarification point, the tool that was run as  
14 part of that was an in-line inspection tool.  
15 That is clearly a method, that is something  
16 that is part of the Integrity Management  
17 Program that we have within PG&E. And that  
18 is something that we are going to continue to  
19 do on our lines that are piggable, and we  
20 continue to make more of our lines piggable  
21 to exactly identify those types of issues.

22           Q    Is line 147 piggable?

23           WITNESS JOHNSON:  A  At this time I  
24 don't -- well, one thing, no, Line 147 cannot  
25 be pigged today at 125 pounds with no valves  
26 open. I don't know of a tool right now that  
27 could be run through that system, and  
28 certainly not at the lower pressures that we

1 are talking about that it is currently  
2 operating at.

3 Q As the head of Pacific Gas and  
4 Electric's gas projects, sir, would you  
5 recommend to management that they reconstruct  
6 Line 147 so it is piggable?

7 A We plan to get all -- in time, we  
8 will get all of our lines, certainly over  
9 greater than 6 inch, piggable. It is simply  
10 a matter of looking at which ones we make  
11 piggable first. I think Line 147 would  
12 ultimately be one of those lines. If there  
13 is segments or things that need to be done to  
14 the pipeline to make it piggable, we will go  
15 about doing that work.

16 MR. MEYERS: One minute, your Honor.

17 ALJ BUSHEY: We will be off the record.

18 (Off the record.)

19 ALJ BUSHEY: Back on the record.

20 Mr. Meyers.

21 MR. MEYERS: One final set of  
22 questions, if I might.

23 Q Mr. Johnson, you are aware of the  
24 NTSB's urgent Recommendation P-10-3 issued to  
25 PG&E as a result of the San Bruno disaster?

26 WITNESS JOHNSON: A They had numerous  
27 recommendations to PG&E. I don't have them  
28 memorized by number at this point. That was

1 quite some time ago.

2 Q Would it refresh your recollection  
3 if I told you that this recommendation had to  
4 do with MAOP validation and traceable,  
5 accurate, and verifiable records?

6 A I think there were several tied to  
7 that concept.

8 Q And do you know whether that  
9 recommendation has now been cleared by the  
10 NTSB?

11 A Which one are you specifically  
12 referring to?

13 Q P-10-3 MAOP validation.

14 WITNESS SINGH: A I can try. I am  
15 familiar with that recommendation as well as  
16 P-10-2 and 10-4. And my understanding is,  
17 subject to check, that P-10-2 and 3 have been  
18 closed by the NTSB.

19 Q Mr. Singh, thank you for that.

20 Do you recall that Chris Johns,  
21 President of PG&E, sent a letter to the NTSB  
22 on January 31st, 2013, requesting that  
23 clearance? Are you aware of that fact?

24 A There is many letters that have  
25 been exchanged with our executives at PG&E  
26 with the NTSB. So that may be one of the  
27 letters. I'm presuming you are looking at  
28 it. I don't have it in front of me. I will

1 have to take your word for it.

2 Q I guess my question, gentlemen, is  
3 whether or not in retrospect now you believe  
4 that your request to clear that  
5 recommendation to NTSB was made in good faith  
6 based upon the knowledge that you had in  
7 October, the information concerning Line 147  
8 was not accurate?

9 WITNESS JOHNSON: A I believe if we  
10 made that recommendation, we made it in good  
11 faith.

12 Q That recommendation was made in  
13 January of 2013, and yet you had information  
14 concerning the discrepancy in Line 147 in  
15 October/November of 2012?

16 A As Mr. Singh has stated and we  
17 stated here many times, this is an ongoing  
18 process to get records better and better. At  
19 no point does that necessarily invalidate all  
20 the work that has gone on to improve records.  
21 As we've said, we believe our records are in  
22 very good shape, but it is a continuous  
23 process to get better and better. As we dig  
24 up pipelines, we will know more and more.

25 Q Mr. Singh, I ask you the question  
26 whether or not you are aware of any efforts  
27 that PG&E has made either orally or by  
28 correspondence with the NTSB to correct the

1 record with respect to your MAOP validation?

2 MR. MALKIN: I'm going to object to the  
3 question, your Honor, on two grounds. First,  
4 it assumes facts not no evidence. Namely,  
5 the record, quote, needed to be corrected.

6 Secondly, we are veering further and  
7 further from Line 147 which I thought Mr.  
8 Meyers committed earlier he was going to  
9 limit his questions.

10 ALJ BUSHEY: Mr. Meyers, the NTSB  
11 declaration is not on the list in Ordering  
12 Paragraph 4.

13 MR. MEYERS: I was wondering how long  
14 you would let me go.

15 ALJ BUSHEY: Thank you, Mr. Malkin, for  
16 saving me.

17 Who is next? Mr. Gruen.

18 MR. GRUEN: No, we don't mind if ORA  
19 goes before us, your Honor. If that is okay  
20 with you.

21 MS. PAULL: Because we have very  
22 limited cross.

23 ALJ BUSHEY: Okay, go ahead.

24 MS. PAULL: I have a couple of  
25 questions and Mr. Roberts has a few too.

26 CROSS-EXAMINATION

27 BY MS. PAULL:

28 Q Looking again, you may not need to

1 refer to the table in Exhibit I again, but  
2 look at it if you need to. The table with  
3 the updated specifications.

4 So looking at the table again for  
5 Segment 109 of Line 147 in your October 2011  
6 pressure restoration filing the MAOP of  
7 design was 437. Is that right?

8 WITNESS SINGH: A That is what is  
9 stated here.

10 WITNESS JOHNSON: A That is what is  
11 stated on the document.

12 Q Okay. Now, the updated MAOP of  
13 design is 330, correct?

14 A Correct.

15 Q Now let's look at the MAOP of test  
16 for October 2011. It is 404, right?

17 A That is what is showing on this  
18 table, yes.

19 Q And the updated has not changed,  
20 right? It is the same?

21 A That is correct. It wouldn't  
22 change. They are based on the hydrostatic  
23 test. The hydrostatic test didn't change.

24 Q Okay. But is it your testimony  
25 that you are not now requesting 330 instead  
26 of 365 because the MAOP of design is 330?

27 A What I believe I stated, we are  
28 asking for 330 because we are being very



1 conservative on our request. We believe we  
2 have the right to ask for 400 based on the  
3 previous MAOP. But based on our very  
4 conservative assumptions, at this point in  
5 time we are asking for 330 pounds.

6 Q If the design MAOP is lower, I  
7 thought we had covered earlier, I thought you  
8 had agreed, you can correct me if I'm wrong,  
9 that under federal regulations 619, 192.619,  
10 the operator has to choose the lower. If you  
11 have test MAOP and design MAOP and the design  
12 MAOP is lower, you choose lower. Is that not  
13 your understanding?

14 A I believe what we said earlier,  
15 maybe I misunderstood the question, but when  
16 you talk about design of a pipeline, that is  
17 for pipelines built after 1970 when the code  
18 went into place. So this line was built  
19 earlier than that.

20 Q And that is the basis for your  
21 belief that you are legally entitled to set  
22 the MAOP at 400?

23 A I believe we can request 400 based  
24 on the codes that are in place today.

25 Q I see. And just to clarify one  
26 more thing about that. The basis for your  
27 belief that you can legally set the MAOP at  
28 400, you are not relying on the Commission

1 decision that ordered PG&E to go out and  
2 validate MAOP through testing or replacing,  
3 are you?

4 A Well, at the federal level we have  
5 grandfather. We've already talked about  
6 that.

7 It is clear, I'm not going to put  
8 words into the ALJ's mouth, but it was the  
9 decision here that the State of California is  
10 getting away from grandfathering. And to  
11 validate the MAOP of the pipeline specific to  
12 Line 147, MAOP of that pipeline prior to this  
13 was 400 pounds. To validate the MAOP of that  
14 pipeline, we would conduct the hydrostatic  
15 test to verify that MAOP was safe. For this  
16 pipeline it would be 600 pounds or greater,  
17 which is what we've done for the pipeline  
18 segments. As an interim safety measure, we  
19 said we would go about a calculation of the  
20 MAOP as an interim safety measure prior to  
21 the hydrostatic test. That is, in essence,  
22 my understanding what we've agreed to.

23 We've completed the MAOP activity,  
24 and we will continue to get better at that.  
25 Now we are going through the process of  
26 pressure testing any of our pipelines that  
27 have not been previously tested.

28 Q Thank you. We got far afield I

1     though I think. My question is actually very  
2     simple.

3                    You don't interpret the Commission  
4     order to require you to validate MAOP by  
5     strength test only --

6                    A    No.

7                    Q    -- do you?

8                    A    No. We have been -- we are  
9     getting rid -- the State of California wants  
10    to get rid of the grandfather clause, not  
11    strength test, pressure test. We've been  
12    ordered to pressure test all of the pipelines  
13    that have previously not undergone any  
14    pressure testing.

15                   Q    Thank you for that correction,  
16    pressure test.

17                    But do you --

18                    A    Under that order is the process we  
19    are going through.

20                   Q    So is it your belief that the  
21    Commission ordered, directed PG&E to validate  
22    MAOP on the basis of pressure test only and  
23    gave PG&E permission to disregard design  
24    MAOP --

25                   MR. MALKIN: Your Honor?

26                   MS. PAULL: -- in the MAOP validation  
27    process?

28                   ALJ BUSHEY: Sustained.

1           Ms. Paull, we have Ordering  
2 Paragraph 4. There is a list of items in  
3 there. Nowhere in that list does it say an  
4 interpretation of Commission's previous  
5 decisions.

6           MS. PAULL: This goes to F, your Honor,  
7 the MAOP validation which we've been talking  
8 about.

9           I'm just trying to understand the  
10 basis for Mr. Johnson's as belief that PG&E  
11 could, if it wanted to, set the MAOP at 400.]

12          ALJ BUSHEY: F says their proposed  
13 maximum operating pressure and maximum  
14 allowable operating pressure for each segment  
15 in the entire line.

16          MS. PAULL: That's exactly what I'm  
17 talking about.

18          ALJ BUSHEY: That's a number. We know  
19 exactly what the number is. It's 330.

20          MS. PAULL: I was asking to clarify.

21          Q Are you proposing 330 because  
22 that's a design MAOP? And I believe your  
23 answer is no.

24          ALJ BUSHEY: Ms. Paull, it's not on the  
25 list. He told you what the answer is. 330.  
26 That's what they're proposing. That's Item  
27 F. I'm sure there are probably thousands of  
28 reasons why they propose 330. The point of

1 this list is what are they proposing. 330.

2 MS. PAULL: Okay. We know what they're  
3 proposing.

4 ALJ BUSHEY: Good. That takes care of  
5 Item F.

6 MS. PAULL: Do you really think so,  
7 your Honor?

8 ALJ BUSHEY: That's what it says.  
9 Proposed MOP and MAOP for each segment.

10 MS. PAULL: Doesn't what the Commission  
11 need to determine what MAOP is required?

12 ALJ BUSHEY: No. We need to know what  
13 their proposed is. This is what they have  
14 proposed.

15 MS. PAULL: And I was asking the basis  
16 for the number they're proposing just to  
17 clarify because we have --

18 ALJ BUSHEY: Ms. Paull, we've been over  
19 this for now we're -- well, into our third  
20 day of this.

21 MS. PAULL: I actually think I got an  
22 answer to my question. I actually think it's  
23 very relevant, your Honor.

24 ALJ BUSHEY: Okay. Thank you for that  
25 opinion. Do you have any further questions  
26 for this witness?

27 MS. PAULL: No, but Mr. Roberts does.

28 ALJ BUSHEY: Okay. Mr. Roberts.

1           MR. ROBERTS: I think these will go  
2 hopefully very quickly.

3                           CROSS-EXAMINATION

4 BY MR. ROBERTS:

5           Q    Good afternoon, gentlemen. You had  
6 just mentioned a moment ago, Mr. Johnson,  
7 that the use of assumed values was an interim  
8 measure. And the word "interim" in that  
9 case, did I understand correctly that it's of  
10 use until you hydro test. But then once  
11 you've hydro tested, that interim measure --  
12 that's the end of the interim period? If I'm  
13 not correct, please define "interim".

14           WITNESS JOHNSON: A I think -- I think  
15 when we use the term, "interim," we're  
16 talking about until the pressure test is  
17 done. So I don't have the exact wording of  
18 all the rulings that have gone on, but in my  
19 words, we did the MAOP validation based on  
20 very conservative assumptions as an interim  
21 safety measure until we can pressure test  
22 every piece of pipe that previously has not  
23 undergone a pressure test. And I believe  
24 that's the essence of the requirement.

25           Q    Okay. Thank you. Now, I just have  
26 a follow-up question on the City of San  
27 Carlos' discussion about safety factor. And  
28 I'd like to ask you to turn to page A-60 of

1 Exhibit A to PG&E's October 11th filing?

2 A I don't think we have Exhibit A up  
3 here.

4 MS. PAULL: It's the safety  
5 certification.

6 WITNESS JOHNSON: Okay. Exhibit A.  
7 Where is Exhibit A? The whole thing is  
8 Exhibit A. Okay. What page was it?

9 MR. ROBERTS: Q Page A-80 -- page  
10 A-60.

11 WITNESS JOHNSON: A A-60. Okay. So  
12 we're back to the PFL.

13 Q Correct.

14 A MAOP report. I'm sorry.

15 Q MAOP report, yes.

16 A Okay.

17 Q In the Decision that we've been  
18 talking about and the specific area that the  
19 ALJ asked us to look at, Item A of that asks  
20 for the percent specified minimum yield  
21 strength at MAOP?

22 A I'm sorry. Item A being where now?

23 Q This is -- so I'm actually taking a  
24 small step back. Decision 11-09-006 had  
25 asked that if you want to raise -- to restore  
26 pressure, you need to provide the percent  
27 specified minimum yield strength at MAOP. So  
28 the judge handed out a copy of the Decision.

1 I thought you might have that or if that  
2 sounds familiar --

3 A I wasn't up here when it was handed  
4 out. Go ahead. Your question.

5 Q So the judge asked for that. And  
6 in the page I just asked you to look at the  
7 one, two, three, fourth column from the right  
8 provides a column entitled, "Percent SMYS per  
9 R." Do you see that?

10 A Yeah.

11 Q Okay. Is the percent SMYS an  
12 indication of the factor of safety for each  
13 of these features?

14 A It could be.

15 Q Okay.

16 A It could be. I mean, we're using  
17 very conservative assumptions; right? So  
18 this would be a calculation, and so that  
19 would be a starting point. We're using  
20 specified minimum yield strength, that's a  
21 safety factor there. That's the minimum  
22 yield strength of the pipe. We're using  
23 joint efficiencies that are below necessary  
24 requirements, and we're using strengths  
25 below. So there's safety factors on safety  
26 factors on safety factors. This would be one  
27 indication of a specific safety factor.

28 Q Well, that column in particular is



1 summing the information to -- from the left  
2 of that, and aren't those values the overall  
3 safety factor that is provided for each of  
4 those features given your MAOP of record?

5 A I'm not sure I understood that  
6 question again. So we've got --

7 Q So all the assumptions --

8 A -- a joint efficiency factor.

9 Q Correct.

10 A Right? So there's conservative  
11 assumptions in there.

12 Q Yes.

13 A And then there's the test pressure.

14 Q Uh-huh.

15 A Right? So there's conservative  
16 assumptions. We've tested well above the  
17 operating pressure. Is that your question?

18 Q My question is I would understand  
19 the percent SMYS per R to be a measure of the  
20 factor of safety provided by the MAOP of  
21 record that you've requested, which is 330,  
22 and that that number encompasses all of the  
23 other conservative decisions you've chosen to  
24 make. So for example, the decision to use a  
25 conservative SMYS, the decision to use a  
26 conservative joint efficiency factor, and it  
27 also incorporates the joint MAOP of test  
28 because that is the higher than the MAOP of

1 record.

2 So what I'm asking is is one  
3 measure of the overall factor of safety for  
4 the features of this line -- is the percent  
5 SMYS per R a metric to tell us what the  
6 factor of safety is?

7 A I guess in very rough terms you  
8 could do that. Yes, there's a hundred  
9 percent SMYS; right? So if you're at  
10 50 percent of a hundred percent of SMYS,  
11 you've got a safety factor, if you want to  
12 use math, engineering terms -- it would be  
13 two.

14 Q That was actually -- yes.

15 A That was the conversation. What I  
16 don't think is incorporated in that the SMYS  
17 itself a conservative number. I'm going to  
18 use hypothetical numbers. If the SMYS was at  
19 100 and we said this was operating at  
20 50 percent, that would be 50 of a hundred,  
21 safety factor of two. That SMYS because of  
22 conservative assumptions may be 150. Does  
23 that make sense?

