

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE  
STATE OF CALIFORNIA



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ADMINISTRATIVE LAW JUDGES JESSICA T. HECHT and MARCELO  
POIRIER, co-presiding

Order Instituting Investigation on ) EVIDENTIARY  
the Commission's Own Motion into the ) HEARING  
Operations and Practices of Southern )  
California Gas Company with Respect )  
to the Aliso Canyon storage facility )  
and the release of natural gas, and )  
Order to Show Cause Why Southern )  
California Gas Company Should Not Be )  
Sanctioned for Allowing the ) Investigation  
Uncontrolled Release of Natural Gas ) 19-06-016  
from its Aliso Canyon Storage )  
Facility. (U904G) )

REPORTERS' TRANSCRIPT  
Virtual Proceeding  
March 24, 2021  
Pages 979 - 1150  
Volume 7

Reported by: Carol Ann Mendez, CSR No. 4330  
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VIRTUAL PROCEEDING

MARCH 24, 2021 - 10:02 A.M.

\* \* \* \* \*

RAVI KRISHNAMURTHY,

resumed the stand and testified further as follows:

ADMINISTRATIVE LAW JUDGE POIRIER: We will be on the record. Good morning, everybody. This is day seven of the evidentiary hearings in Investigation 19-06-016 on the Aliso Canyon Gas Leak.

While we were off the record, before we started, we handled some housekeeping matters and confirmed that SED can rely on the direct exhibits of SoCalGas during their cross and also indicated that we will be receiving some updates or having discussion more on the upcoming schedule of the proceedings.

With that, I think let's start with Ms. Frazier. Please go ahead.

(Speaker muted.)

ALJ POIRIER: You're muted, Ms. Frazier.

MS. FRAZIER: Good morning, your Honor. We would like to just follow up on the

1 questions that Mr. Gruen asked  
2 Mr. Dr. Krishnamurthy yesterday and provide  
3 one clarification.

4 So if it's acceptable to you, I will  
5 proceed with the questioning of  
6 Dr. Krishnamurthy.

7 ALJ POIRIER: Please go ahead.

8 REDIRECT EXAMINATION

9 BY FRAZIER:

10 Q Dr. Krishnamurthy, do you recall  
11 during the cross-examination by Mr. Gruen  
12 that he requested a response to two  
13 questions?

14 A Yes, I do.

15 Q And I believe that the first  
16 question was: "Do you recall seeing any  
17 history documents, either the DOGGR history  
18 of oil and gas wells or SoCal daily well  
19 activities in the SS-25 well file, for the  
20 period 1997 to October of 2015?"

21 Do you recall that question being  
22 asked of you by Mr. Gruen?

23 A Yes, I do.

24 Q And are you prepared to answer that  
25 question here today?

26 A Yes. Yes, I am.

27 Q Please do so.

28 A Okay. We went back yesterday and

1 reviewed our data files, specifically for  
2 SS-25, and I can state today with -- and  
3 confirm today that from the period 1997 to  
4 October 2015, we did find a lot of data on  
5 SS-25 provided by SoCalGas. These included  
6 temperature surveys, included noise surveys,  
7 included some water analysis data and some  
8 well pressure data in looking backwards, I  
9 believe.

10 Similarly, we also obtained data  
11 such as -- and also a cementing report and of  
12 a few others things. We also obtained data  
13 from DOGGR, as we have mentioned in the past.  
14 So from -- we did receive and we included  
15 that data in our analysis. I wanted to  
16 confirm this and last night we went back to  
17 our data set to confirm where we got it and  
18 we did receive this.

19 Q Thank you. Also, in response to a  
20 question from Ms. Bone yesterday regarding  
21 pressure testing and workovers, can you  
22 please elaborate or clarify your testimony?

23 A Yeah. I just wanted to clarify,  
24 I'm not sure I -- exact -- I did answer it  
25 correctly, but I wanted to further clarify.

26 There was a pressure test in 1973  
27 which was tested in stages, and Mr. Lotterman  
28 discussed that in his examination of me.

1           And in addition to that, in '76 and  
2     '79, there were tests performed. These  
3     included the completion equipment was run and  
4     these tests are quite often conducted to  
5     confirm the completion equipment, the tubing,  
6     the casing and the packer are all in tact.  
7     So it's part of the practice of testing that  
8     equipment is what we believe those tests in  
9     1976 and '79 were done. So I wanted to just  
10    clarify that answer. Thank you.

11           MS. FRAZIER: No further questions from  
12    Blade.

13           ALJ POIRIER: Does any other party have  
14    any questions? Okay. Ms. Bone, I think you  
15    have one.

16                           RE CROSS-EXAMINATION

17    BY MS. BONE:

18           Q     Mr. Krish -- sorry.

19           ALJ POIRIER: I can hear you. Go  
20    ahead.

21           MS. BONE: Great.

22           Q     I just had a clarification on your  
23    clarification regarding the pressure tests  
24    that were done in 1976 and 1979.

25                   Did you have documents that reflect  
26    that this was the purpose of the test to test  
27    the equipment, or are you speculating based  
28    on other information you have?

1           A    I believe we have documents,  
2   Ms. Bone.  That is my -- I would have to  
3   consult with my colleagues again to make sure  
4   we have those documents, but I believe it is  
5   based on documentation.

6           MS. BONE:  Okay.  Thank you very much,  
7   Mr. Krishnamurthy.

8           ALJ POIRIER:  Anything further from  
9   Mr. Krishnamurthy?

10                   (No response.)

11           ALJ POIRIER:  Hearing none, today you  
12   are finally done.  Thank you,  
13   Mr. Krishnamurthy.

14           THE WITNESS:  Thank you.

15           ALJ POIRIER:  Ms. Frazier, I appreciate  
16   you clarifying.

17           MS. FRAZIER:  Thank you very much for  
18   allowing us to do so.  And, I guess, may we  
19   be excused again?

20           ALJ POIRIER:  You can.  Thank you.  
21   Have a nice night.

22           MS. FRAZIER:  You, too.

23           ALJ POIRIER:  Okay.  I think next let's  
24   move to handling of the exhibits.  I'm not  
25   sure who on SoCalGas is the lead on that, but  
26   please continue.

27                   You're on mute, Ms. Patel.

28           MS. PATEL:  Sorry.  It was my turn.

1 I believe we're going to enter the  
2 five Commission exhibits into the record. So  
3 I can read them now.

4 It's Commission Exhibit-1000, which  
5 is the Blade Energy Partner's Root Cause  
6 Analysis of the Uncontrolled Hydrocarbon  
7 Release from Aliso Canyon SS-25, dated  
8 May 16, 2019, referred to throughout the  
9 testimony as the main report.

10 Commission Exhibit-1001, which is  
11 the Supplemental Report, Volume 1, Approach.

12 Commission Exhibit-1002, which is  
13 the Supplemental Report, Volume 2, SS-25 Well  
14 Failure Causes.

15 Commission Exhibit-1003, which is  
16 Supplemental Report Volume 3, Post SS-25 Leak  
17 Event.

18 And Commission Exhibit-1004,  
19 Supplemental Report Volume 4, Aliso Canyon  
20 Casing Integrity.

21 (Exhibit No. Commission Exhibit-1000  
22 was marked for identification.)

23 (Exhibit No. Commission Exhibit-1001  
24 was marked for identification.)

25 (Exhibit No. Commission Exhibit-1002  
26 was marked for identification.)

27 (Exhibit No. Commission Exhibit-1003  
28 was marked for identification.)

(Exhibit No. Commission Exhibit-1004  
was marked for identification.)

1 ALJ POIRIER: Thank you. Are there any  
2 other exhibits?

3 MS. PATEL: No. It's my understanding  
4 that the other exhibit is already in the  
5 record.

6 ALJ POIRIER: Okay. Thank you. We're  
7 going to -- I think we have a -- do we have  
8 any objections to moving these exhibits into  
9 the record?

10 (No response.)

11 ALJ POIRIER: Hearing none, they are so  
12 moved.

13 This is Commission Exhibit 1000,  
14 Commission Exhibit 1001, Commission  
15 Exhibit 1002, Commission Exhibit 1003 and  
16 Commission Exhibit 1004 are moved on to the  
17 record.

18 (Exhibit No. Commission Exhibit-1000  
19 was received into evidence.)

20 (Exhibit No. Commission Exhibit-1001  
21 was received into evidence.)

22 (Exhibit No. Commission Exhibit-1002  
23 was received into evidence.)

24 (Exhibit No. Commission Exhibit-1003  
25 was received into evidence.)

26 (Exhibit No. Commission Exhibit-1004  
27 was received into evidence.)

