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1 SAN FRANCISCO, CALIFORNIA

2 16 DECEMBER 2013 - 9:09 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 continued evidentiary hearings in order  
8 instituting ruling making on the Commission's  
9 own motion to adopt new safety and  
10 reliability regulations for natural  
11 transmission and distribution pipelines and  
12 related ratemaking mechanisms. This is  
13 Rulemaking 11-02-019.

14 Good morning. I'm Administrative  
15 Law Judge Maribeth Bushey, the assigned  
16 administrative law judge to this proceeding.  
17 At this point we may have the assigned  
18 commissioner, Commissioner Florio, join us.  
19 But that's uncertain to other demands on his  
20 time.

21 Our purpose this morning is the  
22 continued cross-examination of PG&E's  
23 witnesses. Mr. Malkin, if you would like to  
24 call your first two witnesses forward, we  
25 will begin with cross-examination by Mr.  
26 Long.

27 MR. MALKIN: Thank you, your Honor.  
28 PG&E recalls Mr. Johnson and Mr. Singh.

1 ALJ BUSHEY: Witnesses may be seated  
2 and are reminded they remain under oath from  
3 our last hearing.

4 WITNESS JOHNSON: Okay.

5 KIRK JOHNSON and SUMEET SINGH,  
6 resumed the stand and testified further as  
7 follows:

8  
9 ALJ BUSHEY: Mr. Long?

10 MR. LONG: Thank you, your Honor.

11 CROSS-EXAMINATION

12 BY MR. LONG:

13 Q Good morning, gentlemen. I asked  
14 previously for you to be supplied for certain  
15 documents to help the cross-examination to go  
16 more efficiently. And those documents  
17 include Mr. Johnson's verified statement  
18 dated August 30th, 2013; the exhibit from the  
19 first hearing, it's labeled OSC-4, that's a  
20 slide package; the exhibit with the letter M,  
21 as in Mary, from -- I believe that was the  
22 November 20th hearing day; and the Code of  
23 Federal Regulations dealing with pipeline  
24 safety, 49 CFR Part 192. And we may if  
25 necessary -- I don't intend to ask questions  
26 based on the transcript, but you never know.  
27 That may come up. So if those are at the  
28 ready, that would be good as well.

1 WITNESS JOHNSON: A Okay.

2 Q So thank you for returning. Let me  
3 start by asking some general questions  
4 regarding the purposes of the MAOP validation  
5 project and the pipeline features list that  
6 was created as part of that project.

7 First, let me make -- just to set  
8 the foundation, one of the -- one of the  
9 elements of the of the MAOP validation effort  
10 was the creation of the -- or the rebuilding  
11 of a pipeline features list; is that right?

12 WITNESS SINGH: A It was creating a  
13 pipeline features list. That's correct.

14 Q Okay. I want to ask you about the  
15 purposes of that. But first, do you think  
16 the MAOP validation effort and the associated  
17 pipeline features list has served any safety  
18 purposes?

19 WITNESS JOHNSON: A Well, it's -- it  
20 was an order to -- as an interim safety  
21 measure to go through that process. So I  
22 think in terms of understanding the system,  
23 it is -- it has assisted us in understanding  
24 what's there, and it moves us through the  
25 process of the interim safety measures as  
26 ordered by the CPUC.

27 Q Okay. And in particular, let me  
28 just focus the question now on the pipeline

1 features list element of that MAOP validation  
2 project. Does that serve any safety purposes  
3 for the company?

4 WITNESS SINGH: A Again, as stated by  
5 Mr. Johnson, that is part of the process that  
6 was used to meet the requirements of the  
7 order that was instituted by the Commission  
8 as well as -- which was really in response to  
9 the NTSB recommendations issued January  
10 of 2011.

11 Q Okay. And you've spoken of it as  
12 being in response to an order and your  
13 answers have been in that nature. But I want  
14 us to think about other possible values,  
15 purposes served by the pipeline features  
16 list.

17 Would you say that the pipeline  
18 features list is an important -- has  
19 importance for the Pipeline Safety  
20 Enhancement Plan or PSEP effort?

21 WITNESS JOHNSON: A Well, it does in  
22 that the in the interim -- it's part of the  
23 PSEP filing as I recall. So the PSEP filing  
24 said in essence that PG&E is to pressure test  
25 or replace pipeline that's have previously  
26 not undergone a pressure test and as an  
27 interim safety measure do the MAOP activity  
28 in a nutshell. And so it serves the purposes

1 of the MAOP activity and it serves the  
2 purposes of taking pressure reductions on an  
3 interim basis and helping prioritize the PSEP  
4 work.

5 Q So you mentioned the updated PSEP  
6 application that PG&E just filed. Is that  
7 what you were referring to, Mr. Johnson?

8 A Well, I'm referencing the entire  
9 PSEP -- PSEP documents that happened. I  
10 believe it was actually December of last  
11 year -- was the final order that came out.

12 Q Okay. But as you know, there was  
13 indeed an application filed just a month or  
14 so ago to update the PSEP filing; is that  
15 right?

16 A There -- there is an updated  
17 filing. What I was actually referencing is  
18 the fact that the order talks about  
19 prioritizing the work based on this interim  
20 safety work. So it's a prioritization of not  
21 just what happened in the first round of  
22 PSEP, but what might happen going forth to  
23 PG&E's system.

24 WITNESS SINGH: A Just to add on to  
25 that, the order that we're referencing here  
26 is the June 2011 order, which also required  
27 the operators to submit a Pipeline Safety  
28 Enhancement Plan, which PG&E submitted in

1 August of 2011, the Decision being issued by  
2 the Commission December of 2012, and most  
3 recently the updated filing that was  
4 submitted about a month ago.

5 Q Okay. In that updated filing you  
6 just referenced, the -- the updated pipeline  
7 features list that was developed as part of  
8 MAOP validation, that was used to update the  
9 work that needed to be done in PSEP; is that  
10 right?

11 MR. MALKIN: Your Honor, I think we're  
12 getting pretty far afield of the specific  
13 pressure restoration lines and the issue in  
14 the order to show cause. There is a whole  
15 separate proceeding on the PSEP update  
16 application as your Honor is well aware.

17 MR. LONG: This really shouldn't take  
18 long, but the point of it -- I'm happy to  
19 explain -- is that the pipeline features list  
20 and MAOP validation work is important for  
21 safety not just for this specific MAOP  
22 validation issues that have been raised thus  
23 far, but in a more general sense for PSEP and  
24 other reasons. And that's -- that's why it's  
25 very important to get this pipeline features  
26 list work done properly.

27 ALJ BUSHEY: Okay. Let's -- let's ask  
28 the panel if they agree or disagree with the



1 statement you just made.

2 MR. LONG: Well, okay.

3 WITNESS JOHNSON: I'm sorry. You have  
4 to repeat it. It went on for a while.

5 MR. LONG: It wasn't intended as a  
6 question. It was intended as a response to  
7 the objection.

8 ALJ BUSHEY: It's not a complicated  
9 concept.

10 MR. LONG: Right.

11 ALJ BUSHEY: And I don't think that you  
12 probably even need their testimony. I'm sure  
13 it's in several Decisions that already exist  
14 in this proceeding.

15 MR. LONG: Q Well, let me ask you this  
16 question. Would you agree that in -- it's  
17 important to have accurate records in the  
18 pipeline features list in order to accurately  
19 update the work that needs to be done in the  
20 PSEP program?

21 WITNESS JOHNSON: A Well, I think what  
22 we have stated is that the work we did on  
23 MAOP is an input into the prioritization of  
24 work under PSEP or whatever comes after the  
25 PSEP.

26 Q So is that a yes?

27 A So as we laid it out with the -- as  
28 an interim safety measure. And as we've

1 described probably in the PSEP documents and  
2 certainly we've had discussions here is it's  
3 one of the tools in determining the  
4 prioritization of work.

5 WITNESS SINGH: A And the features  
6 list is not the only way to -- to do this  
7 work. That's a process that PG&E adopted to  
8 ensure that we have an understanding of where  
9 do we have the traceable, verifiable, and  
10 complete strength test records as identified  
11 in the NTSB recommendation, subsequent CPUC  
12 directives, and where we do not.

13 And where we do not have that  
14 information, we put together a pipeline log  
15 and decision tree, which was filed in August  
16 and which was subsequently approved in  
17 December. And the input to that decision  
18 tree is based on the characteristics of the  
19 pipeline and the associated attributes.

20 Q So if you get the pipeline features  
21 list information wrong, it can lead to  
22 incorrect outcomes when you run information  
23 through the PSEP decision tree; isn't that  
24 right?

25 WITNESS JOHNSON: A Well, we're taking  
26 -- we're taking conservative assumptions, and  
27 the PSEP decision tree has some very specific  
28 issues there. So the information that gets

1 put in rolls something out.

2 Q Yes.

3 A But we look at a much broader  
4 scale. The MAOP activity is done on a  
5 component-by-component basis. We're not  
6 replacing pipeline on a foot-by-foot basis.  
7 We're looking at them just as we stated in  
8 PSEP kind of in a larger scale so that you do  
9 it in an efficient manner.

10 So whether you're replacing  
11 pipeline or hydrostatically testing, you're  
12 not going to go in and do a 6-foot piece of  
13 pipe. You're going go in and do a mile or  
14 half-a-mile or two miles or three miles or  
15 four miles. So it's an input.

16 Q Right. If the pipeline features  
17 list input is incorrect, overly aggressive --  
18 not conservative as you say, Mr. Johnson, but  
19 overly aggressive, that can lead to an  
20 incorrect output when you run it through the  
21 decision tree?

22 MR. MALKIN: Objection, asked and  
23 answered.

24 ALJ BUSHEY: Mr. Long, it's beyond  
25 asked and answered. It's been litigated and  
26 parsed carefully in a Commission Decision.  
27 We've been through all of this.

28 MR. LONG: Well, I -- I guess I'm glad

1 you see this as obvious. I don't think it  
2 seems obvious to the company that -- which --  
3 which persists -- has persisted in trying to  
4 minimize the problems associated with  
5 incorrect pipeline features and MAOP  
6 validation work.

7 ALJ BUSHEY: I understand that's your  
8 position, Mr. Long. Do you have any  
9 questions for these witnesses?

10 MR. LONG: I sure do.

11 ALJ BUSHEY: Okay. Let's proceed to  
12 those.

13 MR. LONG: Q Mr. Singh, I think this  
14 question goes to you since you're not  
15 overseeing integrity management work; is that  
16 right?

17 WITNESS SINGH: A That is correct.

18 Q Is the pipeline features list  
19 records being used for integrity management  
20 purposes?

21 A Pipelines feature list, as I stated  
22 before, gives information about which  
23 sections of our pipeline are tested, which  
24 ones are not tested, and also gives us  
25 indications with regards to the  
26 characteristics of the pipe.

27 So yes, it is an input to integrity  
28 management work. It is an input to pipeline

1 safety enhancement planning work that we've  
2 just talked about here as well.

3 Q And can incorrect information in  
4 the pipeline features list lead to incorrect  
5 integrity management outcomes, for example,  
6 if an overly aggressive assumption is made  
7 such as was made with Line 147, Segment 109?

8 MR. MALKIN: Objection.

9 MR. LONG: I don't understand the  
10 nature of the objection.

11 ALJ BUSHEY: Mr. Long, this is all  
12 completely obvious. If they have inaccurate  
13 information, it is going to lead to  
14 inaccurate outcomes. That's why they've  
15 spent how many -- I forgot how many hundreds  
16 of millions of dollars trying to get the very  
17 most accurate information they can have.  
18 That is crystal clear in the record.

19 MR. LONG: Okay. All right. Is that  
20 crystal clear to --

21 MR. MALKIN: Your Honor --

22 MR. LONG: -- to the witnesses? I just  
23 wish I felt that everybody was agreeable to  
24 that.

25 ALJ BUSHEY: Well, not everybody agrees  
26 to the Commission's Decisions, but the  
27 Commission's Decisions are what they are.

28 MR. LONG: All right. All right.

1           Q    Now, I want to transition now to  
2   some of the specific testimony that you gave  
3   both in the August 30th, 2013, verified  
4   statement and in the slide presentation you  
5   gave at the hearing on September 6th.  So  
6   we're going to turn to those OSC-4 slides.  
7   Do you have that in front of you, gentlemen?

8           WITNESS JOHNSON:  A  This is the  
9   document here you're referring to?  Looks  
10  like these?

11          Q    That's right.  Uh-huh.

12                  And the first slide relates to  
13  Segment 109 of Line 147.  Do you see that?

14          A    Yes.

15          Q    On my slide package, there are blue  
16  bars -- a series of blue bars.  The first  
17  MAOP per design -- that's the wording at the  
18  bottom.  It's shown 660 psig I suppose that  
19  is.  Is that right?

20          WITNESS SINGH:  A  Pounds per square  
21  inch.

22          WITNESS JOHNSON:  A  Pounds per square  
23  inch gauged.  It shows it's 660.

24          Q    Okay.  And there are other design  
25  MAOPs shown.  There's one in the next -- if  
26  you go to the far right, the one to the left  
27  of that is 396.  And then there's another one  
28  for 330.  Do you see that?

1           A    To the right? Well, as we  
2 articulated before there's 1, 2, 3, 4, 5 bars  
3 here.

4           Q    Yes. I'm asking about the MAOPs  
5 per design. I see three. The two on the far  
6 right show an MAOP per design of 60 percent  
7 SMYS of 396. And the one after that is 330.  
8 And that's showing MAOP per design at  
9 50 percent SMYS. Do you see that?

10          A    Yes, I see it.

11          Q    Now, is one of these bars the --  
12 the MAOP per design that would be calculated  
13 under Section 192.105 of the Federal  
14 Regulations?

15          A    Well, if you want to point us out  
16 to the code, I don't -- I don't necessarily  
17 believe that that's accurate. I believe the  
18 330 pounds -- you're going to find that in  
19 the code, Sumeet?

20                What section of the code you're  
21 referring to?

22          Q    192.105.

23          A    105. You're talking about 192 and  
24 105, design formula for steel pipe?

25          Q    That's right.

26          A    So on an interim -- I'll see if I  
27 can answer your question as I understood it.  
28 This -- this calculation is the calculation

1 we made for the interim safety measures for  
2 the MAOP activity, including the conservative  
3 assumptions. So it is not -- 192.105 would  
4 be for pipelines built after 19 -- after the  
5 code was put into place. ]

6 Obviously, we didn't build this  
7 pipe for the code because the code wasn't in  
8 place. So the 330 is the number we calculate  
9 as the interim safety measure.

10 Q Okay. Which one of these would be  
11 the one that would be calculated if you were  
12 using the 192.105 design formula?

13 A You really can't -- I mean you're  
14 talking about just the equation itself? You  
15 can't use the 105 code for pipe built before  
16 '71.

17 Q Okay. Let's stop there. You're  
18 familiar with the ASME standards, are you?

19 A Yeah. I'm familiar with some ASME  
20 standards.

21 Q This is 1957 vintage pipe?

22 A I don't remember all the 1957  
23 vintage pipe.

24 Q All right. Well, can we stipulate  
25 that 1957, the ASME standards would have  
26 required the exact same formula to calculate  
27 the design pressure?

28 A I don't know that we can. I'd have



1 to see it.

2 Q Let's just assume that. Okay? Can  
3 we assume that?

4 MR. MALKIN: Your Honor, we're getting  
5 far afield assuming things.

6 ALJ BUSHEY: Where are we going here?

7 MR. LONG: All I want to do is figure  
8 out which one of these is the one that is  
9 required under the code for design pressure.

10 ALJ BUSHEY: I think they said none of  
11 them.

12 MR. MALKIN: That's right. It was  
13 asked and answered.

14 MR. LONG: Q All right. Well, which  
15 represents the -- I want to know which one  
16 represents the MAOP per design if you were  
17 using 192.105.

18 MR. MALKIN: That was asked and  
19 answered.

20 ALJ BUSHEY: Yeah. They said none of  
21 them.

22 MR. MALKIN: Said none of them.

23 MR. LONG: Q If you were. I'm saying  
24 if you were using 192.105, which one would it  
25 be?

26 ALJ BUSHEY: They said it wasn't any of  
27 them. They didn't use this formula.

28 MR. LONG: Q All right. Then why did

1 you use 330 as the MAOP?

2 WITNESS JOHNSON: A 330 is the number  
3 that we came up -- that was based on the MAOP  
4 validation exercise that we underwent and  
5 discussed ad nauseam the other day for  
6 purposes of Line 147, Seg 109, using  
7 conservative assumptions.

8 Q Okay. And how did you arrive at  
9 that number?

10 A Well, it was in the document. I  
11 mean we --

12 WITNESS SINGH: A So if your question  
13 is what mathematical equation did we use? Is  
14 that your question, Mr. Long?

15 Q My question is how did you arrive  
16 at the number 330? Why did you use that as  
17 the limiting MAOP? Why is that the new MAOP  
18 that you're asking for for Line 147, for  
19 example? Why?

20 A So as part of -- as Mr. Johnson  
21 stated, as part of the interim safety measure  
22 we used a mathematical equation that is the  
23 same as what you see here. It is basically a  
24 Barlow's equation that has D rating factors,  
25 but that's an interim safety measure until we  
26 do a pressure test.

27 And it's very clear in the  
28 Commission's order from June of 2011 that

1 that is an interim step, an interim process  
2 to drive pressure reductions where  
3 appropriate until we've tested that the  
4 respective segments or to help prioritize the  
5 pressure testing work. And that's how we  
6 used that equation on an interim basis  
7 because we did not have pressure tests for  
8 all of our system, which we've been very  
9 clear about at the onset.

10 Q Okay. This is going to take a long  
11 time if we keep having answers that are quite  
12 lengthy like that.

13 It just so happens that the MAOP  
14 that you used to establish a maximum  
15 allowable operating pressure for Line 147,  
16 Segment 109, is the formula, is determined by  
17 the formula in section 192.105; is that  
18 right?

19 WITNESS SINGH: A We have --

20 WITNESS JOHNSON: A So You're  
21 referring to the formula, so that we're all  
22 crystal clear on that,  $\frac{2 \text{ S-T}}{\text{D paren F-E-T}}$  divided  
23 by D paren F-E-T. Is that what you're  
24 referring to? Is that the equation you're  
25 talking about?

26 Q I'm not sure I quite read it your  
27 way, but yes, that's the one, the one that's  
28 right there in Section 192.105.

1           A    Okay.  So that's essentially, as  
2 Mr. Singh said, it's Barlow's equation with  
3 some coefficients tied to it.

4           Q    That's right.

5           A    That is the generic equation used  
6 for the interim safety steps on MAOP using  
7 conservative assumptions.

8           Q    So that is the -- that is the  
9 formula that was used to determine the 330  
10 MAOP; is that right?

11          A    That is the formula we used for all  
12 of the MAOP calculations.

13          Q    Okay.

14          A    That is the formula, yes.

15          Q    That's how you got to 330?

16          A    For that segment, yes.  I mean  
17 it's -- it's an equation.  And I think we  
18 showed in the Pipeline Features List how  
19 that -- how that is done.

20          Q    Okay.  So what I'm trying to get  
21 at, I didn't think it was going to be  
22 difficult, is what's the difference between  
23 these three bars that have MAOP per design?  
24 One of them uses -- it says it's 100 percent  
25 SMYS, which I think means the value for F,  
26 the capital letter F, in 192.105 is 100 or  
27 100 percent or 1.0; is that right?

28          A    So the -- and I thought we

1 explained this earlier, but 300 -- 660  
2 pounds, if we operate at a hundred percent  
3 SMYS with conservative assumptions on this  
4 pipeline, the equation comes up to 660 pounds  
5 with the conservative assumptions.

6 Q But you're putting it in your  
7 phrasing, and I'm asking you a different  
8 question so to see if I can -- we can arrive  
9 at a different understanding of what these  
10 words mean.

11 ALJ BUSHEY: Mr. Long, I'm not -- where  
12 are we going with all of this? What is it --  
13 I mean this is a very interesting discussion  
14 about Barlow's equation.

15 MR. LONG: Right now I'm trying to  
16 understand their testimony on September 6th  
17 and what the significance of these different  
18 bars is and where they got them from. And it  
19 really shouldn't be difficult.

20 MR. MALKIN: Your Honor, Mr. Long's  
21 comment a moment ago showed he is not trying  
22 to understand this. He doesn't like the  
23 answers he's hearing. He's arguing with the  
24 witnesses and wants them to accept his  
25 characterization of their testimony.

26 MR. LONG: Well.

27 MR. MALKIN: That is purely  
28 argumentative. We don't have --

1 ALJ BUSHEY: I'm trying to understand  
2 where we're going here. What difference does  
3 it make?

4 MR. LONG: I think sometimes you just  
5 need to understand what people are saying in  
6 order to be able to reach conclusions. And  
7 Mr. Malkin may think I'm trying to argue to a  
8 point. The fact is I am trying to understand  
9 the testimony they gave on September 6th.  
10 This is the first chance I've had to ask  
11 questions. I want to understand what this  
12 bar on the far left is and how it relates to  
13 these other two bars on the far right because  
14 that seemed to be something that was  
15 important for them to try to convey to us.  
16 And I sincerely don't understand how they got  
17 to those things, and I would like to know.  
18 And I think I figured it out but --

19 ALJ BUSHEY: Why don't we move on to  
20 your hypothesis as to what -- you think you  
21 figured it out. Why don't we put forward  
22 that hypothesis.

23 MR. LONG: Okay.

24 ALJ BUSHEY: Because if what you're  
25 just trying to do is understand this, that  
26 would have been appropriate for discovery.  
27 If you have a point you're trying to make,  
28 and Mr. Long, you usually do, let's get that

1 point out there and start wrestling with the  
2 point rather than trying to --

3 MR. LONG: And sometimes you need some  
4 foundation, and I am here trying --

5 ALJ BUSHEY: I'll let you go with a  
6 scant amount of foundation. Let's dive right  
7 into what is your hypothesis.

8 MR. LONG: Q Okay. My hypothesis is  
9 that when you say MAOP per design at 100  
10 percent SMYS, that's using a factor for  
11 capital F of 1.0. When you say MAOP per  
12 design at 60 percent SMYS, that's using a  
13 factor for F of .60. And when you use MAOP  
14 per design of 50 percent SMYS, that's using a  
15 factor for F of .50. Is that correct?

16 WITNESS JOHNSON: A For the equations  
17 you laid out, .50 -- yeah, 60 percent SMYS  
18 would be a factor of F in this equation, the  
19 F component if you will. And then 50 percent  
20 would be .5, and a hundred percent SMYS would  
21 be .1.

22 WITNESS SINGH: A 1.0.

23 WITNESS JOHNSON: A 1.0. Excuse me.

24 Q Okay. Thank you. So if we go to  
25 Slides 2, 3, and 4, the way you arrived at  
26 those calculations would be the same as we  
27 just talked about; is that right?

28 WITNESS JOHNSON: A Yes. They should

1 all -- all the equations and the logic are  
2 the same on each one of the segments.

3 Q Okay. Thank you.

4 WITNESS SINGH: A It's predicated on  
5 the different attributes for that respective  
6 pipe, their SMYS level, wall thickness,  
7 diameter. There's other inputs into that  
8 formula.

9 Q All right. Let's now look at the  
10 verified statement of Mr. Johnson dated  
11 August 30th. Please ask you to turn to  
12 paragraph 39 in that statement.

