BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE

STATE OF CALIFORNIA

ADMINISTRATIVE LAW JUDGE MARIBETH A. BUSHEY, presiding

) EVIDENTIARY) HEARING)) Order Instituting Rulemaking on the) Commission's Own Motion to Adopt New) Safety and Reliability Regulations) Rulemaking for Natural Gas Transmission and) 11-02-019 Distribution Pipelines and Related) Ratemaking Mechanisms.))

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Reported by: Alejandrina E. Shori, CSR No. 8856 Thomas C. Brenneman, CSR No. 9554 Wendy M. Pun, CSR No. 12891

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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.

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- 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.

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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 project and the pipeline features list that 5 6 was created as part of that project. 7 First, let me make -- just to set the foundation, one of the -- one of the 8 9 elements of the of the MAOP validation effort 10 was the creation of the -- or the rebuilding of a pipeline features list; is that right? 11 12 WITNESS SINGH: A It was creating a pipeline features list. That's correct. 13 Q Okay. I want to ask you about the 14 purposes of that. But first, do you think 15 the MAOP validation effort and the associated 16 17 pipeline features list has served any safety 18 purposes? 19 WITNESS JOHNSON: A Well, it's -- it was an order to -- as an interim safety 20 measure to go through that process. So I 21 think in terms of understanding the system, 22 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 ordered by the CPUC. 26 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

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- 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

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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.
- Q So is that a yes?
- A So as we laid it out with the -- as
- 28 an interim safety measure. And as we've

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- 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

- 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

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- 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?

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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.

- 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

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- 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

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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

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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, parens 2 S-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.

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- 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?
- A So the -- and I thought we

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- 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

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- 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?

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- 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?

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- 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

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- 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?
- 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?

- 3107
- 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

3109

- 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

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- 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 going-forward work; is that right? 10 11 A It was applied on all the work that 12 was done after December 2011, which also included doing the rework of all the work 13 that was done in 2011. 14 15 Q Okay. We'll get into that a little 16 bit more because I do want to get some of that timing down that was discussed a fair 17 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 slides at the September 6th hearing. And 22 23 I think maybe the one that might be most 24 helpful here is slide on page 9 of OSC-4. If I could ask to you turn to that. 25 26 There's a green -- at least on mine, I've got a green shaded oval at the 27 bottom. It says Added Engineering Analysis 28

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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

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- 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.

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- 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?
- A That is correct.
- 28 Q So but then after you learned about

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- 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

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- 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

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- 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

 \Box

- 1 And there, the discrepancy was
- 2 between the plat map and the purchased
- 3 documents; is that right?
- 4 A That's what's stated in the related
- 5 job documents plus the related engineering
- 6 and construction knowledge box.
- 7 Q This is also referenced in
- 8 Mr. Johnson's statement, Paragraph 39. I
- 9 believe it's 39. Yeah.

- 10 A Correct.
- 11 Q So what -- was it a break down of
- 12 the process for the pipeline features list to
- 13 identify these segments as seamless?
- 14 A In this specific instance -- and
- 15 it's covered in the September 6th transcript
- 16 where I alluded to that. I'll state it
- 17 again. The engineer recognized the
- 18 difference in between these two records.
- 19 Purchase order has been typically identified
- 20 as a higher source strength of a document as
- 21 opposed to a transmission plat. There was
- 22 conflicting information in this case.
- 23 Obviously that has been identified.
- 24 The engineer opted to use the
- 25 purchase order, clearly stated that in the
- 26 features list. And it's also clearly stated
- 27 in our portal that the strength testing that
- 28 was planned to be done in October of 2011 is

- 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

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- 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

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- 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.

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- 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.
- 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

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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 updated6 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.

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- 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

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- 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.

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- 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

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- 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?

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- 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 identification.)
- 11
- 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?
- 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?
- A l 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

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- 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

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- 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

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- 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.

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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.

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

- 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

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- 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

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- 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

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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

- 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.

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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.
- 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

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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

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- 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?

1

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
- enormous amount of reporting to the 27

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28 Commission staff as we speak. We have

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1 activities that happen and we have to report within two or four hours. We have quarterly reports. We have yearly reports. We have a whole listing of reports. And how we put it 5 in place so we don't miss this again has not been determined. Q And what about reporting these type of -- this exact type of situation to cities? Is that your same answer, that you don't have 10 a plan? A Yeah, I have not seen the plan for how we're going to report it to the cities. WITNESS SINGH: A One item I would like to add to that is if you have reviewed the proposed decision that was issued by ALJ Bushey, it's clear specifically for that proceeding for 147 if we have that issue we have an obligation to report to the 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

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- 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

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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 identification.)
- 6
- 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 identification.)
- 10
- 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 identification.)
- 17
- 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 identification.)
- 25

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

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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.

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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

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- 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.

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- 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?

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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

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

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- 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.

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- 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.

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- 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

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- 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.

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- 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

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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 received into evidence.)
- 9
- 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?

- 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.

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- 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

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- 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

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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

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- 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.

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- 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

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- 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

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- 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

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- 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

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- 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

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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

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- 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

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- 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 --

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- 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

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- 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,

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1 6, and 7 into the record, and they will be
2 received into the evidentiary record.
3
         We'll be off the record.
         (Exhibit No. OSC-5 was received into
4
         evidence.)
5
6
         (Exhibit No. OSC-6 was received into
         evidence.)
7
8
         (Exhibit No. OSC-7 was received into
         evidence.)
9
10
          (Off the record)
11
       ALJ BUSHEY: We'll be back on the
12 record.
13
          Mr. Malkin reminds me that OSC-4 has
    not been formally accepted into the record
14
15 and we will do so now. OSC-4 received on
16 September 6th will be received into the
    evidentiary record today. Thank you.
17
18
          We'll be off the record.
          (Exhibit No. OSC-4 was received into
19
         evidence.)
20
          (Off the record)
21
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?
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- 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?