28 ALJ POIRIER: Thank you, Ms. Patel.  
Ms. Patel -- okay. I think we're done with  
that. I think we're going to move to

1 cross-examination of Cal Advocates'  
2 witnesses.

3 Ms. Bone?

4 MS. BONE: Your Honor, before we swear  
5 the witnesses in, I wanted to make an  
6 objection on the record.

7 Your Honor, over the past week,  
8 SoCalGas has served many of the exhibits it  
9 has indicated it will use as cross-exhibits  
10 for the Cal Advocates' witnesses. And they  
11 have gotten better at getting them in -- back  
12 to us in a more timely manner. However,  
13 until pressed by Cal Advocates, SoCalGas has  
14 failed to identify which exhibits it would  
15 use to cross our witnesses and which  
16 witnesses should be prepared to address which  
17 exhibits. In essence, SoCalGas appears to be  
18 taking the position that a witness should be  
19 prepared to answer questions about any of the  
20 more than 100 exhibits comprising thousands  
21 of pages that the utility has already served  
22 on the parties.

23 It took two requests last week to  
24 get SoCalGas to identify the exhibits meant  
25 for Cal Advocates' witnesses and to break  
26 down the exhibits by witness. We got that  
27 breakdown late last Thursday afternoon, the  
28 day before our witnesses were anticipated to

1 go on the stand.

2 Yesterday, at approximately one  
3 o'clock, seeing no new exhibits being served,  
4 Cal Advocates reached out to SoCalGas for  
5 confirmation that those exhibits identified  
6 last Thursday would be the only exhibits that  
7 our witnesses would be crossed on.

8 We did not learn until after 6:30  
9 last night that SoCalGas intended to cross  
10 our witnesses on an additional seven  
11 exhibits, comprising over 250 pages that were  
12 served last -- yesterday, but not identified  
13 for our Cal Advocates' witnesses.

14 We believe that it is fundamentally  
15 unfair to expect witnesses to guess at which  
16 exhibits they will be crossed on or to wait  
17 until after 6:30 at night to provide that  
18 information.

19 I will acknowledge that we learned  
20 about 10 minutes ago, make it 20, that many  
21 of these new exhibits, the additional  
22 250 pages, are probably not going to be used  
23 for cross of our witnesses and were just  
24 being provided just in case.

25 We will go forward with the cross  
26 and not ask for an extension because we  
27 understand the value of the availability of  
28 our court reporters and the need to move

1 forward. However, I wanted this behavior to  
2 be reflected on the record and as a result of  
3 this behavior, our witnesses may not be  
4 entirely prepared, and I may object to the  
5 extent that one of these late-identified  
6 exhibits is now being used to cross one of  
7 our witnesses.

8 Thank you.

9 ALJ POIRIER: Thank you, Ms. Bone.

10 Ms. Patel, can you please address  
11 this?

12 MS. PATEL: Thank you, your Honor.

13 As Ms. Bone noted, it may have been  
14 lost though, because there was a whole circle  
15 there. We did serve the exhibits last  
16 Thursday -- we served the exhibits prior to  
17 last Thursday. We identified last Thursday  
18 which witnesses would be cross-examined on  
19 which exhibits.

20 Last night, I did send an e-mail  
21 prior to 6:30 identifying additional exhibits  
22 that each witness may be crossed on, and this  
23 morning I informed Cal Advocates that it's  
24 extremely unlikely that those exhibits will  
25 come up today.

26 MR. LOTTERMAN: Your Honor, this is Tom  
27 Lotterman. Let me add a little clarity to  
28 that statement. I can tell you that today we

1 will not be using any of the exhibits served  
2 last night at 6:30.

3 ALJ POIRIER: Okay. I appreciate that.  
4 We have had this discussion multiple times  
5 and we need those exhibits provided by the  
6 deadline. I do think it's unfair to provide  
7 something at 6:30, if they're going to be  
8 responsible for that. So I am -- I think  
9 it's a good development that that will not  
10 happen.

11 Ms. Bone.

12 MS. BONE: Just to be clear, your  
13 Honor, the exhibits are being served and they  
14 may even be served by the deadline, but  
15 SoCalGas is not identifying that they're for  
16 specific witnesses. And this is just basic  
17 common courtesy that you identify an exhibit  
18 and which witness should be prepared.  
19 Otherwise, they have to be expected to look  
20 at the entire record of thousands of pages.  
21 We don't know which exhibits are going to be  
22 used to cross which witnesses. So this is  
23 just, you know, fundamentally unfair and also  
24 not consistent with standard practice in  
25 hearings.

26 MR. LOTTERMAN: Your Honor, may I  
27 respond to that briefly as well?

28 ALJ POIRIER: Please go ahead.

1 MR. LOTTERMAN: The list of exhibits  
2 and the designation of witnesses that we  
3 provided last Thursday will be the exhibits  
4 and witnesses we will use today.

5 ALJ POIRIER: Okay. Thank you,  
6 Mr. Lotterman.

7 Again, we have a process out there.  
8 Let's follow it. Let's try to be -- we need  
9 to be as specific as we can moving forward  
10 with everybody. We have a lot to cover. I  
11 understand that we're at day seven and we  
12 still have a lot to go, but it's going to  
13 help us with the efficiency of these hearings  
14 moving forward.

15 With that, go ahead Ms. Bone. ]

16 MS. BONE: One more thing, your Honor.  
17 The damage has been done because the  
18 remaining cross after our witnesses go on is  
19 going to be SoCalGas' witnesses, and we are  
20 preparing to provide them the courtesy that  
21 we did not receive.

22 ALJ POIRIER: Thank you, Ms. Bone.

23 ALJ Hecht, do you have any comments  
24 before we move forward?

25 ALJ HECHT: Yes. I would say it sounds  
26 like SoCalGas and their attorneys are abiding  
27 by the letter but perhaps not the spirit of  
28 the request that we made to identify these

1 documents in advance. I recognize that there  
2 are some limitations to knowing what you're  
3 going to use before you go into the  
4 cross-examination.

5 Having said that, I wouldn't like to  
6 think that anybody is gaming these  
7 instructions or taking advantage of the  
8 system that we've set up. So I expect that,  
9 to the extent possible, people will identify  
10 in advance the exhibits that will be used. I  
11 hope that that's clear and I hope that we  
12 don't have a repetition.

13 MR. LOTTERMAN: Understood, your Honor.  
14 Thank you.

15 ALJ HECHT: Thank you.

16 ALJ POIRIER: Do we have any further  
17 comments on this matter?

18 (No response.)

19 ALJ POIRIER: Okay. Seeing none and  
20 hearing none, let's move ahead.

21 Ms. Bone, can you please present  
22 your first two witnesses, please.

23 MS. BONE: Yes, your Honor. Cal  
24 Advocates calls Mr. Alan Bach and Mr. Matt  
25 Taul to the stand.

26 Will your Honor administer the oaths  
27 now.

28 ALJ POIRIER: I will.

1                   Mr. Taul and Mr. Bach, are you  
2 there?

3                   WITNESS BACH: Yes.

4                   WITNESS TAUL: Yes.

5                   ALJ POIRIER: What I'm going to do is  
6 read through the entire attestation and then  
7 I'll ask each of you to respond to that.  
8 I'll call on each of you after I do that;  
9 okay?

10                   Does the witness solemnly state  
11 under penalty of perjury that the testimony  
12 the witness is giving in the case now pending  
13 before the Commission shall be the truth, the  
14 whole truth, and nothing but the truth;

15                   Does the witness attest that they  
16 will testify based on their own knowledge and  
17 memory free from external influences or  
18 pressures;

19                   Does the witness attest that they  
20 will adhere to all formal requirements for  
21 testifying under oath, including the  
22 prohibition against being coached;

23                   Does the witness attest that they  
24 will only refer to materials provided by the  
25 parties, exhibits premarked and identified by  
26 the parties, and previously shared with the  
27 opposing party;

28                   Does the witness attest that they

1 will not make any recording of the proceeding  
2 and attest that they understand that any  
3 recording of the proceeding held by Webex,  
4 including screenshots or other visual copying  
5 of a hearing, is absolutely prohibited;

6 Does the witness understand that the  
7 violation of these prohibitions may result in  
8 sanctions, including removal from the  
9 evidentiary hearings, restricted entry to  
10 future hearings, denial of entry to future  
11 hearings, or any other sanctions deemed  
12 necessary by the Commission;

13 Does the witness attest that they  
14 will not engage in private communication by  
15 phone, text, or e-mail, or any other mode of  
16 communication while under oath and being  
17 examined;

18 And, lastly, if the witness  
19 experiences any attempts to tamper with their  
20 testimony, they will report that occurrence  
21 to the providing officer immediately?