13 WITNESS SINGH: A Is that on page 9?

14 Q That's correct. If you want to  
15 take a moment to refamiliarize yourself  
16 with -- yourselves with that paragraph.

17 WITNESS JOHNSON: A Just 39?

18 Q That's right. So my question is --

19 A I haven't finished reading it. I'm  
20 sorry.

21 Q No problem.

22 A Okay. Have you finished?

23 Q Okay. The paragraph says that Mr.  
24 Harrison directed his team to re-review the  
25 documentation and information obtained from  
26 construction activities on the entire Line  
27 147. And my question is, who was Mr.  
28 Harrison reporting to at this time?



1           WITNESS SINGH:  A  In November of 2012  
2  Mr. Harrison was reporting to the director of  
3  the MAOP validation project, which was Joe  
4  Medina, position that I formerly held.  And  
5  Joe Medina reported to me.

6           Q  Mr. Medina reported to you?

7           A  Correct.

8           Q  Thank you.  And was this re-review  
9  done at Mr. Harrison's initiation or  
10  initiative?

11          A  I do not recall specifically whose  
12  initiative.  We identified, as we have stated  
13  previously, the discrepancy as part of the  
14  leak repair process in October of 2012.  And  
15  as a prudent operator as we identified that  
16  discrepancy the question we asked is, where  
17  else do we potentially have a discrepancy  
18  along Line 147, which basically initiated  
19  this initiative.

20          Q  And would it be fair to say this  
21  re-review was done because of the records  
22  error discovered for Line 109 after the leak  
23  investigation?

24          A  It wasn't Line 109.  It was --

25          Q  I'm sorry.  Segment 109.

26          A  -- Segment 109.

27          Q  Thank you.  But otherwise was my  
28  statement accurate?

1           A    Could you please restate that?

2           Q    Was the re-review referenced in  
3 paragraph 39 done because of the records  
4 error discovered for Segment 109?

5           A    It was one of the things that was  
6 done as part of our root cause analyses in  
7 ensuring that -- in identifying are there any  
8 other potential discrepancies along that  
9 entire length of the pipeline.

10          Q    So did it have anything to do with  
11 Segment 109?

12          A    As a result of the discrepancy that  
13 was identified, this is part of our normal  
14 course of business, where we identify an  
15 issue, where we have a difference we will  
16 learn from that.  And we put together a whole  
17 root cause analysis report associated with  
18 the issue.  One of those steps was to perform  
19 a re-review of all the records associated  
20 with that line.

21          Q    You thought that was the prudent  
22 thing to do after you learned about the error  
23 on Segment 109?

24          A    Amongst several other things that  
25 we did.

26          Q    Okay.  Now, I want to ask about  
27 Exhibit M, which was one of the documents I  
28 asked you to have in front of you.  This is a

1 e-mail dated Saturday, November 17th. And I  
2 believe we established at the previous  
3 hearing that the author of the e-mail was  
4 David Harrison.

5 Do you have that in front of you,  
6 gentlemen? ]

7 WITNESS JOHNSON: A Yes.

8 Q You see in the first line of  
9 the text of the e-mail after the individuals  
10 Jim and Tom are named, it says: This is good  
11 information but Sumeet's expectations are  
12 considerably higher.

13 Do you know if the Sumeet in  
14 the first line is you, Mr. Singh?

15 WITNESS SINGH: A There's no other  
16 Sumeet that I know of.

17 Q I was guessing that was the case.  
18 So you think that's you?

19 A I'm pretty sure that's me.

20 Q Is it your understanding that this  
21 e-mail relates to the Pipeline Features List  
22 error in the seam weld for Segment 109 of  
23 Line 147?

24 A It has to do with the root cause  
25 analysis report that I requested the team to  
26 generate as a result of the discrepancy that  
27 was identified in the field.

28 Q For Segment 109?

1           A    That is correct.  Segment 109 on  
2   Line 147.

3           Q    Okay.  Now the last sentence says:  
4   At the executive level, this situation is  
5   considered a near hit -- in quotation  
6   marks -- from a safety perspective that could  
7   have severely damaged the company's  
8   credibility.

9           Mr. Singh, since you're referenced  
10   in this e-mail, does that sentence accurately  
11   summarize your views regarding the  
12   seriousness of the Pipeline Features List  
13   error that was discovered for Segment 109?

14          A    I think we previously stated that  
15   "near hit" is a term that we typically use  
16   when we talk about safety incidents as it  
17   pertains to field observations, motor vehicle  
18   incidents, potential OSHA reportable  
19   incidents.

20          As we do our field work, never  
21   really seen that term used for engineering  
22   related work.

23          This obviously is not an e-mail  
24   that I drafted.

25          Q    Right.

26          A    So, can't really speak to  
27   the definition of that term as the author  
28   would have been thinking about it as part of

1 the writing this e-mail.

2 Q That's why I'm asking you. You're  
3 on the stand, I have a chance to ask you  
4 questions whether this represents your views.

5 Did you think that the error that  
6 was discovered regarding Segment 109 had  
7 the potential to severely damage  
8 the company's credibility?

9 A Well, it was a records discrepancy.  
10 It was not a safety issue from my  
11 perspective. We've stated that several times  
12 as to why it wasn't a safety issue.

13 The line was strength tested to  
14 more than two times what it was operating at  
15 at that point in time.

16 Q Okay. Could a records discrepancy  
17 severely damage the company's credibility,  
18 particularly after you've undergone a lengthy  
19 MAOP validation effort?

20 A I'm not sure if it can or couldn't.  
21 We're looking at it from a safety  
22 perspective. That's the lens we looked at it  
23 from. We were looking at it from an  
24 engineering and operations perspective. We  
25 were also looking at it from why did the  
26 discrepancy happen, what was the cause of  
27 the discrepancy, and what could we learn from  
28 it, and where else could something like this

1 exist. It's part of our continuous  
2 improvement and learning process which we've  
3 also talked about.

4 Q I just want to ask you directly.  
5 Were you concerned when you learned about  
6 this Segment 109 error in which it turned out  
7 the assumption was not -- there was an  
8 assumption made and it was not a conservative  
9 assumption. Instead, it was an overly  
10 aggressive assumption that proved to be  
11 incorrect. Were you concerned that that  
12 could, that discrepancy could severely damage  
13 the company's credibility?

14 A No. What I was concerned about was  
15 what does this mean in terms of the safety  
16 and operations of the system and why did  
17 the error occur, which is the reason  
18 I requested the team to write a root cause  
19 analysis report.

20 And the first statement states that  
21 in terms of my expectations, I was not okay  
22 with just an e-mail describing what happened.  
23 I wanted a formal root cause analysis done on  
24 why it happened, why did it occur, and what  
25 controls do we have in place to make sure  
26 something like this doesn't occur again. And  
27 that's really my expectation.

28 Q So you didn't express any concerns

1 to Mr. Harrison or anyone else about  
2 the company's credibility when you learned  
3 about the Segment 109 error?

4 A I think I clearly articulated  
5 the concerns that I had, which --

6 Q And so the answer to my question is  
7 no, you did not?

8 A That is correct. My concern was  
9 the safety and the operations of the system,  
10 ensure we do everything prudently from an  
11 engineering standpoint, and also learn why  
12 this discrepancy happened. Those were the  
13 errors I was focused on.

14 Q Okay. Now let's go back to  
15 Mr. Johnson's statement, paragraph 52A.

16 This paragraph 52 is talking about  
17 refinements to the MAOP validation process.

18 Are we agreed on that?

19 And then A, B and C are some  
20 specific examples of refinements. Just to  
21 get us all on the same page.

22 A That's correct.

23 Q Okay. And on 52A, you're talking  
24 were a new step, additional independent third  
25 party review that was taken in December 2011;  
26 is that right?

27 A That is what that states, correct.

28 Q And this is a quality assurance

1 project. And quality assurance is sometimes  
2 abbreviated QA; is that right?

3 A It's not necessarily a quality  
4 assurance project. It's a quality assurance  
5 process.

6 Q Thank you.

7 A As part of the MAOP validation  
8 project.

9 Q And this was applied on  
10 going-forward work; is that right?

11 A It was applied on all the work that  
12 was done after December 2011, which also  
13 included doing the rework of all the work  
14 that was done in 2011.

15 Q Okay. We'll get into that a little  
16 bit more because I do want to get some of  
17 that timing down that was discussed a fair  
18 amount at the hearing.

19 So now we're in sync between  
20 the verified statement and the slides.

21 Mr. Singh, you led us through these  
22 slides at the September 6th hearing. And  
23 I think maybe the one that might be most  
24 helpful here is slide on page 9 of OSC-4. If  
25 I could ask to you turn to that.

26 There's a green -- at least on  
27 mine, I've got a green shaded oval at the  
28 bottom. It says Added Engineering Analysis



1 QA.

2 Does that oval represent what's  
3 being discussed in paragraph 52A of this  
4 verified statement?

5 A Yes, it is.

6 Q Okay. And then -- bear with me for  
7 a moment here.

8 And so the QA was applying to  
9 the engineering analysis, correct?

10 A So if you go back and look at the  
11 transcript as I was describing this process,  
12 this is two of the four steps for the MAOP  
13 validation project.

14 Just to ground ourselves again,  
15 just quickly cover that, the first step being  
16 the collection of the actual records. Second  
17 step being transposing the information from  
18 those records on to the Pipeline Features  
19 List, which does not include making any  
20 assumptions. And those two steps are not  
21 shown here. And the third step being  
22 engineering analysis which is the resolution  
23 of the unknowns which is shown here. And  
24 then the last step is I believe the last box  
25 which is MAOP Validation where calculations  
26 take place.

27 Q That's helpful. It's that last  
28 step that this QA process applied to; is that

1 right?

2 A The last of the four I covered, is  
3 that your question?

4 Q Let's look at this slide 9.  
5 There's three boxes that are bracketed. One  
6 is Engineer's Assessment, one is Peer  
7 Engineer Review, and the other is Engineering  
8 QC.

9 I think that comprises  
10 the engineering assessment or the resolution  
11 of the unknown features part of the analysis  
12 that you were talking about; is that right?

13 A It's -- the engineer's assessment  
14 is the resolution of the unknowns. The Peer  
15 Engineer Review is a form of quality control.  
16 Engineering QC is a secondary form of quality  
17 control which is part of the process. And  
18 then QA is on top of that.

19 Q Okay. And did the QA apply just to  
20 these three bracketed boxes or did it apply  
21 to something bigger than that? That's what  
22 I'm trying to understand.

23 A So the QA was done across different  
24 steps of the MAOP validation project, which  
25 we actually covered by slide 6. We had a QA  
26 for record collection. We had a QA for PFL  
27 build. We had a QA for engineering analysis.  
28 And we had a QA for MAOP report. So there

1 are several QA steps that were being  
2 implemented as part of the process. And this  
3 is the QA that was validating and ensuring  
4 that the quality control steps we had in  
5 place for the engineering analysis were  
6 rendering the desired results associated with  
7 that respective process.

8 Q Okay. And then so when you used  
9 the term "engineering analysis," you're  
10 referring to these three bracketed boxes  
11 I just mentioned; right?

12 A It's the resolution of the unknown  
13 features, correct.

14 Q It's just the top box then,  
15 Engineers Assessment?

16 A Well, it really starts with  
17 the decision tree: Are specifications  
18 unknown? Yes or no. Because the QA is  
19 happening at the end of that flow chart, so  
20 it's checking everything upstream of that as  
21 well.

22 Q So December 2011, you added this  
23 Engineering Analysis QA Process. Was there  
24 any engineering analysis QA prior to  
25 December 2011?

26 A There was no engineering analysis  
27 QA but there was a peer engineer review and  
28 an engineering QC process prior to December

1 of 2011.

2 Q Okay. Now, did this knew  
3 engineering analysis QA that began in  
4 December 2011, did it apply to what we are  
5 referring to as the pressure restoration  
6 lines, that is Line 101, Line 132A and  
7 Line 147?

8 A It did not initially. That was  
9 part of our planned scope to go back and look  
10 at that for all of the pressure restoration  
11 lines.

12 And one of the reasons why we did  
13 that this way is because as we were doing our  
14 non-HCAs -- I think I explained that  
15 ad nauseam at the last hearing, probably take  
16 another 15 seconds to talk about it -- but we  
17 basically went back and did the work from  
18 pressure limiting station to pressure  
19 limiting station which included non-HCAs and  
20 HCAs, which is why we did it as one pipeline  
21 section. So all the rework that was done was  
22 done including those controls.

23 We had planned to apply this to  
24 the pressure restoration lines when the issue  
25 happened or the discrepancy was identified in  
26 October of 2012. As a result of that, we  
27 further reprioritized to apply this to  
28 the pressure restoration lines as well.

1           But initially when we embarked our  
2 non-HCA effort, the idea was not necessarily  
3 to apply it to the pressure restoration  
4 lines. But we did include that in our road  
5 map.

6           Q    So let's unpack the chronology  
7 a little bit.

8                    So the first time through when you  
9 are doing your MAOP validation work for  
10 the pressure restoration lines, this would be  
11 in the fall of 2011.

12           A    Mm-hmm.

13           Q    You -- there's no -- this  
14 engineering analysis QA process wasn't in  
15 place because that came later; is that right?

16           A    That came in December of 2011.  
17 What was in place was the MAOP report QA  
18 which is as part of the MAOP validation  
19 process which is further downstream of this.

20           Q    Okay. So then December 2011, you  
21 have a new QA process for engineering  
22 analysis, but that doesn't apply to the  
23 pressure restoration lines because of what  
24 you just explained. These lines had already  
25 been fully addressed from limiting station to  
26 limiting station; is that right?

27           A    That is correct.

28           Q    So but then after you learned about

1 the problem in Segment 109, you decided you  
2 better go back and add -- and redo the MAOP  
3 validation work for the pressure restoration  
4 lines -- I'll stop there. Is that right?

5 A Well, that's when we further  
6 reprioritized our schedules to ensure that we  
7 include the pressure restoration lines as  
8 part of the revalidation process.

9 Prior to that go back and validate  
10 this, I believe we were also looking at  
11 Line 101 even prior to that October of 2012  
12 issue or discrepancy that was identified on  
13 Segment 109. So it wasn't just solely  
14 because of the fact that there was  
15 a discrepancy identified, that that's  
16 the reason we decided to ensure that the  
17 pressure restoration lines went through this  
18 process. We had that identified in our road  
19 map. The discrepancy that took place further  
20 prioritized us to focus on the pressure  
21 restoration lines first.

22 Q Let's go back to slide 7, this  
23 slide back in OSC-4. The starting box for  
24 this sort of decision flow analysis here says  
25 Are specifications unknown? Do you see that?

26 A I see that.

27 Q Is it possible for there to be  
28 conflicting documents regarding

1 specifications?

2 A There we came -- I think you're  
3 alluding to an example that we walked through  
4 on slide 8 where we had documents, two  
5 different documents with two different  
6 attributes, yes.

7 Q Right.

8 A So we came across as part of our  
9 records effort where we had differences in  
10 the information on the documents and records,  
11 but not every record is the same.

12 Q So what happens when you have  
13 a discrepancy between the documents? Do  
14 you -- how do you answer the question Are  
15 specifications unknown? Would that be they  
16 would be known, so would that be a yes?  
17 Where does it go?

18 A So keep in mind this is downstream  
19 of the Pipeline Feature List process. And we  
20 established a hierarchy of records because  
21 the quality of every record is not the same  
22 in terms of the source strength as part of  
23 the process that we've outlined.

24 We come across situations where we  
25 have a record with a greater source strength.  
26 For example, an as-built, that would be  
27 a known as opposed to a record that may be  
28 just a design drawing because we don't have

1 the original as-builts for that respective  
2 specification.

3 So in that instance,  
4 the specification would be known. And that  
5 would be determined as part of the pipeline  
6 features list proceed. If there's two  
7 records of the same source strength,  
8 the features list process would identify that  
9 as unknown.

10 Q Two records?

11 A Of similar source strength.

12 Q Of similar --

13 A They have --

14 Q You've got two equal records.

15 A Have a discrepancy. The process  
16 was to identify that unknown.

17 Q That would be a no?

18 A Unknown.

19 Q Are specifications unknown? Oh,  
20 that would be a yes. They would be --

21 A That's how I would answer  
22 the question.

23 Q All right. So, and I think you  
24 just alluded to this, Mr. Singh. There was  
25 a situation like this for Segments 103, 103.1  
26 and 103.6; is that right?

27 A That would be slide 8.

28 Q Slide 8. Thanks.





1 going to validate the integrity of the seam.  
2 So from that perspective, the engineer was  
3 not concerned. Was it an error in judgment?  
4 Yes, it was, and I clearly articulated that  
5 on September 6th.

6 Q Okay. Okay.

7 ALJ BUSHEY: Mr. Long, we're having a  
8 nice reminiscing adventure through all of the  
9 September 6th hearing documents. All of  
10 these are in the record, and they seem to be  
11 just being read aloud to us. Is there  
12 something that is not in the nature of  
13 discovery that you would like to get from  
14 these witnesses?

15 MR. LONG: I -- I believe one of the  
16 purposes of cross-examination can be to  
17 understand the witness's testimony and be  
18 able then based on the understanding  
19 developed through cross-examination to make  
20 recommendations to the Commission. Not all  
21 cross-examination is with a barbed point. So  
22 not all my questions here today are for my  
23 purpose. I -- I have waited patiently since  
24 the September 6th -- I would have asked these  
25 questions on September 6th, but --

26 ALJ BUSHEY: Or you could have sent  
27 discovery requests. They're reading aloud  
28 from documents in the record. I don't think

1 necessarily you need to get to a barbed point  
2 in cross-examination, but the purpose of  
3 cross-examination is to get facts not now on  
4 the record on the record. These facts are  
5 all in the record.

6 MR. LONG: I'm about to ask a question  
7 to you that I'd like to get an answer to. I  
8 hope it will be of interest to you. Maybe  
9 I'll make of it interest to you in a brief at  
10 some point, but these questions are for me to  
11 get to the next question.

12 ALJ BUSHEY: So we'll get to the --

13 MR. LONG: It's not going to be an  
14 earth-shattering question. It's probably not  
15 going to be one that the newspapers are going  
16 to be all that interested in.

17 ALJ BUSHEY: We don't use journalistic  
18 standards here. We're using evidentiary  
19 standards. And I'm looking for facts not now  
20 in the record that you're looking to put in  
21 the record. Okay? Let's focus on that. So  
22 why don't you ask the question.

23 MR. LONG: Q I wanted to ask why in  
24 the verified statement of Mr. Johnson the --  
25 if you look at the beginning of -- just  
26 before Paragraph 25, Segment 109 issue is  
27 referred to as human error. And then the --  
28 before Paragraph 39, the issue related to

1 Segments 103, 103.1, and 103.6 is referred to  
2 as record discrepancy errors. What's the  
3 difference there?

4 WITNESS SINGH: A The reason why  
5 Segment 109 is identified as a human error --  
6 I'm sure you're aware. You read the root  
7 cause analysis report. It was a  
8 misapplication of our pipeline resolutions  
9 for our unknown features list. And clearly  
10 that document would have led you to a joint  
11 efficiency factor of .8. It was a  
12 misapplication of that specific standard by  
13 the engineer. So it was a human performance  
14 issue.

15 In this case, as I clearly just  
16 articulated maybe a couple of minutes ago,  
17 there was a difference in a purchase order  
18 and a transmission plat. And the engineer  
19 recognized that because he specifically  
20 documented it within the features list, also  
21 documented the fact that the strength test  
22 that was going to be done in October of 2011  
23 was going to verify the integrity of the  
24 seem. So the engineer assessed all the  
25 information and made the best judgment from  
26 his perspective as is part of the process.  
27 That's why there's a difference between the  
28 two.

1           Q    It was still an error of judgment,  
2 but you view it as qualitatively different  
3 from the error that was made with respect to  
4 Segment 109?

5           A    Correct, because all the available  
6 information was assessed to reach that  
7 conclusion.

8           Q    Now, returning to Slide 9 in this  
9 engineering analysis QA. In the transcript  
10 of the September 6th hearing, Mr. Singh, you  
11 testified that this QA process used a  
12 sampling process and found an overall error  
13 rate -- and that's -- those words are words  
14 you used -- an overall error rate of  
15 0.9 percent. Do you recall that testimony?

16          A    I do. And in fact, it's also  
17 clearly written in the testimony that I filed  
18 as part of the PSEP updated filing.

19          Q    Okay. Good. I've read that. So  
20 I'm glad we're on the same page about that.

21          A    I'm glad you did.

22          Q    What was the -- what was the time  
23 period when the sampling was done? From what  
24 time to what time?

25          A    So the sampling was done as part of  
26 the weekly production process. And when I  
27 refer to production, I'm talking about the  
28 pipeline features list production. So the

1 sampling was done over a timeframe between  
2 December of 2011 all the way to the  
3 conclusion of the project sometime in early  
4 to mid 2013.

5 Q Did the sampling include the  
6 pressure restoration pipelines, that is Line  
7 101, 132a and Line 137?

8 A I don't recall offhand. There's  
9 more than 1400 pipeline features lists that  
10 was reviewed as part of that sampling  
11 process.

12 Q You're not able to say whether  
13 those pressure restoration lines and their  
14 many associated features were included in the  
15 sampling process for the engineering analysis  
16 QA?

17 A I don't have that number. I think  
18 the number to be exact that we looked at was  
19 1400 -- 1400. It's in the updated filing, so  
20 I don't recall every single features list of  
21 those 1400 lines. My memory is not that  
22 good.

23 Q In fact, based on that testimony  
24 the updated application testimony that you  
25 referred to, the total population samples --  
26 I'm sorry. The total population, not the  
27 sample. The total population was 12,309  
28 features. Would. You accept that subject to

1 check?

2 A That is actually correct.

3 Q And you sampled from that 1474  
4 features; is that right?

5 A That's stated in my PSEP updated  
6 filing.

7 Q And you said that the error rate  
8 was 0.9 percent. Let's understand what  
9 constituted as an error that counted in this  
10 0.9 percent. Is it correct that the only  
11 errors that counted were when the value for  
12 the feature was less conservative than  
13 correct value and that error caused the MAOP  
14 to be higher than the correct MAOP; is that  
15 right?

16 A I'm not sure I follow that exactly,  
17 but it's basically when -- we're talking  
18 about the PSEP updated filing. I think  
19 there's a separate proceeding for that. But  
20 it would be what's characterized as a Type 5  
21 error in that proceeding. And it's where the  
22 actual feature ends up being the limiting  
23 factor. So if there was a higher MAOP of the  
24 pipeline and we identified that through a  
25 error, the feature actually became a limiting  
26 factor, so it further lowered the MAOP of the  
27 entire line, then it would be a Type 5 error.  
28 And that's what the .9 percent alludes to.

1           Q    So I'm reading from your testimony.  
2    >Type 5 defect causes an incorrect feature  
3    >MAOP that is less conservative than the  
4    >correct feature MAOP and causes an incorrect  
5    >MAOP for the entire PFL that is greater than  
6    >the correct PFL MAOP."  Is that correct?

7           A    Basically it becomes a limiting  
8    >factor and governs the entire PFL.  That's  
9    >correct.

10          Q    And the reason I'm get to go this  
11    >is when this QA process was being used, it  
12    >was only looking for this particular type of  
13    >error, right?  What you call a Type 5 error;  
14    >correct?

15          A    That's incorrect.  So if you  
16    >actually look at wholistically the chapter  
17    >that I filed, there's five different types of  
18    >errors, 1 through 5, that are clearly  
19    >articulated in the testimony.  And.  There's  
20    >also subsequent workpapers that describe the  
21    >QA procedure that was used for each of the  
22    >respective types of errors.