24 Q Uh-huh.

25 A Because we've used conservative  
26 factors together. So this is one very  
27 conservative way to look at it.

28 Q Okay.

1           WITNESS SINGH:  A  The one thing I  
2 would like to add on to that is in this  
3 calculation -- Mr. Rosenfeld also spoke to  
4 that -- there's also an inherent conservatism  
5 built into the methodology.  And that  
6 methodology includes the use of the joint  
7 efficiency factor.  And the joint efficiency  
8 factor is based on seam type as you can see  
9 in this report.  And this number represents  
10 the actual hoop stress of the line.

11                   And we've been talking a lot about  
12 the federal code and the interpretation, and  
13 Mr. Rosenfeld provided that.  He cited a  
14 specific letter in our workshop yesterday as  
15 well, and it's publicly available on PHMSA's  
16 website.  It was a 1979 letter which PHMSA  
17 clearly stated that the hoop stress equation  
18 do not use the joint efficiency factors.  The  
19 joint efficiency factors is .8 to .6.

20                   We're still using a value of 1.0,  
21 but our conservative methodology uses the  
22 joint efficiency factor.  So to the point  
23 Mr. Johnson made earlier, it's safety factors  
24 on top of safety factors on top of a  
25 conservative methodology to do the arithmetic  
26 calculation.

27           Q  So based on what you just said, are  
28 you saying that the factor of safety for

1 features in the middle of this page, which  
2 currently show -- they show a percent of SMYS  
3 at 50 percent. Do you believe that the  
4 actual factor -- and by 50 percent, that  
5 would imply a two time safety factor.

6 Because there's conservatism built  
7 into some of these other numbers, is the  
8 actual factor of safety in your mind higher  
9 than two?

10 WITNESS JOHNSON: A Yes, I would  
11 expect it to be higher than two if you use  
12 the equations as Mr. Singh just pointed  
13 out --

14 Q Uh-huh.

15 A -- and if you really look at what  
16 is really the strength of the material you're  
17 looking at.

18 Q Okay.

19 A And I think we shared that on  
20 Segment 109 we're using 33000. Clearly the  
21 test showed -- 39,300 I believe is the  
22 number. So right there you've got a  
23 significant safety factor.

24 Q So now I'm -- and I'm almost done,  
25 your Honor.

26 Now I'm going to ask a hypothetical  
27 about a piece of pipe here that says A.O. --  
28 any of these in the middle of the page that

1 say A.O. Smith pipe.

2 A It's not a hypothetical if you're  
3 pointing to a piece of pipe. Just tell me  
4 what piece of pipe you're looking at.

5 ALJ BUSHEY: Mr. Johnson.

6 THE WITNESS: I'm sorry.

7 MR. ROBERTS: Q Let's start with a  
8 real set of data on your element of the PFL,  
9 which is any of the ones that say A.O. Smith  
10 pipe that have a design MAOP of 330 and a  
11 calculated percent SMYS of 50. There's many  
12 of them. You can pick any one of them.

13 WITNESS SINGH: A Okay.

14 Q Now we're going to go into the  
15 hypothetical situation. This table shows a  
16 SMYS of 33 percent. What would the  
17 calculated percent SMYS be, everything  
18 else --

19 WITNESS JOHNSON: A I'm sorry. This  
20 table does not show 33 percent.

21 Q 33,000 PSI, I'm sorry, for SMYS.

22 A Okay.

23 Q If instead of 33,000 we used a  
24 stronger pipe with a SMYS of 66,000,  
25 everything else being equal, would the  
26 calculated percent SMYS now go to 25 percent  
27 or would that stronger pipe provide a factor  
28 of safety of four?

1           A    At least, yes.

2           Q    Okay.  Just one other question,  
3 then.  And now I'd ask you to turn to page  
4 A-183, which is into the hydro test report.

5           A    Okay.

6           Q    So we're not going to talk about  
7 the slopes of this curve today.  Thank you  
8 for going over that yesterday.  What I want  
9 to look at is the relative position of the  
10 actual line relative to the calculated  
11 expected yield curve, the straight line.  And  
12 my question is fairly -- I hope it's simple.

13                    We -- we agreed in the workshop  
14 that this curve does not show yielding, that  
15 the -- that the pipe did not yield during the  
16 spike test on Test T43B; correct?

17           A    Correct.  There has been no  
18 yielding in any of the hydro static testing  
19 that we've done.

20           Q    Does the PV plot or any other data  
21 in the test report show how close you came to  
22 yielding?

23           A    Well, I don't -- I don't know that  
24 you can say how close you came to yielding.  
25 I mean, you're looking for yield.  We have no  
26 reason to believe we're even close to yield.  
27 So I mean, if you wanted to roughly look at  
28 it, you can probably, you know, look

1 across -- and what is that? 700 and -- 740,  
2 750 pounds.

3 Q Uh-huh.

4 A And the line that was expected --  
5 that in theory would yield at; right, in  
6 theory -- and there's a lot of issues with  
7 that -- is the red line. So you've got --  
8 what? 200 and -- 200-plus pounds before  
9 yield in this particular case.

10 Q So if all the pipe were as expected  
11 when they calculated that expected yield, you  
12 are very far from what you expected yield to  
13 be in this test?

14 A Oh, yes, absolutely.

15 Q Okay.

16 A I mean, this is -- this is -- we  
17 only tested to 600 pounds; right? Other  
18 than -- there's some segments we tested to --  
19 1,200 pounds I believe was the number we saw  
20 earlier. So yeah, it's not -- it's not --  
21 it's not anywhere close to where we expect to  
22 have yield.

23 Q But if -- and now I will go  
24 hypothetical. If there were a piece of cast  
25 iron or something with a very low yield  
26 strength, this curve wouldn't tell us how  
27 close we got to that. It would only tell you  
28 you did not achieve yield; is that correct?

1           WITNESS SINGH:  A  Let me answer that  
2 question.  First of all we don't use cast  
3 iron pipe.

4           Q  It's a hypothetical.

5           A  And if we had a material like cast  
6 iron pipe, it would not be able to withstand  
7 this type of pressure.  It would actually not  
8 pass the hydro test --

9           Q  Okay.

10          A  -- according to my understanding.  
11 And we have to look at the material  
12 properties.  And I'm not going sit here and  
13 have that engineering discussion about what  
14 the material properties are of cast iron,  
15 what the minimum yield strength is, what is  
16 the wall thickness.  Maybe there's pipe  
17 manufactured that can withstand that, but we  
18 do not use cast iron pipe at they pressures.

19          Q  Okay.  So I did preface my question  
20 by saying this is a hypothetical.  I was just  
21 trying to look for my data to what type of  
22 pipe would have a significantly lower yield  
23 strength.  So forget about the type of  
24 material.  But if there was a material in  
25 there that had a significantly lower yield  
26 strength, this plot doesn't show how close  
27 you same to that.  It only shows you did not  
28 achieve yield?



1           WITNESS JOHNSON:  A  Well, if you  
2  hypothetically were looking for a lower -- a  
3  lower SMYS piece of pipe, which is what I  
4  think you're stating -- is that what you're  
5  stating?

6           Q  Correct.

7           A  This red line would drop down.  The  
8  theoretical -- based on that information, the  
9  theoretical yield on that pipe would drop.  
10  Here I said roughly it's 200-plus pounds.  If  
11  that red line dropped, it would be less than  
12  200 pounds.  You would get a relative feel  
13  for it.

14          Q  That would be if you knew what the  
15  material was and could calculate this value.

16          A  You just hypothetically told me  
17  what it was.

18          Q  I didn't.  All I said was  
19  hypothetically if a material is in there that  
20  you don't know has a significantly lower  
21  pressure at which it would yield, this curve  
22  wouldn't tell you -- you wouldn't have a  
23  valid red line.  You wouldn't know where the  
24  red line was.  And this curve doesn't tell  
25  you how close you came to the actual red  
26  line.  It only tells you you did not cross  
27  the red line; is that correct?

28          A  I don't know if it's correct.  I

1 didn't quite follow you. Was there a  
2 question?

3 Q Yes. Does this yield tell you --  
4 does this curve tell you how close you came  
5 to actually yielding every part of the pipe  
6 under test?

7 A Well, so the yielding of a piece of  
8 pipe under test -- the weakest link will  
9 yield --

10 Q Correct.

11 A -- the one with the lowest SMYS in  
12 theory. This curve clearly shows there's no  
13 yield. And I think we've gotten through  
14 that.

15 Q Yeah.

16 A Where you draw your red line is  
17 where you -- where you believe you have  
18 potential yield based on the information you  
19 have.

20 Q Understood.

21 A Okay. Good.

22 Q But what -- what you didn't address  
23 is if we don't know the material -- so in the  
24 case -- when this test was performed, you had  
25 not yet had the leak on 109 and you didn't  
26 know some of the characteristics of pipe in  
27 this test, T43B, were different than you  
28 thought.

1           And in that case, this -- for those  
2 segments, the red line is not applicable and  
3 you wouldn't have known during the test what  
4 the expected yield was. What I'm asking you  
5 is -- is I think pretty straightforward.  
6 This is actually a -- a kind of elementary  
7 question -- that a PV curve -- stress strain  
8 curve if you want -- if it stops at a place  
9 before yielding, it does not tell you how  
10 close you came to yield, only that you did  
11 not yield; is that correct?

12           WITNESS SINGH: A That's irrelevant  
13 because you've -- because you've actually  
14 done the strength test, and you've validated  
15 that margin of safety. And how close you  
16 come to yield is -- is really irrelevant.  
17 And again, we could have Mr. Rosenfeld, who  
18 is the industry expert, talk about that.

19           MS. PAULL: Your Honor, could you  
20 please ask --

21           ALJ BUSHEY: Let me interject here.  
22 First of all, I don't think it's an  
23 elementary question. I think it's more of  
24 differential equations type question. But I  
25 think that it's a straightforward questions  
26 that if the red line isn't there, the  
27 information that you have doesn't tell you  
28 what's going to happen in the next pressure

1 segment; right?

2 WITNESS JOHNSON: Right.

3 ALJ BUSHEY: Right. That's all.

4 MR. ROBERTS: Thank you. No further  
5 questions, your Honor.

6 ALJ BUSHEY: Mr. Gruen?

7 MR. GRUEN: Yes, your Honor. Thank  
8 you.

9 CROSS-EXAMINATION

10 BY MR. GRUEN:

11 Q Good afternoon, gentlemen. If we  
12 could turn back to the popular Exhibit I,  
13 last page? I'll go with the crowd. And the  
14 line that -- that indicates Segment 109, do  
15 you have that in front of you?

16 WITNESS JOHNSON: A Yes, we have the  
17 same document in front of us.

18 Q Same document. That's right. And  
19 under the second column where it says,  
20 "length," the number there indicates 1,327;  
21 is that correct?

22 A That's correct.

23 Q And that's in reference to feet; is  
24 that correct?

25 A Yes, that would be in reference to  
26 feet.

27 Q Okay. So continuing over on that  
28 line, I'm going to skip past the October 2011

1 as filed for pressure restoration broad  
2 column and go to the updated specifications  
3 column that Mr. Meyers defined earlier. And  
4 under that broad column looking at long seam,  
5 for Segment 109, the long seam is identified  
6 as A.O. Smith SMAW; correct?

7 A That's correct.

8 Q Okay. So we see here referenced,  
9 then, that the updated specs show 1,327 feet  
10 of A.O. Smith SMAW long seam. And I want to  
11 ask you how many actual feet of pipe from  
12 1957 job installation can you absolutely  
13 without doubt state is A.O. Smith pipe?

14 A Is -- I'm sorry. You want to try  
15 that question again?

16 Q Sure. How many feet of the job  
17 installation from 1957 can you without doubt  
18 state is A.O. Smith pipe within Segment 109?

19 A Say without doubt? I -- I would --  
20 if you're asking me to go back and pull the  
21 as-built drawings out and measure -- is that  
22 what you're asking me?

23 Q Let's ask it this way. Based upon  
24 visual inspection, what you have seen of the  
25 pipe -- either you or your staff has seen of  
26 the pipe, how much of it can you be certain  
27 that you have seen is A.O. Smith pipe?

28 A Well, we have -- I think the facts

1 behind this particular segment is we have the  
2 job. We have the job indicating how many  
3 feet it is. We did dig up one section at the  
4 front as you very well know; right? And  
5 we've seen segments at the back, so I think  
6 we're pretty comfortable that based on our  
7 records 1,327 is -- is accurate.

8 WITNESS SINGH: A Could I add  
9 something?

10 ALJ BUSHEY: Hold on. Mr. Gruen,  
11 what's the question?

12 MR. GRUEN: Q The question is actually  
13 how many feet have been observed within the  
14 section as being A.O. Smith pipe? I'm not  
15 asking about your records. I'm asking about  
16 what you've seen or your staff, the field  
17 personnel, have actually seen on the segment  
18 as being A.O. Smith pipe.

19 WITNESS SINGH: A So as part of the  
20 leak repair process, we would excavate a bell  
21 hole. On this particular one I don't have  
22 the actual inspection form in front of me.  
23 It's typically 8 feet by 8 feet or 10 feet by  
24 10 feet. We have to go back and look at the  
25 actual inspection form. That also identifies  
26 what the actual length of the pipe was that  
27 was exposed as part of the repair process.

28 WITNESS JOHNSON: A So to answer that

1 question fairly, you would have to go back  
2 and pull all the jobs previously where you've  
3 specifically dug up the pipe. Is that your  
4 question? How many feet have we dug up and  
5 looked at? Because in order to do that, I  
6 would have to go pull the drawings and look  
7 and see what the size of our bell holes are  
8 for that job and the section of pipe and add  
9 it up for you.

10 Q So at this point though --

11 A We have not dug up all 1,327 feet  
12 if that's what you're asking.

13 Q So you cannot confirm all  
14 1,327 feet are actually A.O. Smith SMAW pipe?

15 WITNESS SINGH: A That goes back to  
16 the conservative assumptions. At the point  
17 that the repair was made, we identified that  
18 this section of the pipe was A.O. Smith, had  
19 a .25 wall thickness as part of the  
20 nondestructive examination and and the  
21 inspection work that we do.

22 We went back, as Mr. Johnson  
23 articulated, to identify the pipe that was  
24 installed as part of that 1957 job, and for  
25 that entire section of the -- the length of  
26 that pipe, we assumed a lower SMYS value and  
27 a lower long seam value.

28 Q I understand.

1           A    And that's exactly what we do,  
2 continuously apply the conservative  
3 assumptions.

4           Q    That was -- that was far more than  
5 my question asked for but thank you for  
6 the --

7           A    I apologize.

8           Q    -- for the additional information  
9 Mr. Singh.

10                   At this time, your Honor, I've  
11 prepared a packet of handouts so that they  
12 can be referenced. We only have to circulate  
13 them once, and they're provided so they can  
14 be referenced in an expedited fashion.

15           ALJ BUSHEY: We'll be off the record.

16                   (Off the record)

17           ALJ BUSHEY: We'll be back on the  
18 record.

19                   While we were off the record, we  
20 identified Exhibit N. It's comprised of  
21 seven different data responses from PG&E.

22                   We're on the record.

23                   Mr. Gruen, would you like to begin  
24 asking questions?

25                   (Exhibit No. N was marked for  
26 identification.)

27           MR. GRUEN: Yes, your Honor. Gladly.

28           MR. MALKIN: I'm sorry. You said this



1 was N?

2 ALJ BUSHEY: N as in Nancy.

3 MR. GRUEN: Q Gentlemen, Mr. Johnson  
4 and Mr. Singh, do you have a copy of Exhibit  
5 N in front of you?

6 WITNESS JOHNSON: A Yes, we just  
7 received it.

8 WITNESS SINGH: A I do as well.

9 Q And referencing the first e-mail,  
10 this is a data response to Energy Division's  
11 Data Request 5, Question 2, Attachment 48.  
12 Do you see that?

13 WITNESS JOHNSON: A Well, I'm looking  
14 at the first e-mail, so that's where I'm at  
15 now.

16 Q Top right corner.

17 A Top right corner. Okay.

18 Q Are you familiar with this  
19 document?

20 A I'm -- I don't know. I have to go  
21 through and read it.

22 Q Mr. Singh, are you familiar with  
23 this document?

24 WITNESS SINGH: A I have to go back  
25 and read it as well.

26 MR. MALKIN: Your Honor, the question  
27 is ambiguous when Mr. Gruen asks this  
28 document. It is six and seven pages of

1 e-mails and attachments.

2 MR. GRUEN: Your Honor, I recognize  
3 that Mr. Malkin would like to harp on the  
4 volume of this document, but I actually just  
5 specified that this was Energy Division's  
6 Data Request 5, Question 2, Attachment 48.  
7 And the witness recognized it. There's not  
8 much question here about what the  
9 identification of the document is.