22 Mr. Taul, do you attest?

23 WITNESS TAUL: I agree.

24 ALJ POIRIER: Mr. Bach, do you attest  
25 to that?

26 WITNESS BACH: Yes, I do.

27 ALJ POIRIER: Okay. Thank you.

28 Ms. Bone.

1 MS. BONE: Yes, your Honor.

2 ALAN BACH and MATTHEW TAUL, called  
3 as witnesses by the California Public  
4 Advocates Office, having been sworn and  
5 having attested, testified as follows:

6 DIRECT EXAMINATION

7 BY MS. BONE:

8 Q Mr. Taul, can you please identify  
9 which testimony and exhibits you're  
10 sponsoring.

11 And, your Honor, just to make  
12 things move along more quickly, I'll have  
13 Mr. Taul and Mr. Bach identify both sets of  
14 testimony both from the panel as well as for  
15 their individual testimony at this time.

16 So, Mr. Taul?

17 WITNESS TAUL: So I am sponsoring my  
18 opening testimony, which was coauthored with  
19 Mr. Alan Bach, that is Section 2, opening  
20 testimony. I am also sponsoring my own  
21 testimony on recordkeeping, which is  
22 Section 5 of opening testimony as well as the  
23 reply testimony.

24 ALJ POIRIER: Ms. Bone, what's the  
25 number of that exhibit?

26 MS. BONE: Yes, just to be clear, that  
27 would be Exhibit 400 and Exhibit 402.

28 Q In addition, Mr. Taul, are you also  
sponsoring the supporting documents that

1 accompanied your testimony, Exhibits 401 and  
2 403?

3 WITNESS TAUL: Yes. Yes, I am.

4 Q And, Mr. Bach, which exhibits and  
5 testimony and other information are you  
6 sponsoring?

7 WITNESS BACH: Yes, I am sponsoring Cal  
8 Advocates opening testimony. That's Exhibit  
9 Number 400, Sections 2, and specifically  
10 pages 3, lines 11 to page 7, line 4, and then  
11 skipping over Mr. Taul's section within  
12 the same sect -- sorry -- Mr. Taul's portion  
13 but within the same section, page 9, line 9  
14 to page 10, line 11, in addition and within  
15 exhibit Section 4.

16 Again in sur-reply testimony, this  
17 is Cal Advocates-402, I'm sponsoring  
18 Section 3 and 4. And for both opening  
19 testimony and sur-reply, I'm sponsoring the  
20 reference citations that are in Cal Advocates  
21 supporting attachments 401 and 402.

22 Q So for Mr. Taul and Mr. Bach, do  
23 Cal Advocates' Exhibits 400 through 403  
24 represent your testimony in the case?

25 Mr. Taul?

26 WITNESS TAUL: Yes.

27 Q And Mr. Bach?

28 WITNESS BACH: Yes.

1           Q    Mr. Taul, you're an engineer;  
2    correct?

3           WITNESS TAUL:   That's right.

4           Q    Can you please explain your  
5    educational and professional engineering  
6    background.

7           A    Sure.  I received a Bachelor's of  
8    Science in Mechanical Engineering from the  
9    University of California, Berkeley, and I  
10   went to work with PG&E, or a subcontract with  
11   a company that worked for PG&E, to be more  
12   specific, several years back, had nearly  
13   three years in service -- and this will  
14   become more useful in my separate  
15   recordkeeping section -- going to different  
16   site locations, reviewing documents,  
17   estimating whether maintenance had been  
18   missed on these documents, flagging internal  
19   issues, maintenance that was noncompliant  
20   within PG&E's own internal standards,  
21   flagging that for review by CPUC, as well as  
22   looking over engineering as-built documents  
23   and generally digitizing PG&E's system,  
24   taking a lot of hard-copy records and  
25   bringing them to their digital software.

26                   Following that, I joined Cal  
27   Advocates in 2019, I believe, and I have been  
28   working on several different cases, one of

1     them de-energization mostly, regionalization  
2     partly, and a few other cases here and there.  
3     But this is my first time before the  
4     Commission and first time in hearings.

5             Q     And you're doing great. Thank you.  
6                     Mr. Bach, you're also an engineer;  
7     correct?

8             WITNESS BACH: Yes, that's correct. I  
9     have a Bachelor's in Engineering Science from  
10    the University of California, Berkeley, and  
11    then a Civil Engineering and Master's also  
12    from UC Berkeley. And I was part of the  
13    Commission Safety and Enforcement Division,  
14    specifically the Gas Safety and Liability  
15    Branch for one year and have been in the  
16    Public Advocates Office for a little over  
17    three years now. In addition, I have a  
18    professional engineering license in  
19    mechanical engineering.

20            WITNESS TAUL: And I would add that I  
21    have an engineering training certificate,  
22    which is the prerequisite to take and pass  
23    that same professional engineering  
24    examination accredited by the State of  
25    California.

26            MS. BONE: Thank you, Mr. Taul, and  
27    thank you, Mr. Bach.

28                     Mr. Bach, your voice is kind of a

1 little fuzzy so I don't know if there's a way  
2 of fixing that so that we can hear you more  
3 clearly.

4 Mr. Taul, to the extent that this  
5 testimony requires engineering judgment, does  
6 this reflect your best engineering judgment  
7 on these issues?

8 WITNESS TAUL: It does, yes.

9 Q And the same question for Mr. Bach.

10 WITNESS BACH: Yes, it does.

11 Q Thank you. And your voice is  
12 coming through more clearly now.

13 So, your Honor, both Mr. Taul and  
14 Mr. Bach are now available for  
15 cross-examination.

16 ALJ POIRIER: Thank you, Ms. Bone.

17 Mr. Lotterman, you're up.

18 MR. LOTTERMAN: Yes, Your Honor. Thank  
19 you. Just taking some notes here. Thank  
20 you.

21 CROSS-EXAMINATION

22 BY MR. LOTTERMAN:

23 Q Good morning, gentlemen. What I  
24 wanted to do is talk through some  
25 preliminaries and then we'll get into the  
26 reports yourself. Before we talk specifics,  
27 there's a concern that I believe you made an  
28 attestation that you would not be recording

1 these proceedings. There is a concern that  
2 someone else may, and so we have been asking  
3 all our witnesses if they consent to being  
4 recorded by third parties.

5 Mr. Taul, what is your answer?

6 WITNESS TAUL: I do not consent.

7 Q Mr. Bach?

8 WITNESS BACH: I do not consent.

9 Q Thank you. All right. Gentlemen,  
10 I've been practicing law for a long time but  
11 this is the first time I've ever examined two  
12 witnesses at one time. So I was hoping we  
13 could establish some ground rules to maybe  
14 make this move a little more efficiently. I  
15 believe one of you was identifying the  
16 particular portions of Section 2 that each of  
17 you prepared. If that's the case, would you  
18 mind turning to your opening testimony, CalPA  
19 Exhibit 402 and starting at page 3, just sort  
20 of give me a sense so I can bracket when  
21 Mr. Bach is testifying so to speak or when  
22 Mr. Taul or maybe both of you if that's  
23 possible.

24 WITNESS BACH: Yes. So for Section 2,  
25 I will be testifying starting at the start of  
26 that section and then, as I mentioned, going  
27 down all the way until page 7, line 4. And  
28 then starting -- in the paragraph starting at

1 line 5, that is Mr. Taul's section. And then  
2 Mr. Taul's section continues until page 9,  
3 line 8. And then on page 9, line 9 until the  
4 end of that section is my section.

5 Q That's very helpful. Very helpful.  
6 I think that will -- if I can digest that  
7 information quickly, I think that will help  
8 the examination go much more quickly.

9 So you just answered my question  
10 about the role of each of you in this  
11 testimony. I take it we don't need a chief  
12 spokesperson because if I talk about a  
13 particular section, I will just address  
14 myself to the person who authored it.

15 And by the way, if at any point,  
16 Mr. Bach and Mr. Taul, one of you wants to  
17 jump in and add something or clarify  
18 something or supplement something that your  
19 colleague has said, just raise your hand.  
20 I'll try to keep an eye on things and try to  
21 make that happen. I may not pick it up right  
22 away but at some point in time.

23 And, Ms. Bone, you are welcome to  
24 alert me to that possibility going forward.  
25 All right.

26 So I'd like to start by  
27 understanding your qualifications a little  
28 better. Mr. Bach, I believe you testified

1 you are -- and also looking at your  
2 qualifications in your testimony -- I believe  
3 you are currently a utilities engineer in the  
4 Safety Branch of the Public Advocates Office  
5 in San Francisco; is that right? ]

6 WITNESS BACH: I'm an engineer in the  
7 energy infrastructure (indecipherable)  
8 previously the energy safety  
9 infrastructure (inaudible.)