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- 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.

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- 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.

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- 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 MIpts means Milpitas Terminal,
- 27 but I'm just trying to make sure that's a
- 28 correct assumption.

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- 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 as important now that we've established what 11 we just talked about. There's a separate 12 exhibit which has a clear trace for Lomita 13 Park, which I think is more important to be 14 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 this proceeding. 22 23 MR. ROBERTS: Okay. 24 ALJ BUSHEY: So is that where you're going? 25 26 MR. ROBERTS: I guess that's a fair characterization of what I was trying to 27 28 understand --

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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

3197

- 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.

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- 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

3198

- 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

3200

1 questions.

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- 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

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- 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

PUBLIC UTILITIES COMMISSION, STATE OF CALIFORNIA SAN FRANCISCO, CALIFORNIA

3202

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

3203

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

3204

- 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

3205

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.

WITNESS JOHNSON: A I think what we're 1 2 trying to say is keep in mind what's in GIS from 1949. GIS didn't exist in 1949, right. 3 So you couldn't pot -- it's --4 5 WITNESS SINGH: The technology we're 6 using --7 WITNESS JOHNSON: A The technology didn't exist. So you can't compare and the 8 say they're different because it didn't 9 exist. 10 11 Q Well, you're saying in this chart that you're comparing to data in the GIS 12 13 system. So does the GIS system --14 A The GIS system had estimates of where we thought the pipe was based on a GIS 15 longitude and latitude that was based on 16 original drawings from the '30s, '40s and 17 '50s. So it was estimated using, if you 18 19 will, techniques that were available back 20 then. There were no GIS coordinates that we have today available to us available back 21 22 then. 23 Q But in reality, you have documents that say where a pipeline is. And when you 24 25 go to do work on that pipeline you refer to

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- 26 those documents to know where to dig,
- 27 excavate and do work?
- 28 A No. No. When you dig on a

3207

- 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

3208

- 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?

- A Correct.
- 28 Q Will that more accurately capture

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- 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.

ALJ BUSHEY: And that would be an

27 interesting statement if they hadn't just

28 said the opposite. So they've just testified

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3210

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.

3213

- 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,

3214

1 Section A?

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- 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

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- 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

3217

- 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?
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- 17 Received into evidence.
- 18 (Exhibit No. OSC-10 was received into evidence.)
- 19
- 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

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3218

- 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?
- 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 identification.)
- 15
- 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.

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- 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 --

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- 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.
- ALJ BUSHEY: That will be OSC-12.
- 27 (Exhibit No. OSC-12 was marked for identification.)
- 28

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- 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 identification.)
- 6
- 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?

- 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).

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- 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

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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 identification.)
- 20
- 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.

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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.

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- 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

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- 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

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- 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 witness by Pacific Gas and Electric
- 12 Company, having been previously sworn, resumed the stand and testified as
- 13 follows:
- 14 ALJ BUSHEY: Mr. Long.
- 15 MR. LONG: Okay. Your Honor, prior to
- 16 Mr. Harrison taking the stand, I distributed
- 17 documents that I will be using in
- 18 the cross-examination of Mr. Harrison and I
- 19 would like to have those marked.
- 20 I left two copies on your desk and
- 21 there are approximately --
- 22 MR. MALKIN: May we go off the record
- 23 a moment?
- ALJ BUSHEY: Off the record.
- 25 (Off the record)
- 26 ALJ BUSHEY: We'll be back on the
- 27 record.
- 28 While we were off the record, we

1	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 identification.)	
9		
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 identification.)	
13		
14	ALJ BUSHEY: OSC-18 is Attachment 15 of	
15	PG&E's Response to TURN Data Request 34-2.	
	(Exhibit No. OSC-18 was marked for identification.)	
17		
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 identification.)	
22		
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.

- 1 exhibits roughly in order and I believe they
- 2 should be familiar it 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 be 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

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- 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

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- 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.

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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

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- 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

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- 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

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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?
- 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

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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?
- 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

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- 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

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- 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

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- 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?

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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

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.

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- 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?
- 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

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- 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

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- 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

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- 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

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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

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1	process.
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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

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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

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- 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?

- A All right. Page 7.
- 28 Q And I understand that this decision

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- 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.

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- 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?
- 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 into evidence.)
 17
- 18 (Exhibit No. OSC-16 was received into evidence.)
- 20 (Exhibit No. OSC-17 was received into evidence.)
- 21

- 22 (Exhibit No. OSC-18 was received into evidence.)23
- 24 (Exhibit No. OSC-19 was received into evidence.)25
- 26 MS. PAULL: Your Honor, we would like
- 27 to move OSC-10 and 11 into evidence.

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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

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- 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

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1 adjourned. Thank you.

- 2 (Whereupon, at the hour of 1:35 p.m., this matter having been
 3 submitted upon receipt of reply briefs due January 31, 2014, the Commission
 4 then adjourned.)
- 4 then aujourned.)
- 5 ****
- 6

- 7
- 8
- 9

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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) Rulemaking for Natural Gas Transmission and) 11-02-019 Distribution Pipelines and Related) Ratemaking Mechanisms.))

)

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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.

Alejandrina E. Shori CSR No. 8856

3262

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) Rulemaking for Natural Gas Transmission and) 11-02-019 Distribution Pipelines and Related) Ratemaking Mechanisms.))

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EXECUTED this 16th day of December, 2013.

Thomas C. Brenneman CSR No. 9554

3263

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) Rulemaking for Natural Gas Transmission and) 11-02-019 Distribution Pipelines and Related) Ratemaking Mechanisms.))

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