10 ALJ BUSHEY: But what part of this is  
11 relevant, Mr. Gruen? If you could just ask  
12 the substantive question?

13 MR. GRUEN: Yes, your Honor.

14 Q The -- could you read the first --

15 ALJ BUSHEY: No, Mr. Gruen. Don't lead  
16 them into the document. Ask them a  
17 substantive question.

18 MR. GRUEN: Okay.

19 Q Did you know that Mr. Harrison  
20 asked whether the pipe was at the Mile Post  
21 2.2 was X-rayed? ]

22 WITNESS JOHNSON: A At what point?

23 Q At the point where the pipe was  
24 excavated.

25 A You're talking about when we first  
26 found the weld? I don't remember the  
27 exact --

28 Q When you first found --

1 A Excuse me. First found the leak?

2 Q Yes.

3 A When we first found the leak I  
4 recall there was an e-mail of some sort  
5 floating around where somebody, and it may  
6 have been Mr. Harrison, asked, did we do any  
7 x-rays at that point in time. So I do recall  
8 that issue coming up. But again, the leak  
9 has been repaired and that whole segment has  
10 been cut out. So it's got nothing to do with  
11 the safety of the pipeline system.

12 Q Moving to the next document in  
13 turn, it's got the next cover page.

14 A Next cover page.

15 Q It says R.11-13-019 and Safety  
16 Enforcement Division. After that cover page  
17 it's an e-mail from Joe Medina to Bennie  
18 Barnes sent September 11th, 2013.

19 ALJ BUSHEY: Again, Mr. Gruen, it's not  
20 important that we read the e-mail into the  
21 record.

22 MR. GRUEN: Okay.

23 ALJ BUSHEY: What substantive issue?

24 MR. GRUEN: Q The substantive  
25 question, note from Sumeet on the second page  
26 that talks about the traceability regarding  
27 the potential installation and installation  
28 location of reconditioned pipe along Line

1 147.

2 And just a clarification for Mr.  
3 Singh. Does PG&E know whether it has  
4 reconditioned pipe on Line 147 in other  
5 locations beside Milepost 2.2?

6 WITNESS SINGH: A The only indication  
7 we have is what we've already stated through  
8 all the data requests. We don't have  
9 definitive, traceable, verifiable and  
10 complete records that it's reconditioned  
11 pipe. Based on all the testing that we have  
12 done, based on subject matter experts that  
13 have opined on this such as Mr. Rosenfeld, we  
14 believe that it is reconditioned pipe, but if  
15 you're asking, do we have traceable,  
16 verifiable, complete records that show the  
17 installation of that reconditioned pipe, the  
18 answer is no.

19 But do we believe now based on all  
20 the testing that we've done that it's likely  
21 reconditioned pipe? Yes. And this is the  
22 only location that we've come across on 147  
23 with this indication. But again, we have  
24 stated this so many times, I don't have any  
25 concerns about the safety of the line. It's  
26 successfully strength tested. It's good  
27 pipe.

28 Q I appreciate that from both of you.

1 I haven't asked about the safety of the line  
2 here or any opinions. I'm just asking very  
3 narrow focused questions here.

4 A Okay.

5 Q So moving to the next document  
6 again, there's a placeholder that talked --  
7 that is labeled R.11-02-019 Safety and  
8 Enforcement Division Hearing Exhibit is the  
9 next cover page for the next exhibit.

10 A I'm sorry. You moved on to the  
11 next cover page?

12 Q The next document.

13 WITNESS JOHNSON: A It's 11-02-019.  
14 Is that what you said?

15 Q They're all the same cover pages.

16 A That's very helpful.

17 MR. MALKIN: It's the third stapled  
18 batch.

19 WITNESS JOHNSON: A So is it the  
20 e-mail from Sumeet saying Wednesday, November  
21 21st at 9:24 a.m.?

22 MR. GRUEN: Q That's right.

23 WITNESS JOHNSON: A Very good.

24 Q Exactly. And on the first page for  
25 this, the particular job file for -- related  
26 to the segment where the leak was located in  
27 October 2012, is there a complete job file,  
28 was there a complete job file identified or

1 found for that particular section of pipe?

2 WITNESS SINGH: A How would you define  
3 complete in your terms?

4 Q Well, here it says, "We can't find  
5 any additional job file information." And  
6 that was provided to you from Mr. Harrison.  
7 So could you find any job file information on  
8 the line?

9 A I think you're going to have to ask  
10 Mr. Harrison that question. He did the  
11 records research, and the records we  
12 identified for that segment were reviewed by  
13 our engineering team. And I've already  
14 stated previously that, did we have  
15 specifications that stated that that segment  
16 was reconditioned in the job file? No, we  
17 did not.

18 Q I'll just ask if you're familiar  
19 with this document then?

20 A With this, I'm sorry, this document  
21 being the one?

22 Q DRA 86, Question 13, Attachment  
23 499. The e-mail dated November 21st, 2012,  
24 at 9:24 a.m. from you to Mr. Harrison.

25 A I absolutely responded to it at  
26 that point in time. Now you're jogging my  
27 memory in terms of the details. So I'm sure  
28 I read it at that point in time before

1 responding.

2 Q Thank you. And moving to the next  
3 cover page then.

4 A Sure.

5 Q Moving to the third page of the  
6 document.

7 MR. MALKIN: May I ask your Honor for  
8 clarification. Is that the third point  
9 counting the cover or excluding the cover?

10 ALJ BUSHEY: Mr. Gruen, where are we  
11 and why are we there?

12 MR. GRUEN: Your Honor, it says page 3  
13 at the bottom of the page and it is excluding  
14 the cover. Your Honor, at the first page of  
15 the document it stated it's an e-mail from  
16 Kirk Johnson dated November 27th, 2012, 9:54  
17 a.m.

18 ALJ BUSHEY: So you're in the next  
19 pack.

20 MR. GRUEN: Yes, the next pack.

21 ALJ BUSHEY: All right.

22 MR. GRUEN: Q Page 3 going down there  
23 are a couple of other things going on with  
24 this issue. And again, this is focusing on  
25 whether there is -- this is showing  
26 uncertainty as to whether there is  
27 reconditioned pipe on Line 147 that was --  
28 that came from Line 101 in 1929; isn't that

1 correct?

2 WITNESS JOHNSON: A Where are you  
3 reading that again? The top, are you on the  
4 top of the page 3?

5 Q Page 3.

6 A What do you want us to read?

7 Q Where it says, "There are a couple  
8 of other things going on with this issue."

9 A Okay.

10 Q And it says, the second point down,  
11 "We think we have established a weak link."  
12 That's how it starts.

13 A Okay.

14 Q Would you like me to ask the  
15 question again?

16 A Yes, please.

17 Q So didn't this sentence show that  
18 there was uncertainty as to whether  
19 reconditioned pipe was taken from Line 101  
20 and put into Line 147?

21 A Well, I think, as Mr. Singh has  
22 pointed out numerous times, we don't have a  
23 traceable, verifiable record, but we believe  
24 that this is reconditioned pipe in Line 147  
25 in Segment 109 based on what we have now  
26 seen.

27 The date of this document was -- I  
28 can't find the date, but this is now -- it's



1 after November 16th, right? So we would have  
2 made the repair on or about that time.

3 Q Great. Thank you. And moving on  
4 to the next cover page. Let me know when  
5 you're there if you would, please.

6 A Is it the -- I got a different one.  
7 What's the page?

8 Q This is the document that's a  
9 response to DRA 86, Question 13, Attachment  
10 475.

11 A Review of risks MAOP validation?

12 Q That's right. That's the title of  
13 the document. Thank you. And going to page  
14 2, the sentence right above Section 2.3.

15 A I'm sorry. What section? What are  
16 we reading here?

17 Q Let me back up. Do you know who  
18 wrote this document?

19 A I don't know specifically who wrote  
20 this document.

21 WITNESS SINGH: A I don't know  
22 definitively. I can --

23 Q Are you familiar with the document?

24 A I may have reviewed it at some  
25 point. I can't attest to that. Maybe some  
26 e-mails with this attachment. I don't know  
27 definitively. Subject to check. Do you want  
28 to reread this whole document at this point

1 in time?

2 MR. GRUEN: Your Honor, would PG&E  
3 stipulate to this going into the record since  
4 the witnesses don't seem to be familiar with  
5 the document. This is a PG&E --

6 ALJ BUSHEY: Mr. Gruen, that makes  
7 absolutely no sense. If the witnesses aren't  
8 familiar with it, then they can't  
9 authenticate it and we can't move it into the  
10 record. Why would they stipulate to  
11 something they can't --

12 MR. GRUEN: Because if Mr. Harrison  
13 were on the stand, your Honor, I believe he  
14 would recognize it.

15 ALJ BUSHEY: He's next up.

16 MR. GRUEN: I misunderstood. I  
17 understood that I was to cross the panel with  
18 this particular set of documents. Okay.

19 ALJ BUSHEY: Not of Mr. Harrison's  
20 information.

21 MR. GRUEN: No problem. I can cross  
22 Mr. Harrison with it then. Thank you.

23 Q I'll move on to the next document.  
24 Next cover page and going to -- this is a  
25 document entitled L147 Seam Type Joint  
26 Deficiency PFL Error. And turning to page 3  
27 of this document, let me ask you again, are  
28 you familiar, are either of you familiar with

1 this document?

2 WITNESS SINGH: A I am familiar with  
3 the final version of this document, which I  
4 think we've previously discussed. And one of  
5 the e-mails was at my request, the MAOP  
6 validation team, I requested them to do a  
7 root cause analysis of why we had a  
8 discrepancy between our features list and  
9 what we found. This looks to be like a draft  
10 because there's several insertions in here  
11 that say, "explain, rewrite, define, explain  
12 why" on page 1.

13 So with this particular specific  
14 document if that's the question, I have to  
15 reread it. I have seen a final version of  
16 this document, but it didn't have some of  
17 these insertions.

18 Q Okay. Let me ask you, if you turn  
19 to page 3, please, are you familiar with the  
20 concept that the completed pipeline features  
21 lists and the resulting MAOP validation  
22 conclusions are not a hundred percent error  
23 free?

24 A I am absolutely aware of that. Not  
25 only am I aware of that, I filed a testimony  
26 as part of the PSEP updated filing, and I  
27 spoke to that earlier. And if you want to  
28 know the error rate, we can actually look at

1 that table, which is .9 percent.

2 Q Okay. Thank you, Mr. Singh.

3 A Pleasure.

4 Q And I want to just direct your  
5 attention to the process of achieving a zero  
6 error rate for PFLs just on page 3 just below  
7 the section entitled Data Quality. And it  
8 identifies several things.

9 So is this a complete set of steps  
10 that are identified for correcting the errors  
11 on the PFL for Line 147?

12 A Again, I have to go back and  
13 compare this to the final draft or the final  
14 version of this that I reviewed. I can't sit  
15 here today and validate that for you. If you  
16 want me to go through this and read it and  
17 say and validate, did we apply this for Line  
18 147 as part of the recertification process, I  
19 could do that for you.

20 Q Yes, please.

21 A Okay.

22 ALJ BUSHEY: Wait a minute. Mr. Gruen,  
23 you presented a document that's obviously a  
24 draft. A final version exists. So the  
25 witness can't authenticate this.

26 MR. GRUEN: Let me ask it this way,  
27 your Honor.

28 Q If all of the things that PG&E is

1 doing to achieve a zero error rate for the  
2 PFL on Line 147, has PG&E retroactively  
3 applied all of those measures to the PFL for  
4 Line 147?

5 WITNESS SINGH: A For Line 147, I  
6 mentioned this earlier, as part of the MAOP  
7 validation process we made enhancements to  
8 the process. And I discussed that at length  
9 at the September 6th direct hearings. And  
10 what we also identified was at that point in  
11 time, that point being when we identified the  
12 discrepancy in October of 2012, the Line 147  
13 PFL had not gone through the enhanced  
14 process. As a result of the discrepancy we  
15 identified, we did what any prudent operator  
16 would do. We identified the root cause and  
17 we went back and reevaluated and assessed the  
18 records for every foot of that pipe, every  
19 inch of that pipe.

20 Q So when will the process be  
21 complete for updating the PFL on Line 147?

22 A I'm not sure I understand your  
23 question. The process of updating the PFLs  
24 for all of our systems is ongoing. It's part  
25 of our mapping process. As we go out and  
26 make modifications to our system, what Mr.  
27 Johnson testified to earlier in terms of the  
28 valve automation work that's going on within

1 those stations, that's new construction. We  
2 will go and update our PFLs as we go in and  
3 make updates and physically do construction  
4 or replace certain assets or install new  
5 assets. It's an ongoing process.

6 Q Am I understanding correctly that  
7 PG&E is uncertain as to when it will complete  
8 the error corrections on Line 147 for the  
9 PFL?

10 A I'm not sure I'm following your  
11 question. What I've stated is that the PFLs  
12 are a source of our asset knowledge  
13 information on a going-forward basis. We  
14 will stop updating those PFLs once we never  
15 do any work on our system, which is  
16 impossible.

17 Q Just talking about correcting the  
18 errors on the existing, the existing PFL.  
19 When will PG&E complete the error corrections  
20 on the existing PFL for Line 147? That's all  
21 I'm asking.

22 MR. MALKIN: Objection, assumes facts.

23 ALJ BUSHEY: Sustained. Mr. Gruen, you  
24 know, they've been telling us for three days  
25 now that it's an ongoing process. They don't  
26 know everything that's in the ground. If  
27 they find out more things, they'll update  
28 their records.

1 MR. GRUEN: Understood, your Honor,  
2 I'll move on.

3 Q Moving to the next document, the  
4 next cover page, and this is the last, the  
5 last one. And if you -- this is data  
6 response DRA 086, Question 13, Attachment 548  
7 entitled Line 147 October 15th Leak Repair  
8 Summary. Are you familiar with this  
9 document?

10 WITNESS JOHNSON: A Assuming it's the  
11 final one, yes.

12 WITNESS SINGH: A Are you alluding to  
13 this, okay, October 15th leak repair summary,  
14 and that's got the date of 21 November 2012?

15 Q Yes.

16 A Okay. We've got that in front of  
17 us.

18 Q And you're familiar with this  
19 document?

20 A I'm absolutely familiar with this  
21 document.

22 WITNESS JOHNSON: A Seen it.

23 Q If you turn to page 2 under the  
24 Recommended Next Steps, point No. 4 that PG&E  
25 retroactively reviewed all PFLs completed as  
26 part of the MAOP validation project to  
27 identify and address any similar instances.

28 I'm assuming that means similar

1 instances to the leak repair that PG&E did on  
2 Line 147; is that correct?

3 WITNESS SINGH: A In this context it  
4 was instances where we have PFLs that have  
5 not gone through our enhanced quality control  
6 process, the revisions that we made. So keep  
7 in mind, this document was dated 21st  
8 November 2012. You also provided a draft  
9 version of the root cause analysis. There's  
10 a final version of the root cause analysis  
11 report. There were concrete recommendations  
12 within that root cause analysis report in  
13 terms of what the cause was of the error. We  
14 validated that, does -- and asked the  
15 question, does our enhanced process address  
16 those errors?

17 MR. GRUEN: So am I understanding  
18 correctly that you are still -- strike that.

19 That's fine. Your Honor, I have one  
20 or two more questions.

21 ALJ BUSHEY: All right.

22 MR. GRUEN: Q Did you have any records  
23 showing that the October 2012 leak identified  
24 in approximately Post Mile 2.2 on Line 147,  
25 did you have any records showing that that  
26 leak existed prior to when it was discovered?

27 WITNESS JOHNSON: A We wouldn't have  
28 any notification of a leak existing prior



1 until we discovered a leak.

2 Q But once you discovered it, you  
3 went back and looked at the records; isn't  
4 that right, to see if there were -- if there  
5 was a leak in the location that the records  
6 showed prior to that time?

7 A Well, we would go back and look at  
8 the records, but if there was a leak prior,  
9 we would have fixed it prior.

10 Q But were you able to identify any  
11 records that showed a leak in the location  
12 prior to the October 2012?

13 A In that exact location?

14 Q Yes.

15 A No. There were no records  
16 indicating a leak in that exact location  
17 prior.

18 MR. GRUEN: Thank you, your Honor. No  
19 further questions at this time.

20 ALJ BUSHEY: Thank you. Final  
21 questions from any party?

22 (No response)

23 ALJ BUSHEY: Mr. Malkin, redirect.

24 MR. MALKIN: Can we take a personal  
25 convenience break?

26 ALJ BUSHEY: Yes. Ten minutes, 5  
27 minutes after 3.

28 (Recess taken)

1 ALJ BUSHEY: We'll be back on the  
2 record.

3 Mr. Malkin, redirect.

4 MR. MALKIN: Thank you, your Honor.

5 REDIRECT EXAMINATION

6 BY MR. MALKIN:

7 Q Mr. Singh, I want to clear up a  
8 point of confusion. The transcript at page  
9 2691 through 2692 quotes you as saying the  
10 following:

11 In those circumstances where  
12 we have acquired pipe from  
13 third party operators and we  
14 didn't have that  
15 information, absolutely we  
16 used the federal minimum  
17 standard.