10 Q Okay. I am sorry. I didn't pick  
11 up your title, sir.

12 A I'm a utilities engineer.

13 Q Got it. Okay. Yeah. Thank you.  
14 And I believe you said you got your  
15 Bachelor's and Master's in Engineering  
16 Science and Civil Engineering from Berkeley;  
17 is that right? Could you give me the dates  
18 of both of those degrees?

19 A Yes. The Bachelor's was May, 2015.  
20 And the Master's was also May, 2016.

21 Q 2016. Okay. And when did you  
22 obtain your professional engineering  
23 certificate or your license for mechanical  
24 engineering in California?

25 A I believe that was July, 2019.

26 Q 2019. Okay. Thank you very much.  
27 So I noticed in your qualifications you talk  
28 about conducting inspections on utility gas

1 infrastructure and taking courses toward  
2 becoming a PHMSA certified pipeline  
3 inspector. I was wondering have you ever  
4 inspected a storage facility?

5 A I had been on a storage facility in  
6 (indecipherable) but I was primarily focused  
7 on control room operations.

8 Q Okay. Did you inspect during that  
9 time any storage wells?

10 A I did not directly inspect any  
11 storage wells.

12 Q Have you ever run a casing  
13 inspection tool?

14 A I have not.

15 Q All right. And I believe in the  
16 description of your current duties and  
17 responsibilities in the Public Advocates  
18 Office, you talk about working on PG&E's  
19 general rate case; is that correct?

20 A Yes; that's correct.

21 Q Did that afford you the opportunity  
22 to get familiar with that utility's storage  
23 system?

24 A Yes. To some extent.

25 Q All right. And I believe you also  
26 mentioned your work on RAMP, R-A-M-P; is that  
27 right?

28 A Yes; that's correct.

1 Q All right. In doing so, did that  
2 afford you the opportunity to become familiar  
3 with PG&E's Risk Assessment Program?

4 A Yes.

5 Q All right.

6 Mr. Taul, your turn. I take it  
7 you're also a utilities engineer in the  
8 Safety Branch of the Public Advocates Office  
9 in San Francisco?

10 WITNESS TAUL: That is correct, yes.

11 Q All right. And looks like you also  
12 went to Berkeley. What year did you get your  
13 bachelor of science degree in mechanical  
14 engineering?

15 A That would be May of 2016.

16 Q All right. And looking at your  
17 work history, I think you mentioned just a  
18 minute or two ago that you began working in  
19 your current job in 2019. And before that  
20 for roughly three years, you were contracting  
21 with PG&E as an internal auditor. Did I get  
22 that right?

23 A Yes. So it was another company  
24 that had PG&E's contract. So I wasn't a PG&E  
25 employee, but I did have internal access, LAN  
26 ID, able to make changes as an internal  
27 auditor.

28 Q Got it. Okay. And you mentioned

1 that some of your work the goal of which was  
2 to clean up the data storage in PG&E's  
3 maintenance control software and reviewing  
4 records.

5 Can you give us a little more  
6 detail as to what that involved?

7 A Yeah. Each of these is their own  
8 little story. So PG&E had a maintenance  
9 control software in the early 2000s I  
10 believe. It was an FAT database. Might have  
11 been NetWeaver. I can't remember the exact  
12 implementation.

13 But they had a software called  
14 "ANLTD," which from my understanding as a  
15 technician working with other technicians on  
16 the ground, stores data at the equipment  
17 level. And so that meant that if the  
18 equipment was replaced or taken out of  
19 service so went a lot of the notifications,  
20 work orders, and all the attributes for that  
21 particular asset with the removal of that  
22 equipment. And so it wasn't a great  
23 structure for maintaining software.

24 And I think 2015 or 2016, they  
25 changed to a new software implementation  
26 called AMBBS. And part of our duty was  
27 trying to clean the data from the ANLTD  
28 system after the transmission to AMBBS.

1           Now, this new management control  
2 software system put equipment at a functional  
3 location, which I believe is similar to what  
4 SoCalGas had for their backing up software,  
5 which is where all the equipment, all the  
6 assets, all the maintenance, all the work  
7 orders, all the notifications, they're all  
8 stored to a functional location that  
9 represents a physical location in the real  
10 world. So it's just a better way of storing  
11 that software.

12           The goal of cleaning up the data  
13 was getting the actual physical records,  
14 which was the quote unquote document of  
15 record. This allowed us to -- and we would  
16 go back and look at these documents ten years  
17 prior in order to update their digital  
18 systems so that PG&E knew what they actually  
19 had in the field.

20           The other one was reviewing  
21 records. So, again, that kind of ties into  
22 the control software. Just trying to make  
23 sure that PG&E knew what it had on the  
24 ground.

25           Q   And did it entail cleaning up data  
26 involving underground storage?

27           A   Other folks did in our team. I was  
28 originally scheduled to go to Los Medanos,

1 which is a co-generating station that I  
2 thought had well storage. And McDonald  
3 Island of PG&E as well, which I'm pretty sure  
4 has gas storage there. But I ended going to  
5 neither of those. So long answer, no.

6 Q You also mentioned in your  
7 qualifications that you traveled to 18  
8 different PG&E gas transportation  
9 distribution maintenance yards to ensure  
10 compliance with its internal standards and  
11 CPUC regulations; is that accurate?

12 A That is, yes.

13 Q Did your travel take you to any  
14 PG&E storage facilities?

15 A No. As I was not taken to Los  
16 Medanos or McDonald Island.

17 Q So as I understand both of your  
18 qualifications, you're both mechanical  
19 engineers by education and/or training;  
20 correct?

21 WITNESS TAUL: That would be correct.

22 Q Okay. Thank you.

23 Has either of you had any training  
24 in petroleum engineering?

25 WITNESS TAUL: This is Matthew Taul.  
26 No.

27 Q Mr. Bach?

28 WITNESS BACH: No.

1 Q Any of you ever have any work  
2 history in the petroleum engineering area?

3 WITNESS TAUL: No.

4 Q Mr. Bach?

5 WITNESS BACH: No. Besides any  
6 information that cross over with natural gas.

7 Q Okay. Understood. And I think I  
8 know the answers to these, but raise your  
9 hand if -- let me give you the list. I think  
10 we can go through this pretty quickly.

11 Raise your hand if you have any  
12 experience working at underground storage  
13 facilities or underground storage generally  
14 or in the oil and gas business.

15 Either one of you?

16 (No response.)

17 BY MR. LOTTERMAN:

18 Q Okay. Has either one of you ever  
19 visited an underground storage facility?

20 WITNESS BACH: No.

21 Q All right.

22 MS. BONE: No. Objection, your Honor.  
23 I believe that they're answering yes. I can  
24 only see Mr. Bach.

25 But Mr. Taul, I believe, has also  
26 visited an underground storage facility; is  
27 that correct?

28 WITNESS TAUL: Underground storage? I

1 do not believe my work took me there, no.

2 (Crosstalk.)

3 ALJ POIRIER: Mr. Lotterman, I  
4 appreciate that you're trying to move us  
5 through. But I think it would be easier if  
6 we just ask each person the question. I  
7 think Mr. Bach had a different answer.

8 BY MR. LOTTERMAN:

9 Q All right. Mr. Bach, have you ever  
10 visited an underground storage facility aside  
11 from any work on this particular proceeding?

12 WITNESS BACH: Yes. I visited PG&E's  
13 Los Medanos gas storage. I think it's called  
14 Gill Ranch in (indecipherable). Those were  
15 mainly control room inspections.

16 (Reporter clarification.)

17 ALJ POIRIER: Let's go off the record.

18 (Off the record.)

19 ALJ POIRIER: We will be back on the  
20 record.

21 Mr. Lotterman, if you could restate  
22 the question, I think that would be helpful.

23 We can continue. Thank you.

24 BY MR. LOTTERMAN:

25 Q I believe I had just asked Mr. Bach  
26 about his visiting underground storage  
27 facilities. I believe he answered. I asked  
28 him what the purpose of the visit was, and I

1 believe he answered that question. So I  
2 don't think there's a question pending.

3 What I was going to ask next to  
4 both of you is -- I'll do this individually.

5 Mr. Bach, do you belong to any  
6 professional organizations like AGA or  
7 Society of Professional Engineers or anything  
8 like that?

9 WITNESS BACH: I --

10 (Crosstalk.)