23          Q    Okay.  All right.  So when you talk  
24    >about the 0.9 percent error rate, you're only  
25    >talking about one of the five categories of  
26    >errors, the Type 5 errors; right?

27          A    Yes.  That's what's considered  
28    >defective versus a defect.  It's a standard



1 nomenclature used by ASQ or American Society  
2 Quality.

3 Q And these errors were consequential  
4 errors; right?

5 A I would deem a product, in this  
6 case the PFL, to be defective versus a  
7 defect.

8 Q They're consequential errors in  
9 that they caused PG&E to overestimate the  
10 MAOP?

11 A That's correct. That's what that  
12 means.

13 Q So segments 109, 103.1, and 103.6  
14 would be examples of Type 5 errors; right?

15 A Well, so if you go back to the  
16 verified statement, there was for Segment --  
17 the segments you just referred to -- there  
18 were two issues that drove that. One was the  
19 difference in the specifications, and the  
20 other was the change in the interpretation of  
21 federal regulations as we know it as one  
22 class out.

23 Q But these -- these would be Type 5  
24 errors under PG&E's current interpretation?

25 A Under PG&E's current  
26 interpretation, correct.

27 Q So 0.9 percent of the sampled  
28 features had Type 5 errors. That ends up

1 when you're talking about a sample size of  
2 1474 about 13 or 14 errors; is that correct?

3 A That's about 13 or 14 PFLs,  
4 correct, if you do the math.

5 Q Now, you learned -- you learned  
6 about the results of this QA process at some  
7 time -- at some point. Do you remember  
8 roughly when?

9 A So as I articulated previously, the  
10 QA process -- and again, we're talking about  
11 quality assurance theory here; right? But  
12 the reason why we implemented quality  
13 assurance on a weekly basis is to ensure that  
14 the controls that we have for that process  
15 were effective. And that's exactly what we  
16 did.

17 There was a report out that was  
18 done on a weekly basis. So over time, these  
19 issues were identified. They were corrected  
20 for that respective features list. Any  
21 learnings that came out of that, similar to  
22 what I articulated before in terms of the  
23 discrepancy that happened with 109 -- a root  
24 cause analysis is done to identify what  
25 caused it and was there a breakdown in the  
26 process, was it a process issue, was it a  
27 human performance issue, was it an isolated  
28 issue.

1           Those are the types of things and  
2 discussions that took place on a weekly basis  
3 to continue to enhance and reenforce the  
4 controls for our process.

5           Q   All right. Now, so you sample, and  
6 in the sample you get 13 or 14 errors. For  
7 the whole population, would you expect to see  
8 the same error rate, 0.9 percent?

9           A   Well, I think it's clearly again  
10 stated in my updated filing. So if you  
11 actually look at the statistical theory here,  
12 based on the population and the error rate,  
13 there's 99 percent confidence that you would  
14 have a similar error rate plus or minus  
15 .6 percent, as clearly articulated in my  
16 testimony --

17          Q   Okay.

18          A   -- associated with what's not  
19 looked at.

20          Q   Okay. And you have to understand  
21 that testimony is not part of the record in  
22 this case.

23          A   I understand that, but you keep  
24 referring to the .9 percent, so I'm not sure  
25 how else to describe it in terms of the QA --

26          Q   Okay.

27          A   -- aspect because it's clearly  
28 spelled out in that testimony.

1           Q    Right.  So you talked about the  
2 confidence interval.  You're saying there's a  
3 99 percent confidence that the error rate  
4 would be using that interval you just talked  
5 about between 0.3 percent and 1.5 percent for  
6 the entire population; is that right?

7           A    That's correct.

8           Q    And if we do the arithmetic, then  
9 the errors in the entire population, if they  
10 were at the low end, 0.3 percent, that would  
11 be a total of 37 these Type 5.  Errors and at  
12 the high end, that would be 185 Type 5  
13 errors.  Is that -- is that -- does that  
14 sound right to you?

15          A    I'll take your word for it.  I'll  
16 have to do the math to validate that.

17          Q    So in other words, this QA process  
18 shows there's a 99 percent probability that  
19 there are Type 5 consequential errors ranging  
20 between 37 and 185 in the pipeline features  
21 list; is that right?

22          A    Well, again, I think we stated this  
23 previously as well, and I'll go again back to  
24 the September 6th hearings.  We've always  
25 stated that we have humans who are doing this  
26 work.  Any time we have that, you can't  
27 eliminate human error.  You can manage and  
28 control it.  That's one of the reasons why

1 the Commission never ordered us to rely on  
2 the records work only to establish the MAOP.  
3 That's the reason why we strength test  
4 because that truly is the safety validation.

5 Q But remember, PFL is used not just  
6 for validating MAOP, but it's also used for  
7 PSEP and integrity management and other  
8 purposes also; isn't that right?

9 WITNESS JOHNSON: A Well, I'll speak  
10 to PSEP. PSEP is either hydro testing pipe  
11 that previously hasn't been tested or  
12 replacing pipe. All it's being used for is  
13 prioritization of that work. Ultimately  
14 every piece of pipe is going to be pressure  
15 tested or replaced. So it's simply a  
16 prioritization mechanism on an interim basis  
17 as clearly articulated in the ALJ Decision.

18 Q Now, Mr. Singh, do you know what  
19 percent of the -- in the sample that was  
20 done -- the sample that yielded 0.9 percent  
21 Type 5 errors, do you know what percent had  
22 -- of the sample had Type 4 errors?

23 WITNESS SINGH: A I do not have that  
24 information here.

25 Q All right. I'd like to turn to a  
26 different topic. And I have a document.

27 ALJ BUSHEY: Do you want this marked  
28 for identification?

1 MR. LONG: Yes, please, your Honor.  
2 Thank you.

3 ALJ BUSHEY: We'll be off the record.  
4 (Off the record)

5 ALJ BUSHEY: We'll be back on the  
6 record.

7 The documents will be identified as  
8 OSC-5.

9 Mr. Long?

10 (Exhibit No. OSC-5 was marked for  
11 identification.)

12 MR. LONG: Thank you, your Honor.

13 Q Mr. Singh, I've been told that  
14 you're -- although there's not a name of a  
15 witness, that you are able to answer  
16 questions about this.

17 WITNESS SINGH: A Yep.

18 Q Okay.

19 A Depending on the question.

20 Q Pardon me?

21 A Depending on the question.

22 Q All right. Let's give it a go.

23 This data request asked about a topic that --  
24 relates to a topic known as the one-class-out  
25 issue. Would you agree with that?

26 A I agree with that.

27 Q Okay. And in -- in your errata  
28 document, there was mention of a study that

1 PG&E was doing to determine lines that had a  
2 higher MAOP if they -- if they were taking  
3 advantage of PG&E's prior interpretation of  
4 one class out as compared to the  
5 interpretation that PG&E has now come to of  
6 one class out. Is that your understanding?

7 A That's correct.

8 Q And so if you look at this  
9 attachment -- and that is the entirety of the  
10 attachment that came with the data request  
11 response. I apologize for the very small  
12 print. But this is the -- if we look -- look  
13 at Subpart b in Answer 8, this is the  
14 spreadsheet that PG&E provided that was  
15 available at the time of this response,  
16 October 8th, 2013, showing the pipeline  
17 segments that were affected by this change in  
18 interpretation; is that right?

19 A It's part of the spreadsheet that  
20 we've submitted to the Safety and Enforcement  
21 Division because we have requested an  
22 interpretation from the Safety and  
23 Enforcement Division that pertains to  
24 192.611. We submitted two letters, and this  
25 was at the request of the SED to provide this  
26 information.

27 Q And at the top -- very top, there's  
28 a total shown. That's 9.25 miles. Is that

1 what this -- all these segments sum to?

2 A That's correct. If you take the  
3 feature length, you add it all up, divide it  
4 by 5280, it would give you roughly  
5 9.25 miles.

6 Q Now, has there been ongoing work  
7 and has there been determination that there  
8 are additional segments that fall under this  
9 category of pipeline features not considered  
10 appropriate to operate one class out?

11 A I think the data response stated  
12 that we're continuing to do this work. This  
13 is the best information I have available to  
14 me. There very well could be additional work  
15 that the team is doing. We've stated that as  
16 part of our data response that this is a  
17 continuing effort. We're continuing to  
18 review all of our features list.

19 MR. LONG: All right. Could I have  
20 just a moment off the record to review, your  
21 Honor.

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

23 (Off the record)

24 ALJ BUSHEY: We'll be back on the  
25 record.

26 Mr. Long?

27 MR. LONG: Thank you, your Honor.

28 That's all the questions. I will move for



1 the admission of this data request response  
2 at the appropriate time.

3 ALJ BUSHEY: Okay.

4 Ms. Strottman?

5 MR. MEYERS: Your Honor, I will do the  
6 cross-examination.

7 ALJ BUSHEY: Okay.

8 CROSS-EXAMINATION

9 BY MR. MEYERS:

10 Q Good morning, your Honor.

11 Good morning, Mr. Singh. Good  
12 morning, Mr. Johnson.

13 WITNESS SINGH: A Good morning.

14 Q I'm going to try to ask you  
15 questions that's at a little higher or  
16 general level, not as specific as Mr. Long's  
17 been.

18 So this -- the reason we're here  
19 today is we're examining PG&E's records and  
20 the process by which Mr. PG&E looks at its  
21 records to validate various engineering  
22 assumptions relative to the operation of its  
23 pipelines. And with that preface, obviously  
24 when you know what's in the ground and you  
25 have accurate records for what's in the  
26 ground, that's one set of circumstances.

27 When you don't know what's in the  
28 ground, there's a thorough process that

1 you've outlined in your testimony whereby you  
2 obtain the information necessary to make your  
3 conclusions.

4 My question is simply this. What  
5 is the process that you use when you need to  
6 verify the accuracy of the information that  
7 you have concerning the pipe specifications?  
8 In other words, how is it that you can  
9 determine that your records are in fact  
10 accurate? If your records show that the pipe  
11 is of a certain size or dimension, what is  
12 the process that you've gone through to  
13 ensure that that is in fact a correct record?

14 WITNESS SINGH: A So we talked about  
15 this as well. The process that we use is  
16 when we excavate and have the opportunity to  
17 learn more information about our pipeline  
18 system, we obtain that, we validate our  
19 records as part of the MAOP validation  
20 project. We had excavations that we  
21 conducted as part of that to validate the  
22 information both in records as well as some  
23 of the conservative assumptions that we were  
24 making. So some of that was part of the  
25 excavation process that we've used.

26 And again, I'll reiterate that there  
27 is that is no way a substitute in any way  
28 shape or form for strength testing. And

1 that's why we use the strength testing to  
2 truly validate the safety of that respective  
3 component and the pipeline section.

4 Q Thank you very much for that. So I  
5 think the word of the day is prescient. We  
6 can't expect PG&E to be prescient and know  
7 that a record is inaccurate unless it does  
8 some sort of nondestructive examination of  
9 what's in the ground to verify the records  
10 that you've got. And your database is in  
11 fact in the ground.

12 A That's not what I -- that's not  
13 what I believe I said.

14 Q Okay. Go ahead and correct me,  
15 please.

16 A You interpreted that. We have  
17 records of varying source strength as I  
18 talked about. We have as-builts, and  
19 as-builts are really those records where our  
20 field engineers are redlining the actual  
21 as-installed condition of that respective  
22 pipeline. And that's what we relied on as  
23 part of our MAOP validation process.

24 To the extent we didn't have those  
25 as-builts, we relied on associated records.  
26 But not all records have the same source  
27 strength.

28 Q Are there instances where the

1 as-builts turned out to be inaccurate?

2 A I have to go back and -- and look  
3 at that information. I don't have that  
4 information offhand. That's the best  
5 available information that we have. And  
6 as-builts are a reliable source of records  
7 that not just us, but a lot of pipeline  
8 operators use to have a understanding of  
9 what's in the ground.

10 Q So my understanding is that PG&E  
11 did about a hundred nondestructive digs or  
12 examinations as part of your MAOP process.  
13 Is that accurate to your knowledge?

14 A I don't have the exact number in  
15 front of me. It seems about right. Maybe a  
16 little bit more, a little bit less. I don't  
17 have the exact number.

18 Q And out of the records reviewed  
19 from those nondestructive examinations, what  
20 percentage of the records reviewed were  
21 determined to be inaccurate?

22 A I don't have that information here  
23 in front of me. If the question is did we  
24 identify differences in regards to what's in  
25 the ground versus what was in the record,  
26 again, not every record is the same. There's  
27 different types of records. I think I've  
28 talked about that.

1           If your question is did we come  
2 across those situations, yes, we did. And  
3 again, that goes to the point that I  
4 reiterated earlier and at the onset when we  
5 started this project. It's impossible for us  
6 to know every inch of our system until we dig  
7 up every inch of our system. We're not  
8 different than any other operator, which is  
9 why we actually do a strength test.

10           Q   Thank you. I understand that. But  
11 the very reason that we're here today is  
12 because the records that you had for Line 147  
13 turned out to be wrong, and you relied upon  
14 the records. You filed your MAOP validation  
15 based upon those records, and those records  
16 turned out to be wrong.

17           So my question is simply this.  
18 Having learned from that process, what  
19 changes have you as the official at PG&E in  
20 charge of this process -- what changes have  
21 you made to your systems, your protocols,  
22 your procedures to ensure that you don't have  
23 another situation like we just had in San  
24 Carlos where you've got records that you  
25 believe to be accurate but turn out not to be  
26 accurate? Are you going to be -- well, I'll  
27 let you answer.

28           MR. MALKIN: Your Honor, I -- I object.

1 ALJ BUSHEY: It's on -- we went over  
2 that with Mr. Long.

3 MR. MEYERS: No, we didn't, your Honor.

4 ALJ BUSHEY: It's Slide 8.

5 MR. MEYERS: Slide 8 deals with -- I'm  
6 referring to the Exhibit OSC-4.

7 ALJ BUSHEY: Oh, you're right. It's  
8 Slide 9.

9 MR. MEYERS: Q The very first box is  
10 are the specifications unknown. In the case  
11 of Line 147, the specifications were known;  
12 correct, in your records?

13 WITNESS SINGH: A I'm sorry. They  
14 were known or -- please repeat the question?  
15 I didn't catch the last part. Did you say  
16 known or unknown on 147? ]

17 Q Are the specifications unknown?  
18 It's the very first box.

19 A I see that.

20 Q In OSC Exhibit No. 4.

21 A Right.

22 Q And I'm referring to page 9, which  
23 is the enhanced process.

24 A Right.

25 Q First box of the decision tree is  
26 are the specifications unknown, correct?

27 A Yes.

28 Q So with respect to Line 147 in San

1 Carlos -- I'm just using that as an example,  
2 we will not be litigating that -- you knew  
3 the specifications for that line. You had  
4 records that showed the specifications. Is  
5 that correct?

6 A No, that is incorrect. So for  
7 Segment 109 we did not know what the --

8 Q I'm sorry. 147. If I said 109, I  
9 apologize.

10 A Segment 109 for Line 147, we did  
11 not know the long seam associated with that  
12 respective segment, which as it would have  
13 come into this process, are specifications  
14 unknown? The answer was yes. Is the  
15 pipeline required? No. And we knew the  
16 outer diameter, installation year.

17 And that's the reason why in  
18 accordance with the approval from the CPUC  
19 order and directive we used conservative  
20 engineering assumptions. It was a  
21 misapplication of the assumption because our  
22 underlying procedure and standard clearly  
23 stated a joint efficiency factor of .8. And  
24 all that's laid out fairly well on Slide 7.

25 Q Well, let's assume for the purposes  
26 of this that you have high quality records.  
27 And I know that you've got gradations of  
28 quality of your records. I understand that.

1 But you've got high quality records that  
2 showed that a piece of pipe has  
3 characteristics that allow you as an engineer  
4 to validate the operating pressure of those  
5 pipes.

6 But let's assume also that those  
7 errors are in fact wrong, that what's in the  
8 ground is different than what those records  
9 show. I was using Line 147 as an example,  
10 but let's not use that. Let's just use a  
11 hypothetical.

12 What process do you go through to  
13 ensure that the record that you have in the  
14 ground, or the record that what you have in  
15 the ground is in fact accurate? You  
16 previously testified that you do exploratory  
17 digs, nondestructive testing. My question to  
18 you, sir, is, are you continuing to do those  
19 digs, those nondestructive testings?

20 WITNESS JOHNSON: Okay.

21 WITNESS SINGH: A As part of the  
22 pipeline safety work that we've been doing,  
23 at any time we excavate our pipeline system,  
24 we have the opportunity to learn more about  
25 the pipeline system to validate what's in the  
26 ground versus what's in the records. Every  
27 prudent operator should be doing that. And  
28 that's exactly what we do. Every time we



1 excavate, we have an opportunity to validate  
2 the underlying records database we have.

3 And the other piece that we do, we  
4 clearly articulated that, in accordance with  
5 the Commission order -- and not just because  
6 it's a Commission order, it's the right thing  
7 to do -- we're strength testing. We've  
8 stated that.

9 Q I recognize that. But there's a  
10 nuance in your answer that I'm troubled by,  
11 and that is, are you doing this excavation  
12 and verification of the accuracy of your  
13 records as an adjunct to other work that  
14 you're doing, or are you doing it simply as a  
15 matter of integrity management or for a  
16 matter of ensuring that your records are  
17 accurate? In other words, I can understand  
18 you doing this as a part of another process.  
19 Are you doing it specifically on a  
20 going-forward basis as a program to validate  
21 the information that you have?

22 A That's what the MAOP validation  
23 process was all about was to establish that  
24 baseline. And where we come across issues,  
25 and if there's a question in our mind of  
26 what's in the records database versus what's  
27 in the field, absolutely we'll dig it up.  
28 I'm not -- maybe I'm not understanding the

1 question.

2 Q I'll try it one more time and then  
3 we'll see whether we can move forward here.

4 Following the Order to Show Cause  
5 that's been issued in this case, has PG&E  
6 altered its process for validating the  
7 accuracy of the records of those pipelines  
8 that it has in the ground to ensure that the  
9 record corresponds to what's actually in the  
10 ground? Has that process changed as a result  
11 of this OSC?

12 A All the process changes that were  
13 made were made agnostic of and even prior to  
14 the OSC. And I think we talked about that,  
15 and in terms of the MAOP validation process,  
16 in terms of continuing to ensure that we  
17 obtain the information every time we do a dig  
18 to validate what's in our system and database  
19 and continuing to strength test where we  
20 don't have prior strength test records.

21 Q So it's your testimony that,  
22 notwithstanding these proceedings, that the  
23 process that PG&E has used to validate the  
24 accuracy of its records and to establish the  
25 Maximum Allowable Operating Pressure has not  
26 changed?

27 A I believe I've answered that  
28 question.

1 Q A simple yes or no would be easy.

2 MR. MALKIN: Asked and answered and  
3 argumentative.

4 MR. MEYERS: His answers, your Honor,  
5 are argumentative as well.

6 ALJ BUSHEY: Well, they're lengthy.  
7 They're lengthy. They are lengthy answers.  
8 But I think the answer is yes. And it may  
9 even be that they were prescient in doing all  
10 of this prior to the Commission issuing the  
11 OSC. Is that accurate?

12 WITNESS SINGH: That's exactly --

13 ALJ BUSHEY: Yes or no.

14 WITNESS SINGH: Yes.

15 ALJ BUSHEY: Good.

16 MR. MEYERS: Thank you. One second,  
17 your Honor.

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

19 (Off the record)

20 ALJ BUSHEY: Back on the record.

21 Mr. Meyers.

22 MR. MEYERS: Thank you. That's it.

23 ALJ BUSHEY: Thank you.

24 Ms. Strottman.

25 MS. STROTTMAN: Thank you.

26 CROSS-EXAMINATION

27 BY MS. STROTTMAN:

28 Q Good morning, Mr. Singh and Mr.

1 Johnson. Britt Strottman on behalf of the  
2 City of San Carlos.

3 Mr. Johnson, I'm going to refer you  
4 to your verified statement filed on August  
5 30th, 2013. I'm sorry. I'm not sure what  
6 exhibit.

7 WITNESS JOHNSON: A I've got the  
8 verified statement in front of me. So if you  
9 just -- whatever paragraph you're on.

10 Q Yeah. I'm looking at paragraph 35.

11 A 35. Okay.

12 Q And in paragraph 35 you discuss  
13 that your engineer had mistakenly assumed  
14 DSAW pipe. Do you see that? It's at the  
15 bottom of the last sentence on the right-hand  
16 side.

17 A You're referencing where it states:  
18 "Our MAOP validation document for this  
19 segment originally showed it as long seam as  
20 DSAW"?

21 Q Yes.

22 A Is that what you're referencing?

23 Q Yes.

24 A Okay.

25 Q So it says here, "We determined  
26 that our engineer had mistakenly assumed DSAW  
27 pipe when preparing the PFL in October of  
28 2011."

1           Do you know on what basis the  
2 engineer had made that assumption? Did you  
3 talk to that engineer?

4           A I did not personally talk to that  
5 engineer, but I think Mr. Singh just went  
6 over in great detail that it was human error  
7 and that there were discussions with that  
8 engineer in terms of applying the documents  
9 that we had in place at the time.

10          Q So you don't have any information  
11 on how the engineer came to that assumption?

12          A Well, I think we've tried to lay  
13 out in this document that he made a mistake.  
14 He did not apply the document correctly.

15          Q But you didn't have the discussion  
16 with him on how he came to that conclusion?

17          A How he came to the conclusion --

18          Q Yes.

19          A -- he made an error?

20          Q Yes.

21          A I think that was our conclusion  
22 that he made an error. I think the root  
23 cause analysis indicated he made an error.

24          Q No. I'm sorry. On what basis he  
25 thought he had made that assumption, on what  
26 basis. What information did he have where he  
27 sat down and said, this is DSAW pipe? Did  
28 you have any conversations with him about

1 that?

2 A I did not personally have any  
3 conversations with him about that.

4 Q Mr. Singh?

5 WITNESS SINGH: A I did not have a  
6 personal conversation with the engineer, but  
7 as part of the root cause analysis report  
8 that was done there were discussions that  
9 took place with the engineer is my  
10 understanding.

11 Q But you don't know on what basis  
12 the engineer came to that assumption?

13 A I do not specifically know the  
14 basis, the engineer, the conversation with  
15 the engineer as the team developed the root  
16 cause analysis. And it's clear in our  
17 conservative engineering assumptions  
18 procedure or what we call the PRUPF that if  
19 you apply that correctly and that's the only  
20 tool that our engineers were using to resolve  
21 those unknowns, that clearly was a oversight  
22 or a mistake of how it was applied.

23 Q Okay. Now I'm going to ask you  
24 another set of questions, and then I will be  
25 finished with my questions.

26 If you have another situation like  
27 San Carlos where you have the wrong record  
28 for what's in the ground which ultimately

1 results in the wrong MAOP, what is PG&E's  
2 plan to inform the CPUC of this type of  
3 discrepancy and municipalities of these types  
4 of errors?

5 WITNESS JOHNSON: A Well, in terms of  
6 informing the CPUC, I don't think we've  
7 actually got -- we haven't internally figured  
8 out exactly how we're going to do that, but  
9 we've made it clear that going forward we  
10 will notify the CPUC. I can't speak to the  
11 other entities you stated.