18 What did you mean in what's quoted  
19 there as saying "where we have acquired pipe  
20 from third party operators"?

21 WITNESS SINGH: A It should be  
22 acquired pipelines, not acquired pipe, and  
23 that would have been corrected as I would  
24 have reviewed my transcript and had the  
25 opportunity to submit the errors that are  
26 included in that transcript.

27 MR. MALKIN: Thank you. I have nothing  
28 further.

1 ALJ BUSHEY: Thank you. Questions for  
2 the witness?

3 (No response)

4 ALJ BUSHEY: Hearing none then, the  
5 witnesses are excused.

6 Mr. Malkin, would you like to call  
7 your next witness.

8 MR. MALKIN: I would, your Honor. PG&E  
9 calls David Harrison.

10 ALJ BUSHEY: Mr. Harrison was called  
11 earlier today and sworn earlier today. He  
12 remains under oath.

13 DAVID HARRISON  
14 resumed the stand and testified further as  
15 follows:

16  
17 ALJ BUSHEY: Mr. Malkin.

18 MR. MALKIN: Thank you, your Honor.  
19 Just have a few questions for Mr. Harrison.

20 REDIRECT EXAMINATION

21 BY MR. MALKIN:

22 Q For the sake of time, Mr. Harrison,  
23 I'm not going to ask you about your current  
24 position, responsibilities, educational and  
25 work background. Somebody else may want to,  
26 and if so, that's fine.

27 I want to ask you directly --

28 MR. MEYERS: Pardon me, your Honor.

1 Point of order. Has Mr. Harrison been sworn?

2 ALJ BUSHEY: Yes. We did that this  
3 morning.

4 MR. MALKIN: Q I want to ask you  
5 directly about an e-mail that you wrote,  
6 everybody here has read because it was on the  
7 front page of the newspaper. It's a November  
8 17th, 2012 e-mail in which you wrote in part,  
9 quote, "Could the recent hydrotest  
10 contributed to additional cracking in this  
11 pipe and essentially activated a threat? Are  
12 we sitting on a San Bruno situation?"

13 When you wrote that e-mail on  
14 November 17th, did you think that there was a  
15 then existing safety hazard on Line 147?

16 A No.

17 Q Then what was your purpose in  
18 writing the e-mail?

19 A The purpose in the e-mail was sort  
20 of due diligence. I wanted to make sure that  
21 we had thought of all the issues and any  
22 possible concerns with the pipeline at the  
23 time. And I was trying to get the other  
24 people to think about those possibilities.

25 My reference to San Bruno is not in  
26 the sense of a failed pipeline. It's what we  
27 learned from an engineering point of view,  
28 from an MAOP point of view from San Bruno,

1 and that is that the pipe wasn't what we  
2 expected it to be. So it was thinking about  
3 it from that point of view, that if this pipe  
4 wasn't what we expected it to be, then could  
5 it be something that would be a problem for  
6 us.

7 Q Now, this and other e-mails that  
8 you will probably be shown on  
9 cross-examination, you raised a number of  
10 questions and issues with respect to Line  
11 147. Were those issues resolved?

12 A Yes, they were. So the e-mail went  
13 out like the 17th, and then soon after, you  
14 know, within days of that we had some  
15 conference calls and calls among the groups.  
16 And there's a variety of e-mails around. And  
17 we basically came to the conclusion that we  
18 were going to keep the pipeline at 300 pounds  
19 until we had the leak -- piece of pipe for  
20 the leak removed and examined to make sure  
21 that we didn't have any potential problems on  
22 it. And that was perfectly safe as far as I  
23 was concerned. That was the right decision  
24 to make.

25 Q Who were the groups that were  
26 involved in these conference calls?

27 A It was all the major groups. There  
28 was integrity management, the pipeline

1 engineers, gas control, MAOP validation. So  
2 those were all the major groups.

3 Q Was the PSEP, Pipeline Safety  
4 Enhancement Plan group also involved?

5 A I believe so, yes. Yeah.

6 Q Do you have any regrets about  
7 writing that e-mail?

8 A It made it to the papers. So  
9 that's one I regret heavily. If I had to do  
10 it over again, I would have worded it  
11 differently, especially if I knew it was  
12 going to end up in the papers. It created a  
13 lot of swirl, a lot of work that's been  
14 unnecessary.

15 But the idea again behind it was to  
16 make sure that we were doing the right thing.  
17 That's what I was trying to get across. And  
18 so that I don't regret asking the question  
19 that we want to make sure we do the right  
20 thing to the pipeline. ]

21 Q Among other things, at one point in  
22 the dialog about this you asked whether the  
23 pipe where the leak had occurred had been  
24 x-rayed. Do you recall that?

25 A Right.

26 Q And that wasn't done, was it?

27 A No, it wasn't.

28 Q Are you concerned about the fact

1 that it wasn't done?

2 A I mean at the time we were talking  
3 about taking the pressure back up, so that is  
4 why I was asking the question. And the end  
5 result, again there within days, we decided  
6 no, we are going to maintain the pressure at  
7 the lower pressure. So, no, I wasn't  
8 concerned if we were maintaining the pressure  
9 until we got the piece cut out and examined.

10 Q You mentioned getting the piece cut  
11 out and examined. There has been prior  
12 discussion about that. To your mind, was  
13 cutting the piece out and examining it in the  
14 laboratory, as Anamet and Exponent have done,  
15 as good as, not as good as, better than  
16 x-raying the pipe?

17 A Way better than x-ray. So, yes,  
18 cutting the piece of pipe out and examining  
19 the laboratory is much more informative than  
20 doing the x-ray.

21 Q Let's talk briefly about AO Smith  
22 pipe. You gave some testimony earlier this  
23 morning about testing that pipe. And I want  
24 to ask you: Generally, do you have a safety  
25 concern about the presence of AO Smith pipe  
26 in PG&E's system?

27 A No, the AO Smith pipe has been very  
28 reliable for us. It has been, you know, good

1 pipe for us. It is older pipe, but it has  
2 been very good. We've done the test. In the  
3 historical documents I've seen tests over the  
4 years of it. We reexamined it every 10 to 20  
5 years. All the tests are consistent. We had  
6 it retested again this summer, like I stated  
7 earlier. So I think AO Smith pipe is good  
8 pipe for us.

9 Q Mr. Singh mentioned earlier that  
10 you were the person who would know most about  
11 whether -- what PG&E's purchase records  
12 showed with respect to the minimum, specified  
13 minimum yield strength of AO Smith pipe. Was  
14 he right about that?

15 A That is right. So the minimum,  
16 specified minimum yield strength that we show  
17 in contracts with AO Smith dating from '29,  
18 they show -- some of the contracts show  
19 33,000, some of them show 35,000, and some of  
20 them show 42,000. So we bought a variety of  
21 pipe from AO Smith, and the lowest value is  
22 33,000. So that is why we sort of  
23 automatically go back to 33,000.

24 Q Independent of whatever PG&E's  
25 Integrity Management Program does or the  
26 Pipeline Safety Enhancement Plan does, do you  
27 believe that PG&E needs to dig up all  
28 reconditioned AO Smith pipe in its system?



1           A    No.

2           Q    Why is that?

3           A    The reconditioned pipe is, like I  
4 said, is fine pipe.  Actually, the  
5 reconditioned pipe is better pipe, in a way,  
6 because the earlier pipe had different girth  
7 welds on it.  This pipe has the girth -- the  
8 original girth welds are gone now.  So this  
9 is actually better pipe, because those  
10 original girth welds are gone.  It has been  
11 reconditioned.  It has been looked at again,  
12 and put back in the ground.

13          Q    Thank you.  I want to ask you a few  
14 questions about hydrotesting.

15                First, do you consider yourself to  
16 be an expert in hydrotesting?

17          A    No.

18          Q    Who would you consider to be a  
19 hydrotesting expert?

20          A    Mr. Rosenfeld.

21          Q    So do you have any concerns today  
22 about the hydrotesting that was done on Line  
23 147?

24          A    No, I don't.  I think hydrotesting  
25 was done correctly.  Again, my point of my  
26 e-mails and the communication was to make  
27 sure that Mr. Rosenfeld or somebody of his  
28 caliber did review it.

1           I mean the time when I wrote the  
2 e-mail, I had just come off testimony in the  
3 records OII. And so I knew people would be  
4 interested in what we found out, and they  
5 would be interested in this. And I wanted to  
6 make sure we gathered all the information  
7 that we could and answered all the questions  
8 before other people started asking them.

9           Q    Do you have an opinion about  
10 whether Line 147 is safe to operate today at  
11 330 psi?

12           A    Yeah, I think the line is fine at  
13 330. The pipeline is tested to twice that.  
14 We've never -- you know, the documentation  
15 that I've seen doesn't show any kind of a  
16 problem with those kind of pressure test  
17 ratios. Mr. Rosenfeld testified to all that.  
18 He is really the expert on it. Everything  
19 that I know is consistent with that.

20                    And so, yeah, I think it is  
21 perfectly safe at 330 pounds.

22           MR. MALKIN: I have nothing further,  
23 your Honor. Mr. Harrison is available for  
24 cross-examination.

25           ALJ BUSHEY: Thank you, Mr. Malkin.

26                    Who would like to go first?

27           MS. PAULL: I have just a few  
28 questions.

1 ALJ BUSHEY: Ms. Paull, okay.

2 CROSS-EXAMINATION

3 BY MS. PAULL:

4 Q Mr. Harrison, I'm Karen Paull for  
5 the Office of Ratepayer Advocates. I have  
6 just a few questions.

7 You said earlier you don't regret  
8 raising the questions you've raised when you  
9 found out about Line 147, right?

10 A That is correct.

11 Q So do you feel that the concerns  
12 that you've raised then were valid concerns?

13 A At the time, yes. I think so, yes.

14 Q And one of those concerns was that  
15 the -- if the pipe is different from what  
16 PG&E thought, it could -- that could affect  
17 how it was prioritized for purposes of the  
18 PSEP program. Is that true?

19 A Well, yes. Yes, it could affect  
20 the PSEP priority potentially. That is why I  
21 was asking the question about the PSEP  
22 priority.

23 I am not that familiar with their  
24 decision tree. I know they have a decision  
25 tree. I know it considers AO Smith pipe, I  
26 believe, somewhere in it, but I don't know  
27 the logic of it exactly. So that is why I  
28 was asking that question.

1           Q    Yes, but you knew enough to know it  
2 could affect whether the pipe was slated for  
3 testing or replacing?

4           A    That is right, yes.

5           Q    Do you know if in fact -- if PG&E  
6 had known what the pipe -- the true  
7 characteristics of the pipe, if it would have  
8 been slated for testing as opposed to  
9 replacement, do you know?

10          A    I mean I got the answer back from  
11 my e-mail that given it was tested, it would  
12 not be slated for replacement. But beyond  
13 that, you know, it is a better question for  
14 PSEP. I don't know the decision tree that  
15 well.

16          Q    But it is your understanding --  
17 now, we know that 147 has been hydrottested,  
18 so that is done. But if we are talking about  
19 pipes that have not yet been tested or  
20 replaced.

21          MR. MALKIN:  Objection, irrelevant.

22          ALJ BUSHEY:  That isn't within the  
23 scope of our hearing. We are talking about  
24 Line 147.

25          MS. PAULL:  Okay then, I'm done.

26          ALJ BUSHEY:  Thank you.

27                Mr. Gruen.

28          MR. GRUEN:  Yes, your Honor.

## 1 CROSS-EXAMINATION

2 BY MR. GRUEN:

3 Q Mr. Harrison, do you have in front  
4 of you Exhibit N as in Nancy?

5 A Yes.

6 Q And during the break I approached  
7 counsel and just asked them to provide you a  
8 copy for purposes of review. And I just  
9 wanted to ask you if there is any document in  
10 this exhibit that you are not familiar with?11 A I believe that I'm familiar. I've  
12 seen them all before, yes.13 Q Okay, thank you. And just  
14 regarding a couple of -- one of the  
15 documents. Can -- have you found the job  
16 file related to the piece of pipe that was --  
17 that where the October 2012 leak was found?18 A Well, we had a job file but it only  
19 had about 6 to 8 documents in it. It had the  
20 most critical stuff. It had the strength  
21 test pressure report. It had a drawing in  
22 it. It was obviously not the full job file.  
23 So that is what we went on the hunt for.  
24 That is where we found there was a 1963  
25 lawsuit and pulled the job file for the  
26 lawsuit, and the job file never made it back  
27 to us.

28 Q And of the job file that was

1 remaining that you did seek, were the  
2 as-builts left in that particular --

3 A Yes. As I remember, there were  
4 as-builts in there for the job, yes.

5 Q Okay. Turning to, it is the  
6 document that is DRA-86 Question 13A  
7 Attachment 475. I believe it is the second,  
8 no, third to last in the set. It is entitled  
9 Review of Risks MAOP Validation.

10 A Okay.

11 Q Are you there?

12 A Yes.

13 Q On the second page above Section  
14 2.3 that says leak on recently tested pipe,  
15 it says: If we cannot show the reconditioned  
16 pipe is indicated in the job files, we may  
17 want to say that all unknown long seam pipe  
18 installed prior to 1965 must be excavated to  
19 determine the long seam.

20 Do you still agree with that  
21 statement?

22 A Well, I didn't agree with it at the  
23 time that I wrote it necessarily. These  
24 are -- you are looking at a very draft  
25 document. And I prepare these, and they get  
26 edited.

27 So the -- sort of my job in  
28 preparing them is to make sure that I include

1 everything in there. So anything that might  
2 possibly need to be done, somebody want to  
3 do, somebody would order us to do, all those  
4 get included in the documents so that they  
5 can then get edited and evaluated.

6 And it is sort of like my e-mail to  
7 begin with, that is why I sort of think in  
8 those modes, making sure that everything is  
9 covered. And so this document was written in  
10 that sense.

11 Q Thank you. And just -- I can refer  
12 you back to Exhibit I, but I don't think it  
13 is necessary. There was a spreadsheet on the  
14 last page where we were identifying the 1300  
15 or so feet of pipe in Segment 109.

16 Just regarding that, are you  
17 comfortable with the assumption that all  
18 approximately 1300 feet of pipe in Segment  
19 109 are AO Smith?

20 A I'm comfortable with it, yes. I  
21 think that is a valid assumption.

22 It is sort of like Kirk and Sumeet  
23 referenced. Until we replace it or dig it up  
24 or something else, we can't be absolutely  
25 sure what that is. But based on all the job  
26 files we've gone through, all the  
27 information, the documentation and the field  
28 work that, you know, that people have done

1 digging those things up, a given job is  
2 typically the same type of pipe. And so we  
3 would expect to be that same pipe for the  
4 1300 feet.

5 MR. GRUEN: No further questions at  
6 this time.

7 ALJ BUSHEY: Thank you, Mr. Gruen.

8 Ms. Strottman.

9 CROSS-EXAMINATION

10 BY MS. STROTTMAN:

11 Q Mr. Harrison, good afternoon. I'm  
12 Brit Strottman on behalf of the City of San  
13 Carlos.

14 Do you have Exhibit N in front of  
15 you?

16 A Which one?

17 Q That is the large packet of  
18 e-mails.

19 A Right.

20 Q In looking at the e-mail at issue  
21 which is the Saturday, November 17th, 2012,  
22 e-mail.

23 A First document?

24 Q First page, yes.

25 So when you drafted this e-mail --

26 A Just to be sure, you are talking  
27 about?

28 Q Where it starts with: I'm guessing



1 that you didn't x-ray anything on this pipe?

2 A Bottom of the first page?

3 Q Yes.

4 A Okay.

5 Q So when you drafted this e-mail on  
6 November 17th, 2012, did you know that a 2011  
7 hydrotest had been completed?

8 A Yes.

9 Q And you still raised these issues  
10 listed in this e-mail, even though you knew  
11 that the 2011 hydrotest had been completed?

12 A That is right. My concern, again,  
13 was to make sure that somebody like Rosenfeld  
14 evaluated it. We had a hydrotest. We had a  
15 leak two years later. It is unusual. The  
16 pipe is something that we didn't expect.

17 I felt that it was safe, but I'm  
18 not the expert. So I wanted somebody like  
19 Rosenfeld or Zach Halbert to evaluate what we  
20 found and have them make a judgment about  
21 whether they thought there was a problem  
22 there, or not.

23 Q But you still raised all these  
24 concerns even though you knew a 2011  
25 hydrotest had been completed?

26 A Yes. Again, I wanted to be sure.

27 Q And I just wanted to break down a  
28 few things from this e-mail. You raised a

1 concern about the X -- that the pipe had not  
2 been x-rayed?