11 MS. BONE: Excuse me. Objection, your  
12 Honor. But I don't recall Mr. Bach answering  
13 the reasons he was at the underground storage  
14 facility. Could we take the time for him to  
15 restate that if he did say anything.

16 ALJ POIRIER: Mr. Bach, can you go  
17 ahead and restate that, please?

18 WITNESS BACH: Yes. My reason for  
19 being at the underground storage facilities  
20 was to inspect the control rooms.

21 ALJ POIRIER: Now can you go ahead and  
22 please answer the question on your membership  
23 and the organizations?

24 WITNESS BACH: Yes. I am not part of  
25 any professional organization to date with  
26 oil and gas.

27 BY MR. LOTTERMAN:

28 Q Mr. Taul?

1           WITNESS TAUL: In my past, I am  
2 familiar that I joined ASME, The American  
3 Society of Mechanical Engineers. I believe  
4 that membership has passed.

5           I am unsure on the status of my  
6 membership in ASSP, The American Society of  
7 Safety Professionals. If I had that accurate  
8 and correct.

9           I am working toward a risk -- I  
10 forget, again, the acronym. A risk  
11 assessment or risk assessor certification.  
12 And went to one of their conferences last  
13 year and have another year to take one more  
14 course to get that certification. ]

15           Q All right. Thank you very much.

16           Gentlemen, before we delve into  
17 your testimony, I was going to make sure we  
18 are all on the same page as far as terms,  
19 venues and let me just sort of run through  
20 the five terms we have been using, and if you  
21 have any problems with them, I will let you  
22 each tell me so.

23           If we use the term "Blade," we are  
24 generally referring to Blade Energy Partners.  
25 If we refer to "Aliso Canyon," we are talking  
26 about SoCalGas' Aliso Canyon Gas Storage  
27 facility. If we talk about the "leak" or the  
28 "incident," we are talking about the leak at

1 the SS-25 well that was first detected on  
2 October 23rd, 2015. "RCA" or "root cause  
3 analysis," that is meant to denote the  
4 undertaking by Blade as outlined in their  
5 main report dated May 16, 2019 and  
6 supplements.

7 And finally, I'm not sure we'll get  
8 this detailed but we may, "SS-25," we are  
9 referring to the "Standard Sesnon 25" well at  
10 Aliso Canyon. Are we okay with those five  
11 terms?

12 I see both of you nodding.

13 WITNESS TAUL: Yes.

14 BY MR. LOTTERMAN:

15 Q Good. Excellent. All right. So  
16 let me -- one final housekeeping measure.

17 I'd like to understand from each of  
18 you what you did to prepare the testimony  
19 that has now been marked and will -- should  
20 be moved into evidence at some point.

21 Why don't we start with you,  
22 Mr. Taul? Did you review any files at Aliso  
23 Canyon in preparation of your portion of the  
24 testimony you're sponsoring today?

25 WITNESS TAUL: So, what you're  
26 referring to, is me and an analyst traveled  
27 down to LA. We requested to see SS-25 well  
28 file at either Aliso Canyon or SoCalGas

1 Tower, whichever, wherever the documents had  
2 to be. By the time we arrived, we were  
3 informed that all of the documents were at  
4 SoCalGas Tower.

5 So to answer your question, I have  
6 not been to Aliso Canyon to visit those  
7 files. But I did visit SoCalGas Tower to  
8 visit the well files, partial well files of  
9 SS-25 and I believe four other wells.

10 In that document -- if those  
11 documents were useful in drafting my opening  
12 testimony, yes.

13 Q Did you request any specific  
14 documents as part of your undertaking?

15 A Yes. I would say,  
16 generally-speaking, documents referring to  
17 maintenance or inspection, looking at whether  
18 or not SoCalGas in its operation in Aliso  
19 Canyon were compliant with their internal  
20 standards or with DOGGR state regulations at  
21 the time.

22 Q And have you read the Blade report?

23 A Yes.

24 Q Just the main report or some of the  
25 sub-reports as well?

26 A Well, I believe I have read all of  
27 them, but I specifically reference in my  
28 opening testimony the Blade main report and

1 Volume 4, 1988 Vertilog Wells Chapter.

2 Q Have you reviewed any -- actually,  
3 have you assisted in preparing any responses  
4 to data requests in this case?

5 A Yes. So, SoCalGas issued Cal  
6 Advocates DR-1 shortly after we submitted our  
7 opening testimony 2019. I worked on  
8 responses to several of those questions.  
9 Some of these questions were not deemed as  
10 appropriate or explanatory SoCal wanted. We  
11 went into a meet and confer and I offered an  
12 additional supplementary set of responses.  
13 And so those are I believe Cal Advocates-404  
14 and 405 exhibits that we're hoping we can get  
15 into the record to fully explain the  
16 testimonies.

17 Q Okay. And have you reviewed data  
18 responses from other participants in this  
19 proceeding that were provided pursuant to  
20 other data requests, as well as Cal  
21 Advocates?

22 A I don't quite understand your  
23 question. Are you asking me whether I have  
24 seen other parties' DRs?

25 Q That's a better way to put it, yes,  
26 sir.

27 A I have seen them. I am not sure  
28 the extent to which other parties' DRs have

1 affected my own testimony.

2 For the most part, my testimony  
3 relied on my experience down in Southern  
4 California looking at the partial well files,  
5 as well as our requests, our data requests to  
6 SoCalGas.

7 Q Aside from Mr. Bach, have you  
8 conferred with any other engineers or those  
9 with expertise in preparing your testimony?

10 A I would assume so.

11 Q Who?

12 A Tyler Holzchuh, who is going to be  
13 on -- in cross later today. I believe  
14 manager Mina Botros. He is the lead on this  
15 particular project. He is also a mechanical  
16 engineer, I believe. I think that -- and  
17 Alan Bach, obviously.

18 Q All right. So, just to be clear,  
19 it sounds to me as if in preparing your  
20 testimony today, you conferred with others  
21 within the Cal Advocates' organization, but I  
22 didn't hear you indicate that you conferred  
23 with any experts outside of that  
24 organization; is that accurate?

25 A Are you raising your hand Alan?

26 WITNESS BACH: Yes. This is Alan Bach.  
27 I am.

28 ALJ POIRIER: Mr. Bach, let's hold off

1 for a second. Please let Mr. Taul answer the  
2 questions.

3 Ms. Bone.

4 MS. BONE: Your Honor, objection.

5 Asked and answered.

6 MR. LOTTERMAN: I was just looking for  
7 some clarification. It's a simple question.

8 WITNESS TAUL: To what specific part of  
9 my testimony are you referring?

10 BY MR. LOTTERMAN:

11 Q No. It's a simple - I am sorry,  
12 Mr. Taul. I didn't want to make this to  
13 complicated. My question is a simple one.  
14 In preparing your testimony that you're  
15 sponsoring in this proceeding, have you  
16 conferred with any other engineers or experts  
17 outside of Cal Advocates?

18 WITNESS TAUL: For my testimony, I rely  
19 on Blade's expertise and I am sure there are  
20 tons of engineers there. I did participate  
21 in a call with Blade's engineers. I believe  
22 it was a telephonic response to a data  
23 request we sent to Blade. Although, again,  
24 I'm not sure I cite to that in my testimony,  
25 if that answers your question.

26 Q It does in part. I want to make  
27 sure you answered completely, though. So,  
28 aside from those employed within Cal

1 Advocates that you conferred with and the  
2 call with Blade engineers, have you conferred  
3 with any other outside experts or engineers  
4 in preparing your testimony in this  
5 proceeding?

6 A In what I have written, those would  
7 be the engineers and professionals, yes. I  
8 think that sums it up.

9 Q What about what you have not  
10 written?

11 A There was some investigations to  
12 other gas storage sites, I believe Gill  
13 Ranch. There was a couple of others just  
14 asking questions about running underground  
15 storage facilities. And all of that informed  
16 what I chose to write about, which is in my  
17 opening testimony.

18 Q All right. So in addition to these  
19 various categories of conferring with,  
20 anything else you need to tell us?

21 A No. That's it.

22 Q All right. Thank you. Did you  
23 read any transcripts of Examinations Under  
24 Oath in this proceeding?

25 A Perhaps. At this point, I can't  
26 remember. Certainly I don't site to them in  
27 any testimonies.

28 Q All right. Well, maybe we'll come

1 across those.

2 Have you read any depositions from  
3 any civil cases that are -- that pertain to  
4 this incident?

5 A I do not believe so, no.

6 Q All right. Mr. Bach, let me run  
7 through the same line of questions with you,  
8 sir. Actually, this is a much more  
9 complicated series of questions, since you --  
10 actually that was Mr. Taul, who did the  
11 missing records.