12 But I would like to correct I think  
13 your statement. It is not what establishes  
14 the MAOP. All the work we're talking about  
15 here is an interim safety measure. What  
16 establishes the MAOP ultimately will be a  
17 pressure test or replacement of the pipe.

18 Q That's fine. But accepting your  
19 answer, you do not know as of yet what PG&E's  
20 plan is if there's a similar almost exact  
21 situation to San Carlos to inform the CPUC of  
22 any discrepancies?

23 A I can't speak to how we're going to  
24 conduct that. Internally we are going to  
25 report. I can't tell you that we've laid out  
26 exactly how we're going to do it. We do an  
27 enormous amount of reporting to the  
28 Commission staff as we speak. We have

1 activities that happen and we have to report  
2 within two or four hours. We have quarterly  
3 reports. We have yearly reports. We have a  
4 whole listing of reports. And how we put it  
5 in place so we don't miss this again has not  
6 been determined.

7 Q And what about reporting these type  
8 of -- this exact type of situation to cities?  
9 Is that your same answer, that you don't have  
10 a plan?

11 A Yeah, I have not seen the plan for  
12 how we're going to report it to the cities.

13 WITNESS SINGH: A One item I would  
14 like to add to that is if you have reviewed  
15 the proposed decision that was issued by ALJ  
16 Bushey, it's clear specifically for that  
17 proceeding for 147 if we have that issue we  
18 have an obligation to report to the  
19 Commission within 30 days. And we plan to do  
20 that.

21 Q And you are aware of that  
22 obligation in the proposed decision?

23 A I think I just cited the proposed  
24 decision. I wouldn't be aware of it if I had  
25 not read it.

26 MS. STROTTMAN: Thank you. I have  
27 nothing further.

28 ALJ BUSHEY: Thank you. I just have a



1 couple of questions and ORA has several,  
2 right?

3 MS. PAULL: Yes.

4 ALJ BUSHEY: So I'm thinking I'll go  
5 and do my questions, and then we'll take our  
6 break, and then we'll go to ORA.

7 MS. PAULL: Sounds good.

8 EXAMINATION

9 BY ALJ BUSHEY:

10 Q All right. Two quick questions.  
11 As-built drawings are considered the highest  
12 quality record; is that correct?

13 WITNESS SINGH: That is correct.

14 Q Have you ever found an as-built  
15 drawing to be in error?

16 A I'm certain we've identified  
17 discrepancies between an as-built and what's  
18 in the ground. I don't specifically sitting  
19 here can recall how many times that was or  
20 where specifically in what vintage that was.

21 Q Okay. So they're not perfect?

22 A No. It's not perfect.

23 ALJ BUSHEY: Okay. Thank you.

24 We will take our morning break for  
25 the next 15 minutes, and we'll resume at 5  
26 minutes to 11 with ORA.

27 (Recess taken)

28 ALJ BUSHEY: We'll be back on the

1 record.

2 While we were off the record we  
3 identified exhibits. OSC-6 is PG&E's  
4 response to DRA's Data Request 096-06.

5 (Exhibit No. OSC-6 was marked for  
6 identification.)

7 ALJ BUSHEY: OSC-7 is PG&E's response  
8 to DRA's Data Request 86-26.

9 (Exhibit No. OSC-7 was marked for  
10 identification.)

11 ALJ BUSHEY: OSC-8 is the Testimony of  
12 Thomas Roberts Regarding Document Management  
13 Concerns Raised By Review of PG&E Documents  
14 at the November 19th, 2013 Workshop at PG&E's  
15 Walnut Creek Facility.

16 (Exhibit No. OSC-8 was marked for  
17 identification.)

18 ALJ BUSHEY: OSC-9 are the exhibits  
19 supporting the Roberts testimony. OSC-9 is  
20 currently labeled potentially confidential.  
21 We are waiting a determination from PG&E if  
22 there are any confidentiality concerns raised  
23 by the document in OSC-9.

24 (Exhibit No. OSC-9 was marked for  
25 identification.)

26 ALJ BUSHEY: So those documents  
27 identified, Ms. Paull, are you ready to  
28 begin?

1 MS. PAULL: Actually, I need to check  
2 with PG&E.

3 ALJ BUSHEY: We'll be off the record.  
4 (Off the record)

5 ALJ BUSHEY: We'll be back on the  
6 record.

7 Ms. Paull.

8 CROSS-EXAMINATION

9 BY MS. PAULL:

10 Q Good morning, Mr. Singh and Mr.  
11 Johnson. I have just a few questions for you  
12 about how PG&E determines the MAOP. After  
13 that Mr. Roberts will have some other  
14 questions for you. Mine should not take  
15 long. And mostly we have done discovery  
16 asking some questions about this. And the  
17 purpose of my cross is mostly to clarify the  
18 answers that are -- some of them are puzzling  
19 to us.

20 So to begin. So I'm going to be  
21 asking a few questions about 49 CFR Part  
22 192.619(a)(1).

23 WITNESS JOHNSON: A 619(a)(1).

24 Q (a)(1). About determining the  
25 MAOP. The first question is very simple.  
26 That section uses the term "design pressure."  
27 And I know in these hearings and testimony  
28 we've all also talked about the design MAOP.

1           They have the same meaning, do they  
2 not? In other words, when PG&E talks about  
3 design MAOP, are you referring to the design  
4 pressure? Does it mean the same thing as the  
5 design pressure under 619(a)(1)?

6           WITNESS SINGH: A No, it does not.  
7 It is not referring to (a)(1). The equation,  
8 which I mentioned earlier, if you're talking  
9 about a specific section of the code 192619  
10 (a)(1), the design MAOP versus the design  
11 pressure of how we use the design MAOP, it's  
12 not (a)(1). It's the Barlow's equation with  
13 the D rating factor that we alluded to  
14 earlier.

15           Q But that's pursuant to (a)(1), is  
16 it not, that you are calculating this design  
17 pressure?

18           A We're calculating the design  
19 pressure as a interim measure, as we  
20 discussed earlier today. And it's using that  
21 same equation which is again the Barlow's  
22 equation with the D rating factors.

23           Q Yes. I remember Mr. Long asking  
24 you some questions about this earlier. So we  
25 can move on.

26           Now, we -- ORA asked -- sent a  
27 discovery request asking you about the MAOP  
28 of Segment 167.2 of Line 101. And I've

1 distributed a copy of the data request about  
2 that and PG&E's response. And I believe  
3 that's been marked as OSC-7, Exhibit OSC-7.  
4 Do you have that in front of you?

5 WITNESS JOHNSON: A Question 26, is  
6 that the one you're referring to?

7 Q Yes. So if you could just have  
8 that in front of you. And we asked, if the  
9 MAOP was 433 psig based on a 1989 pressure  
10 test, then why was PG&E operating it with an  
11 MAOP of 396 psig per the PSEP database?

12 Can you look at the response,  
13 please, just read it to yourselves so that --  
14 towards the -- ]

15 Have you seen this response before?

16 A I have seen it before but  
17 I haven't -- I didn't put it to memory.

18 Q Okay.

19 A There's a lot of data responses --

20 Q Yes.

21 A -- that have been passed around.

22 Q There are.

23 And in the response, PG&E  
24 essentially said that for this segment, 433  
25 is the MAOP of test, 396 psig is the MAOP of  
26 design, correct?

27 A That's what we state, yeah.

28 Q And then PG&E also said that PG&E

1 uses the lowest of the MAOP of test, the MAOP  
2 of design, and the MAOP of record, correct,  
3 is that the response?

4 A I'm sorry. Where did you see that?

5 Okay, you're talking about the last  
6 line, last sentence where it's -- maybe  
7 I missed your starting point. PG&E uses  
8 the lowest value of MAOP of test, MAOP of  
9 design, and MAOP of record to establish  
10 the MAOP of the section of pipeline.

11 Q Yes.

12 A Is that what you referenced?

13 Q Yes.

14 A Okay, I see it.

15 Q And do you stand by this response?

16 A Yes.

17 Q Okay. What was the date of  
18 the response, please?

19 A The date sent looks like it's  
20 October 14, 2013.

21 Q Okay. Now we'd like to direct your  
22 attention to OSC-6, another data response  
23 from PG&E, data response to ORA's or DRA data  
24 response 96, Question 6.

25 And for the record, Mr. Malkin  
26 earlier confirmed that there's nothing  
27 confidential in the portion of the response  
28 included in this exhibit.

1           In this data request, ORA asked  
2 about the MAOP of Line 101. Line 101 is not  
3 one of the lines subject to a PUC pressure  
4 restoration decision, correct?

5           A    I -- yes.

6           Q    Okay. And we asked what is the  
7 MAOP of design and the MAOP based on  
8 hydrotest and so forth, and you responded to  
9 those questions. But if you would look at  
10 subsection F, part F of your response, of  
11 PG&E's response please, now here you say that  
12 the requirements of 49 CFR section 192.619(a)  
13 do not apply to pipelines designed before  
14 July 1, 1970, and whose MAOP is set under  
15 49 CFR section 192.619(c). Is that -- did I  
16 correctly restate the response?

17          A    I'm sorry. I was trying to read it  
18 at the time, but I think it's relatively  
19 accurate.

20          Q    Okay.

21          A    I think the wording is accurate.

22          Q    So it says essentially that 619(a)  
23 doesn't apply to pipelines designed before  
24 July 1, 1970 and whose MAOP is set under  
25 49 CFR 619(c).

26                619(c) is the grandfather -- is  
27 referred to as the grandfather clause, is it  
28 not?

1           A    I believe that's the one that's  
2 oftentimes referred to as the grandfather  
3 clause.

4           Q    So in this response, you're saying  
5 to establish the MAOP of Line 101, PG&E  
6 relies on the grandfather clause; is that  
7 correct?

8           A    No. I think what we're stating is  
9 that at least as we interpreted  
10 the questions, you cannot use 192.619(a) for  
11 a pipeline built prior to 1970 unless you  
12 have all the information necessary to utilize  
13 that section of the code. And we've been  
14 very clear that our records aren't perfect  
15 and we don't have all the information  
16 necessary to utilize that section of code, so  
17 you're required to go to subpart C.

18          Q    So you interpret the regulations to  
19 require -- to establish the MAOP. So let's  
20 say the Commission ordered PG&E to validate  
21 the MAOP of various lines including 101,  
22 right?

23          A    The Commission ordered as an  
24 interim safety measure --

25          Q    M-hmm.

26          A    -- the activity to validate and  
27 utilize the MAOP activity using conservative  
28 assumptions as an interim safety measure



1 until hydrotesting or until the pipeline is  
2 replaced. That is my understanding of what  
3 the Commission's previously ordered.

4 Q And to determine that MAOP pursuant  
5 to that order, did you rely on subsection (c)  
6 or subsection (a)?

7 A We relied on the Commission's order  
8 as an interim safety measure and then  
9 ultimately the MAOP is established based on  
10 a hydrotest or pressure -- or the pipeline  
11 being replaced, as I believe the Commission  
12 ordered.

13 Q So your response says the  
14 requirements on pressure restrictions in this  
15 section do not apply?

16 A I'm sorry. Where are you at now in  
17 this part you're reading to me?

18 Q Let me -- I'm going to rephrase  
19 this.

20 You say that the Commission  
21 decision -- I'm looking at the bottom of page  
22 2.

23 A Bottom of page 2 of --

24 Q Of the same exhibit we're talking  
25 about, OSC-6.

26 A Okay.

27 Q Almost at the bottom of the page.  
28 You say the Commission Decision 11-06-017 did

1 not order utilities to retroactively apply  
2 49 CFR section 619(a) because all pipelines  
3 were new and designed after 1970.

4 A That's correct.

5 Q But we're talking about -- okay.  
6 But you, PG&E chose to establish an MAOP that  
7 is lower than the test MAOP, correct?

8 A Well, I'm a little unclear of what  
9 you're referencing here. So you talked at  
10 one point about a segment of Line 101 and now  
11 you're talking about the pipeline which is  
12 multiple segments of Line 101, so I'm not  
13 clear what your question is referring to.

14 Q Is it --

15 A We requested -- what we requested  
16 for as an MAOP of 330 pounds for Line 147 and  
17 previously we asked for a pressure of  
18 365 pounds on Line 101.

19 Q Okay. I think we've gone as far as  
20 we can go on this line of questions, so I'm  
21 going to move on.

22 Except for one thing.

23 Can you tell us, please, what is  
24 the date of the data response, OSC-6 for  
25 the record?

26 ALJ BUSHEY: OSC-6 is in the record.  
27 We don't need the witness to read the date on  
28 it to us.

1 MS. PAULL: All right.

2 Q I have just one more question. Has  
3 PG&E requested interpretation of any section  
4 of 49 CFR part 192 from the Pipeline  
5 Hazardous Materials Safety Administration,  
6 PHMSA since October 2012?

7 WITNESS SINGH: A I can't recall that  
8 we have. We have requested interpretation  
9 from the Safety and Enforcement Division for  
10 section of the code, but I do not recall any  
11 official filing we made to the PHMSA, subject  
12 to check.

13 Q I was not asking about the Safety  
14 and Enforcement Division. I was asking  
15 specifically about PHMSA.

16 We have a data response from PG&E  
17 responding that it has not requested any  
18 interpretation from PHMSA since October 2012  
19 of part 192. Is that true as far as you  
20 know?

21 A As far as my understanding goes,  
22 yes.

23 Q Mr. Johnson?

24 WITNESS JOHNSON: A As far as I know,  
25 that's correct.

26 Q And you want to replace  
27 Segment 167.2 of Line 101 in order to be able  
28 to operate all of Line 101 at an MAOP of

1 365 psig?

2 A I'm sorry. Where are you  
3 referencing that now?

4 Q Well, it's a different data request  
5 and I was hoping not to have to distribute  
6 it.

7 A What segment was it again that  
8 you're referring to?

9 Q Well, Segment 167.2 of Line 101 is  
10 one that PG&E has spoken about replacing.

11 A There is a section of Line 101 we  
12 have spoken about replacing. I can't verify  
13 that's the exact segment number without  
14 seeing it, but it's up towards Lomita Park,  
15 if that's the one you're referencing.

16 Q It is.

17 A Okay.

18 Q And the reason PG&E wants to  
19 replace that, can you tell us please?

20 A To the best of my knowledge is so  
21 that we can make that line piggable all the  
22 way from Milpitas to roughly Lomita Park.

23 Q And does that segment have a lower  
24 MAOP than the rest of Line 101, is it  
25 the limiting -- the segment that --

26 A I believe it does have a lower MAOP  
27 at that point. There's regulation I believe  
28 upstream of that segment.

1 MS. PAULL: Okay. Thank you.

2 Thank you for responding to my  
3 questions. Those are my questions for now.  
4 Mr. Roberts will have some questions.

5 And maybe this would be a good time  
6 to go off the record so we can distribute  
7 the exhibits he wants to use.

8 ALJ BUSHEY: All right. We'll be off  
9 the record.

10 (Off the record)

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

13 We have previously marked Exhibit  
14 OSC-8, testimony of Thomas Roberts; and  
15 OSC-9, the exhibits supporting that  
16 testimony.

17 And for the record, Ms. Bone,  
18 I understand you wish to move these into the  
19 record, is that correct?

20 MS. BONE: Yes, your Honor.

21 ALJ BUSHEY: Mr. Malkin, I understand  
22 you oppose that.

23 MR. MALKIN: We do, your Honor. And  
24 the reason is just what is stated in  
25 the testimony itself that the first sentence  
26 on page 1: The purpose of my testimony is to  
27 amend the record with regard to a workshop  
28 led by PG&E on November 19, and to draw

1 attention to concerns I have regarding PG&E's  
2 pipeline mapping, recordkeeping, and document  
3 control systems based on a review of  
4 documents related to Line 147.

5 So Mr. Roberts made statements on  
6 the record in the Line 147 hearing that's now  
7 closed and the purpose of this testimony is  
8 to amend it.

9 He goes on and answered a question  
10 3 to further elaborate:

11 This testimony documents my  
12 perceptions based exclusively on  
13 the documents provided by PG&E in  
14 Exhibits A and B supporting its  
15 October 2013 Safety Certification  
16 for Line 147, and other documents  
17 related to Line 147 reviewed at  
18 the November 19, 2013 workshop.

19 To the extent that ORA and  
20 Mr. Roberts had comments on Line 147  
21 documents, and these all go to the hydrotest  
22 related documents, and based on Mr. Roberts'  
23 experience in fields other than pipelines, he  
24 would like to see those records organized  
25 differently and amend his statements in the  
26 Line 147 proceeding.

27 As your Honor said at the beginning  
28 of today, the record on that is closed.

1 This -- there's no basis here for  
2 extrapolating anything. This is Mr. Roberts'  
3 observations on a set of documents that he  
4 commented on previously on Line 147, so it's  
5 irrelevant at this point.

6 ALJ BUSHEY: Okay. So, relevance.

7 Ms. Bone.

8 MS. BONE: Yes, your Honor.

9 As Mr. Roberts' describes in answer  
10 to question No. 2, the overarching conclusion  
11 of his testimony is that the drawings that he  
12 observed at PG&E's offices at the workshop do  
13 not represent a modern drawing or document  
14 control system, and he recommends that  
15 the CPUC review PG&E's overall pipeline  
16 mapping and recordkeeping and document  
17 systems for traceability, verifiability,  
18 completeness, robustness, and accuracy. And  
19 the bulk of Mr. Roberts' testimony focuses on  
20 those maps that he reviewed. And he admits  
21 that only saw the maps for Line 147, but he's  
22 concerned that these are indicative of what  
23 is throughout PG&E's system.

24 Mr. Roberts' testimony was intended  
25 to address the issue raised in the OSC about  
26 whether or not PG&E's records are reliable  
27 and can be relied upon in order to not stay  
28 the Commission's MAOP decision with regard to

1 the other lines and to also draw attention to  
2 this matter as a systemwide problem that at  
3 least the Commission should be looking at  
4 because it's very concerning that an engineer  
5 cannot look at PG&E's records and sort out  
6 what's going on with those maps without  
7 a guided tour by PG&E.

8 And the hope is that ultimately  
9 the CPUC's engineers, including Mr. Roberts  
10 and the engineers from SED and Energy  
11 Division are able to use these systems  
12 independently to verify PG&E's compliance  
13 with applicable safety regulations.

14 So what we'd like to hear from PG&E  
15 today is, you know, a response to  
16 Mr. Roberts' testimony. We'd be happy to  
17 hear their thoughts on it if they have  
18 reviewed it and to understand is this just an  
19 interim thing that we're looking at or is  
20 this the ultimate, final product of what PG&E  
21 is doing in terms of records management.

22 So I'm prepared to ask questions  
23 based on that. And we believe that  
24 Mr. Roberts' testimony and the exhibits  
25 supporting it are an adequate foundation for  
26 those questions.

27 ALJ BUSHEY: Thank you, Ms. Bone.

28 I'm going to grant your request to



1 have OSC-8 and OSC-9 received into the record  
2 with the following limitations: This  
3 information may not be used to address issues  
4 related to the Line 147 pressure restoration  
5 but only may be used in what we're calling  
6 the substantive OSC on the continuing  
7 reliability of PG&E's recordkeeping.

8 (Exhibit Nos. OSC-8 and OSC-9 were  
9 received into evidence.)

10 ALJ BUSHEY: To the extent PG&E wants  
11 to respond, they can do so in the briefs. To  
12 the extent they need to make factual  
13 assertions, they can do so with their  
14 provided declarations attached to their  
15 briefs.

16 Mr. Roberts, are you ready for your  
17 cross-examination?

18 MR. ROBERTS: Yes, your Honor.

19 ALJ BUSHEY: Okay, please begin.

20 CROSS-EXAMINATION

21 BY MR. ROBERTS:

22 Q Hopefully -- good morning,  
23 gentlemen. I'm Tom Roberts. I'm with the  
24 Office of Ratepayer Advocates.

25 Hopefully at the top of your stack  
26 is a data response marked SED-5, Question 13  
27 Attachment 1. Do you have that in front of  
28 you?

1 WITNESS JOHNSON: A SED-5.

2 WITNESS SINGH: A SED-5, Question 13,  
3 right.

4 Q Attachment 1?

5 A Yes, attachment 1.

6 Q If you could please turn to page 6  
7 of that exhibit. Let me know when you are  
8 there, please.

9 A Is it titled Results on the top  
10 right-hand corner?

11 Q Correct.

12 A Okay, I'm there.

13 Q This document shows a map of PG&E's  
14 transmission system. Is it correct that the  
15 red lines in this map indicate pipelines that  
16 would require reduction in maximum allowable  
17 operating pressure, or MAOP, because of  
18 PG&E's revised interpretation of code section  
19 192.611?

20 WITNESS JOHNSON: A I believe we have  
21 a problem. We have a black-and-white copy.

22 MR. ROBERTS: Would it work if I had  
23 them look at a color copy?

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 Mr. Roberts.

1           MR. ROBERTS:  Q  Yes.  So now if  
2  I could ask again, do the red lines on  
3  the map indicate pipelines that require  
4  a reduction in MAOP because of PG&E's revised  
5  interpretation of code section 192.611?

6           WITNESS SINGH:  A  That was  
7  the objective of the discussion we had with  
8  SED as a part of the revised interpretation,  
9  conservative interpretation of one class out,  
10 what would be the impact to the system with  
11 the request that SED made back in March of  
12 this year.  And this was a follow-up meeting  
13 to talk about that.

14          Q  So is it -- was your answer yes  
15 that this does, the red lines do show where  
16 these impacts occur?

17          A  Yeah.  These red lines show  
18 pressure limiting stations to pressure  
19 limiting stations.

20          Q  And the impact in this case is that  
21 an MAOP -- that the MAOP would have to be  
22 reduced based on the revised interpretation  
23 of 192.619, is that the impact that's  
24 referred to in this presentation?

25          A  The impact that's referred to here  
26 is if the MAOP was reduced as a result of  
27 the conservative interpretation, what would  
28 be the impact to our system.

1 Q Okay, thank you.

2 Now looking at the table on  
3 the same page, it looks like what's stated  
4 that the miles impacted is 10.3 miles; is  
5 that correct?

6 A That's correct.

7 Q Is that specific features that are  
8 impacted, the miles of specific features that  
9 are impacted?

10 A That's correct at the time  
11 the presentation was put together.

12 Q Okay. And then below that is the  
13 number of impacted system miles which is  
14 a significantly larger number. Is that  
15 because if the MAOP of a feature is impacted  
16 then the entire pipeline that that's  
17 associated with is also affected?

18 MR. MALKIN: Your Honor, I'm going to  
19 object on relevance grounds.

20 ALJ BUSHEY: Yeah. Mr. Roberts, what  
21 does this have to do with recordkeeping?

22 MR. ROBERTS: It goes to interpretation  
23 of code section 611 and its impacts.

24 MR. MALKIN: That code interpretation  
25 impacted certain specific segments of  
26 Line 147 and 101, and those are among  
27 the five lines that we're supposed to be here  
28 talking about. These questions are going

1 systemwide, way beyond 147, 101, and any of  
2 the other pressure restoration lines.

3 ALJ BUSHEY: Right. And I understand  
4 this issue is being pursued through SED --

5 MR. MALKIN: Right.

6 ALJ BUSHEY: -- in other arenas.

7 MR. ROBERTS: May I have a moment  
8 off the record?

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

10 (Off the record)

11 ALJ BUSHEY: Back on the record.

12 MS. PAULL: Presumably PG&E's  
13 interpretation of 611 is applied to its  
14 entire system. PG&E has relied heavily on  
15 its interpretation of 611 to explain its  
16 actions and decisions in this proceeding, so  
17 it's clearly a relevant issue. That is, it's  
18 pertinent to the lines that were the subject  
19 of the Commission's pressure restoration  
20 decisions and probably to other lines in  
21 PG&E's system.