3 A Right.

4 Q Is that correct?

5 A That is correct.

6 Q And now that is not a concern for  
7 you?

8 A No, because the issue would be that  
9 you've got this small area of a leak. And so  
10 you could potentially x-ray the area around  
11 the leak to see if there was additional wall  
12 thickness loss, or other problems around  
13 there that were interior to the pipe that you  
14 couldn't see from the outside. That would be  
15 what my concern was.

16 And at this point in time, you  
17 know, we basically have cut out that piece  
18 and completely removed it and examined it.  
19 There was no internal kind of damage. And  
20 so, no, at this point there is not a concern  
21 about that.

22 Q And so you also raised a concern  
23 about cracks in any other way other than  
24 visual, which is your second question. Now  
25 you don't have any concerns about that issue?

26 A Right. Same thing again, because  
27 now the piece has been taken out, it has been  
28 examined. People have looked at it and

1 determined there was no crack growth. You  
2 know, there was no crack, active crack or  
3 anything in the area that wasn't related.  
4 There wasn't any cracks related to the leak.

5 And so, again, that is what I  
6 wanted to -- that is what I was asking about,  
7 and we have those answers now.

8 Q Then you asked another -- you  
9 raised another concern is this whole  
10 backfill. Now you don't have any concerns  
11 about that issue?

12 A Well, no, that is just reference to  
13 whether they backfilled the hole, or not. So  
14 basically if the pipe was still -- if the  
15 hole was still open and the pipe was still  
16 exposed, it would be relatively easy for them  
17 to x-ray. But if the hole is already  
18 backfilled, then you would have to go get,  
19 pull a permit again and get the hole dug up.  
20 That is all I was referring to.

21 Q And then you flagged another issue  
22 that this was a 1929 pipe that was recently  
23 tested to 1.5 time the MAOP in 2011.

24 So you no longer have a concern  
25 about that issue?

26 A No. The -- I mean that kind of  
27 goes into the AO Smith discussion in that it  
28 is 1929 pipe. We've had good luck with 1929

1 pipe, but I still wanted to make sure that  
2 somebody like Rosenfeld didn't know of  
3 anything else that we don't know about.

4 But, no, at this point I don't have  
5 any more concerns about that.

6 Q Then you also flagged a concern  
7 that it is a thin wall pipe, and now we found  
8 external corrosion.

9 Now you don't have concern about  
10 that issue?

11 A Right. Because, again, the pipe  
12 was dug up. We evaluated it. There is no  
13 unusual corrosion. There is no internal  
14 corrosion at all virtually on this pipeline.

15 And the reference to thinner wall  
16 pipe, people have asked me about that. That  
17 is just that this is .250 wall pipe. The  
18 other pipe around it was .281 wall and .312  
19 wall. So all the surrounding pipe was  
20 heavier wall than this pipe. That is what my  
21 reference to thinner wall pipe is.

22 Q And then you raised another  
23 concern, could the recent hydrotest  
24 contributed to additional cracking in this  
25 pipe, and essentially activated a threat.

26 And that is no longer a concern to  
27 you?

28 A That is the whole issue with

1 bringing in Rosenfeld and having the piece  
2 cut out, Anamet and Exponent examination of  
3 it. It is sort of due diligence. We checked  
4 it all out. There is no cracks. There is no  
5 issues there. And we ran that to the ground.  
6 That was what I wanted to get done, see done.

7 Q And then the statement are we  
8 sitting on a San Bruno situation. Now you  
9 are saying that you didn't mean a potential  
10 rupture. So you are backtracking on that  
11 statement?

12 A No, I'm not backtracking. Because  
13 what I'm saying is that -- I'm referring to  
14 it as an engineer. I wrote the e-mail to two  
15 other engineers. So I'm talking about it  
16 from an engineering perspective.

17 Again, what did we learn on San  
18 Bruno? What we learned there from an MAOP  
19 evaluation and engineer point of view, is  
20 that the pipe is not always what we think it  
21 is. And so is there a possibility that the  
22 pipe is different in any way?

23 And the way that really comes out  
24 is, you know, how to prove that to yourself  
25 is, again, the things we've been talking  
26 about with the yield. We took the pipe. We  
27 tested it to yield. We didn't test it to  
28 yield, we tested it and it didn't yield. And

1 so, you know, at the pressures we tested it  
2 at we are talking about running it at 330  
3 pounds. So we tested it to more than twice  
4 what we were going to be operating at and  
5 that is a substantial test margin.

6           Essentially what the test is, you  
7 know, you are doing a strength test. You are  
8 testing it. So you want to try and make the  
9 pipe fail. So could -- the question you have  
10 to ask yourself is could anything have  
11 survived this strength test that would then  
12 be a problem at the operating pressure? And  
13 this operating pressure, like I said, we  
14 tested it at two times ratio.

15           And so, no, I don't believe  
16 anything would be a problem. But I wanted,  
17 again, industry experts to take a look at it  
18 because -- to make sure that there wasn't a  
19 problem, there wasn't anything going on.

20           Q Okay. I'm going to have you,  
21 please, it is 16 pages after the first page,  
22 if you wouldn't mind. These e-mails aren't  
23 numbered. There are no page numbers on here,  
24 so I apologize you have to count. The 16th  
25 page after the cover page.

26           A Which package is that?

27           Q I'm sorry, Exhibit N, the one that  
28 is in front of you.

1 MR. MALKIN: Your Honor, could I ask  
2 Ms. Strottman to identify which of the  
3 stapled groups it is in?

4 ALJ BUSHEY: We will be off the record.  
5 (Off the record.)

6 ALJ BUSHEY: We will be back on the  
7 record.

8 Ms. Strottman.

9 MS. STROTTMAN: Thank you.

10 Q Mr. Harrison, I'm going to have you  
11 please look at, it is -- like I said, it is  
12 16 pages after the title page. And the  
13 e-mail is from Jane Yura to Francis Yee. It  
14 is at 8:55 e-mail at the middle of this page.

15 A Yes.

16 Q It says: Francis, I'm concerned  
17 with, it says David's 11/17 note raising  
18 integrity issues. Particularly since he was  
19 our key engineering witness on the records  
20 OII and answered multiple questions related  
21 to pipe. Can you please call, and it is  
22 redacted, and speak to him. Then we need to  
23 have our recommendation.

24 Have you seen that e-mail before?

25 A I've seen it here. I don't believe  
26 I ever saw it prior to the last month or so.

27 Q And did Ms. Yee call you to let you  
28 know that -- or did Ms. Yee call you about

1 the issues that you raised in the e-mail?

2 A I believe so, yes. I don't have  
3 specific recollection of it, but...

4 Q You don't have any specific  
5 recollection of that conversation with  
6 Ms. Yee?

7 A No.

8 Q Anyone else call you and ask you  
9 about that -- the November 17th e-mail?

10 A Well, like Sumeet and I had several  
11 conversations back and forth about it and a  
12 variety of other people. I talked to the  
13 pipeline engineers involved. You know, there  
14 is definitely a lot of phone calls that don't  
15 show up in the e-mail streams.

16 Q Okay. Then can I have you then  
17 please refer to Exhibit M. I'm not sure if  
18 that is in front of you.

19 A No.

20 Q M as in Mary.

21 A All I have is the packet, the N  
22 packet.

23 Q Mr. Harrison, before I ask you  
24 questions about Exhibit M, did any executives  
25 at PG&E call you in response to e-mail that  
26 you drafted on November 17th, 2012, to  
27 discuss your concerns about Line 147?

28 A Well, like I stated, I talked to



1 Sumeet. So I'm not sure whether you consider  
2 Sumeet an executive, or not. Maybe he is.  
3 Kirk definitely is.

4 I would not expect a call from an  
5 executive. This stuff should be going up  
6 through Sumeet, pretty much, yeah. That is  
7 the chain of command. And so I'm following  
8 the chain of command as far as who I would  
9 expect to talk to about these issues.

10 Q Looking at Exhibit M, do you  
11 recognize the first e-mail where it says Jim  
12 Tong?

13 A Right, I do.

14 Q And the second, sorry, the last  
15 sentence of the first paragraph says: At the  
16 executive level, this situation is considered  
17 a near hit from a safety perspective that  
18 could have severely damaged the company's  
19 credibility.

20 Did you draft that statement?

21 A I did.

22 Q So what did you mean by that if you  
23 didn't speak to any executives other than  
24 Mr. Singh?

25 A Well, the executive level is just  
26 a -- you know, it is not capitalized. It is  
27 generally referring to the higher levels in  
28 the company.

1           And the "near hit," was, this is  
2 going to some guys that are working on the  
3 MAOP validation. So this is focused on the  
4 MAOP validation. I'm trying to kick them in  
5 the fanny to get them to give us a good  
6 thorough root cause write-up on this. So I'm  
7 trying to spur them on.

8           The "near hit," the point there is  
9 that we had a mistake on the MAOP validation.  
10 And I get accused of being too much of a  
11 perfectionist. But, by God, I want the  
12 records right. I want them as good as we can  
13 get them. In this case, we had a mistake on  
14 the MAOP validation. At this time, you know,  
15 it didn't cause a reduction in MAOP, but it  
16 could have very well caused a reduction the  
17 MAOP.

18           And so that is what I was referring  
19 to as a "near hit." It is, you know, it is a  
20 phrase that we use at the company. Usually  
21 it relates to an automobile accident, or  
22 something. In this case, it is the same kind  
23 of thing where, you know, this is a mistake  
24 we made. It could have been a problem, and  
25 so we need to make sure that it doesn't  
26 happen again.

27           Q But at that point, even though you  
28 said this is a near hit from a safety

1 perspective, no one at the CPUC knew about  
2 this issue on November 17th. Isn't that  
3 correct?

4 A That is right.

5 Q You drafted this e-mail it looks  
6 like 2-1/2 hours after you drafted the are we  
7 sitting on a San Bruno situation e-mail?

8 A Right.

9 Q And I just wanted to ask you a few  
10 questions about your root cause analysis. So  
11 did the thought ever cross your mind that the  
12 winter season is coming up so you should keep  
13 the line in service and then wait, or do the  
14 root cause analysis and not take this line  
15 out of service because of the winter months?

16 A So when you say "root cause  
17 analysis," there have been some write-ups.  
18 Can you refer to exactly what you are talking  
19 about?

20 Q Well, you state here in your e-mail  
21 Exhibit M on November 17th at 1:35 p.m. that  
22 the formal root cause, you said a "formal  
23 root cause analysis." I'm assuming that you  
24 were requesting that a formal root cause  
25 analysis be conducted, correct?

26 A Yes, I understand. There is a  
27 couple of root causes here that, you know,  
28 some of it had to physically do with the

1 pipe. So if we are focused on the root cause  
2 of the mistakes in the MAOP validation.

3 So I understand that that is what  
4 your question was in regards to, so now can  
5 you reask your question? Sorry.

6 Q Yeah. No, I'm sorry.

7 But I guess what I'm asking you is:  
8 Did you think it was okay to keep this line  
9 in service, Line 147, because of the winter  
10 months? Instead of saying, hey, you know,  
11 what, we need to -- we need to flag this to  
12 the CPUC and have them determine what to do  
13 with this line?

14 A Well, the -- I felt it was okay to  
15 leave it in service. Because we -- well, at  
16 this date it wasn't -- it hadn't been  
17 decided. But within a week we decided to  
18 leave it at 300 pounds through the winter  
19 which, again, is fine.

20 As far as the CPUC goes, those are  
21 things sort of out of my purview. I mean  
22 that would be some lawyers decide that,  
23 somebody else. As far as sending information  
24 to the CPUC, those are all things that I  
25 would not be making a decision on.

26 Q Did you ever recommend to Mr. Singh  
27 that the CPUC be advised of this situation?

28 A No, I would expect him to make

1 those decisions. It wouldn't be something  
2 that I would be involved in.

3 Q I just have a few more questions,  
4 then I'm done.

5 A Okay.

6 Q So you are a technical consultant  
7 for PG&E, correct?

8 A That is right.

9 Q So you are not an employee of PG&E?

10 A That is right.

11 Q And how much do you make an hour as  
12 a consultant?

13 A 200.

14 Q And then do you have a consulting  
15 agreement with PG&E?

16 A I do have a contract.

17 Q So PG&E could call you up and say  
18 your services are no longer needing, correct?

19 A That is right.

20 Q Your contract is subject to  
21 termination at any time?

22 A Yeah, generally. ]

23 Q And how many hours a week let's  
24 just say in the last year have you dedicated  
25 to working for PG&E?

26 A I don't know if Sumeet really wants  
27 to know. I typically work 12 to 14 hours a  
28 day.

1           Q    So -- I'm sorry.  And that's all  
2 for PG&E?

3           A    That is all for PG&E.

4           Q    Okay.  Did the thought ever cross  
5 your mind that if you testified adversely to  
6 PG&E, that that could result in the  
7 termination of your contract?

8           A    Yes, it's crossed my mind.  Yes.

9           MS. STROTTMAN:  Thank you, I have  
10 nothing further -- I'm sorry.

11          Q    You do still work for PG&E;  
12 correct?

13          A    I do still work for PG&E.

14          Q    Thank you?

15          A    The only piece I can add on there  
16 is they can get rid of me, and I can get rid  
17 of them.  If they were doing something that I  
18 feel is really unsafe, to me that is a  
19 personal, ethical dilemma.  And I would  
20 leave.  I don't need a job that bad.

21          MS. STROTTMAN:  Okay.  Thank you.

22          ALJ BUSHEY:  Thank you, Ms. Strottman.  
23                Mr. Meyers?

24          MR. MEYERS:  Thank you, Judge Bushey.

25                        CROSS-EXAMINATION

26 BY MR. MEYERS:

27          Q    Mr. Harrison, I'm Steven Meyers.  I  
28 think we met previously on the OIIs for San

1 Bruno. Good afternoon, and thank you for  
2 your candor.

3 Can you briefly tell me what  
4 exactly your role is with respect to the MAOP  
5 validation process at PG&E?

6 A Well, my role has shifted over  
7 time. So initially with MAOP validation, I  
8 basically designed the original process. I  
9 designed the PFL spreadsheet. I was -- I was  
10 the chief engineer responsible for the MAOP  
11 validation, did a lot of the technical  
12 pieces -- did almost all of the technical  
13 pieces. I was -- served and I still pretty  
14 much serve in this capacity where I'm sort of  
15 the final judge on MAOP-related questions.  
16 So policy, you know, gets decided by the  
17 higher-ups at PG&E, but then if we have  
18 questions that come up, they basically bubble  
19 up to me. And I'll make a final decision on  
20 how it goes within the policy.

21 Q Thank you. To whom do you report?

22 A Right now I report to Joe Medina.

23 Q Okay. And are you in a position  
24 where you can direct PG&E employees to  
25 undertake certain studies or analyses related  
26 to the scope of your services?

27 A Yes, somewhat. I -- in reality,  
28 the group is almost entirely contractors, so

1 there's only, like, one employee in the  
2 entire group. So --

3 Q What is your relationship with  
4 Mr. Singh?

5 A Sumeet, as he alluded to earlier,  
6 has now moved on to another position. So I  
7 used to work directly for Sumeet, and Joe  
8 used to work directly for Sumeet. And now  
9 positions have shifted around, so Joe is now  
10 responsible for MAOP validation.

11 Q Thank you, Mr. Harrison.

12 Mr. Malkin asked you a number of  
13 questions about A.O. Smith pipe, and in  
14 response to those questions -- and I'm  
15 characterizing your testimony here, so if I'm  
16 inaccurate please correct me. But you  
17 basically said you don't have particular  
18 safety concerns about A.O. Smith pipe. It's  
19 generally good pipe, and it's reliable; is  
20 that a fair statement?

21 A That's fair.

22 Q In making that statement, you did  
23 not mention anything with respect to A.O.  
24 Smith pipe that is reconditioned pipe though.  
25 Do you have the same position about A.O.  
26 Smith pipe if it's reconditioned pipe?

27 A Yes, I do. Usually reconditioned  
28 pipe is actually better because it has been



1 reconditioned and reexamined and the girth  
2 welds have been replaced on it.

3 Q And when was the reconditioned A.O.  
4 Smith pipe that exists in Line 147 actually  
5 reconditioned?

6 A Well, I can't really tell you  
7 because we -- we have a weak link to  
8 potentially reconditioned pipe. And so I  
9 don't have anything that I can really put my  
10 finger on and tell you when it was  
11 reconditioned. Reconditioning of pipe was  
12 very common during the 1950s. Pipe was in  
13 huge demand. We have records in the file  
14 that shows 60 truckloads of pipe a day being  
15 shipped out of plant to PG&E, which is just a  
16 huge amount of pipe coming out of the pipe  
17 plant. So they were running out of pipe.  
18 They reconditioned a lot of pipe, and -- I  
19 don't know if that got your question, but --

20 Q That's very close to it. Thank  
21 you, sir.

22 So it would be an assumption on  
23 your part -- perhaps an educated assumption,  
24 but an assumption nonetheless that this piece  
25 of A.O. Smith pipe that is of 1929 vintage,  
26 as you stated in your e-mail, was in fact  
27 reconditioned by PG&E?