12 All right. Mr. Bach, can you tell  
13 us generally what records from Aliso Canyon  
14 or from the gas company you reviewed in  
15 preparing your testimony?

16 WITNESS BACH: All records I reviewed  
17 either were provided within Blade reports or  
18 from data requests, either my own data  
19 request or other Cal Advocates' witnesses or  
20 other data requests of other parties.

21 Q I think you just answered my second  
22 question. Did there come an occasion where  
23 you, either through a data request or  
24 otherwise, requested specific documents from  
25 SoCalGas as part of this proceeding?

26 A Yes, I did.

27 Q Okay. And have you read the Blade  
28 report?

1           A    I've read the Blade report  
2 Volume IV and portions of other volumes.

3           Q    All right.  And have you reviewed  
4 any data -- any responses to data requests by  
5 other parties in this proceeding?

6           A    Yes, I have.  In fact, I believe I  
7 cited one of SED's data requests to SoCalGas  
8 in my sur-reply.

9           Q    All right.  And did you assist your  
10 team in Cal Advocates in responding to data  
11 requests in this proceeding?

12          A    I believe I might have helped draft  
13 some of the questions, but not to the extent  
14 of Mr. Taul.

15          Q    All right.  And have you conferred  
16 -- let's leave aside anyone within the  
17 organization of Cal Advocates.  Have you  
18 conferred with any other engineers or experts  
19 outside of Cal Advocates in preparing this  
20 testimony?

21          A    Yes.  And so the reason I was  
22 raising my hand earlier was Mr. Taul  
23 essentially mentioned the calls -- the calls  
24 with -- of Blade.  I also wasn't in direct  
25 contact, but our witness Tyler Holzchuh,  
26 contacted several other casing inspection  
27 companies.

28          Q    I'm sorry.  Did you say you were

1 involved with that or you were aware of that  
2 happening?

3 A I wasn't in direct contact, but I  
4 was contacted with some of the information  
5 passed on by those companies.

6 Q I see. So it sounds to me as if  
7 Mr. Holzchuh made the call and then whatever  
8 information he gathered he passed along to  
9 you?

10 A Yes, that's correct.

11 Q Got it. Okay. Any other engineers  
12 or experts with whom you conferred in  
13 preparing your testimony for this proceeding?

14 A Not that I recall, besides  
15 obviously other Cal Advocates' witnesses.

16 Q Right. And I'm leaving them out.  
17 I'm assuming you're collaborative and  
18 collegial there and you talk amongst  
19 yourselves and I don't need to understand  
20 that for purposes of today.

21 Have you read any transcripts of  
22 any Examinations Under Oath in this  
23 proceeding?

24 A Are you referring to -- I remember  
25 it was under this proceeding number, but are  
26 you referring to past transcripts related to  
27 Aliso Canyon? I believe I have.

28 Q Right. So let me break that into

1 two categories. There are some civil --  
2 there are some civil litigation going on  
3 regarding Aliso Canyon and when there are  
4 informal examinations there, they're called  
5 depositions. And they have transcripts and  
6 the people who are deposed are under oath.

7 In the context of the CPUC  
8 proceeding, the same exercise is often  
9 undertaken, but they're called EUOs or  
10 Examinations under Oath. That's why I was  
11 starting with EUOs, but I can ask a more  
12 general question. And that is, in preparing  
13 your testimony, did you read any transcripts  
14 of any depositions or other examinations  
15 regarding what happened at Aliso Canyon,  
16 vis-à-vis the SS-25?

17 A Yes, I have.

18 Q Okay. Which ones?

19 A I don't recall the exact ones. I  
20 think -- there was something between SED and  
21 SoCalGas and I believe there was one where  
22 Mr. Mansdorfer was testifying.

23 Q All right. Well, we may get to  
24 that today, and if we do, maybe that will  
25 refresh your recollection a little bit. All  
26 right.

27 So, Mr. Bach, sticking with you,  
28 have you been listening to these proceedings

1 so far?

2 A To portions of it, yes.

3 Q Okay. Have you heard Ms. Felts  
4 testify?

5 A Again, to portions of it.

6 Q Okay. Have you listened to  
7 Dr. Krishnamurthy testify?

8 A Yes, again, to portions.

9 Q Okay. Dr. Krishnamurthy's  
10 testimony lasted two days, Monday and  
11 Tuesday. Can you give us an estimate as to  
12 how much of those two days, what percentage  
13 of those two days you spent listening to him?

14 A Definitely the bulk of it, probably  
15 like around three-quarters.

16 Q All right. Thank you.

17 ALJ POIRIER: Mr. Lotterman, I am  
18 trying to find a time that would be good for  
19 a morning break.

20 MR. LOTTERMAN: Two more questions,  
21 your Honor, if I may.

22 ALJ POIRIER: Please go ahead.

23 MR. LOTTERMAN: Thank you.

24 Q Mr. Taul, did you listen to the  
25 proceedings thus far in this case?

26 WITNESS TAUL: Yes. Yes, I did.

27 Q Did you listen to Felts?

28 A Yes, I did.

1 Q And I am going to borrow a  
2 question. Did you listen to  
3 Dr. Krishnamurthy?

4 A Yes, I did.

5 MR. LOTTERMAN: All right. Your  
6 Honors, this is a good time.

7 ALJ POIRIER: Thank you, Mr. Lotterman.  
8 We will take a break until 11:20. We'll be  
9 off the record.

10 (Off the record.)

11 (Break.)

12 ALJ HECHT: We will be back on the  
13 record.

14 While we were off the record, we had  
15 a short morning break, and we also have been  
16 looking into an unauthorized participant who  
17 has been showing up at least some of the time  
18 on our Webex panelist and Verizon speaker  
19 list, and that is someone named Laurie Biehl.

20 Looking up Laurie Beale, I have  
21 found that it appears to be a name of a court  
22 reporter that is a court reporting service  
23 that is not to my knowledge associated with  
24 the CPUC.

25 If indeed someone is recording this,  
26 I will note that that is in direct  
27 contravention of the instructions of the  
28 attestations that all of the parties

1 participated and of several witnesses and  
2 myself who have said that we do not consent  
3 to be recorded in a fashion other than with  
4 our own court reporters. And I do consider  
5 using an outside reporter to be a sort of  
6 recording.

7           So, I wanted to say that if there is  
8 somebody who has given the panelist  
9 information out to a Laurie Biehl, we would  
10 like to know who that is and what's going on.  
11 There will not necessarily be sanctions,  
12 because I really want to know what is  
13 happening more than I want anything else, but  
14 this is not acceptable and I am very  
15 troubled. And while the person has been  
16 moved off of panelist and speaker, it doesn't  
17 change the fact that I now have a suspicion  
18 that someone is recording this I think in an  
19 unauthorized way.

20           So having gotten that on the record,  
21 I will continue and say I apologize. I have  
22 been having some technical problems this  
23 morning, mostly with my video. My audio has  
24 been completely stable. So I have been  
25 engaged and I think that my issues have now  
26 been resolved.

27           Do we have any housekeeping matters  
28 or other comments before we continue with the

1 cross-examination of the Public Advocates  
2 Office's witnesses?

3 (No response.)

4 ALJ HECHT: All right. I am seeing  
5 none. So with that, we can pick up with the  
6 cross-examination where we left off.

7 Mr. Lotterman.

8 MR. LOTTERMAN: Thank you, your Honor.

9 Q Before, Misters Bach and Taul,  
10 before we get into your testimony, I had one  
11 area I wanted to qualify. I believe both of  
12 you indicated when I asked you earlier about  
13 what you had done to prepare your testimony,  
14 you indicated that there had been a call or  
15 calls with Blade. And I was wondering -- why  
16 don't we start with Mr. Taul.

17 How many calls did you have with  
18 Blade or Blade's engineers in -- vis-à-vis  
19 this proceeding?

20 WITNESS TAUL: Again, the Blade call  
21 would have been Tyler Holzchuh taking the  
22 lead on communicating. I can remember being  
23 in the room for those -- was that twice, at  
24 most? Twice. Perhaps Mr. Bach remembers  
25 more. Maybe he was in the room for more. I  
26 think it was only twice for me.

27 Q Mr. Bach, what is your  
28 recollection?

1           WITNESS BACH: Yes, my recollection is  
2 the same as Mr. Taul. I was on about two  
3 calls.

4           Q All right. I appreciate that,  
5 because I heard one person say "call"  
6 singular and I thought I heard one person say  
7 "call" plural. I just wanted to make sure.