22 ALJ BUSHEY: I don't think PG&E is  
23 saying that this issue doesn't exist and that  
24 it would not potentially have some impact on  
25 the various lines that we're reviewing, but  
26 the OSC doesn't say anything about this.  
27 The OSC is focusing on recordkeeping errors  
28 and this is not recordkeeping. It's

1 regulatory compliance at best. So I'm not  
2 seeing how this addresses the issue before us  
3 in the OSC.

4 MS. PAULL: Well, the Commission is  
5 considering whether it needs to revise  
6 the MAOP of these lines.

7 ALJ BUSHEY: Not for this reason and  
8 not in this OSC. But it's being considered  
9 elsewhere, but not here.

10 MR. ROBERTS: Your Honor, at least for  
11 Line 101, application of or interpretation of  
12 611 is directly relevant. If what you're  
13 stating is that the overall scope of 611  
14 impact is not within the scope of this  
15 hearing, I thought it was. So if that's an  
16 incorrect assumption, is that going to be  
17 handled in a different venue at a later time?

18 ALJ BUSHEY: Right. Right.

19 MR. ROBERTS: Okay.

20 ALJ BUSHEY: I understand SED is  
21 pursuing this and there are discussions and  
22 presumably some sort of resolution will come  
23 forward in the appropriate procedural venue,  
24 but that's not what we're talking about here.

25 And it was -- this was one of  
26 the issues they identified in the document  
27 that they filed as a reason for the delay in  
28 getting the information about the erroneous

1 records to us. But the purpose of the OSC is  
2 to focus on the erroneous records, not to  
3 resolve the one-class-out rule.

4 MS. PAULL: But your Honor, isn't  
5 the overall purpose whether to determine with  
6 the Commission needs to -- what the correct  
7 MAOP should be for those lines and whether it  
8 has to be modified?

9 ALJ BUSHEY: Based on -- the OSC was  
10 clear. The question is given  
11 the recordkeeping deficiencies that were  
12 identified in Line 147, should the Commission  
13 suspend the other pressure restoration orders  
14 that it issued on the same basis? That's  
15 the question. I don't think 611 has --

16 MS. PAULL: Right, but -- I'm sorry.

17 ALJ BUSHEY: I don't think 611 has  
18 anything to do with that and certainly hasn't  
19 been teed up as an issue in the OSC.

20 It may be that the resolution of  
21 the 611 issue may have impacts on those lines  
22 quite apart from the pressure restoration  
23 orders, but we're talking about the pressure  
24 restoration orders.

25 MS. PAULL: Well, your Honor,  
26 I respectfully disagree. PG&E has placed its  
27 interpretation of 611 squarely at issue in  
28 this OSC proceeding.

1 ALJ BUSHEY: How?

2 MR. ROBERTS: I can -- for Line 101,  
3 the verified statements and the data provided  
4 by PG&E does not mention that there was  
5 an incorrect interpretation of a pipe  
6 specification. The reason that they were  
7 seeking reduced MAOP for Line 101 was because  
8 of the revised interpretation of 611. So to  
9 the degree they've asked for a reduced MAOP  
10 for that line, that to my knowledge is not  
11 a function of any changed pipeline  
12 specifications but is solely attributable to  
13 a new interpretation of section 192.611.

14 ALJ BUSHEY: But that's Line 101.

15 MR. ROBERTS: Correct.

16 ALJ BUSHEY: We have one -- we have  
17 a repressurization of 147 that's dealt with.  
18 The OSC is focusing on recordkeeping errors  
19 and whether the recordkeeping errors so  
20 undermine our faith in their ability to run  
21 the system that we should suspend the other  
22 pressure restoration orders that the  
23 Commission has issued. ]

24 MS. PAULL: Why have we had extensive  
25 testimony by PG&E and explanations on their  
26 interpretation of 611.

27 ALJ BUSHEY: Because that was the --  
28 that was their explanation of why it took



1       them so long to get the information to us.

2               MS. PAULL:   And they're also relying on  
3       it for -- to determine the correct MAOP of  
4       various lines.   So the order to show cause,  
5       yes, talked about -- asked whether PG&E's  
6       records can be relied upon, but the records  
7       include information about class location.  
8       And the MAOP has to be determined in  
9       accordance with federal law, which includes  
10      611.   So it's material how PG&E is  
11      interpreting the applicable federal  
12      regulations.

13              ALJ BUSHEY:   There's no doubt that that  
14      is material, and it is being addressed  
15      elsewhere.   611 has a lot of applications, as  
16      this map shows, throughout the system.   So  
17      that issue is being addressed.

18              MS. PAULL:   Where is that being  
19      addressed?

20              ALJ BUSHEY:   Right now there are  
21      discussions with SED and PG&E.

22              MS. PAULL:   But on the record where is  
23      it going to be addressed?

24              ALJ BUSHEY:   They haven't figured out  
25      how they're going to deal with it yet.  
26      That's my understanding.

27              MS. PAULL:   Well, where can the issue  
28      be addressed on the record?   Will that be in

1 the rulemaking? I mean, it has to be  
2 addressed on the record at some point, I'm  
3 sure you agree.

4 ALJ BUSHEY: Right. The best guess I  
5 would say right now would be in rule  
6 revisions to General Order 112. That's  
7 probably where it will turn up, whether it be  
8 some sort of advice letter filing or -- I  
9 don't know. It depends on what they decide  
10 to do, how they decide to handle it.

11 MS. PAULL: Well, if the Commission  
12 suspends the pressure restoration Decisions  
13 and has to determine what the MAOP Decision  
14 should be of Line 101, won't it have to  
15 consider --

16 ALJ BUSHEY: That could be one way that  
17 it could come up, yes.

18 MS. PAULL: Well, don't you want the  
19 record developed on this issue now? And  
20 we're prepared to develop it.

21 ALJ BUSHEY: I think all the parties  
22 need to know what the issues are before --  
23 before we litigate something. And right now  
24 the only issue we're litigating is whether  
25 the pressure restoration order should be  
26 suspended because the records are so  
27 unreliable. That's the question. And if  
28 they are suspended and we want to -- and PG&E

1     opts to attempt to have them -- to obtain  
2     Commission authorization to repressurize the  
3     lines, then they will have to make a  
4     demonstration.

5             MS. PAULL:   So what's the part of all  
6     the testimony that PG&E put in about  
7     interpretation of 611?

8             ALJ BUSHEY:   It's just an explanation  
9     of what took them so long.

10            Mr. Malkin, do you have anything to  
11     add to this?

12            MR. MALKIN:   No, you're exactly right,  
13     your Honor.   That was irrelevant.   When the  
14     initial discrepancy on Line 147 was  
15     discovered, it did not impact the MAOP  
16     because the interpretation that PG&E was  
17     using at that time of Section 192.611.   When  
18     that interpretation changed, it changed the  
19     MAOP.

20            I don't think any party is arguing  
21     that PG&E should not have used as  
22     conservative interpretation that it is now  
23     using, which would be the only impact that it  
24     would have.   And it would be an impact that  
25     would say the prior MAOP was just fine.

26            ALJ BUSHEY:   Okay.   So logically --

27            MR. ROBERTS:   So if I can ask a  
28     question, your Honor?   So at the outcome of

1 this proceeding and the process that follows  
2 it, will there be a decision on what the  
3 right pressure of Line 101 should be? Will  
4 that be something the Commission decides as a  
5 result of this?

6 ALJ BUSHEY: Line 101?

7 MR. ROBERTS: Yes.

8 ALJ BUSHEY: The Commission has already  
9 ruled on that, on Line 101.

10 MS. PAULL: Your Honor, you're  
11 referring to the 2011 pressure restoration  
12 Decisions?

13 ALJ BUSHEY: Yes.

14 MR. ROBERTS: But they've requested a  
15 lower MAOP for Line 101.

16 ALJ BUSHEY: They're operating at a  
17 lower pressure.

18 MR. ROBERTS: Correct.

19 ALJ BUSHEY: So you don't want them to  
20 do that?

21 MR. ROBERTS: No, I -- in the -- I  
22 guess I was envisioning it was parallel to  
23 how 147 was treated in that their evidence to  
24 support the MAOP was discussed in an  
25 evidentiary setting and issues were  
26 discussed.

27 With 101, the requested MAOP relies  
28 on an interpretation of 611, which we haven't

1 had a chance -- we have issued lots of  
2 discovery on it, but we haven't had a chance  
3 to discuss it in this evidentiary setting.  
4 And it does directly relate to what the right  
5 MAOP should be for that line.

6 ALJ BUSHEY: But Mr. Malkin just told  
7 us is that they're using the most -- the  
8 lower of the two possible interpretations of  
9 611. So is it your position that they should  
10 be using the higher one?

11 MR. ROBERTS: No, that's not correct.

12 ALJ BUSHEY: Okay. So you agree with  
13 their interpretation?

14 MR. ROBERTS: Can I have a moment off  
15 the record?

16 ALJ BUSHEY: Well, actually, let me --  
17 it's not -- it's not relevant at this moment  
18 whether you agree or disagree with 611 --  
19 their interpretation of 611 because we're not  
20 going to decide that today.

21 The only thing that we're focusing  
22 on is their recordkeeping errors and whether  
23 everything else should be suspended because  
24 of lack of reliability of the records. So I  
25 don't know how 611 has anything to do with  
26 that.

27 MS. BONE: So your Honor, just a point  
28 of clarification. I think that the

1 Commission has been under the impression that  
2 even when PG&E wants to lower the MAOP from a  
3 Commission approved MAOP like Line 147, they  
4 are expected to have a modified Decision  
5 approving that. So are we not going to have  
6 -- we have -- we're moving towards that with  
7 regard to Line 147. Are we not also going to  
8 move towards that with regards to Line 101?

9 ALJ BUSHEY: Why would we do that? Is  
10 there a request for that to happen?

11 MS. BONE: Well, for the same reasons  
12 that the Commission found that it was  
13 inappropriate for -- for PG&E to not come  
14 forward sooner regarding lowering 147.

15 ALJ BUSHEY: But 101 doesn't have  
16 errors. 101 is a different case. It's a  
17 changed regulatory interpretation; right?

18 MR. MALKIN: That is correct.

19 ALJ BUSHEY: So it's a different  
20 premise, and we all know about it.

21 MS. PAULL: Well, your Honor, I recall  
22 Chief Judge Clopton saying at the first  
23 hearing on these orders to show cause that if  
24 PG&E had learned that the MAOP was  
25 incorrectly calculated and needed to be lower  
26 than what they had requested previously, they  
27 needed to file a petition for modification.

28 So in our minds, these orders to

1 show cause opened up -- so if Line 101 -- if  
2 the MAOP of Line 101 needs to be changed  
3 because of interpretation of 611 or maybe  
4 because they realized they were incorrectly  
5 interpreting 611 -- the record has yet to be  
6 developed -- that -- that puts the Commission  
7 in the same position of having to decide do  
8 we suspend -- does -- do we suspend that 2011  
9 order and determine what the MAOP should be  
10 correctly calculated MAOP of that line.

11 PG&E should not be -- there should  
12 be the Commission Decision in effect, as  
13 Chief Judge Clopton's point was as I  
14 understood -- it if it -- if the Commission  
15 Decision set the wrong MAOP, that Decision  
16 needs to be changed. And if to set the right  
17 MAOP we need to reach conclusions about the  
18 application of 611, then surely you want a  
19 record developed on that issue.

20 ALJ BUSHEY: Way too many steps there.  
21 The sole issue here is whether or not the  
22 other Decision should be suspended. It's not  
23 what if anything should be put in place if  
24 they are suspended. It's whether they should  
25 be suspended.

26 If it's your position -- DRA's  
27 position that because of the changed  
28 interpretation of Section 192.611 that Line

1 101 pressure restoration order should be  
2 suspended, then you're free to -- that's a  
3 legal argument that you're free to make in  
4 your brief. And if you believe that there  
5 should be a petition for modification because  
6 of the way they're operating the line, then  
7 you could file a motion in this docket or  
8 even file a complaint against PG&E.

9 MS. PAULL: But as Chief Judge Clopton  
10 said, it's PG&E's burden to go to the  
11 Commission and ask for the pressure  
12 restoration order to be modified if PG&E  
13 discovers that it's -- it asked for the wrong  
14 MAOP in 2011. That's PG&E's burden.

15 ALJ BUSHEY: Okay. What does that have  
16 to do with cross-examination of these  
17 witnesses?

18 MS. PAULL: Well, if they -- if -- if  
19 PG&E is saying that it is now requesting a  
20 lower MAOP because of its interpretation of  
21 611 through discovery, we have -- and looking  
22 at the testimony of PG&E witnesses, we can  
23 see this may have systemwide impact. And we  
24 were going to explore that issue a little bit  
25 of how -- what could be the impact on this  
26 line and other lines of this interpretation  
27 and what it suggests for -- well, the impact  
28 on the -- on the MAOP of this line and other



1 lines. It seems -- it seems --

2 ALJ BUSHEY: It's most certainly an  
3 issue that needs to be addressed by the  
4 Commission, but it's not teed up as an issue  
5 within the scope of this order to show cause.  
6 So when that issue comes up, you should bring  
7 all this information forward and present it  
8 to the Commission.

9 MS. PAULL: And we would request, your  
10 Honor, if you could at some point maybe after  
11 the hearing clarify how, where that issue is  
12 going to be addressed by the Commission.

13 ALJ BUSHEY: I just -- there are  
14 several procedural opportunities that are at  
15 DRA's disposal to bring the issue forward  
16 immediately if you're dissatisfied with the  
17 face of SED's review of the matter.

18 MS. PAULL: Well, we don't know --  
19 whatever SED's review of the matter is off  
20 the record, and we have no information about  
21 it, your Honor.

22 ALJ BUSHEY: I suggest you go ask them,  
23 and if you're dissatisfied, file something on  
24 the record to bring the issue forward on the  
25 record before the Commission.

26 MS. PAULL: We've not been able -- we  
27 have actually tried to communicate informally  
28 with SED, and --

1 ALJ BUSHEY: Well, that's an  
2 interdivisional issue that I'm sure --

3 MS. PAULL: But asking them it's not  
4 the answer because, first of all, it's by no  
5 means certain that we can get the  
6 information. And second of all, it's not on  
7 the record.

8 ALJ BUSHEY: All right. Well, you're  
9 going to have to have your division arrive at  
10 a position on the existing process, which is  
11 an informal one led by SED. If you find that  
12 you are dissatisfied by that process, there  
13 are several procedural opportunities at your  
14 disposal to bring those issues forward to the  
15 Commission.

16 MS. PAULL: So you're saying the burden  
17 is on -- on ORA to raise the issue?

18 ALJ BUSHEY: If you're dissatisfied  
19 with the way it's being handled, yes.

20 MR. ROBERTS: So your Honor, I just  
21 want to make sure I understand correctly. I  
22 do understand that systemwide impacts of  
23 interpretation of 611 are not to be  
24 discussed --

25 ALJ BUSHEY: They're not within the  
26 scope of today's hearing.

27 MR. ROBERTS: Are impacts of 611  
28 specifically relative to Line 101 also not on

1 the scope of the hearing today?

2 ALJ BUSHEY: Does that specifically  
3 have to do with recordkeeping errors?

4 MR. ROBERTS: I don't think so.

5 ALJ BUSHEY: Okay. Then I think you've  
6 answered your own question.

7 MR. ROBERTS: Okay. Then all of the  
8 exhibits that we just handed out -- we might  
9 want to be off the record.

10 ALJ BUSHEY: I'm sorry? Do you want to  
11 go off the record?

12 MR. ROBERTS: Can we go off the record?

13 ALJ BUSHEY: Off the record.

14 (Off the record)

15 ALJ BUSHEY: We'll be back on the  
16 record.

17 While we were off the record, we set  
18 the dates for briefing. Opening briefs will  
19 be due on January 17th. It will be limited  
20 to 25 pages. Reply briefs will be due on  
21 January 31st, 2014, and will be limited to 10  
22 pages.

23 We'll be off the record.

24 (Off the record)

25 ALJ BUSHEY: We'll be back on the  
26 record.

27 While we were off the record, we  
28 determined that we had not moved Exhibit 5,

1 6, and 7 into the record, and they will be  
2 received into the evidentiary record.

3 We'll be off the record.

4 (Exhibit No. OSC-5 was received into  
5 evidence.)

6 (Exhibit No. OSC-6 was received into  
7 evidence.)

8 (Exhibit No. OSC-7 was received into  
9 evidence.)

10 (Off the record)

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

13 Mr. Malkin reminds me that OSC-4 has  
14 not been formally accepted into the record  
15 and we will do so now. OSC-4 received on  
16 September 6th will be received into the  
17 evidentiary record today. Thank you.

18 We'll be off the record.

19 (Exhibit No. OSC-4 was received into  
20 evidence.)

21 (Off the record)

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

24 Mr. Roberts?

25 MR. ROBERTS: Yes.

26 Q Can you please look at the first  
27 exhibit which is DRA-87, Question-4?

28 WITNESS JOHNSON: A Okay.

1           Q    I believe Ms. Paull already asked  
2 some questions about this, but I just wanted  
3 to ask was this segment part of the original  
4 PSEP application to be replaced?

5           A    When you refer to this segment,  
6 you're talking about Segment 167.2?

7           Q    Correct.

8           A    No, I don't believe -- I don't  
9 believe that's in PSEP.

10          Q    And was it added during the update,  
11 to your knowledge?

12          A    To the PSEP update? I am not aware  
13 that it was added to the PSEP update.

14          Q    Okay. Thank you.

15                    We won't need that one in the  
16 record, your Honor.

17                    If you could now turn to DRA 87,  
18 Question 8? Do you recall that the MAOP of  
19 Line 101 was prior to the San Bruno  
20 explosion?

21          A    My recollection of the MAOP of Line  
22 101 or at least segments of it were 4 hundred  
23 psig.

24          Q    And do you know if that MAOP  
25 changed in the decade that preceded the San  
26 Bruno explosion?

27                    MR. MALKIN: Objection, relevance.

28                    ALJ BUSHEY: Where are we going with

1 this, Mr. Roberts?

2 MR. ROBERTS: About the pressure  
3 history of this line.

4 ALJ BUSHEY: The Line 101?

5 MR. ROBERTS: Correct.

6 ALJ BUSHEY: For what purpose? We're  
7 talking about records discrepancies.

8 MR. ROBERTS: Well, what I'd like to do  
9 is talk about the record of the pressure on  
10 this pipeline, which seems relevant to the  
11 restoration of the pressure on it. I -- I  
12 don't know that my questions go into a  
13 records error, but the questions are  
14 themselves rather short.

15 ALJ BUSHEY: Is there something  
16 interesting here that --

17 MR. ROBERTS: Well, I -- I think so. I  
18 think the question is this pipeline out  
19 pressure according to this data request  
20 response of over 400, and I'm trying to  
21 understand that what that means relative to  
22 PG&E's operation of that line.

23 ALJ BUSHEY: All right. The witnesses  
24 will answer the question.

25 MR. ROBERTS: Q So the last question I  
26 asked was whether the MAOP had changed from  
27 the 400 you previously stated during the  
28 decade that preceded San Bruno?

1           WITNESS JOHNSON:  A  I don't recall a  
2 change.

3           Q  Okay.

4           A  I mean, we're talking -- in this  
5 particular case, you're talking about  
6 Milpitas Terminal; right?  So the very  
7 beginning of Line 101?

8           Q  Correct.

9           A  Okay.  I don't recall there being a  
10 pressure change at Milpitas Terminal on Line  
11 101.

12          Q  Okay.  And so this data request  
13 response does state that the pressure was  
14 402.2 psig in 2003 for this line; is that  
15 correct?

16          A  Well, it states at Milpitas it was  
17 measured at 402.2 psig on the date given on  
18 this data request.

19          Q  Okay.  Are there any federal  
20 requirements with regard to reporting the  
21 pressure on a line if the MAOP of a line is  
22 exceeded?

23          MR. MALKIN:  Objection, relevance.

24          ALJ BUSHEY:  I would have to sustain  
25 him on that one.  What does that --

26          MR. ROBERTS:  I'm -- I'm trying to  
27 understand if exceeding the MAOP is  
28 significant with regard to federal standards.

1 ALJ BUSHEY: And what does that have to  
2 do with recordkeeping? And I think there's  
3 -- there's a 10 percent --

4 WITNESS JOHNSON: 10 percent guidance.

5 MS. PAULL: There's a regulatory  
6 requirement to report, and they have to have  
7 records and keep the information.

8 ALJ BUSHEY: Right. But they have a  
9 10 percent -- 10 percent --

10 WITNESS JOHNSON: Band, if you will.

11 ALJ BUSHEY: -- band if you will.

12 MS. PAULL: Well, it would be good to  
13 get clarified on the record.

14 ALJ BUSHEY: It's in the federal  
15 regulations. We don't need to --

16 MR. ROBERTS: I'd like to understand  
17 that, your Honor, because my understanding is  
18 there is a 10 percent limit in setting  
19 pressure limits on the pressure regulator.  
20 What I don't understand is if there's a  
21 reporting requirement if the MAOP is exceeded  
22 at all because Section 619 of the Code says  
23 you shall operate it below the MAOP. And I  
24 don't know of a Federal Code Section that  
25 says whether they need to report and if that  
26 reporting requirement is less -- is  
27 triggered --

28 ALJ BUSHEY: The reporting requirement



1 is in 112.

2 MR. MALKIN: It's 10 percent.

3 WITNESS JOHNSON: 112 and other  
4 sections of the CFR 49 has the reporting  
5 requirement.

6 MR. MALKIN: It's in the code.

7 MR. ROBERTS: And then I have one more  
8 question on this.

9 ALJ BUSHEY: Okay.

10 MR. ROBERTS: Q Are there similarly  
11 any California requirements if the pressure  
12 is exceeded?

13 WITNESS JOHNSON: A You can go to 112.  
14 It lays out very clearly what the reporting  
15 requirements for California, and then CFR 49  
16 lays out the reporting requirements for  
17 federal.

18 MR. ROBERTS: Thank you. This does not  
19 need to be an exhibit.

20 ALJ BUSHEY: Okay.

21 MR. ROBERTS: Q Next we're going to  
22 turn to TURN's Data Request 34, Question 7,  
23 Attachment 1, the second to the last page if  
24 you can find that.

25 WITNESS JOHNSON: Which one is that?

26 WITNESS SINGH: It's TURN 34, Question  
27 7, Attachment 1.

28 WITNESS JOHNSON: Okay. Question 7.

1           MR. ROBERTS:  Q  I'm looking at a chart  
2  entitled Mlpts-Ter L101 Press.  If you can  
3  let me know when you're there?

4           WITNESS JOHNSON:  A  So it's the --  
5  which one is it now?

6           Q  Second to the last chart.

7           A  Second to the last.  Okay.

8           Q  It just has a blue line -- or a  
9  single line.

10          MR. MALKIN:  Last page of the exhibit  
11  we have.

12          WITNESS JOHNSON:  The last page of this  
13  one?

14          MR. ROBERTS:  Q  There should be a more  
15  simplified chart.

16          WITNESS JOHNSON:  A  That's the last  
17  page.

18          WITNESS SINGH:  A  That's the last  
19  page.

20          Q  So looking at the chart with just a  
21  single trace, is it the pressure for the  
22  Milpitas Terminal?