28 A Technically it is an assumption,

1 yes. An educated assumption is a fair  
2 evaluation of it, yes.

3 Q And it would also be your  
4 assumption, again, a -- a -- an assumption  
5 based upon your expertise as an engineer and  
6 as a consultant to PG&E, that the  
7 reconditioning of that pipe by PG&E at the  
8 time of this significant amount of  
9 construction work in their system was  
10 consistent with the reconditioning  
11 regulations that were applicable at that  
12 time?

13 A That's right.

14 Q So that's an assumption as well.

15 You also answered some questions  
16 from Mr. Malkin concerning contracts that  
17 PG&E entered into to purchase A.O. Smith  
18 pipe. And you referenced various SMYS values  
19 of that pipe in those purchase records being  
20 33,000, 35,000, 42,000 SMYS. And you  
21 indicated as well that the default, if you  
22 will, in the valuation that you as an  
23 engineer makes and that the MAOP validation  
24 team makes is you default back to the 33,000  
25 figure because that's the more conservative  
26 value.

27 So that is basically where we have  
28 records of A.O. Smith pipe purchased but we

1 don't have a specific record for the A.O.  
2 Smith pipe that exists in 147, we will assume  
3 a value of 33,000. Is that a fair statement?

4 A That's a fair statement.

5 Q Okay. So you're using the most  
6 conservative values of documents that are  
7 relevant to that type of pipe but not  
8 necessarily particular to that pipe?

9 A That is right.

10 Q Okay. So do you recall the segment  
11 of pipe referred to as Segment 180 in Line  
12 132 in San Bruno?

13 A I do.

14 Q And what did the purchase records  
15 show regarding that piece of pipe?

16 MR. MALKIN: Objection, relevance.

17 ALJ BUSHEY: Purchase records for  
18 Line --

19 MR. MALKIN: For Segment 180 in Line  
20 132 is what he's asking about.

21 MR. MEYERS: I'm trying to reach a  
22 conclusion here.

23 ALJ BUSHEY: Okay. But it better  
24 include something that is relevant to Line  
25 147.

26 MR. MEYERS: Q Do you recall that  
27 piece of pipe?

28 A I do. I recall the segment, yes.

1           Q    And did that piece of pipe have  
2 purchase records?

3           A    I do not recall right off the top  
4 of my head today.  I -- I really can't  
5 remember right now.  I don't believe we did,  
6 but I'm not really sure.

7           Q    So if there were no purchase  
8 records, what -- what conservative value  
9 would you assume for that piece of pipe?

10           Yes, I know, Mr. Malkin, you have a  
11 concern about relevancy.  But what I'm trying  
12 to get to here is that an assumption that is  
13 made by a witness who is testifying under  
14 penalty of perjury should be validated.  And  
15 we're making an assumption here about pipe  
16 for which we have no purchase records.  I'm  
17 trying to make a comparison between the  
18 absence of purchase records for Line 132,  
19 Segment 180 that exploded and killed eight  
20 people and the lack of purchase records for  
21 this piece of pipe.

22           MR. MALKIN:  Very dramatic, very  
23 irrelevant, particularly in light of the  
24 hydro test that everybody agrees validates  
25 the 330 psig.

26           ALJ BUSHEY:  Well, it completely  
27 changes the factual scenario.

28           MR. MALKIN:  That too.

1 ALJ BUSHEY: So your comparison doesn't  
2 work, Mr. Meyers. I'm wondering if you're  
3 testing me again, so I'm going to sustain  
4 Mr. Malkin's objection.

5 MR. MEYERS: Very good. I'll move on.

6 Q Mr. Harrison, you said in your  
7 testimony that -- that you had regrets  
8 concerning your November 17th, 2012, e-mail.  
9 And I understood you to say that your regrets  
10 were about the consternation, if you will,  
11 that that e-mail had as opposed to the actual  
12 regrets of the factual points that you made  
13 in that e-mail. Is that a correct statement?

14 MR. MALKIN: Objection,  
15 mischaracterizes the testimony.

16 MR. MEYERS: Q Can you characterize  
17 your testimony for me with respect to the  
18 issue of regrets?

19 A Again, I regret writing the e-mail  
20 with those words because it's generated a lot  
21 of consternation and -- and work that wasn't  
22 necessary. The point of the items that I  
23 brought up in that e-mail was to just ask  
24 those questions and make sure that we had  
25 dealt with those questions and performed due  
26 diligence on what we found.

27 Q As you sit here today and as you  
28 read your e-mail of November 17th, which is

1 Exhibit N, do you feel that the issues you  
2 raised were legitimate issues at that time?

3 A They were legitimate issues in that  
4 we needed to make sure that we had answers to  
5 those questions, yes. I think the pipeline  
6 was safe then, and I still think it's safe,  
7 but I wanted to make sure there were no  
8 issues that -- that we could find out that  
9 somebody like Rosenfeld would know of that we  
10 were not aware of.

11 Q In the body of the e-mail you make  
12 the statement, "Could the recent hydro test  
13 contributed to additional cracking in this  
14 pipe and essentially activated a threat?" In  
15 your testimony thus far, you have referred to  
16 the cracking of the pipe in relationship to  
17 the leak site and the segment of pipe that  
18 was been removed by PG&E for further testing  
19 from the system; is that correct?

20 A That's right.

21 Q In your e-mail, were you referring  
22 to any other cracking within that pipeline,  
23 which is about 1,400 -- that section of pipe  
24 that's about 1,400 feet that has not been  
25 removed?

26 A I mean, I don't have any knowledge  
27 of any other damage or cracking or any of  
28 that kind of information. And again, the

1 hydro test should have flushed out anything  
2 that was a problem on the rest of the  
3 pipeline.

4 Q So you're satisfied based upon your  
5 review of the hydrostatic testing that there  
6 is not a likelihood that the hydro test  
7 contributed to additional cracking or  
8 activating a threat within the remainder of  
9 the pipeline that has not been removed for  
10 destructive testing?

11 A That's right. Just to be clear  
12 here, you're asking me for my opinion, but my  
13 opinion is also based on what -- what the  
14 experts have said. I'm not an integrity  
15 management engineer. I asked about the  
16 threats. I know integrity management has  
17 nine different categories of threats, but I  
18 don't know all the details. So again, that's  
19 why I was raising the question, so the other  
20 people who are experts, such as the integrity  
21 management engineers, can -- can weigh in on  
22 what they feel.

23 Q The next sentence is actually a  
24 partial sentence. "Are we sitting on a San  
25 Bruno situation?" Again, I understood your  
26 explanation of that to be not so much a  
27 question of the failure of Line -- of 132 and  
28 the resulting fire that caused damages, but

1 rather the absence of records. Is that what  
2 you meant by that, "Are we sitting on another  
3 San Bruno situation?"

4 A Yeah. Again, I believe what we  
5 learned from an engineering MAOP perspective  
6 in San Bruno is a pipe is not always what we  
7 think it is. If it's not what we think it  
8 is, then what is it and have we done what we  
9 need to do to ensure it's safe.

10 Q Well, why do we care if we do a  
11 hydro test?

12 A Well, that's just it. The hydro  
13 test did make it safe, but I wanted to make  
14 sure that we still felt -- somebody like  
15 Rosenfeld felt that the hydro test was still  
16 safe. That was the point of the e-mail.  
17 There's the things that I brought up in the  
18 e-mail, pressure reversals, those kind of  
19 issues are unusual phenomenon that have  
20 occurred, very rare under certain  
21 circumstances, and I'm not the expert on  
22 them. I want the expert to weigh in on them.

23 Q So when you said, "Are we sitting  
24 on another San Bruno," you were not referring  
25 to the possibility that the original hydro  
26 test of Line 132 caused a fatigue crack which  
27 grew over time? You were not referring to  
28 that?



1           A    No, I was not referring to that.

2           Q    Your final statement in this e-mail  
3 -- I'm sorry, the final statement of that  
4 paragraph of the e-mail says, "I don't want  
5 to panic people, but it seems like we should  
6 consider this and possibly possible -- and  
7 probably move this pipe up the PSEP priority  
8 for replacement."

9                    If MAOP validation process operated  
10 as you thought it was operating and if PG&E  
11 was testing to 1.5 MAOP and that hydro test  
12 was satisfactory, why would you suggest in  
13 your e-mail that this piece of pipe be  
14 replaced?

15           A    Because at the time we were  
16 considering -- operating it at 365 pounds  
17 and/or higher. And so depending on what we  
18 were going to do with that pipeline, we might  
19 want to consider replacing it.

20           Q    You were here in the hearing room  
21 when Mr. Johnson testified that this pipe  
22 could be operated at 400 psig; correct?

23           A    Right.

24           Q    If the pipe is operated on 400  
25 psig, would you recommend that it be  
26 replaced?

27           A    I would have to evaluate it, go  
28 back and look more closely at it. But again,

1 I would rely on people like Rosenfeld and the  
2 integrity management people and what their  
3 views were on it. And they're saying that  
4 it's safe at 400 pounds.

5 MR. MEYERS: Mr. Harrison, thank you  
6 very much.

7 ALJ BUSHEY: Thank you very much.

8 MR. LONG: Your Honor, can I just ask a  
9 follow-up question on one of Mr. Harrison's  
10 answers to Ms. Strottman?

11 ALJ BUSHEY: Sure.

12 CROSS-EXAMINATION

13 BY MR. LONG:

14 Q Mr. Harrison, Tom Long with TURN.

15 Exhibit M, Ms. Strottman asked you  
16 a question about that. Do you have that in  
17 front of you?

18 A I do.

19 Q And it's the -- it's the "near hit"  
20 sentence that I wanted to ask you about. And  
21 if I -- if I jotted down your answer  
22 correctly, you said that what you meant by --  
23 words to the effect that what you meant by  
24 near hit was there was a mistake in MAOP  
25 validation for this segment, 109, but at the  
26 time it didn't cause a reduction in the MAOP,  
27 and that's why it was a near hit?

28 A Right.

1           Q    So does that mean that if it had  
2 caused a reduction in the MAOP, that would be  
3 a hit?

4           A    I would have termed it that way,  
5 yes, in comparison.  Yes.

6           Q    Okay.  So now you remember this  
7 exhibit.  I think you were asked questions  
8 about this earlier today, Exhibit I, with the  
9 chart about the changes in MA -- various MAOP  
10 parameters from October 2011 to the current?

11          A    Right.

12          Q    Okay.  In fact, the -- for Segment  
13 109, the MAOP of design in October 2011 was  
14 437, and the MAOP of record was 396.  And now  
15 by virtue of the mistake in MAOP that was  
16 discovered, the MAOP design has gone down to  
17 330.  And as a result the MAOP of record has  
18 gone down to 330.

19          A    That's correct.

20          Q    So in fact, isn't this a hit?

21          A    That is correct, yeah.  So at the  
22 time -- again, you're asking about when I  
23 wrote this e-mail, and the time I wrote the  
24 e-mail, that's why I wrote it that way.  And  
25 in effect, we have taken that into  
26 consideration.  And as we've discussed, we've  
27 taken a conservative value for the line,  
28 including the joint factor, so you arrive at

1 a 330-pound MAOP.

2 If you remove the joint factor  
3 impact, you end up with a design pressure I  
4 believe at 412. So you're back over  
5 400 pounds. And so that, again, is -- you  
6 know, that's what we've been discussing here  
7 that we've been taking a conservative joint  
8 factor. We don't really think it needs to be  
9 applied, but --

10 Q So from your perspective, this is  
11 exactly what you don't want to happen in an  
12 MAOP validation. You don't want to find out  
13 that a supposedly validated MAOP needs to be  
14 corrected to a lower MAOP; isn't that right?

15 A That's right. Absolutely.

16 MR. LONG: That's all I have. Thank  
17 you.

18 ALJ BUSHEY: Thank you, Mr. Long.

19 EXAMINATION

20 BY ALJ BUSHEY:

21 Q Mr. Harrison, I have a couple of  
22 questions for you on a completely different  
23 topic. How are you?

24 A All right.

25 Q You've been -- you've been through  
26 a lot, and I wanted to know about morale and  
27 about how this ensuing controversy has  
28 settled among the working-level engineers at

1 PG&E. I'm very concerned that it may have  
2 undermined your -- I think you call it your  
3 questioning culture. Could you -- could you  
4 talk to me about how you've experienced this  
5 in the last couple of months?

6 A Well, it does get challenging in  
7 that I -- I -- I talked to Sunil in the  
8 interview with Sunil about it a bit. And  
9 yeah, the biggest comment that I get that I  
10 can say is, you know, the other engineers  
11 talk about me and say, "Oh, I'm not writing  
12 any e-mails."

13 And I think that's a bad thing.  
14 It's definitely a bad thing because the  
15 people are much more wary of e-mails, and  
16 it's going to be harder for them to share  
17 safety-related concerns. I think the company  
18 does support them, though, and are trying to  
19 encourage people to bring them up. And they  
20 are bringing up issues. But it does get more  
21 challenging I think as we -- you know,  
22 because my e-mails made it into the newspaper  
23 and then, you know, I have to testify. And  
24 nobody wants to go through the grilling.

25 Q Right. And is there anything that  
26 we can do to make the grilling less  
27 grill-like?

28 A I don't -- I don't know right now

1 off the top of my head. I can't think of  
2 anything, but --

3 Q But you're aware of all the  
4 whistleblower protections and you felt like  
5 your management was supporting you?

6 A Right. Yeah.

7 Q And so other than enabling you to  
8 survive the process and go back and say that  
9 it's --

10 A Survivable.

11 Q -- survivable, that's all we can  
12 do?

13 A Yeah, I think so. I mean, the  
14 management did respond. There was debate  
15 about the issues. We got a variety of groups  
16 together. So I mean, I think the process did  
17 work, and so I -- I think that's -- that's  
18 good.

19 ALJ BUSHEY: All right. Thank you.

20 Redirect, Mr. Malkin?

21 MR. MALKIN: May I have a moment, your  
22 Honor.

23 ALJ BUSHEY: We'll be off the record.

24 (Off the record)

25 ALJ BUSHEY: We'll be back on the  
26 record.

27 Mr. Malkin, redirect?  
28

1 REDIRECT EXAMINATION

2 BY MR. MALKIN:

3 Q Okay. Mr. Harrison, I just have a  
4 few questions for you on two points.

5 One, in response to a question from  
6 Ms. Strottman, you testified that if you  
7 testified adverse to PG&E, PG&E could  
8 terminate your contract. Do you recall that?  
9 Do -- has that fact that your contract is  
10 currently terminable at will in any way  
11 influences your testimony today?

12 A No.

13 Q Has anyone from PG&E threatened you  
14 in any way about either your e-mail, your  
15 testimony, or anything having to do with Line  
16 147?

17 A No. They tease me about taking  
18 away my e-mail, but they're just teasing me.

19 Q Do you as you sit here today have  
20 any concerns about any retaliatory action  
21 being taken against you either for the  
22 e-mail, the questions you've raised or your  
23 testimony, or anything related to Line 147?

24 A No, I don't.

25 Q You've mentioned in connection with  
26 that that the termination right goes both  
27 ways?

28 A That's right.

1           Q    Do I understand correctly that if  
2 you felt there was a safety issue with  
3 respect to Line 147 that you raised that PG&E  
4 refused to address, that would you exercise  
5 that right and stop working for PG&E?

6           A    That's right.

7           Q    Okay. The last thing I want to ask  
8 you about is the questions from Mr. Long  
9 about your e-mail talking about a near hit.  
10 And then you went on to testify that when the  
11 MAOP changes, as Exhibit I reflects for  
12 Segment 109, in your terminology, that's a  
13 hit. Do you recall that testimony?

14          A    That's right.

15          Q    And as I recall, you explained also  
16 that if -- even with the changed  
17 specifications on Line 109 that if you did  
18 the MAOP calculation literally according to  
19 the code without the joint efficiency factor,  
20 the MAOP of design would be 412; is that  
21 right?

22          MR. LONG:  Objection, vague. I didn't  
23 hear that testimony. That is a leading  
24 question. It would be better if it were  
25 phrased in a less leading fashion.

26          ALJ BUSHEY:  Try and tie it back to  
27 something that he said previously.

28          MR. MALKIN:  Q   Did you testify to what



1 the MAOP of design for Segment 109 would be  
2 if you literally followed the code and didn't  
3 include the joint efficiency factor the way  
4 PG&E does?

5 A And yes, I did it on the telephone,  
6 so I'm not sure I got it exact. But I  
7 believe it's 412. 412 pounds would be  
8 without the joint efficiency factor.