8                       So to the best of both your  
9 recollections, it was two calls and we'll go  
10 from there.

11           All right. So let's turn to the  
12 testimony, and I get the impression,  
13 Mr. Bach, that given what you told us earlier  
14 that the bulk of my questions are going to go  
15 to you, at least initially, and then we'll  
16 probably finish up with Mr. Taul.

17                       So let me start with you first,  
18 sir, if you don't mind.

19                       When I turn to Section 2 of the  
20 opening testimony, and that's on -- that  
21 begins as you noted on page 3 of Exhibit  
22 CalPA-400-2.

23                       Right out of the box, you talk  
24 about a 1988 memo which -- regarding  
25 "candidate wells for casing inspection,  
26 comma, Aliso Canyon field." Is that right?

27           WITNESS BACH: Yes. That's correct.

28           Q And, in fact, that memo is in your

1 supporting exhibits to your testimony, true?

2 A Yes. That's correct.

3 Q And you note in your discussion,  
4 which we'll talk about in a minute, that that  
5 employee who wrote the memo recommended  
6 performing casing integrity logs and in this  
7 case Vertilogs on 20 wells at Aliso Canyon;  
8 is that right?

9 A Yes. That's correct.

10 Q All right. As well as, by the way,  
11 recommending pressure testing, true?

12 A Yes. That's correct.

13 Q All right. And just so we have our  
14 terminology correct here for purposes of  
15 today, you know, it's my understanding there  
16 is a difference between sort of monitoring  
17 tools like a temperature log or a noise log  
18 and casing inspection tools like Vertilogs;  
19 is that your understanding as well?

20 A That is my understanding as well.

21 Q All right. So when I say "casing  
22 integrity" or "casing inspection tools,"  
23 let's assume we are talking about kind of a  
24 Vertilog and we'll talk about the specifics  
25 in a minute. If I want to look at more  
26 general monitoring tools, like temp logs or  
27 noise logs, I will indicate that. Okay?

28 A Okay.

1           Q    Good.  And you observe in the  
2 section that you wrote that of the 20 wells  
3 that were recommended for casing integrity  
4 logs, only seven of those inspections were  
5 done, correct?

6           A    Yes.  That's correct.

7           Q    And although SS-25 was one of the  
8 20 recommended, it was not inspected; true?

9           A    Yes.  That is correct.

10          Q    And you note that of the seven  
11 wells that were inspected -- so 13 weren't --  
12 so total of 20; 13 weren't, 7 were.  Of the 7  
13 that were, SoCalGas performed remediation on  
14 4 of them; is that right?

15          A    Yes.  That's correct.

16          Q    All right.  And then you state in  
17 your testimony that in your view a prudent  
18 operator would have inspected all 20; in  
19 other words, the other 13, including SS-25,  
20 right?

21          A    Yes.  At least based on the results  
22 of the wells that were inspected.

23          Q    Okay.  Okay.  We'll get to that in  
24 a minute.

25                   And you say at the end of your  
26 report, and I believe this is your Section 2.  
27 Let me make sure.  Yes, it is.  Okay.  So at  
28 the very end of your report, you say, and

1 basically:

2 And if SoCalGas had inspected  
3 those other 13 wells, including  
4 SS-25 --

5 MS. BONE: Objection.

6 ALJ HECHT: Could you please state your  
7 objection?

8 MS. BONE: Objection, your Honor. If  
9 he could please indicate the page that he is  
10 quoting from, that would be helpful for the  
11 witness.

12 ALJ HECHT: That would be helpful,  
13 Mr. Lotterman.

14 MR. LOTTERMAN: Glad to, your Honor. I  
15 will slow things down a little bit.

16 Q And, Mr. Bach, if you turn to  
17 page 9 of the testimony, it looks like you  
18 have up on the screen, right at the bottom,  
19 do you see where line 21 begins?

20 WITNESS BACH: Yes.

21 Q Mr. Moshfegh, you don't need to  
22 pull this up.

23 Do you see where line 21 begins?

24 A Yes.

25 Q You basically say:

26 If SoCalGas had inspected those  
27 other 13 wells, including SS-25,  
28 it may have timely -- the leak may

1                   have been timely identified and  
2                   prevented.

3                   Is that, in essence, what you're  
4                   saying?

5                   A    Yes.

6                   Q    All right.  So, I'd like to spend a  
7                   couple of minutes unpacking that testimony  
8                   and clarifying that -- the record.

9                   Let's begin by the memo at issue.  
10                  Let's call it the 1988 memo; all right?

11                  A    Okay.  Got it.

12                  Q    Good.  And I'd like to -- and  
13                  Mr. Moshfegh, if you would pull that up.  And  
14                  for all of you, it's CalPA Exhibit 401 at  
15                  pincite 266 and it goes through 268.  We're  
16                  going to put it on the screen for you,  
17                  Mr. Bach, but you're also welcome to look at  
18                  your own exhibits, whichever you prefer, sir.

19                  I would like to go to the first  
20                  page, Mr. Moshfegh, 266, please.

21                  Mr. Bach, do you see that?

22                  A    Yes, I do.

23                  Q    All right.  So, let's set the table  
24                  here.  Obviously it's a Southern California  
25                  Gas Company interoffice correspondence,  
26                  right?

27                  A    Yes, that's correct.

28                  Q    And it's written by a Mr. D.R.

1 Horstman to M.E. Melton, correct?

2 A Yes, that's correct.

3 Q And for the court reporter,  
4 Horstman is spelled H-o-r-s-t-m-a-n. And  
5 Melton is M-e-l-t-o-n. And the memo is dated  
6 August 30, 1988, true?

7 A That's correct.

8 Q All right. And if I do the math,  
9 that's 27 years before the leak in 2015,  
10 correct?

11 A Yes, that's correct.

12 Q All right. And if you look right  
13 at the top line, it says:

14 Attached is a listing of all  
15 casing flow wells of 1940s and  
16 1950s vintage currently in  
17 operation at the subject field.

18 Do you see that?

19 A Yes.

20 Q And when you read the phrase --  
21 first of all, do you know what he meant by  
22 "casing flow wells?"

23 A I am not completely sure, but I  
24 would assume it would exclude -- it might  
25 exclude monitoring wells. So, obviously it  
26 may be wells that SoCalGas is actually  
27 injecting or extracting gas from.

28 Q Okay. All right. And do you have

1 a sense from reading this, because I know you  
2 had to interpret this as part of your  
3 testimony, do you have a sense as to what he  
4 meant by '40s and 1950s vintage?

5 A Those would be pipes installed or  
6 with materials manufactured in the 1940s,  
7 '50s.

8 Q Well, let's assume it means -- and  
9 I think we can clarify this in a minute.  
10 Let's assume it means the time when the well  
11 was drilled. Okay?

12 A Okay.

13 Q All right. And let's assume --

14 MS. BONE: Objection.

15 ALJ HECHT: What is your objection?

16 MS. BONE: The objection is, you know,  
17 the witness answered that he thinks that it  
18 was based on the materials at that time, and  
19 now we're going to make an assumption that  
20 it's something other than what the witness  
21 believed?

22 ALJ HECHT: I think that the witness  
23 should stick with what the witness believes.  
24 Is there a way to rephrase this question?

25 MR. LOTTERMAN: Your Honor, I will  
26 clean up that answer in two minutes.

27 ALJ HECHT: All right.

28 BY MR. LOTTERMAN:

1           Q    And, Mr. Bach, when you look at  
2 this memo, it says that basically the purpose  
3 of the -- of running the casing inspection  
4 surveys or Vertilogs is quote, "run to  
5 determine the mechanical condition of each  
6 well casing."

7                   Do you see that?

8           WITNESS BACH:  Yes, I do see that.

9           Q    And what do you interpret the  
10 phrase "mechanical condition" to mean?

11           A    It could be any combination of  
12 leaks or it could be wall thickness loss.

13           Q    Or it could be a mechanical issue  
14 with a piece of equipment downhole, correct?

15           A    Yes.  Yes.  Sorry.  My example for  
16 not exhaustive.

17           Q    I understand.  But your examples do  
18 include corrosion, correct?

19           A    Yes.

20           Q    Good.  Okay.  And if you look at  
21 the next paragraph, it says:

22                   The wells included on the attached  
23 list are prioritized based upon  
24 deliverability, operational  
25 history and the length of time  
26 since their last workover.

27                   Do you see that?

28           A    Yes, I do.

1 Q Do you know what was meant by  
2 "prioritized based upon deliverability?"

3 A I would have to double check. I  
4 would assume, subject to check, the amount of  
5 gas extracted or injected by the well.