23          WITNESS JOHNSON:  A  It's whatever you  
24  requested.  I haven't read through the --

25          Q  I guess based on the title, it  
26  appears the Mlpts means Milpitas Terminal,  
27  but I'm just trying to make sure that's a  
28  correct assumption.

1           A    I would assume that's the case.  
2 Milpitas Terminal for Line 101, so that's the  
3 beginning of Line 101.

4           Q    And this shows that for a period of  
5 time towards the end of 2012 into March  
6 of 2013, the pressure was around 350 psig; is  
7 that correct?

8           A    That -- that appears to be the  
9 case.

10          Q    Now, what I wasn't sure of is does  
11 this plot apply to the pressure history that  
12 Segment 167.2 would have seen?

13          A    No.

14          Q    Okay. And then if I understand  
15 correctly the other page, the more  
16 complicated page may -- may provide that. So  
17 if looking at the legend at the top of this,  
18 does one of these traces apply to Segment  
19 167.2?

20          A    I would have to go back and look at  
21 the maps explicitly, but Lomita Park is -- is  
22 the regulator station that is just down  
23 stream of that segment that you're referring  
24 to.

25          Q    Okay.

26          A    But again, I'd have to go back and  
27 look at the drawings and make sure that I  
28 understand what it was that was requested.

1           MR. ROBERTS: Your Honor, I think we  
2 would like this one to go into the record.

3           ALJ BUSHEY: For what purpose?

4           MR. ROBERTS: To be marked?

5           ALJ BUSHEY: Mr. Roberts, what purpose  
6 does this have that relates to recordkeeping  
7 errors?

8           MR. ROBERTS: This relates more to the  
9 previous question of what you do when the  
10 pressure exceeds an MAOP. And this one isn't  
11 as important now that we've established what  
12 we just talked about. There's a separate  
13 exhibit which has a clear trace for Lomita  
14 Park, which I think is more important to be  
15 on the record. But -- and that's next.

16           ALJ BUSHEY: Okay. I'm -- it seems to  
17 me like you're building an evidentiary case  
18 for a violation of MAOP exceeding reporting  
19 requirements. ]

20                   And it may be a fine case that  
21 you're building, but that's not the issue in  
22 this proceeding.

23           MR. ROBERTS: Okay.

24           ALJ BUSHEY: So is that where you're  
25 going?

26           MR. ROBERTS: I guess that's a fair  
27 characterization of what I was trying to  
28 understand --

1 ALJ BUSHEY: Okay.

2 MR. ROBERTS: -- through these cross  
3 questions.

4 ALJ BUSHEY: And do you have the Lomita  
5 Park exceedance one?

6 MR. ROBERTS: Yes. That's the next  
7 trace.

8 ALJ BUSHEY: Okay. Lets's look at that  
9 and see if by any chance the witnesses are  
10 familiar with this exceedance and have done  
11 something about it. Which one is it?

12 MR. ROBERTS: That is DR ED 005,  
13 Question 7.

14 ALJ BUSHEY: Okay.

15 MR. ROBERTS: Q And so here we have a  
16 single trace that I interpret as being the  
17 pressure at Lomita Park which does apply to  
18 Segment 167.2 during a time period starting  
19 sometime it looks like in December and  
20 extending out towards March 30th of 2013. Is  
21 that a fair characterization of this?

22 WITNESS JOHNSON: A It's the pressure  
23 at Lomita Park, which probably relatively  
24 closely represents as close as possible for  
25 that segment, but it won't be identical by  
26 any means.

27 Q Do we know systematically if the  
28 pressure that 167.2 saw would be higher or

1 here than this history?

2 A It could be.

3 Q But I mean do we know which way it  
4 goes?

5 A No. If you can't -- we don't  
6 measure that explicit segment. So you  
7 wouldn't know.

8 Q But for example, if it were  
9 downstream of a pressure regulator, you would  
10 expect it to be less if that pressure  
11 regulator was set?

12 A Good portion of the time, yes.

13 Q Well, given that this is the -- we  
14 asked for a pressure history of segment --  
15 no. I'm sorry. It doesn't state that.

16 What this chart does show is some  
17 cases where the pressure at this point of the  
18 system exceeded 330 psig and in at least one  
19 case it exceeded 350 psi. And that  
20 exceedance appears to be in February of 2013  
21 if I understand correctly.

22 So my question is, by February of  
23 2013 the issue on Line 147 had happened.  
24 That had initiated a discussion about  
25 interpretation of 611, and PG&E at some time  
26 possibly in this timeframe or not determined  
27 that the MAOP of the line should be 330.

28 So I guess my first question is, do

1 you know if the determination that the  
2 pressure of 101 as limited by Segment 167.2  
3 should have been 330 psi within this time  
4 window or after?

5 WITNESS JOHNSON: A I don't recall the  
6 exact timing of that, of when we came to that  
7 conclusion for that segment of Line 101.

8 Q So hypothetically if that decision  
9 were made in January of 2013, then at some  
10 level PG&E would have known that that new  
11 MAOP had been exceeded.

12 And I'm curious if that -- I guess  
13 this goes back to a previous question. Does  
14 that trigger any reporting to the state or to  
15 the federal PHMSA?

16 A If hypothetically we reduced the  
17 MAOP of any pipeline and we lower the  
18 pressure in that pipeline at that point in  
19 time, I don't believe it requires any  
20 reporting to my knowledge of lowering the  
21 pressure of the pipeline.

22 MR. ROBERTS: Okay. We would like this  
23 marked as an exhibit, your Honor.

24 ALJ BUSHEY: Why? For what purpose?  
25 What fact is relevant to the determination of  
26 recordkeeping errors? Maybe I should -- Mr.  
27 Malkin.

28 MR. MALKIN: Object on relevance

1 grounds.

2 MS. PAULL: It's pretty important to --  
3 if there's evidence that the MAOP had to be  
4 reduced, the pressure history can be an  
5 indication, putting aside reporting  
6 requirements, the pressure history seems like  
7 a very important question whether the MAOP,  
8 the revised MAOP was exceeded and if so when.

9 ALJ BUSHEY: To recordkeeping errors?  
10 You know, as I explained to Mr. Roberts, he  
11 seems to be putting together a case that they  
12 violated their MAOP and didn't report it.  
13 But that's not -- that's not what we're here  
14 to litigate. And if anything --

15 MS. PAULL: Well, PG&E has requested a  
16 lower MAOP.

17 ALJ BUSHEY: They seem to be operating  
18 at it, you know, so.

19 MR. ROBERTS: Except that that trace  
20 shows that at least --

21 ALJ BUSHEY: Historically at times they  
22 weren't, but the more recent stuff shows that  
23 they're operating at it. And if you want to  
24 pursue litigation about this as a violation,  
25 that's fine. But that's not what we're here  
26 to litigate today.

27 So Mr. Malkin's objection is  
28 sustained. Let's move on to the next



1 questions.

2 MR. ROBERTS: So questions about the  
3 class location changes specific to 101 are  
4 not in the scope of this hearing; is that  
5 correct?

6 ALJ BUSHEY: Are they based on -- if  
7 there's something to do about document  
8 errors.

9 MR. ROBERTS: No.

10 ALJ BUSHEY: Then no, that's not  
11 relevant to what we're doing today.

12 MR. ROBERTS: Q Then if you could  
13 please turn to SED-1, Question 2, Attachment  
14 3.

15 WITNESS JOHNSON: A SED-1, Question 2,  
16 Attachment 3. I don't -- Question 1, SED-1,  
17 Question 2?

18 Q Correct.

19 A Attachment 3?

20 Q Yes.

21 A All I have is this.

22 Q There should be a back page to that  
23 with a chart.

24 WITNESS SINGH: A Is that it?

25 Q Yes.

26 WITNESS JOHNSON: He's got it. We'll  
27 share it.

28 Q And if I could also -- I believe

1 Mr. Long asked for you to have the October  
2 16th filing available. I have a question  
3 relative to Attachment A to that filing.

4 A Did you want to cover this first,  
5 or are we going to another one?

6 Q It kind of goes in parallel. So  
7 you'd want to have both.

8 A Okay. Which one was it again?

9 Q Your October 16 filing, Attachment  
10 A.

11 A My verified statement?

12 Q It's part of the filing. I don't  
13 think it's actually your verified statement.

14 MS. PAULL: It's the attachment to the  
15 safety location.

16 MR. MALKIN: That's the Line 147  
17 recertification filing?

18 MR. ROBERTS: That's correct.

19 WITNESS JOHNSON: A I don't know that  
20 we have that up here. Mr. Long gave us a  
21 binder with a lot of stuff in it. I don't  
22 know if it's in here or not.

23 Q Okay. I can maybe ask the question  
24 without it being there.

25 That safety certification included  
26 the results of a centerline survey. Are you  
27 familiar with that?

28 A I'm familiar with the project. I'm

1 not familiar with the document. I don't know  
2 that I'm familiar with the document you're  
3 referring to.

4 MR. ROBERTS: Can someone provide the  
5 witness with a copy of that if they have it?

6 ALJ BUSHEY: Well, Mr. Roberts, I'm  
7 sure it's a voluminous document with --

8 MR. ROBERTS: No. It's very short.  
9 That's one of the points is that it's very  
10 concise.

11 MR. MALKIN: That relates specifically  
12 to Line 147 recertification.

13 ALJ BUSHEY: Right. What is the  
14 relevance of this, Mr. Roberts?

15 MR. ROBERTS: It's relative -- okay.  
16 I'm sorry. That is specific to 147.

17 ALJ BUSHEY: So are we not pursuing  
18 this line of cross?

19 MR. ROBERTS: Well, actually, I do have  
20 a question that even if he doesn't have it I  
21 can start here.

22 ALJ BUSHEY: Okay.

23 MR. ROBERTS: Q Does the centerline  
24 survey as provided in that filing relate only  
25 to Line 147 or was it an excerpt from a  
26 larger study?

27 WITNESS JOHNSON: A The centerline  
28 survey work that PG&E is doing we're doing

1 for all 6750 miles of our gas transmission  
2 system.

3 Q In this October filing the  
4 conclusion or the results as stated talk  
5 about the location of vegetation and  
6 structures adjacent to the pipeline. And  
7 what I -- it looks like those are the only  
8 two results provided at that time. Is that  
9 correct with your understanding?

10 A Well, you've got the document in  
11 front of you. So whatever is provided is  
12 provided.

13 Q Then I guess if you can turn to the  
14 exhibit and specifically the chart on the  
15 back. This chart does mention a centerline  
16 survey. Is that the same survey of which you  
17 took results from in the October 16th filing?

18 A Well, if you're using the term  
19 "centerline survey," I'm not sure what you're  
20 exactly referring to, but centerline survey  
21 is the effort we have ongoing to locate the  
22 pipeline for all 6750 miles. So.

23 Q Well, actually, that is a question  
24 to you. Is the centerline survey that's  
25 mentioned in the October 16th filing the same  
26 as the study that's referenced here?

27 A Well, I think what we mentioned in  
28 the filing was Line 147, correct? That's

1 what you're referring to?

2 Q Yes.

3 A So that's the information relevant  
4 to Line 147.

5 Q From the same survey?

6 A Well, I don't know if you call it  
7 the same. We're surveying. We've got  
8 multiple survey parties surveying 6750 miles  
9 of pipeline. So it's the same project I  
10 would call it.

11 Q Okay. So what this slide shows is  
12 that a majority of the -- step back once.

13 This slide appears to be showing  
14 the location of pipelines as observed in that  
15 survey relative to data in your records  
16 relative to their location. Is that a  
17 correct interpretation?

18 WITNESS SINGH: A The chart is  
19 showing -- you're talking about this graph,  
20 the bar graph?

21 Q Yes.

22 A Yeah. The paragraph is showing the  
23 results obtained from the pipeline centerline  
24 survey as it pertains -- comparing it to the  
25 existing centerline information that was in  
26 our GIS. And that's one of the reasons why  
27 we did the survey. And SED has been aware of  
28 this project for several months ever since

1 the onset of the project.

2 Q Okay. So if, for a value of zero,  
3 that means that this survey found that a  
4 pipeline was exactly where the GIS system  
5 said it would be?

6 WITNESS JOHNSON: A I'm sorry. Where  
7 are you seeing a value of zero?

8 Q The left-most column starts at zero  
9 feet. The bar represents 0 to 10 feet.

10 A Okay.

11 Q So even though we don't have that  
12 resolution, if we had a separate bar for zero  
13 that would represent a pipeline whose  
14 location per the survey was the same as was  
15 in the current GIS; is that correct?

16 A Yeah. I think the intent of the  
17 bar is to say how close was it. And so  
18 for -- of the 2169 miles that were done at  
19 the time of this print, it looks like -- I  
20 mean the print is pretty small -- 63.3  
21 percent was between 0 and 10 feet.

22 Q Okay.

23 WITNESS SINGH: A That is a  
24 apples-to-oranges comparison because as part  
25 of the work that we are doing with the  
26 pipeline centerline effort we're using the  
27 commercially available technology which is  
28 down to centimeter accuracy.

1           WITNESS JOHNSON:  A  I think what we're  
2 trying to say is keep in mind what's in GIS  
3 from 1949.  GIS didn't exist in 1949, right.  
4 So you couldn't pot -- it's --

5           WITNESS SINGH:  The technology we're  
6 using --

7           WITNESS JOHNSON:  A  The technology  
8 didn't exist.  So you can't compare and the  
9 say they're different because it didn't  
10 exist.

11          Q  Well, you're saying in this chart  
12 that you're comparing to data in the GIS  
13 system.  So does the GIS system --

14          A  The GIS system had estimates of  
15 where we thought the pipe was based on a GIS  
16 longitude and latitude that was based on  
17 original drawings from the '30s, '40s and  
18 '50s.  So it was estimated using, if you  
19 will, techniques that were available back  
20 then.  There were no GIS coordinates that we  
21 have today available to us available back  
22 then.

23          Q  But in reality, you have documents  
24 that say where a pipeline is.  And when you  
25 go to do work on that pipeline you refer to  
26 those documents to know where to dig,  
27 excavate and do work?

28          A  No.  No.  When you dig on a

1 pipeline, you locate the pipeline and then  
2 you dig. You do not count on a GIS  
3 coordinate.

4 Q Do you design a project before you  
5 excavate?

6 A No. You pot hole.

7 Q I'm sorry?

8 A You pot hole. If you are replacing  
9 a pipeline or building a new pipeline you go  
10 out and survey and locate where that pipeline  
11 is going to go, and then you pot hole to make  
12 sure you know what's in the ground, and then  
13 you lay it out accordingly.

14 Q So if you had a valve automation  
15 process that required excavation, you have to  
16 do the potting and the survey before you  
17 could generate design drawings?

18 A No, not for a valve automation. I  
19 know where the valve is because I can  
20 physically see it.

21 Q If it's aboveground?

22 A Even if it's below ground I can  
23 still see it.

24 Q So let me rephrase that.

25 If you knew you had to replace a  
26 pipe feature that was inhibiting your ability  
27 to do, say, ILI and that was completely  
28 underground, before you could do the design



1 drawings to replace that part you would have  
2 to do a field survey to make sure?

3 A You do a field survey as part of  
4 pipeline work. You always, the first thing  
5 you always do before you get into any sort of  
6 final design is to actually physically locate  
7 the pipeline.

8 Q Okay. So looking again at this  
9 chart, what I was going to ask about is, even  
10 though a majority of the pipeline appears to  
11 be within 10 feet of where the GIS system  
12 said, there's approximately 12 percent of the  
13 pipeline that's 50 feet or more away from  
14 where GIS said it was.

15 So is it incorrect to infer that  
16 this slide shows that over 10 percent of  
17 PG&E's location data in the current GIS  
18 system is off by 50 feet or more?

19 A I would say the estimate that we  
20 used in the GIS system is off by the numbers  
21 you see there at the point where we did 29 --  
22 1269 miles.

23 Q And then as we move to -- my  
24 understanding is you're migrating to a new  
25 GIS system that's referred to as an eGIS  
26 system?

27 A Correct.

28 Q Will that more accurately capture

1 where the pipeline in the ground is?

2 A Well, the centerline survey will  
3 accurately capture where the pipeline is.  
4 The purpose of the centerline survey is to  
5 make sure we know, as Mr. Singh pointed out,  
6 with very good data now exactly where that  
7 pipeline is based on the technology available  
8 to us today.

9 Q So let me see if I understand this  
10 correctly then. Using modern technology you  
11 will locate the pipes through the centerline  
12 study and that information will go into the  
13 new eGIS system?

14 A Correct.

15 MR. ROBERTS: Okay. We would like to  
16 have this marked as an exhibit, your Honor.

17 MR. MALKIN: Object, irrelevant.

18 ALJ BUSHEY: How is this relevant to  
19 recordkeeping errors? All of these are very  
20 interesting topics.

21 MR. ROBERTS: I think this one does  
22 because this chart certainly does show that  
23 over 10 percent of their pipelines as  
24 surveyed in this study are 50 feet or more  
25 from the location in the GIS system.

26 ALJ BUSHEY: And that would be an  
27 interesting statement if they hadn't just  
28 said the opposite. So they've just testified

1 exactly what this is and what it shows and  
2 the limited usefulness of it to make that  
3 conclusion.

4 MR. ROBERTS: So is your --

5 ALJ BUSHEY: I think it's an  
6 interesting topic, and they seem to be hard  
7 at work on it.

8 MS. PAULL: So this is material  
9 testimony, and they discuss this exhibit, and  
10 these are GIS -- these are records about  
11 where the pipes are located.

12 ALJ BUSHEY: This is their new system  
13 that they're making.

14 MS. PAULL: So that testimony can come  
15 into the record, but it came about -- it was  
16 a clarification or new information about  
17 putting into context the information, the  
18 record they currently have on where their  
19 pipes are located. That's recordkeeping.  
20 That's pipeline recordkeeping. I don't see  
21 how much closer you can get than that.

22 MR. MALKIN: There's nothing to relate  
23 any of this to the pressure restoration  
24 lines. It was an interesting discussion of  
25 the work that's going on, and I probably  
26 should have objected sooner, but I thought  
27 there might be -- might be going somewhere  
28 that was linked to what we were talking

1 about.

2 MS. PAULL: We were told that the focus  
3 of this hearing at the moment is pipeline  
4 records and --

5 ALJ BUSHEY: And not the accuracy of  
6 transferring what they have into this new GIS  
7 system. They did a very good job of  
8 explaining exactly what this is and why we  
9 can't draw that conclusion.

10 MS. PAULL: Your Honor, PG&E provided  
11 the results of the centerline survey in  
12 support of Mr. Johnson's safety  
13 certification.

14 ALJ BUSHEY: For Line 147?

15 MS. PAULL: For Line 147.

16 ALJ BUSHEY: Right. That's done.  
17 We're talking about --

18 MS. PAULL: So clearly they believe  
19 that that's material to the safe operation of  
20 the line and the establishment of the correct  
21 MAOP or they wouldn't have put it in their  
22 support for Mr. Johnson's safety  
23 certification.

24 ALJ BUSHEY: Absolutely. And now they  
25 have just testified how this is going to  
26 improve the accuracy of their records.

27 MR. ROBERTS: In the future sometime.

28 MS. PAULL: I think that the objection

1 on relevance has absolutely no merit, your  
2 Honor.

3 ALJ BUSHEY: Well, thank you for that  
4 input. The GIS system is just -- and what  
5 they're doing here, and I am particularly  
6 concerned about the conclusion that you're  
7 drawing from the table when the witnesses  
8 have just testified to the exact opposite.

9 For that reason, because this  
10 information may be mischaracterized, I'm  
11 going to sustain Mr. Malkin's objection and  
12 not allow this into the record.

13 So let's go on. Mr. Roberts, do you  
14 have any more cross-examination?

15 MR. ROBERTS: Yes. One more. Oh.

16 Q I have one follow-up question on  
17 this topic, and that is, what GIS system are  
18 you currently using to do your daily  
19 operations relative to gas pipelines? Are  
20 you using the eGIS?

21 WITNESS JOHNSON: A When you say  
22 "daily operations," what are you referring to  
23 exactly?

24 Q If you needed to either show an  
25 engineer where a pipe feature was or have  
26 somebody do work in the field that required  
27 looking at a drawing or a computer terminal  
28 that located a particular feature.

1           A    Well, I don't know that -- you're  
2 going to use the pipeline features list if  
3 you're actually looking at things like  
4 hydrostatic testing and other things like  
5 that. As I stated earlier, if you're going  
6 to physically go out and do work, the first  
7 thing you do is mark the pipeline. You do  
8 not count on where somebody thinks something  
9 might be on a system that dates back 50 years  
10 when you have the ability to actually know  
11 exactly where it is and then you pot hole and  
12 you go to work.

13                If you're laying out new drawings,  
14 you're using an entirely new system to lay  
15 out where you're going to go whether it's in  
16 the middle of street or a field. So.

17           ALJ BUSHEY: Thank you. And that topic  
18 was litigated to a fare thee well in the PSEP  
19 proceeding.

20                So Mr. Roberts, further questions?

21           MR. ROBERTS: Yes.

22           Q    I think we should just have one  
23 left, which is DRA 86, Question 7. If you  
24 can turn to page 2. The second paragraph  
25 talks about a study that was performed  
26 between 2011 and 2013.

27           WITNESS JOHNSON: A So you're talking  
28 about the second paragraph under Answer 7,

1 Section A?

2 Q Correct.

3 A Okay.

4 Q Looking at the numbers here, I  
5 realize it might take a minute to do a little  
6 math, but it looks like there were 153 pipe  
7 specifications that were the subject of the  
8 study and that 30 of those were found to have  
9 an error, which is approximately 20 percent;  
10 is that correct?

11 A I don't know that that's correct.

12 WITNESS SINGH: A What it states is --

13 WITNESS JOHNSON: A We found  
14 differences.

15 WITNESS SINGH: A Right.

16 Q So --

17 WITNESS JOHNSON: A I believe this was  
18 the -- I'll let Mr. Singh answer because he  
19 actually ran the study, but, or his team did.  
20 But I believe these are the validation digs  
21 we did to exactly verify what was in the  
22 ground.

23 WITNESS SINGH: Right.

24 WITNESS JOHNSON: A So the purpose of  
25 the dig was to verify something.

26 WITNESS SINGH: A This was part of the  
27 MAOP project, which I believe I alluded to  
28 earlier, that we included and performed

1 excavations as part of that project for  
2 exactly these types of reasons, to identify  
3 where we were making conservative  
4 assumptions, where it was appropriate for the  
5 respective locations, where we were using the  
6 specific records were those appropriate.

7 I don't see that the term "error."  
8 Maybe you can point to which specific section  
9 that you were referencing. What it does  
10 state is that we found differences. So those  
11 differences could be that the records were  
12 more conservative, or those differences could  
13 be that the field results were more  
14 conservative. So would not necessarily  
15 characterize them as error. I would  
16 characterize them as differences.

17 Q So I guess what I'm hearing is that  
18 if you find a difference between what's in  
19 your records and what you see in the field,  
20 you don't agree that that's an error in the  
21 recordkeeping system?

22 A It goes back to the definition of  
23 error. And I think we had a discussion with  
24 Mr. Long in terms of how we defined error.  
25 It has a very prescriptive definition as part  
26 of this process, which was really if it was  
27 defective or not, and defective really being  
28 did the specifications that were identified



1 in the field end up lowering the MAOP of the  
2 entire line. So that's the way we're  
3 defining error in this particular context.