9 Q Last question. Despite the fact  
10 that you consider a change of MAOP on Segment  
11 109 to be a hit in your terminology, do you  
12 have any doubt in your mind about the safety  
13 of that line over the past two years?

14 A No, I think the line is fine.  
15 330 pounds is perfectly safe operating  
16 pressure for the pipeline, and so the line I  
17 think is fine.

18 MR. MALKIN: No further questions, your  
19 Honor.

20 ALJ BUSHEY: Thank you, Mr. Malkin.

21 MR. LONG: Your Honor, could I just ask  
22 about that 412 calculation? I must have  
23 missed that.

24 RECROSS-EXAMINATION

25 BY MR. LONG:

26 Q So Mr. Harrison, tell me what 412  
27 represents?

28 A So if you calculate the -- the SMYS

1 -- the pressure that you could operate the  
2 pipeline at, not operating it out of class,  
3 but ignore the 0.8 joint efficiency factor,  
4 taking what the code says at 1.0, then you  
5 get a 412 pressure I believe.

6 Q Okay. And that was earlier today  
7 that you said that?

8 A Well --

9 MR. LONG: Anyway. Okay. I understand  
10 what you're talking about. Thank you. That  
11 answers my question.

12 CROSS-EXAMINATION

13 BY MS. BONE:

14 Q A clarification. Which code  
15 section are you referring to?

16 A Well, we're talking about the  
17 design formula essentially without the joint  
18 efficiency factor in it, so it's two times  
19 the SMYS times the wall thickness divided by  
20 the diameter and then take 50 percent of  
21 that.

22 Q So that's 192.105?

23 A Yeah, in effect. But again,  
24 without the joint efficiency factor in it.

25 MS. BONE: Understood. Thank you very  
26 much.

27 ALJ BUSHEY: Any final questions for  
28 the witness?

1 Ms. Strottman.

2 MS. STROTTMAN: I just have one.

3 RE-CROSS-EXAMINATION

4 BY MS. STROTTMAN:

5 Q Thank you, Mr. Harrison. You -- it  
6 seems like -- and please let me know if I'm  
7 mischaracterizing this -- your testimony --  
8 that you feel badly because you think you've  
9 generated a lot of work that's not necessary  
10 as a fallout from your e-mail; is that  
11 correct?

12 A That's right.

13 Q So if PG&E reported these issues of  
14 Line 147 and 101 right away to the CPUC, we  
15 wouldn't all be sitting here; is that  
16 correct?

17 MR. MALKIN: Objection.

18 ALJ BUSHEY: Speculation. Try again.

19 MR. MALKIN: It's also outside the  
20 scope or redirect.

21 ALJ BUSHEY: We just need one reason.

22 MS. STROTTMAN: I don't think that is  
23 outside the scope but --

24 Q So Mr. Harrison, we are all here,  
25 isn't that correct, because PG&E waited four  
26 months to tell the CPUC of these issues and  
27 nine months to tell the parties involved;  
28 isn't that correct?

1           MR. MALKIN:  Objection, argumentative,  
2           speculative.

3           MS. STROTTMAN:  I don't think that's  
4           argumentative, and I'm not sure that's  
5           speculative.  I mean, we all know why we're  
6           here.

7           ALJ BUSHEY:  Well, then why do we need  
8           to ask?

9           MS. STROTTMAN:  It would be nice for  
10          him to answer but --

11          ALJ BUSHEY:  Yes, we're here because of  
12          some rulings I wrote.

13          MS. STROTTMAN:  My point is that if  
14          PG&E had been forthcoming -- it's not  
15          Mr. Harrison's fault that he thinks he  
16          generated a lot of work.  PG&E should have  
17          reported these issues to the Commission and  
18          then to the parties, and then we wouldn't all  
19          be sitting here.

20          ALJ BUSHEY:  Thank you for your  
21          perspective on that, Ms. Strottman.

22          MS. STROTTMAN:  Thank you.                   ]

23          ALJ BUSHEY:  Anything final for the  
24          witness?

25                        (No response)

26          ALJ BUSHEY:  Hearing none, then the  
27          witness is excused.

28                        Ms. Strottman, your client wanted to

1 make a statement.

2 MS. STROTTMAN: Yes. Thank you.

3 STATEMENT OF MR. RUBENS

4 MR. RUBENS: Your Honor, I suppose I  
5 have a unique role here as representing a  
6 party, and I'm the city attorney for the  
7 city. I've been the city attorney for five  
8 years. It's not really in the record, but I  
9 was the interim city attorney for the City of  
10 San Bruno when the disaster happened there.  
11 So I'm intimately involved in what can happen  
12 when a pipeline fails. It's catastrophic.

13 The City of San Carlos didn't seek  
14 this process. It was imposed upon us when we  
15 were presented with an e-mail on October 3rd  
16 of this year. Your Honor reacted to that and  
17 issued an order which resulted in this  
18 proceeding. And it's an expedited  
19 proceeding. We have asked for time to have  
20 our expert further evaluate, and that hasn't  
21 been granted. Perhaps there is still time  
22 depending on when the CPUC considers it.  
23 Special counsel mention that request for  
24 further review on that.

25 The public is very concerned about  
26 the safety of Line 147 in San Carlos. It  
27 runs through the heart of the town. It  
28 passes thousands of residences past. I've

1 walked the line. Many of the places where  
2 the line is it's less than 25 feet from the  
3 front doors of homes. Sometimes it goes  
4 between people's yards. Sometimes it's right  
5 behind their house depending on where it is  
6 in the line. It passes a city park. It goes  
7 through a city park. It goes through a  
8 nature preserve. It passes over the Hetch  
9 Hetchy Aqueduct. It's a very serious line.  
10 Its safety must be assured.

11 I think the credibility of PG&E is  
12 relevant, with all due respect to your Honor,  
13 and that's because the reason we're here, and  
14 I know this is argument, but the reason we're  
15 here is because it was 11 months until the  
16 City of San Carlos was given the e-mails that  
17 we consider red flag e-mails. They may be  
18 able to be explained after the fact, and  
19 there are sworn statements that try to  
20 explain that, but the fact is when you look  
21 at the e-mails and you see them, there were  
22 serious concerns raised.

23 And PG&E, instead of reporting it to  
24 the CPUC and taking immediate action to  
25 communicate it to the City of San Carlos,  
26 which might have created a different  
27 procedure here, they decided to hide it. And  
28 they decided to hide it because the winter

1 season. That's all the sworn statements.  
2 And because of this rushed proceeding I spent  
3 the whole weekend reading them all. They all  
4 say from PG&E employees the winter season was  
5 a major factor in their decisionmaking  
6 process.

7 So what I see when I look at these  
8 sworn statements is that PG&E decided, rather  
9 than go through a safety process because of  
10 what they discovered about the type of pipe  
11 there and the leak, they decided, we're just  
12 going to go with system rather than safety.  
13 That's what I see. Because that's what they  
14 were -- that's why they delayed. There can  
15 be only one explanation why they delayed, and  
16 that's it.

17 The city -- the one point that I saw  
18 today in these hearings that I think needs to  
19 be underlined is PG&E is relying on a  
20 standard that doesn't make any sense.  
21 They're saying because it's pre-1970 pipe  
22 that was operated before 1970 that it can  
23 have a higher standard than known pipe that's  
24 in the ground. And that makes no sense to me  
25 at all. Unknown pipe has -- can run at a  
26 higher operating pressure than known pipe.  
27 That just doesn't make any sense. I think  
28 that's part of why the public is so upset

1 about this because PG&E does not know what's  
2 in the ground there, and they still don't.  
3 None of the testimony in these hearings have  
4 shown that they know what's in the ground.  
5 In fact, they admit they don't know what's in  
6 the ground.

7           So in conclusion, we have requested  
8 this hearing that we want safe pipeline  
9 through San Carlos. If that includes  
10 replacing the pipe, if it includes proper --  
11 applying the proper standard until PG&E can  
12 get the resources and mobilize to get the  
13 pipe repaired, that's what we're after in  
14 this proceeding.

15           So I wanted to say that for the  
16 record. I know that I'm not testimony. I'm  
17 fully aware that I'm argument, but because  
18 I'm the city attorney and, you know, local  
19 government is closest to the people, I think  
20 I need to make that statement for the record.  
21 Thank you.

22           ALJ BUSHEY: All right. Thank you.

23           MR. MALKIN: Your Honor, if we may. I  
24 don't want as a lawyer to take on Mr. Rubens'  
25 statements, but the point that he makes that  
26 is really important is the concern of the  
27 public. And we would appreciate it if you  
28 would allow Mr. Rosenfeld to briefly address



1 that question to put the mind of the public  
2 at ease as to the safety of this pipeline.

3 ALJ BUSHEY: Mr. Rosenfeld, are you  
4 prepared to make such a statement?

5 MR. ROSENFELD: Yes, I am.

6 ALJ BUSHEY: Yes. Let's do that. Mr.  
7 Rosenfeld, please come forward.

8 MS. STROTTMAN: Your Honor, I'm sorry.  
9 I'm going to object to this. He's already  
10 testified. I don't know. It's like --

11 ALJ BUSHEY: No. I let Mr. Ruben make  
12 a speech about the interest of the public.  
13 I'm going to ask Mr. Rosenfeld to come back  
14 here and address the public. Don't address  
15 us. Address the public and tell them what  
16 his response as a nationwide expert is on  
17 these issues. I think that's exactly to the  
18 point of what we're doing. And Mr. Rosenfeld  
19 is uniquely in a position to address the  
20 public. So please come forward, Mr.  
21 Rosenfeld.

22 MR. MALKIN: Would you like him to take  
23 a seat up there?

24 ALJ BUSHEY: Yes. Please be seated.

25 MR. MALKIN: Or have my seat?

26 ALJ BUSHEY: Mostly for the convenience  
27 of the court reporters.

28 You remain under oath. You have

1 heard the statement. And I'd like you to  
2 conceptually address your comments to the  
3 members of the public who live near Line 147.

4 MICHAEL ROSENFELD

5 resumed the stand and testified further as  
6 follows:

7  
8 THE WITNESS: Sure. You know, the  
9 concerns are understandable, but, and I think  
10 it's reasonable that, for example, that David  
11 Harrison was asking the questions he was  
12 asking. I think the kinds of -- there are no  
13 bad questions. The issue is, you know,  
14 what's -- how do we know that it's safe. How  
15 do we -- you know, is PG&E being prudent in  
16 the way they're approaching things?

17 I think that, well, I've tried to  
18 look at the safety aspects of this pipeline  
19 from a number of different angles including  
20 what was provided for in the regulations  
21 historically and currently. What do I  
22 interpret the CPUC's expectations to be in  
23 terms of re-verifying the integrity of the  
24 pipeline. You know, certainly a lot of  
25 questions have come up about is the  
26 hydrostatic test effective because there was  
27 a leak afterwards.

28 And so I tried to look at it from

1 the standpoint of what do we know about --  
2 what can we say about the safety of the  
3 pipeline having been hydrostatically tested  
4 to essentially twice what PG&E proposes to  
5 operate it at. And this is not, you know, a  
6 hydrostatic test. It's a proof test. It's  
7 called a proof test because it proves the  
8 ability of the pipe to do what it's supposed  
9 to do. You know, conceptually it's like  
10 saying if the bridge can hold an 80-ton  
11 truck, it's logical that it can hold up a  
12 40-ton truck, and it doesn't matter what the  
13 bridge is made out of. Whether it's wood,  
14 stone, wrought iron or, you know, high test  
15 steel, it can do that job.

16 So the hydrotest, and this is --  
17 this is not radical new science. It's pretty  
18 well -- well trod ground in terms of  
19 understanding how something like a pipeline  
20 or a pressure vessel or things like that can  
21 be safe. So we know it works. It's been  
22 done, practiced for decades. So, and a  
23 successful test can make up for or can help  
24 compensate for some things that aren't known  
25 such as every -- the complete description of  
26 every piece of pipe. And that relies on the  
27 fact that the hydrotest was performed to a  
28 pretty high level over and above what the

1 pipeline operates.

2           So taking -- you know, I know that  
3 the City of San Carlos has asked for a  
4 fracture, fracture mechanics or fracture  
5 control approach to this. Well, the  
6 explanation for why what happened in San  
7 Bruno would not happen here as a result of  
8 due to damage caused by the test or due to  
9 some fairly -- fairly uncommon sorts of  
10 metallurgical concerns such as pressure  
11 reversals comes -- the assurance of that  
12 actually comes from a fracture mechanics  
13 analysis of what you get out of a hydrostatic  
14 test. And that's very well documented in the  
15 technical literature as well if you wanted to  
16 do your own research.

17           So I feel very comfortable about  
18 what the hydrotest proves. The fact that a  
19 leak occurred sometime afterwards is  
20 interesting, but you know, it is not proof  
21 that the hydrostatic test doesn't demonstrate  
22 the strength of the pipe.

23           So, and then the other -- another  
24 approach that I took here was that I know  
25 that the hydrostatic test is not a -- it's  
26 not a silver bullet. I mean it does not deal  
27 with every possible concern that could happen  
28 with the pipeline over time. There are

1 things that it doesn't address. So I tried  
2 to look at it from the standpoint of what --  
3 what are the integrity threats or integrity  
4 concerns that do affect natural gas pipelines  
5 as demonstrated through cumulative industry  
6 experience, through reportable incidents that  
7 are presented or that are reported to PHMSA  
8 and what industry guidelines say about  
9 dealing with that and just tried to work  
10 through each one of those.

11 Do we have evidence that there's a  
12 problem, or do we have evidence that any  
13 condition has worsened in the last two years  
14 with respect to those particular things. And  
15 I don't -- I don't see evidence that  
16 there's -- that there are other problems  
17 affecting the pipeline.

18 So you know, and then finally, I  
19 think I alluded to this on Monday, I thought,  
20 well, knowing what I know about A.O. Smith  
21 pipe or about hydrotesting or pipelines in  
22 general or risk assessment, how would I feel  
23 if I were living near this pipeline? There's  
24 a pipeline that goes through my neighborhood.  
25 It's not next to my house. It's a propane  
26 pipeline, but if it failed it would be --  
27 certainly be a bad thing. I'm conscious of  
28 its presence. So I certainly am able to I

1 think put myself in the point of view of how  
2 would I feel about living next to this  
3 particular pipeline.

4 I think all of the evidence points  
5 to it being a safe pipeline. I don't think I  
6 would feel terribly concerned about that. In  
7 fact, there are many, many, many other things  
8 that pretty much everybody here in this room  
9 is exposed to in terms of risk, whether it's  
10 traffic accidents or food poisoning or, you  
11 know, poor medical treatment or things of  
12 that nature that are much more likely,  
13 present much higher risks I think than this  
14 particular pipeline. So that's my take on  
15 it.

16 ALJ BUSHEY: Thank you. Thank you, Mr.  
17 Rosenfeld. All right. Is there anything  
18 else to come before the Commission on this  
19 matter? You have your objection on Line 147.

20 MS. BONE: We need to enter documents  
21 into the record, and if possible we'd like a  
22 few minutes off the record with PG&E to see  
23 if we can stipulate to most of them and make  
24 this easier.

25 ALJ BUSHEY: Okay. We'll be off the  
26 record.

27 (Off the record) ]

28 ALJ BUSHEY: We will be back on the

1 record.

2 While we were off the record we  
3 identified Exhibit O. That is going to be  
4 the Felts testimony. SED advocacy is going  
5 to provide me a copy of that.

6 (Exhibit O was marked for  
7 identification.)

8 ALJ BUSHEY: Exhibit P is the Roberts  
9 testimony.

10 (Exhibit P was marked for  
11 identification.)

12 ALJ BUSHEY: And Exhibit Q is the  
13 Roberts support.

14 (Exhibit Q was marked for  
15 identification.)

16 ALJ BUSHEY: Are there any objections  
17 to Exhibits A through N? Any objections to  
18 receiving A through N into the record?

19 MS. BONE: We are still working on  
20 that.

21 MR. MALKIN: I believe we may have some  
22 objections. I'm trying to -- I have no  
23 objection to A. Although, we are talking  
24 about whether we need to redact.

25 MR. VALLEJO: No, I was thinking  
26 Exhibit A to the safety --

27 MR. MALKIN: Oh.

28 MS. BONE: Oh.

1 ALJ BUSHEY: Hearing Exhibit A through  
2 N.

3 MR. MALKIN: No objection to A. No  
4 objection to --

5 MS. BONE: Can I fill in, Joe, are you  
6 working on that?

7 MR. MALKIN: Yes.

8 MS. BONE: On K?

9 So PG&E has stipulated to the entry  
10 of K into the record, the ones you are asking  
11 about, but we are going to need to redact it.  
12 So we will do a late filing to get that copy  
13 to you. And we've agreed that it can be  
14 filed with the redaction of the second and  
15 third columns.

16 ALJ BUSHEY: So the version of K that I  
17 have should be removed?

18 MS. BONE: Correct, and we will get you  
19 a new one.

20 ALJ BUSHEY: Any objection to any  
21 others?

22 MR. MALKIN: We are going through.  
23 We've gotten up to F, and we have no  
24 problems.

25 ALJ BUSHEY: Okay.

26 MR. MALKIN: G is good.

27 ALJ BUSHEY: We will be off the record.

28 (Off the record.)



1 ALJ BUSHEY: Back on the record.

2 While we were off the record  
3 Exhibits A through J which have been  
4 previously identified have been received into  
5 evidence.

6 (Exhibits A thru J were received  
7 into evidence.)

8 ALJ BUSHEY: We will be off the record.

9 (Off the record.)

10 ALJ BUSHEY: We will be back on the  
11 record.

12 While we were off record we  
13 addressed Exhibit K. It has been removed  
14 from the documents offered in hearing.

15 MS. BONE: That is not exactly right.  
16 The K that we talked about earlier is still  
17 there. The one on the marine standards.

18 MR. MALKIN: That was my error. It had  
19 originally been marked as K, but then it was  
20 withdrawn and K was used for this other  
21 exhibit that we have no objection to with the  
22 agreed redaction of two columns. That would  
23 allow one to precisely identify locations of  
24 the pipe.

25 ALJ BUSHEY: That is what I understood.  
26 So Exhibit K that has been provided to me has  
27 been removed from the record. A late-filed  
28 revised Exhibit K with two columns redacted

1 will be provided to me.

2 We will be off the record.

3 (Off the record.)

4 ALJ BUSHEY: We will be back on the  
5 record.

6 While we were off the record we  
7 discussed Exhibit N. The only portion of  
8 Exhibit N that was used as a  
9 cross-examination exhibit was the first page.  
10 I'm removing the other pages from Exhibit N.  
11 We will receive the first page only into the  
12 record.

13 (Exhibit N was received into  
14 evidence.) ]

15 MS. BONE: Your Honor, there's an  
16 additional exhibit that we don't have that  
17 needs to be given a -- a letter.

18 ALJ BUSHEY: Okay. Can we do that when  
19 we get to the end of the letters because  
20 we've got things that have a letter that  
21 aren't in the record?

22 Exhibit N?

23 MR. MALKIN: Exhibit N we object to.  
24 It's a mishmash of things, very little of  
25 which was the subject of any questioning. If  
26 it gets boiled down to the things that were  
27 actually used in the hearing, then -- and I  
28 -- I don't include the one where the witness

1 said, "I don't recognize it," then we  
2 wouldn't object.

3 MR. LONG: Your Honor, I don't  
4 understand this principle that PG&E is using.  
5 They're e-mails. Is there something that  
6 they're worried about?

7 MR. GRUEN: Your Honor, in addition to  
8 that, I asked Mr. Harrison explicitly if  
9 there was any document in here with which he  
10 was not familiar.

11 ALJ BUSHEY: That's not the basis for  
12 getting something in the record as a  
13 cross-examination exhibit. You have to ask  
14 cross-examination on it.

15 MR. GRUEN: And I did ask  
16 cross-examination on each and every document  
17 in this exhibit, your Honor. And I asked  
18 Mr. Harrison. I asked extensive questions of  
19 both Mr. Johnson and Mr. Singh. I'm not  
20 following the exact grounds of the objection  
21 -- the basis for Mr. Malkin's objection on  
22 this.

23 ALJ BUSHEY: So Mr. Malkin, you're  
24 disputing counsel's assertion that questions  
25 were asked regarding each one of these seven  
26 packets.

27 MR. MALKIN: Yes. I think the record  
28 will accurately reflect that there were

1 questions about some of these. There was the  
2 blanket question, which as you said doesn't  
3 establish the basis for admission. There  
4 were some questions about certain of these  
5 documents, and as I said, if this gets boiled  
6 down to those, we would not have an  
7 objection.

8 ALJ BUSHEY: And who would you envision  
9 doing this boiling-down process?

10 MR. MALKIN: I would envision SED  
11 advocacy doing it in the first instance, and  
12 our looking at it and concurring.

13 ALJ BUSHEY: Okay. How soon can you do  
14 that, Mr. Gruen?

15 MR. GRUEN: Your Honor, I'm not clear.  
16 I explicitly -- and the record will reflect  
17 that I asked questions about every document.

18 ALJ BUSHEY: Then it will be very  
19 quick. And you'll just go through the -- the  
20 transcript with page citations for each one  
21 and you'll send it into them and the whole  
22 thing will come in.

23 MR. GRUEN: Understood, your Honor. I  
24 will work to turn that around by the end of  
25 the week.

26 ALJ BUSHEY: Okay. All right. So that  
27 will take care of Exhibit N.

28 And O is the Felts testimony. P is

1 Roberts' testimony. Q is the Roberts  
2 support. That brings us to an unallocated  
3 letter, which would be R. Ms. Bone?

4 MS. BONE: R. And PG&E has now  
5 stipulated that the exhibit Mr. Roberts  
6 sought to put in on Monday, which had an  
7 excerpt from the PRUPF can now be admitted  
8 because the entire document was included in  
9 the recent PSEP update proceeding.

10 ALJ BUSHEY: So that's going to be  
11 Exhibit R.

12 (Exhibit No. R was marked for  
13 identification.)

14 (Exhibit No. R [late-filed] was  
15 received into evidence.)

16 MS. BONE: Yes.

17 ALJ BUSHEY: Can I have a copy of it?

18 MS. BONE: I don't have it now so it  
19 will be late-filed.

20 ALJ BUSHEY: Okay. Any other  
21 documents?

22 MR. GRUEN: Your Honor, may I just  
23 clarify that in the case of Exhibit O, it  
24 includes both Ms. Felts's testimony as well  
25 as the exhibits that are referenced by her  
26 testimony?

27 ALJ BUSHEY: Okay.

28 MS. STROTTMAN: And your Honor we want

1 to late-file Dr. Stevick's testimony.  
2 Apparently there is some confidential  
3 information in there.

4 ALJ BUSHEY: What are you going to do  
5 about that confidential information?

6 MS. STROTTMAN: Give it to PG&E to  
7 redact it. Although we don't think it is  
8 confidential, but apparently just two lines  
9 need to be redacted.

10 ALJ BUSHEY: So Dr. Stevick's  
11 testimony.

12 MS. STROTTMAN: Mr. Malkin did  
13 stipulate to us entering it into testimony,  
14 but I just want to make sure you see it and  
15 make sure all the redactions are in there.

16 ALJ BUSHEY: You've got five days to do  
17 that. It will be late-filed Exhibit S.

18 MS. STROTTMAN: S?

19 ALJ BUSHEY: File it as redacted I  
20 don't want it under seal. Just everything  
21 redacted.

22 (Exhibit No. S was marked for  
23 identification.)

24 (Exhibit No. S [late-filed] was  
25 received into evidence.)

26 MS. BONE: Your Honor, I had an  
27 oversight. With regard to Mr. Roberts'  
28 testimony, which is now marked as Exhibit P

1 and entered into the record, there is one  
2 very minor errata that I wanted to bring to  
3 parties's attention. I'm not going to do a  
4 formal filing on it. It's Footnote 75 should  
5 be the same as Footnote 74.

6 ALJ BUSHEY: What page is that on?

7 MS. BONE: Towards the end on page 19.

8 ALJ BUSHEY: So Footnote 75 should be  
9 ibid.

10 MS. BONE: Yeah, ibid.

11 ALJ BUSHEY: All right. I made that  
12 correction in the official record.

13 Any further exhibits?

14 MR. MALKIN: Yes, your Honor. We have  
15 one. We would like to mark the workshop  
16 summary that we sent out that was commented  
17 on by both Mr. Roberts and Mr. Singh in the  
18 discussion this morning given that they both  
19 talked about it.

20 ALJ BUSHEY: Okay. Exhibit T. Is  
21 anybody going to object to that?

22 MS. PAULL: We object and if it's going  
23 to come in we've prepared a version --

24 ALJ BUSHEY: We'll be off the record.

25 (Off the record)

26 ALJ BUSHEY: We'll be back on the  
27 record.

28 While we were off the record, we

1 agreed to mark as Exhibit T the workshop  
2 summary presented by PG&E. It will only be  
3 marked for identification and not moved into  
4 the evidentiary record.

5 (Exhibit No. T was marked for  
6 identification.)

7 ALJ BUSHEY: We'll be off the record.

8 (Off the record)

9 ALJ BUSHEY: We'll be back on the  
10 record.

11 Exhibit U is ORA's version of the  
12 workshop summary. It's identified for the  
13 record, but not received into evidence.

14 Is there anything further to add  
15 into the record?

16 (Exhibit No. U was marked for  
17 identification.)

18 MS. BONE: Your Honor, if there are no  
19 further exhibits to add to the record, I  
20 thought it would be helpful to get some  
21 confirmation about certain other things just  
22 to ensure that we all agree that they are on  
23 the record, that there might be some open  
24 issues here.

25 Is PG&E's verified statement  
26 considered to be on the record of this  
27 proceeding?

28 ALJ BUSHEY: It's been filed and



1 served.

2 MS. BONE: So the answer is yes?

3 ALJ BUSHEY: Yes.

4 MS. BONE: And the same with SED's  
5 concurrents?

6 ALJ BUSHEY: Yes.

7 MS. BONE: Okay. And all of the  
8 documents that Mr. Singh also filed following  
9 up on PG&E's verified statements? Mr.  
10 Singh's documents --

11 ALJ BUSHEY: His supplements that were  
12 filed and served.

13 MS. BONE: Supplements, et cetera.

14 ALJ BUSHEY: Yes.

15 MS. BONE: And lastly with regard to  
16 the documents that are generally in the PSEP  
17 proceeding, this rulemaking, are they  
18 considered to be part of the record of this  
19 proceeding? Or do you separate -- do you  
20 designate the OSCs as something different?

21 ALJ BUSHEY: This is not an OSC. This  
22 is a re-pressurization.

23 MS. BONE: So you believe that all the  
24 records that are in the PSEP proceeding are  
25 part of the records of this proceeding?

26 ALJ BUSHEY: I don't see why not.

27 MS. BONE: Wonderful. Thank you.

28 MR. MALKIN: Well, that -- that opens

1 up two-and-a-half years worth of things that  
2 -- whatever.

3 ALJ BUSHEY: We can't ignore them.  
4 They're here.

5 Anything further?

6 MS. PAULL: Yes, your Honor I would  
7 like the record to reflect that while we were  
8 off the record, I renewed my request to have  
9 the safety certification -- PG&E's safety  
10 certification consisting of Exhibit A and B,  
11 the two exhibits that were filed October 11th  
12 and -- rather, served October 11th and  
13 16th -- that they be made part of the record  
14 and that you denied that request.

15 ALJ BUSHEY: Yes, consistent with our  
16 past practice in dealing with pressurization,  
17 that information is not included in the  
18 formal record.

19 Is there anything further to come  
20 before the Commission?

21 MS. STROTTMAN: Yes.

22 MR. GRUEN: Your Honor, may SED do a  
23 late-served -- late service of Exhibit O,  
24 which is Ms. Felts' testimony.

25 ALJ BUSHEY: Yes, I already indicated  
26 that.

27 MS. STROTTMAN: Your Honor, I'm sorry.  
28 Are you going to outline a briefing schedule?

1 ALJ BUSHEY: No, there's no briefing.

2 MS. STROTTMAN: Oh, that's right.

3 You're going to issue your Proposed Decision.

4 ALJ BUSHEY: Right.

5 MS. STROTTMAN: And then we can file  
6 comments --

7 ALJ BUSHEY: Comments on it.

8 MS. STROTTMAN: -- on the Proposed  
9 Decision.

10 ALJ BUSHEY: At this point, I don't  
11 know how realistic hitting the December 5th  
12 agenda will be.

13 MS. STROTTMAN: Okay.

14 ALJ BUSHEY: But certainly no later  
15 than December 19th. When the proposed  
16 decision comes out, you will have -- our  
17 practice has been a few days. And by a few,  
18 I mean between three and five days to file  
19 one round of comments on it.

20 MS. STROTTMAN: And, your Honor, I have  
21 a procedural question. The City of San  
22 Carlos is interested in some sort of order  
23 that if PG&E discovers some sort of leak on  
24 Line 47 that PG&E report it to San Carlos.  
25 Do you suggest a way --

26 ALJ BUSHEY: I suggest that the Mayor  
27 of San Carlos Carl Kirk Johnson and make that  
28 request.

1 MS. STROTTMAN: So that order cannot  
2 come from the CPUC?

3 ALJ BUSHEY: Well, it could, but  
4 they'll almost certainly voluntarily tell you  
5 that.

6 MS. STROTTMAN: I don't know about  
7 that, but --

8 ALJ BUSHEY: Well, why, don't you start  
9 with --

10 MS. STROTTMAN: Especially after --

11 ALJ BUSHEY: Why don't you start with a  
12 simple request to their executives, and if  
13 they turn you down, then you can file a  
14 motion in this docket.

15 MS. STROTTMAN: Okay. Thank you.

16 ALJ BUSHEY: Anything further?

17 Hearing none then, the record is  
18 closed on the Commission's consideration of  
19 Line 1 --

20 MS. PAULL: No. Aren't there  
21 late-filed exhibits scheduled to come in?

22 ALJ BUSHEY: We just went over that.  
23 With the late-filed exhibits, the record is  
24 closed.

25 MS. PAULL: Oh, with the late filed  
26 exhibits.

27 ALJ BUSHEY: With the late-filed  
28 exhibits, the record is closed on the

1 re-pressurization of Line 147.

2 THE REPORTER: I'm sorry. We're on the  
3 record.

4 ALJ BUSHEY: And this matter is  
5 submitted for Commission consideration.

6 Is there anything further to come  
7 before the Commission today? Hearing none,  
8 then this evidentiary hearing is concluded,  
9 and the Commission is adjourned. Thank you.

10 (Whereupon, at the hour of  
11 4:57 p.m., this matter having been  
12 concluded, the Commission then  
13 adjourned.)

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BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE  
STATE OF CALIFORNIA

Order Instituting Rulemaking on the  
Commission's Own Motion to Adopt New  
Safety and Reliability Regulations  
for Natural Gas Transmission and  
Distribution Pipelines and Related  
Ratemaking Mechanisms.

Rulemaking  
11-02-019

CERTIFICATION OF TRANSCRIPT OF PROCEEDING

I, Alejandrina E. Shori, Certified Shorthand Reporter No. 8856, in and for the State of California do hereby certify that the pages of this transcript prepared by me comprise a full, true and correct transcript of the testimony and proceedings held in the above-captioned matter on November 20, 2013.

I further certify that I have no interest in the events of the matter or the outcome of the proceeding.

EXECUTED this 20th day of November, 2013.

\_\_\_\_\_  
Alejandrina E. Shori  
CSR No. 8856

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE  
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Order Instituting Rulemaking on the  
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Rulemaking  
11-02-019

CERTIFICATION OF TRANSCRIPT OF PROCEEDING

I, Ana M. Gonzalez, Certified Shorthand Reporter No. 11320, in and for the State of California do hereby certify that the pages of this transcript prepared by me comprise a full, true and correct transcript of the testimony and proceedings held in the above-captioned matter on November 20, 2013.

I further certify that I have no interest in the events of the matter or the outcome of the proceeding.

EXECUTED this 20th day of November, 2013.

\_\_\_\_\_  
Ana M. Gonzalez  
CSR No. 11320

BEFORE THE PUBLIC UTILITIES COMMISSION  
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STATE OF CALIFORNIA

Order Instituting Rulemaking on the  
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Rulemaking  
11-02-019

CERTIFICATION OF TRANSCRIPT OF PROCEEDING

I, Thomas C. Brenneman, Certified Shorthand Reporter No. 9554, in and for the State of California do hereby certify that the pages of this transcript prepared by me comprise a full, true and correct transcript of the testimony and proceedings held in the above-captioned matter on November 20, 2013.

I further certify that I have no interest in the events of the matter or the outcome of the proceeding.

EXECUTED this 20th day of November, 2013.

\_\_\_\_\_  
Thomas C. Brenneman  
CSR No. 9554



BEFORE THE PUBLIC UTILITIES COMMISSION  
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STATE OF CALIFORNIA

Order Instituting Rulemaking on the  
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Rulemaking  
11-02-019

CERTIFICATION OF TRANSCRIPT OF PROCEEDING

I, Wendy M. Pun, Certified Shorthand Reporter  
No. 12891, in and for the State of California do  
hereby certify that the pages of this transcript  
prepared by me comprise a full, true and correct  
transcript of the testimony and proceedings held in  
the above-captioned matter on November 20, 2013.

I further certify that I have no interest in the  
events of the matter or the outcome of the proceeding.

EXECUTED this 20th day of November, 2013.

Wendy M. Pun  
CSR No. 12891