4 Q Okay. So following up on that  
5 then, the paragraph concludes by saying that  
6 two of the specification differences required  
7 a reduction in the pipe section's MAOP. Is  
8 it correct then to say that those two would  
9 constitute a error of the records on those  
10 pipes?

11 A In the way I just described the  
12 context that's -- that's what we were trying  
13 to find as part of these excavations, that  
14 are there differences and do those result in  
15 impacting the MAOP? And this was part of the  
16 MAOP validation process absolutely.

17 Q Okay. Now, this paragraph says  
18 that the study was performed between 2011 and  
19 2013. And obviously this many excavations  
20 took a significant amount of time to perform.

21 Do you know generally, did you do  
22 this field verification after you had  
23 compiled the PFL and considered at least the  
24 compilation and verification of that pipe  
25 section complete, or were some of these digs  
26 done before that process was complete?

27 A These -- the digs on the MAOP  
28 validation project were done as part of

1 validating that respective component. So in  
2 some cases we did not have the information  
3 for that specification on the record. That's  
4 where we made conservative assumptions. And  
5 as part of the validation of that  
6 conservative assumption, we excavated that  
7 respective component to identify what was in  
8 the field. So it was done as part of  
9 building the PFL.

10 MR. ROBERTS: Okay. I think we're  
11 wrapped up if we can have a moment off the  
12 record.

13 ALJ BUSHEY: Okay. And I assume you  
14 want to move this in?

15 MR. ROBERTS: Yes.

16 ALJ BUSHEY: OSC-10, any objections?

17 Received into evidence.

18 (Exhibit No. OSC-10 was received  
19 into evidence.)

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 Mr. Roberts, you have one more  
25 question.

26 MR. ROBERTS: Yes. We actually have an  
27 additional handout. ]

28 We only have a few copies

1 unfortunately.

2 ALJ BUSHEY: Mr. Roberts, this document  
3 says it's a draft.

4 MR. ROBERTS: Correct.

5 ALJ BUSHEY: Okay. Mr. Roberts, what's  
6 your question?

7 MR. ROBERTS: Q So my question is,  
8 this document appears to refer to the same  
9 study we just talked about before we went off  
10 the record; is that correct?

11 WITNESS SINGH: A That is correct.

12 Q And in this document -- oh. This  
13 document is titled Analysis of PG&E's Records  
14 Draft.

15 And in the first paragraph, it  
16 talks about -- at the end of that paragraph,  
17 it says out of all the records reviewed,  
18 20 percent were found to be inaccurate record  
19 specifications.

20 Do you see that?

21 A Yeah, I see that.

22 Q So in this document, PG&E is using  
23 the word "inaccurate" as opposed to  
24 discrepancy; is that correct?

25 A This is a draft document. It  
26 states inaccurate. And what we stated in  
27 the data response I believe was differences,  
28 not discrepancies.

1 ALJ BUSHEY: Is that it, Mr. Roberts?

2 MR. ROBERTS: We would like this to be  
3 an exhibit, your Honor.

4 ALJ BUSHEY: It's a draft. It's not  
5 going to have much value.

6 MS. PAULL: It's in the record of  
7 the recordkeeping OII I am told. Exhibit  
8 CPSD No. 49. It's a discovery response that  
9 PG&E produced in the recordkeeping OII.

10 ALJ BUSHEY: Right. But it's still  
11 a draft. I'll let it in for what it's worth,  
12 which frankly isn't much but we'll take it.  
13 OSC-11.

14 (Exhibit No. OSC-11 was marked for  
15 identification.)

16 ALJ BUSHEY: Okay. Redirect,  
17 Mr. Malkin?

18 MR. MALKIN: Thank you, your Honor.

19 REDIRECT EXAMINATION

20 BY MR. MALKIN:

21 Q First question, Mr. Singh, do you  
22 still have in front of you OSC-5? That's  
23 a data request response that Mr. Long had  
24 marked.

25 May I approach the witness, your  
26 Honor, share my --

27 WITNESS SINGH: I apologize. I've got  
28 a lot of paperwork up here.

1 MR. MALKIN: (Handing document to the  
2 Witness).

3 Q And this, Mr. Singh, is a list  
4 of -- that you provided to SED of segments  
5 that were thought to be impacted by  
6 the updated class -- one class out  
7 interpretation.

8 The question I have is on the first  
9 page of the -- second page of the table,  
10 about halfway down the page there is  
11 a two-foot reducer on Line 131 listed.

12 A I see that.

13 Q Did you find that?

14 And the question is, is that  
15 segment, that two-foot reducer in fact  
16 operating one class out?

17 A No, it's not. This is a working  
18 document that was provided to the SED.

19 MS. PAULL: Objection. I'm sorry.  
20 I should have objected earlier. I'm sorry to  
21 interrupt you, Mr. Singh.

22 But I thought you had ruled, your  
23 Honor, that one class out was outside  
24 the scope of this proceeding.

25 ALJ BUSHEY: That's -- where are we  
26 going with this?

27 MR. MALKIN: The -- since this document  
28 is in evidence, your Honor --

1 ALJ BUSHEY: Right.

2 MR. MALKIN: -- I just wanted to make  
3 sure there was no inference drawn that there  
4 was any segment of Line 131 that was  
5 operating one class out.

6 ALJ BUSHEY: And can the witnesses  
7 agree with your counsel's statement?

8 WITNESS SINGH: A I do. It's not  
9 one --

10 ALJ BUSHEY: Good. Mission  
11 accomplished, Mr. Malkin. Move on.

12 MR. MALKIN: Thank you, your Honor.

13 Q Okay. You had a number of questions  
14 about 49 CFR 619(a). And first question I'd  
15 like to ask you is, is there PHMSA guidance  
16 that supports your interpretation that  
17 619 (a) is not applicable to pipelines whose  
18 MAOP is set under 619(c)?

19 WITNESS SINGH: A Yes, there is.

20 MR. MALKIN: I'd like to have, your  
21 Honor, marked as the next two exhibits  
22 a document. The first one is  
23 the Determination of Maximum Allowable  
24 Operating Pressure Natural Gas Pipelines  
25 PHMSA Instructions.

26 ALJ BUSHEY: That will be OSC-12.

27 (Exhibit No. OSC-12 was marked for  
28 identification.)

1 MR. MALKIN: And the next one is the  
2 March 17, 2008, letter from Jeffrey Wiese,  
3 PHMSA, to Dennis Fothergill.

4 ALJ BUSHEY: That will be OSC-13.

5 (Exhibit No. OSC-13 was marked for  
6 identification.)

7 MR. MALKIN: Thank you.

8 Q Mr. Singh, have you seen OSC-12 and  
9 OSC-13 before?

10 WITNESS SINGH: A Yes, I have.

11 Q And are these two documents among  
12 the PHMSA guidance to which you referred?

13 A Yes, they are.

14 Q Focusing on OSC-12, is there any  
15 portion of that that is particularly  
16 pertinent to the way in which PG&E interprets  
17 49 CFR 192.619?

18 A It's the top of page 2. Want me to  
19 read the paragraph?

20 Q Yes, just so we're sure where you  
21 are?

22 A Starts with:

23 For transmission pipelines, under  
24 certain circumstances a design  
25 pressure limit (or lack of  
26 information on which to set  
27 a design pressure limit) may be  
28 overridden by 192.619(c).

1           And it continues on.

2           Q    Okay.  And the next to last  
3 sentence of that is:

4                    If that is the case, the historic  
5                    operating pressure may be used to  
6                    set the MAOP in lieu of the design  
7                    pressure.

8           A    That's correct.

9           Q    Turning to OSC-13, is there  
10 anything in particular in that document that  
11 supports your interpretation of 192.619?

12          A    It's the last paragraph of that  
13 letter, starts with --

14          Q    Paragraph of the letter or --

15          A    Of the --

16          Q    -- that you wish to discuss?

17          A    The first --

18          Q    First page?

19          A    First page.  I apologize.  It  
20 starts with "A pipeline operator would need  
21 data to support all four pressures listed  
22 above to establish the MAOP of a pipeline  
23 segment using 192.619(a)."

24                    And it continues on to state:

25                            When these rules were first  
26                            promulgated in 1970, PHMSA  
27                            recognized that an operator may  
28                            not have all the pressure data



1           needed for existing pipelines.  
2           Therefore, we included in  
3           the rules a "grandfather clause"  
4           to allow pipeline operators to  
5           establish the MAOP of an existing  
6           pipeline segment in satisfactory  
7           condition....

8           And then it continues on based on  
9           "the highest actual operating pressure to  
10          which the segment was subjected during  
11          the 5 years prior to July 1, 1970."

12          MR. MALKIN: I would like to have  
13          marked as the next in order, your Honor,  
14          the third exhibit we handed out, OPS List of  
15          Retroactive and Non-Retroactive Subparts of  
16          Pipeline Safety Laws and OPS Pertinent  
17          Contacts.

18          ALJ BUSHEY: Okay, this will be OSC-14.  
19                        (Exhibit No. OSC-14 was marked for  
20                        identification.)

21          MR. LONG: Your Honor, I'd just note  
22          this is essentially legal argument about  
23          interpretation of the code. I don't object  
24          to this. It's fine. It's just something  
25          that they can use in their brief, but it's  
26          not really -- doesn't really need to be  
27          a factual evidentiary exhibit I believe. But  
28          that said, it's not a big deal.

1 ALJ BUSHEY: Well, it's a place that we  
2 can all have copies of it too, because some  
3 of this stuff doesn't look like it's readily  
4 available.

5 Continue, Mr. Malkin.

6 MR. MALKIN: I'm happy to just put this  
7 in evidence and not take up any more hearing  
8 time asking about it.

9 ALJ BUSHEY: Okay.

10 MR. LONG: I would just note that  
11 I don't think it's evidence. I think it's  
12 something that they want to use for legal  
13 argument. And again, we don't object --

14 ALJ BUSHEY: Okay.

15 MR. LONG: -- to them using it for that  
16 purpose.

17 ALJ BUSHEY: We can compile it as an  
18 exhibit then.

19 Okay, final questions for  
20 the witnesses?

21 MR. LONG: I do have some follow-up on  
22 these exhibits.

23 ALJ BUSHEY: Okay, quickly.

24 RECROSS-EXAMINATION

25 BY MR. LONG:

26 Q Mr. Malkin just led you through  
27 OSC-12, OSC-13, interpretation of federal  
28 regulations implemented in 1970.

1           You're aware that there were  
2 regulations, governing regulations in  
3 California prior to that date; correct?

4           WITNESS SINGH: A If you're referring  
5 to GO-112.

6           Q Yes.

7           A Yes.

8           Q The first GO-112 iteration went  
9 into effect in the 1960-61 time frame; is  
10 that right?

11          A That's my understanding.

12          Q Prior to that, there were  
13 standards, the B 31.8 ASME or ASME standards  
14 that PG&E followed; isn't that correct?

15          MR. MALKIN: Your Honor, I'm going to  
16 object. This goes way beyond --

17          ALJ BUSHEY: Sustained.

18          MR. LONG: Well, wait a minute.

19          ALJ BUSHEY: It has already been  
20 litigated. We already know the answer to all  
21 these questions.

22          MR. LONG: All right. I think "going  
23 beyond" is just an inappropriate objection.  
24 Their point is for pipeline -- that these  
25 rules apply for pipeline installed prior to  
26 1970. But my point is that Segment 109, for  
27 example, was installed in 1957 and there were  
28 design pressure standards that applied under

1 the ASME standards, and then GO-112 applied  
2 and continued those design pressure standards  
3 and so --

4 ALJ BUSHEY: Whatever it was, it wasn't  
5 619 subsection (a).

6 MR. LONG: It was exactly the same.

7 ALJ BUSHEY: And you'll be free to  
8 argue that in your brief. That's a legal  
9 argument.

10 MR. LONG: Yeah. But it just seems to  
11 say that I made my point, I don't think it's  
12 fair to say these are far afield. They were  
13 directly in response to the efforts that  
14 Mr. Malkin was trying to make to --

15 ALJ BUSHEY: But they're not disputed.  
16 That's not a disputed fact. It has been  
17 litigated in this proceeding exactly what  
18 rules applied.

19 So okay, any final questions for  
20 the witnesses?

21 (No response)

22 ALJ BUSHEY: Seeing none, the witnesses  
23 are excused.

24 Mr. Malkin, would you like to call  
25 your next witness?

26 MR. MALKIN: Well, actually, Mr.  
27 Harrison is -- was not one of our witnesses  
28 here but Mr. Long had asked for him to, so he

1 can ask questions. So we --

2 ALJ BUSHEY: So you will, as a  
3 courtesy, provide Mr. Harrison. How about  
4 that?

5 MR. MALKIN: As a courtesy, we have  
6 brought Mr. Harrison back for an encore.

7 ALJ BUSHEY: Thank you.

8 Thank you. Mr. Harrison, you were  
9 sworn in the last time and you remain under  
10 oath.

11 DAVID HARRISON, recalled as a  
12 witness by Pacific Gas and Electric  
13 Company, having been previously sworn,  
14 resumed the stand and testified as  
15 follows:

16 ALJ BUSHEY: Mr. Long.

17 MR. LONG: Okay. Your Honor, prior to  
18 Mr. Harrison taking the stand, I distributed  
19 documents that I will be using in  
20 the cross-examination of Mr. Harrison and I  
21 would like to have those marked.

22 I left two copies on your desk and  
23 there are approximately --

24 MR. MALKIN: May we go off the record  
25 a moment?

26 ALJ BUSHEY: Off the record.

27 (Off the record)

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

While we were off the record, we

1 identified Exhibit OSC-15, which is a PG&E  
2 Attachment 3 to TURN Data Response 34-2.

3 (Exhibit No. OSC-15 was marked for  
4 identification.)

5 ALJ BUSHEY: Exhibit OSC-16 is  
6 attachment 7 of PG&E's response to TURN Data  
7 Request 34-2.

8 (Exhibit No. OSC-16 was marked for  
9 identification.)

10 ALJ BUSHEY: OSC-17 is Attachment 13 to  
11 PG&E's response to TURN's Data Request 4-2.

12 (Exhibit No. OSC-17 was marked for  
13 identification.)

14 ALJ BUSHEY: OSC-18 is Attachment 15 of  
15 PG&E's Response to TURN Data Request 34-2.

16 (Exhibit No. OSC-18 was marked for  
17 identification.)

18 ALJ BUSHEY: And OSC-19 is  
19 Attachment 42 to PG&E's Response to TURN Data  
20 Question 34-2.

21 (Exhibit No. OSC-19 was marked for  
22 identification.)

23 ALJ BUSHEY: Mr. Long.

24 MR. LONG: Thank you, your Honor.

25 CROSS-EXAMINATION

26 BY MR. LONG:

27 Q Good afternoon, Mr. Harrison.

28 So I want to go through these

1 exhibits roughly in order and I believe they  
2 should be familiar to you. Is that the case?

3 A Generally, yes.

4 Q Okay. These were exhibits provided  
5 in discovery by PG&E. They, as I understand  
6 them, are e-mail and sometimes attached to  
7 documents that relate to the root cause  
8 analysis for the Segment 109 error. Is that  
9 your understanding?

10 A Yeah. That's the first ones at  
11 least.

12 Q Okay. And we'll try to go through  
13 this relatively expeditiously. But if a few  
14 ground-rule things we need to cover. One is  
15 these are redacted. They've redacted out  
16 pretty much any name in them. The redactions  
17 were done by PG&E. And in many instances,  
18 your name has also been redacted. And I want  
19 to make sure that we have understanding that  
20 PG&E does not intend to redact  
21 Mr. Harrison's name from these documents.  
22 That is, PG&E does not object to revealing  
23 your name, Mr. Harrison's name.

24 We can talk about Mr. Harrison  
25 being on the documents, right?

26 MR. MALKIN: Yes. Mr. Harrison's name  
27 is already out there courtesy of  
28 the newspaper, and redaction of that was an

1 error. The redactions were intended, with  
2 the exception of Mr. Harrison already known,  
3 to redact the name of PG&E employees below  
4 the level of director.

5 ALJ BUSHEY: Mr. Long, from what I can  
6 tell, most of these are already in the record  
7 so --

8 MR. LONG: No. No. No. No. No.  
9 Only one of them is in the record.

10 ALJ BUSHEY: Okay. Let's travel some  
11 new ground with them, then.

12 MR. LONG: Okay.

13 Q And there are also other engineers  
14 that you worked with that are involved in  
15 these e-mails; is that right?

16 A That's right.

17 Q I do want to honor PG&E's  
18 confidentiality concerns with those people  
19 but wanted to see if it would be acceptable  
20 on occasion to use initials for -- to refer  
21 to those people, first and last initial?

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

23 (Off the record)

24 ALJ BUSHEY: We'll be back on the  
25 record.

26 Mr. Long.

27 MR. LONG: Q Mr. Harrison, let's look  
28 at the first document the one that's labeled



1 OSC-15. That's a Saturday, November 17, 2012  
2 document. So you were dealing with this  
3 issue on a Saturday, I see.

4 A Yes.

5 Q Okay. And from later documents,  
6 we'll see it spilled over to Sunday and then  
7 to the early days of the next week?

8 A Right.

9 Q So this was something considered --  
10 dealing with this root cause analysis was  
11 something that was considered time sensitive  
12 necessary to have several people devoted --  
13 devoting their weekend to?

14 A Well, I don't know about devoting  
15 their weekend, but we were definitely working  
16 on it over the weekend, yes.

17 Q So why was that necessary?

18 A It was considered a sensitive issue  
19 to understand what was going on right away.

20 Q Why was it a sensitive issue?

21 A Just because we'd found an error in  
22 the PFL process and so we wanted to get to  
23 the bottom of that as soon as possible and  
24 make sure we knew what was going on,  
25 understand it.

26 Q Okay. So looking at this,  
27 the first e-mail at the top, do you recall --  
28 I can tell you that that is an e-mail to you.

1 Do you recall that?

2 A Yes.

3 Q Okay. And it's from an engineer  
4 you worked with?

5 A Yes.

6 Q Do you need to know the name of  
7 the person?

8 A No.

9 Q Do you remember who it was?

10 A Yes.

11 Q All right. The paragraph after  
12 the numbered items reads, begins with the  
13 word bottom line. Do you see that?

14 A Yes.

15 Q And then later in that top line, it  
16 says: But a Tier 2 dig should have been  
17 initiated.

18 What is that telling us and what is  
19 a Tier 2 dig?

20 A A Tier 2 dig would just be a lower  
21 priority dig to essentially verify our  
22 records.

23 Q Lower priority than what?

24 A A Tier 1 dig is a higher priority  
25 dig that we need to perform in order to  
26 validate MAOP.

27 Q All right. Later at the end of  
28 that same paragraph, it says: In fact, we

1 need a seam characterization of the 5/16ths  
2 inch 1957 pipeline as well, also Tier 2.

3 What does the 5/16ths 1957 pipe  
4 refer to?

5 A 5/16ths is the wall thickness, so  
6 we're just saying that, you know, that's sort  
7 of the crux of the issue really, is to do  
8 the Tier 2 dig and to get the seam  
9 characteristics.

10 I mean that's the -- that's sort of  
11 the additional step is to make sure we get  
12 the seam characteristics.

13 Q Okay. But what was the -- is that  
14 Segment 109, the 5/16ths?

15 A I believe that's what is being  
16 referred to here, yes. But I'm not  
17 completely clear on that because up above  
18 they say the quarter-inch 1957 pipe.

19 Q All right.

20 A Yes. So they must be referring to  
21 the next job, job next to this one which is  
22 the 1957 also.

23 Q Job next to this one, meaning  
24 adjoining, segment adjoining --

25 A Yeah.

26 Q -- Segment 109?

27 A Yeah.

28 Q So the e-mail below that is earlier

1 in time on that same Saturday, one we've seen  
2 before and it is in a different exhibit. And  
3 it's an e-mail from you; is that right?

4 A Right.

5 Q Okay. So you say in the first line  
6 of that e-mail: This is good information,  
7 but Sumeet's expectations are considerably  
8 higher.

9 And does "Sumeet" refer to Mr.  
10 Singh?

11 A Yes.

12 MR. MALKIN: Your Honor, I'm going to  
13 object. This was asked and answered in the  
14 Line 147 hearing.

15 ALJ BUSHEY: I think we did this  
16 morning as well.

17 MR. LONG: I asked Mr. Singh -- now  
18 this Mr. Harrison, the author of the  
19 document. I'm asking him questions about  
20 what he meant when we wrote this.

21 ALJ BUSHEY: And who Sumeet was?

22 MR. LONG: If my questions are going to  
23 be micromanaged, then this will take a lot  
24 longer. I think if I can get --

25 ALJ BUSHEY: Get to --

26 MR. LONG: -- ask my questions.

27 ALJ BUSHEY: Get to something  
28 substantive, okay?

1 MR. LONG: I believe I am. And  
2 sometimes that's not apparent to everybody in  
3 the room until the brief. And you know,  
4 there are other decision makers.

5 ALJ BUSHEY: All right. All right.

6 MR. LONG: Okay.

7 Q The last line of that same  
8 paragraph says that at the executive level,  
9 this situation is considered a near hit from  
10 a safety perspective that could have severely  
11 damaged the company's credibility.

12 Mr. Harrison, can you tell me what  
13 you meant when you wrote that?

14 MR. MALKIN: Your Honor, that was  
15 explicitly covered by Mr. Long in the Line  
16 147 hearing.

17 MR. LONG: Okay.

18 MR. MALKIN: That very question.

19 MR. LONG: I think counsel is right and  
20 I will move on. I had forgotten that. I'm  
21 sorry.

22 THE WITNESS: I was just going to refer  
23 to my prior response.

24 MR. LONG: Okay, that's fine.

25 ALJ BUSHEY: Let's move along.

26 MR. LONG: Q In the next paragraph,  
27 Mr. Harrison, you say: I suspect this will  
28 mean some more conservative changes to the

1 PRUPF.

2 What are you referring to there?

3 A So the PRUPF, the P-R-U-P-F, is the  
4 document that we used to guide us on making  
5 assumptions. And I'm just looking at  
6 basically making a comment that perhaps we  
7 need to reevaluate that and we may need to  
8 make some changes there.

9 Q I'm done for the moment on that  
10 document. Can we move to the next one,  
11 please. That's OSC-16 Attachment 17. Excuse  
12 me, Attachment 7 to TURN Data Request 34-2.  
13 And this is the same chain of e-mails just  
14 a few added on it. Do you see that?

15 A I guess so.

16 Q So --

17 A Okay, on the first page.

18 Q Added to the previous chain. We  
19 have a later -- the one on the bottom of  
20 the page is later that same Saturday  
21 afternoon at 3:42 p.m. and then one after  
22 that at 6:57 p.m. Do you see that?

23 A Right.

24 Q So there are six items in  
25 the bottom, in the e-mail at the bottom of  
26 the page. I want to ask you about the first  
27 one. And in particular, are you -- let's  
28 see. This is actually an e-mail to you. Do

1 you understand what's being referred to there  
2 and what problem is being noted?

3 A Yes.

4 Q Can you explain it?

5 A Well, basically this is explaining  
6 that the engineer that SSAW -- like in  
7 the second to last sentence there, SSAW was  
8 possible up through the end of 1958. And so  
9 this infers that the engineer, it's getting  
10 to the fact that the engineer should have  
11 picked SSAW pipe and instead they made  
12 a mistake and picked another value for it.  
13 And this is -- we're just starting to flesh  
14 out that information.

15 Q Let's look at the e-mail above  
16 that. In the second paragraph it says on  
17 item 4: It is very likely there is  
18 reconditioned pipe. There are other concerns  
19 about our tracking of reconditioned pipe that  
20 I will be writing up.

21 Can you explain what -- those  
22 concerns about tracking a reconditioned pipe  
23 that you were referring to?

24 A It's just -- I don't remember  
25 exactly why I wrote that in this e-mail. But  
26 in general, you know, we've been trying to  
27 track reconditioned pipe the whole time we  
28 did the MAOP validation process, and so

1 I don't remember specifically what I was  
2 referring to there. ]

3 But I -- yeah.

4 Q But reconditioned pipe means pipe  
5 that had potentially been -- that was at  
6 least manufactured a date earlier than --  
7 many years potentially earlier than the date  
8 of installation; is that right?

9 A Right.

10 Q And it could in fact have been  
11 previously used pipe?

12 A That's right. Reconditioned pipe  
13 would normally be previously used pipe, yes.

14 Q So for reconditioned pipe, the date  
15 of installation would not reflect the date of  
16 manufacture; correct?

17 A That's right.

18 Q And that's one of the concerns;  
19 correct?

20 A That's right, yeah.

21 Q So if you're basing -- if the PRUPF  
22 that you just referred to is basing the --  
23 the resolution on the date of installation  
24 when in fact the date of manufacture could  
25 have been several decades earlier, that could  
26 be a problem; isn't that right?

27 A Yes, it could be, but the PRUPF  
28 logic is reasonably complicated, and that's



1 why the engineer made a mistake. And so the  
2 way this actually works is our records at  
3 this time in 2011 showed that we had stopped  
4 purchasing the SSAW A.O. Smith pipe in 1948.  
5 And then we apply a 10-year sliding window to  
6 that. So we made the assumption that we  
7 could have installed that pipe as many as 10  
8 years after we actually purchased it.

9 So that's why we end up with that  
10 -- in 1958 -- we have to assume that in 1958  
11 we could have installed SSAW pipe.

12 Q But Segment 109 was pipe that was  
13 installed in 1940 -- sorry, 1957, and may  
14 have been manufactured in the 1920s; isn't  
15 that right?

16 A That's right. That's exactly why  
17 we do that logic in the PRUPF. Did I miss  
18 something?

19 Q Maybe I did.

20 A So we purchased the pipe in '29.

21 Q Yeah.

22 A And we purchased it all the way  
23 through 1948. So then we take a 10-year  
24 window and apply it after 1948, and we say,  
25 okay, we stopped purchasing in '48, but we  
26 might have had that laying around in  
27 stockpile, we might have reconditioned  
28 something, and we could still have another

1 10-year window on there. So we made the  
2 assumption that we could have still installed  
3 that pipe as late as 1958?

4 Q That works because A.O. Smith pipe  
5 was pipe that you originally purchased in the  
6 1920s, but you continued to purchase in the  
7 1940s?

8 A Right. 1948 was the last year that  
9 our records show that we had purchased it.  
10 Now, some of these dates have been adjusted  
11 since then, but --

12 Q But in a different situation, you  
13 could have pipe manufactured in the 1920s  
14 that you only purchased for 10 years and then  
15 put back into the ground in 1957, and then  
16 your PRUPF wouldn't work that way, would it?

17 A It's possible. But based on our  
18 historical data, it doesn't quite work that  
19 way. We don't have anything that we cut off  
20 -- not cut off, but that we stopped  
21 purchasing in the '20s so --

22 Q Now, you refer back to that -- or  
23 the second -- let's see. Back to the e-mail  
24 at the top of this page on Item 5. You say  
25 in the second sentence there, "I am writing a  
26 companion piece that is larger in scope so I  
27 will probably recast yours."

28 Did you write that companion piece?

1           A    I did.

2           Q    What was that about?

3           A    It was basically the summary that's  
4 -- I think it's in these records.  So it  
5 ended up, you know, going to Sumeet and I  
6 believe going up the chain to the executives  
7 eventually.

8           Q    I'm just not aware of what document  
9 that was.  What was the title of it or where  
10 was it in the record?

11          A    It's probably Line 147 Executive  
12 Summary, something like that.  It's -- we've  
13 seen it in here, so --

14          Q    And then near the bottom of that  
15 e-mail at the top of the page, it says:

16                    Related to this incident but not  
17                    what you need to write-up.  I  
18                    believe I can show you pipe  
19                    installed in the 1960 that's is  
20                    reconditioned A.O. Smith, so I will  
21                    probably be recommending a review of  
22                    assumptions.

23                    Did you recommend a review of  
24 assumptions?

25          A    Yes, we did go back and review  
26 those assumptions.  And like I said, we've  
27 made some adjustments since these e-mails  
28 were written.

1           Q    And how is that reflected in the  
2 going-forward process?

3           A    Meaning the --

4           Q    You recommended a review of  
5 assumptions. Did something new happen? Did  
6 something change?

7           A    Yeah, the PRUPF and the assumptions  
8 document -- you got to remember this is  
9 early -- or late in 2011. So we definitely  
10 revised the assumptions as we went forward  
11 and improved our assumptions as we learned  
12 more, did the excavations, verified  
13 information.

14          Q    You said late in 2011. This --  
15 this episode is late 2012; right?

16          A    Oh, yes. Sorry. Yeah, sorry.  
17 Late in 2012.

18          Q    Moving to the next document,  
19 OSC-17, I'd like to direct your attention  
20 again to the first page. Again, this is the  
21 same e-mail string, some e-mails added to it.

22                   Let's look at the one in the middle  
23 of the page, second e-mail down on the page,  
24 Sunday, November 18th at 3:20 p.m. And this  
25 is from you; is that right?

26          A    I think so, yes.

27          Q    Okay. All right. You have been  
28 given a draft, and we'll look at the draft in

1 the next document. But you say:

2 My understanding is that Sumeet and  
3 Jesus Soto see this as very  
4 important, and they are expecting  
5 100 percent compliance. If we have  
6 seen PFLs that don't have the right  
7 assumptions then we need to identify  
8 this as an issue and it will become  
9 a quick hit project...

10 What was your understanding about  
11 this being -- about Mr. Singh and Mr. Soto  
12 expecting a hundred percent compliance based  
13 on?

14 A Well, the hundred percent  
15 compliance is in reference to the application  
16 of the assumptions, that, you know, we expect  
17 them to be applied correctly. And so that's  
18 -- that's what I'm speaking about.

19 Q Okay. All right. And is that your  
20 understanding in fact, that 100 percent  
21 compliance was expected?

22 A Yes. I mean, that's definitely  
23 what our goal was, was 100 percent  
24 compliance.

25 Q Okay.

26 A We -- I think we've shared before.  
27 I mean, we tried to automate some of this  
28 because you're kind of mixing a lit bit the

1 data in 2011 and 2012. But since 2011 we  
2 tried to automate it to make it much more  
3 bulletproof so that we didn't have the  
4 mistakes.

5 Q Okay. If we go to the e-mail  
6 above, that's your response to the engineer  
7 who wrote you -- I'm sorry. Let's flip that.  
8 You -- you wrote the e-mail that we just  
9 talked about, and then an engineer you work  
10 with responded; is that right?

11 A Yes.

12 Q And it says:

13 (Redaction) and I have run into PFLs  
14 in which we find errors. It's that  
15 simple. If the expectation is  
16 100 percent compliance with policy  
17 and standards, as in no errors, I'm  
18 at a loss to understand any course  
19 of action other than 100 percent or  
20 higher QC of the full data set on  
21 top of the QC already performed.

22 Now, do you agree with that  
23 statement? Did you agree with that  
24 statement?

25 A Well, it is very difficult to get  
26 100 percent compliance. There's always a  
27 variety of things that show up, so the  
28 chances of us getting absolutely 100 percent

1 compliance are probably slim. But clearly  
2 that's our goal to do that.

3 Q Uh-huh. And so was this idea  
4 adopted to do a hundred percent or higher QC  
5 of the full data set?

6 A Yes, it is, except we really have  
7 not completed all of that. I think we've  
8 explained in data requests that we -- we have  
9 our full set of assumptions, and we've had a  
10 process over the years to evaluate all of  
11 these. And as we get things loaded into the  
12 new GIS system, we are planning to rerun the  
13 full set of assumptions against that -- that  
14 set of data again and -- and essentially QC  
15 the entire data set again.

16 Q Uh-huh. Let's look at the next  
17 document, which is OSC-18. And this is  
18 actually slightly earlier in time. This is  
19 the draft that was referred to in the  
20 previous -- on the previous e-mails that we  
21 looked at.

22 And I'd like you to turn to the  
23 attachment -- excuse me, yes. Turn to the  
24 attachment to this document. It begins on  
25 the third page. There's a heading, "1.  
26 Summary." Do you see that, Mr. Harrison?

27 A Yes.

28 Q Do you recall this as a early draft

1 of the root cause analysis?

2 A Yes.

3 Q I'd like to direct your attention  
4 to the second page of that draft. If you  
5 look at the very top of that, there's a  
6 comment. I take it when there's double  
7 arrows, that's -- that's comment not  
8 necessarily intended for the final draft, but  
9 just a comment of the -- of the person  
10 preparing the draft; is that your  
11 understanding?

12 A That's right. I think this might  
13 have been somebody reviewing the draft, but  
14 yes.

15 Q Okay. And it says, "I have seen  
16 PFLs where macro conclusions," I think it  
17 means, "have been overridden indirectly  
18 resulting in PFL errors"?

19 A Right.

20 Q That's referring to the automated  
21 process that you say -- you and Mr. -- you  
22 just mentioned and Mr. Singh testified to  
23 that's meant to address the complexity of the  
24 PRUPF; is that right?

25 A That's right.

26 Q And so this is pointing out that  
27 sometimes even though that automated process  
28 may lead to a conclusion, sometimes engineers



1     override that conclusion anyway?

2             A     That's right.

3             Q     Is that a problem?  Is that a good  
4     thing?

5             A     Sometimes you have to allow it  
6     because sometimes there's a good reason to  
7     overrule the conclusion of the macro.  But at  
8     the same time, you're trying to implement it  
9     to make sure there's no mistakes.  So you  
10    know, you're sort of on the fence.  You need  
11    sort of both sides to it, and it's very  
12    difficult to make an automated tool that is  
13    completely bulletproof and knows all the  
14    situations that might occur.

15            Q     Okay.  Thank you.  The next heading  
16    on that same page says, "QC of earlier PFL  
17    builds."  Do you see that?

18            A     Yes.

19            Q     I'm just going to read this -- the  
20    first part of this.  It says:

21                   QC process shortcomings which have  
22                   been allowed -- which could have  
23                   allowed this to occur on other PFLs  
24                   are possible prior to -- and  
25                   notation to fill-in the date -- when  
26                   the current process was implemented,  
27                   which was designed to eliminate the  
28                   chance of shortfalls in QC.  On a

1           separate but related note, random  
2           spot checks of PFL quality have  
3           occasionally resulted in the  
4           discovery of errors in PFLs.  
5           Is that consistent with your  
6           experience?

7           A    Yes, it's definitely not a hundred  
8           percent perfect.

9           Q    And then if we go down that same  
10          paragraph later, there's the double arrow,  
11          and it says:

12                From time to time, I have looked at  
13                supposedly completed PFLs to gather  
14                certain data and have found blatant  
15                errors and assumptions employed  
16                during the PFL process. This  
17                suggests to me that if management's  
18                expectations are zero error rate for  
19                PFLs, the entire database needs a  
20                new QC review by people who are  
21                better trained than those who  
22                performed the QC which failed to  
23                catch errors I subsequently found.  
24                Is that your concern as well, Mr.  
25          Harrison?

26           A    It's a concern. I would not make  
27           it that large of a concern. I mean,  
28           occasionally you do find errors on them, but

1 we -- in our overall process, we reviewed  
2 these PFLs twice through our complete  
3 process. And then again, like I stated, we  
4 were going to rerun the assumptions through  
5 everything again trying to chase out all  
6 these issues that might be in there.

7 Q If we to continue on this draft  
8 heading 3.2, "Purchase documentation," on the  
9 next page?

10 A Okay.

11 Q This is all part of the root cause  
12 analysis. And it says:

13 No purchased documents were found  
14 during the PFL build process, which  
15 requires use of the assumption that  
16 the pipe could have been purchased  
17 any time during the decade prior to  
18 installation.

19 We're talking about Segment 109  
20 here; right?

21 A Right.

22 Q Install date was 1955, so the  
23 purchase date could have been between 1945  
24 and 1955?

25 A Right. That's what I was trying to  
26 explain earlier.

27 Q But in fact, the purchase date  
28 actually could have been -- turned out to be

1 1929?

2 A Right. Right.

3 Q That again highlights the issue of  
4 using install date as opposed to date of  
5 manufacture for reconditioned pipe, does it  
6 not?

7 A Right. Right.

8 Q And finally, OSC-19 is the final  
9 root cause analysis report; is that right?

10 A It looks that way.

11 Q Just a couple questions on this.  
12 On page 3 of that report, under the heading,  
13 "Prior Process Adherence Concerns," there's a  
14 sentence that begins, "Since all Phase 2  
15 mainline PFLs are to be reworked in Phase 3."  
16 Do you see that?

17 A Yes.

18 Q What does mainline refer to?

19 A Mainline is the major lines. So  
20 it's -- we often times have services -- small  
21 services, three-quarter-inch pipe for  
22 example, that come off of -- of mainlines.  
23 So we -- we put those in a different  
24 category. We generically call them shorts.  
25 So mainlines are the main lines. The shorts  
26 come off the mainlines.

27 Q Okay. Okay. And then the next  
28 paragraph says, "It should be noted that it

1 is not planned to rework in Phase 3."

2 Phase 3 refers to Phase 3 of the  
3 MAOP validation process?

4 A That -- yeah, Phase 3 of the MAOP  
5 validation process. That's right.

6 Q This was the phase that was focused  
7 on reviewing pipeline features for the  
8 non-HCA pipelines; right?

9 A Say that one more time? Which  
10 phase?

11 Q Phase 3 was -- Phase 2 was about  
12 the HCA pipeline segments, and Phase 3 was  
13 about the non-HCA segments?

14 A Well, Phase 3 actually included  
15 everything in Phase 2, plus the addition of  
16 the non-HCA segments.

17 Q Okay. Well, apparently not  
18 everything because it says here Phase 3 --  
19 "It's not planned to rework in Phase 3 the  
20 PFLs completed in Phase 2 to enable pressure  
21 restoration."

22 A And that's not actually true. I'm  
23 not sure if it was changed or it was never  
24 actually true. The --

25 Q I think --

26 A Yeah, the -- we did -- we were  
27 planning to rework the early pressure  
28 restorations and run them through the Phase 3

1 process.

2 Q All right. I think Mr. Singh  
3 covered that a little bit, and I think it's a  
4 little different from what you say. But  
5 between you and him, I think we have the  
6 picture.

7 And then under, "Data Quality,"  
8 Heading 3, there are three items. The third  
9 item -- these three items are all under this  
10 -- relating to this sentence that says, "The  
11 process of achieving zero error rate for PFLs  
12 consists of the following."

13 And the third item is:

14 Statistical analysis of errors found  
15 in 2013 will support the QA  
16 processes in Intrepid. Possible  
17 areas for further assessment include  
18 key logic situations, such as a  
19 review of all instances where E  
20 equals 1.0 is applied and where E  
21 equals 0.8 would fail to validate  
22 MAOP.

23 E is a reference to the joint  
24 efficiency?

25 A That's correct. Right.

26 Q And I wanted to know whether this  
27 type of QA process was in fact implemented?

28 A We are still in the process of

1 doing this QA work actually right now.

2 Q So you're -- you're using these  
3 types of, you know, logic-based assessments?

4 A Yes, yes.

5 Q You're still -- you're still  
6 working those up?

7 A Right. There's several hundred of  
8 them that we are reviewing, and we are -- in  
9 some cases we've started correcting data and  
10 -- and making manual reviews. In other  
11 cases, we're looking at, you know, automation  
12 and, you know, prioritizing those kinds of  
13 things.

14 MR. LONG: That's all my questions.  
15 Thank you, Mr. Harrison.

16 ALJ BUSHEY: Thank you, Mr. Long.  
17 Mr. Meyers?

18 MR. MEYERS: Just very quickly.

19 CROSS-EXAMINATION

20 BY MR. MEYERS:

21 Q Good afternoon, Mr. Harrison. If  
22 you could refer to OSC-4? It should be up  
23 there on the dais. It's a Pacific Gas and  
24 Electric Company direct exhibit. First page  
25 is a series of charts. Can I refer you to  
26 page 7?

27 A All right. Page 7.

28 Q And I understand that this decision

1 tree reflects the flow of analysis, if you  
2 will, for your MAOP validation process. And  
3 the three boxes that are in red, those  
4 represent the areas where errors were made it  
5 looks like for Segment 109, Line 147; is that  
6 correct?

7 A That's correct.

8 Q And the next page, on page 8, there  
9 are four boxes in red. And the legend shows  
10 that those are steps that -- where errors  
11 occurred. Are you with me so far?

12 A Yes.

13 Q Okay. Now, could you turn to page  
14 9? And I apologize if I'm having a senior  
15 moment here, but were the enhancements to  
16 this decision tree that are shown in the  
17 green box -- were they a direct result of  
18 what occurred in San Carlos, or were they --  
19 were they changes that were made by the  
20 company as a result of continued analysis of  
21 their decision-making process?

22 A They were changed made due to the  
23 continued evolution of our process. In early  
24 -- in late 2011 when the pressure restoration  
25 filings were made, we knew we needed to make  
26 some improvements and we were still making  
27 those improvements. So these were made in  
28 late 2011.



1           Q    So these changes were not as a  
2 result of these proceedings with respect to  
3 Line 147 and 101?

4           A    That's right. They were  
5 implemented much earlier.

6           Q    Okay. As a result of these  
7 proceedings -- as a result of the OSC that  
8 was issued and these hearings that we've been  
9 having, has this decision tree been changed?

10          A    You know, I wouldn't say that it's  
11 been changed per say. The -- I mean, we're  
12 more aware of these. So we -- we are now  
13 finished with the MAOP validation process,  
14 and as I explained, we're doing quality  
15 control. So we're doing quality control  
16 trying to get the new GIS system lined up and  
17 all the data as accurate as possible.

18                    So in doing that evaluation, we're  
19 more aware of it because of the OSC. We're  
20 more aware of where the possible errors might  
21 be. So we're trying to make sure we evaluate  
22 those. I wouldn't say that the process  
23 overall has significantly changed.

24          Q    Okay. So with respect to page 9,  
25 Enhanced Process December of 2011, that is  
26 the decision process that you're following as  
27 we sit here today?

28          A    Yes. This is what we followed

1 through the MAOP validation process.

2 MR. MEYERS: Okay. Thank you.

3 That's all I have.

4 ALJ BUSHEY: Redirect, Mr. Malkin.

5 MR. MALKIN: Nothing, your Honor.

6 ALJ BUSHEY: Final questions? Hearing  
7 none, the witness is excused.

8 Anything further to come before the  
9 Commission?

10 MR. LONG: I would like to move for the  
11 admission of the exhibits raised in my  
12 cross-examination of Mr. Harrison.

13 ALJ BUSHEY: That is OSC-15 through 19.  
14 Any objections? Hearing none, they are  
15 received into evidence.

16 (Exhibit No. OSC-15 was received  
17 into evidence.)

18 (Exhibit No. OSC-16 was received  
19 into evidence.)

20 (Exhibit No. OSC-17 was received  
21 into evidence.)

22 (Exhibit No. OSC-18 was received  
23 into evidence.)

24 (Exhibit No. OSC-19 was received  
25 into evidence.)

26 MS. PAULL: Your Honor, we would like  
27 to move OSC-10 and 11 into evidence.

28 ALJ BUSHEY: Objections? Hearing none,

1 then 10 and 11 are received.

2 (Exhibit No. OSC-11 was received  
3 into evidence.)

4 MR. MALKIN: And 12 through 14?

5 ALJ BUSHEY: And 12 through 14. All  
6 received into evidence.

7 (Exhibit No. OSC-12 was received  
8 into evidence.)

9 (Exhibit No. OSC-13 was received  
10 into evidence.)

11 (Exhibit No. OSC-14 was received  
12 into evidence.)

13 MS. STROTTMAN: Your Honor, I would  
14 like to clarify, please, that this is not an  
15 adjudicatory proceeding, that as long as we  
16 comply with the ex parte rules that the City  
17 of San Bruno and City of San Carlos are  
18 permitted to meet with the Commissioners and  
19 their staff.

20 ALJ BUSHEY: Well, this is an order to  
21 show cause.

22 MS. STROTTMAN: So then that means it's  
23 an adjudicatory -- I guess I'm just confused  
24 with the Line 147.

25 ALJ BUSHEY: Right. The Line 147 was  
26 not an adjudicatory proceeding.

27 MS. STROTTMAN: Correct.

28 ALJ BUSHEY: But this process result

1 from an order to show cause. I suppose  
2 technically --

3 MR. MALKIN: The order to show cause  
4 did state that it is an adjudicatory  
5 proceeding.

6 ALJ BUSHEY: Oh, good. I already  
7 decided. It could have gone either -- so  
8 yes, it is adjudicatory. No ex parte  
9 contacts.

10 MS. STROTTMAN: Okay. Thank you.

11 MS. BONE: Your Honor, I just wanted a  
12 clarification to be sure it's on the record  
13 that Exhibit OSC-9, the exhibits to Mr. Tom  
14 Roberts's testimony -- PG&E has agreed that  
15 they do not contain any confidential  
16 information.

17 ALJ BUSHEY: I think we've already  
18 received those into evidence.

19 MS. BONE: Right.

20 ALJ BUSHEY: Anything further?  
21 Hearing none, then I will remind the party  
22 that's opening briefs are due on  
23 January 17th. Reply briefs are due on  
24 January 31st. And this matter will be  
25 submitted with the filing of reply briefs on  
26 January 31st.

27 With that, then, this evidentiary  
28 hearing is concluded and the commission is

1 adjourned. Thank you.

2 (Whereupon, at the hour of  
3 1:35 p.m., this matter having been  
4 submitted upon receipt of reply briefs  
5 due January 31, 2014, the Commission  
6 then 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 December 16, 2013.

I further certify that I have no interest in the events of the matter or the outcome of the proceeding.

EXECUTED this 16th day of December, 2013.

\_\_\_\_\_  
Alejandrina E. Shori  
CSR No. 8856

BEFORE THE PUBLIC UTILITIES COMMISSION  
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STATE OF CALIFORNIA

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Rulemaking  
11-02-019

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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 December 16, 2013.

I further certify that I have no interest in the events of the matter or the outcome of the proceeding.

EXECUTED this 16th day of December, 2013.

\_\_\_\_\_  
Thomas C. Brenneman  
CSR No. 9554

BEFORE THE PUBLIC UTILITIES COMMISSION  
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Order Instituting Rulemaking on the  
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Rulemaking  
11-02-019

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I, Wendy M. Pun, Certified Shorthand Reporter  
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I further certify that I have no interest in the  
events of the matter or the outcome of the proceeding.

EXECUTED this 16th day of December, 2013.

Wendy M. Pun  
CSR No. 12891