6 Q Okay. In other words, the amount  
7 of gas that the well can deliver basically,  
8 right?

9 A Yes.

10 Q Okay. What did you understand the  
11 phrase "operational history" to mean?

12 A If there were any past implications  
13 of failures or wall loss or mechanical issues  
14 with that well.

15 Q Could it also mean basically how  
16 the well operated over the course of its 10,  
17 20, 30 years, generally?

18 A Yes. I would agree with that.

19 Q All right. And how did you  
20 interpret the phrase "the length of time  
21 since their last workover?"

22 A It's the last time that the well  
23 had a workover break performing maintenance  
24 on it.

25 Q Do you have any experience or  
26 knowledge with workovers, Mr. Bach?

27 A I have some general knowledge.

28 Q Are you generally aware that they

1 can be dangerous?

2 A I'm aware that there are some  
3 risks. I'm not sure if those risks always  
4 outweigh the potential benefits for  
5 performing them.

6 Q I wasn't asking you, sir, to do a  
7 cost benefit analysis. I was more just  
8 trying to understand if you had an  
9 understanding whether workovers can be  
10 dangerous to life and limb.

11 A I am aware that there have been  
12 some casualties due to workovers.

13 Q Are you also aware that workovers,  
14 when planned, can lead to unplanned releases  
15 on wells?

16 MS. BONE: Objection, your Honor.

17 ALJ HECHT: What is your objection?

18 MS. BONE: My objection is that  
19 Mr. Bach, you know, opined that the benefits  
20 of doing the work order may override the  
21 risk. And counsel has not acknowledged that  
22 and, in fact, reprimanded the client for  
23 discussing that, when that goes directly to  
24 the questions that are being asked.

25 MR. LOTTERMAN: I can give a response,  
26 your Honor, or I can move on.

27 ALJ HECHT: Why don't you move on,  
28 please.

1 BY MR. LOTTERMAN:

2 Q Okay. And, again, I am focusing on  
3 the memo that you cite in your testimony,  
4 Mr. Bach, and that you interpret to reach  
5 some of the conclusions. So I just want to  
6 understand -- I want you to understand that I  
7 am not taking this from nowhere. I was  
8 asking you about whether work --

9 MS. BONE: Objection, your Honor.

10 ALJ HECHT: Yes. Yes. Go on.

11 MS. BONE: To be clear, there is more  
12 than one memo on this issue that Mr. Bach  
13 relied upon. And I don't believe that it is  
14 in the Cal Advocates' record, but it is  
15 included in the Blade Volume IV Review of the  
16 1988 Candidate Wells for Casing Inspection,  
17 and that memo is on page 7 of that volume. ]

18 ALJ HECHT: That other memo, I believe,  
19 is not the one that we are discussing. These  
20 questions should remain specific to the  
21 exhibit that is under discussion now. Can we  
22 please move on.

23 Mr. Lotterman.

24 MR. LOTTERMAN: I will, your Honor,  
25 although I'm a little concerned about the  
26 speaking objections, but maybe they will  
27 stop.

28 Q Mr. Bach, my question for you -- my

1 question for you before we got sidetracked  
2 was are you aware that oftentimes or  
3 sometimes -- let's just put it this way: Are  
4 you aware that sometimes planned workovers  
5 can lead to unplanned releases of natural  
6 gas?

7 WITNESS BACH: Yes, there is always  
8 some risk whenever you do any major  
9 maintenance or replacement or installations  
10 in the well.

11 Q Okay. And are you aware that there  
12 was a joint task force that studied that  
13 issue for 60-some years from 1953 to 2010 and  
14 concluded that a third of all unplanned  
15 releases in the United States on record  
16 occurred during well interventions, including  
17 workovers?

18 A I'm not intimately aware. SoCalGas  
19 might have certainly something along those  
20 lines in the reply or sur-reply testimony.

21 Q Fair enough. But you have not  
22 reviewed that study; is that correct?

23 A That is correct.

24 Q When I look at this cover memo by  
25 Mr. Horstman, does it say that these 20 wells  
26 were chosen because of any specific corrosion  
27 issues?

28 A They don't say it for a specific

1 corrosion issue, it's just that they were  
2 prioritized.

3 Q Right. Right. We'll get to that  
4 in a second. In fact, let's go to the list  
5 and I think we can clarify Ms. Bone's  
6 objection on that.

7 Mr. Moshfegh, let's turn to the  
8 list that's set out and attached to this  
9 memo. It's jump site 267 and 268.

10 Do you have that in front of you,  
11 Mr. Bach?

12 A Yes, I do.

13 Q Okay. And do you see at the very  
14 top it says, "Aliso Canyon Casing Flow Wells  
15 of 1940s and 1950s Vintage"?

16 A Yes.

17 Q And it's actually two-pages and we  
18 don't need to belabor this point, but on the  
19 left-hand side you see where it says "well"?

20 A Yes.

21 Q And if you go down that list, I  
22 believe you are correct. I counted 20 last  
23 night so there's basically 20 wells listed on  
24 the attachment to the 1988 memo; right?

25 A Yes.

26 Q And the next column, I think, is  
27 going to address Ms. Bone's concern. What do  
28 you understand the phrase "Completed,"

1 vis-à-vis a well?

2 A When the well -- the drilling and  
3 installation of pipe in the well allows it to  
4 be operational.

5 Q Okay. And if you -- we don't need  
6 to scan down this on screen, but, Mr. Bach,  
7 if you scan that column on 267 and 268, do  
8 you see any dates that are not 1940s, 1950s  
9 vintage?

10 A I do not.

11 Q All right. So can we agree for  
12 purposes of today's testimony that when the  
13 cover memo says, "Attached is a listing of  
14 all casing flow wells of 1940s and 1950s  
15 vintage," that, in fact, the author of the  
16 memo is referring to completion dates?

17 A Yes.

18 Q And just to be clear, since we  
19 might as well walk through this as well, do  
20 you see the next column called  
21 "Deliverability"?

22 A Yes.

23 Q Does that give you any clarity as  
24 to what that factor entailed as stated in the  
25 cover memo?

26 A Yes. It refers to the rate of gas  
27 flow.

28 Q And it looks like for the next

1 column you were right because you said that  
2 last workover indicated basically when the  
3 most recent workover occurred, and that's  
4 verbatim what it says in that column; right?

5 A Yes, it appears so.

6 Q All right. Now, I want to keep  
7 going over and I want to look at the comments  
8 page. Start on 267 there -- and this won't  
9 take long -- but I want to make sure that  
10 everyone understands the context of this  
11 memo. Okay. If you sort of skim down that  
12 column, you see a lot of phrases called "shoe  
13 leak."

14 Do you see that? The first one I  
15 see is SS-2.

16 A Yes, I do see that.

17 Q And, in fact, SS-2, SS-4, and SS-6  
18 all talk about repaired shoe leaks; right?

19 A Yes, it appears so.

20 Q Yes. But then you go down to the  
21 bottom, SS-17, that one appears to have -- it  
22 says the well has, looks like, a new shoe  
23 leak or an unrepaired one.

24 Do you see that?

25 A Yes, I do.

26 Q What is a shoe leak?

27 A So the shoe of the well is -- so  
28 obviously it's a leak on the shoe of the

1 well, which (inaudible) natural gas in an  
2 uncontrolled manner.

3 (Reporter clarification.)

4 WITNESS BACH: Yes. Sorry about that.  
5 So obviously it's a leak around the shoe of  
6 the well and which would be uncontrolled in  
7 terms of what the -- how a shoe leak would  
8 be -- have greater risk over a leak on other  
9 part of the well. I couldn't answer to that  
10 right now.

11 BY MR. LOTTERMAN:

12 Q All right. All right. Have you --  
13 and I don't want to exceed your level of  
14 knowledge -- but have you dealt with shoe  
15 leaks in the past or even shoes of wells in  
16 the past?

17 A Not prior to doing research for  
18 this proceeding.

19 Q And do you know, for example, at  
20 SS-25 how deep the shoe was at that well?

21 A I believe it's around a thousand  
22 feet.

23 Q Did you say 1,000?

24 A Subject to check.

25 Q Subject to check.

26 WITNESS TAUL: Can I be heard, Matthew  
27 Taul?

28 Q Sure, Mr. Taul. Go ahead.

1           WITNESS TAUL: I think there is some  
2 confusion between a surface casing shoe,  
3 which I believe for SS-25 was around  
4 990 feet, versus the shoe at the bottom of  
5 the well near the formation. Can we clarify,  
6 I guess, on the question because that one, if  
7 memory serves, is 8,000, almost 9,000 feet  
8 down.

9           Q Right. That's a great  
10 clarification and I owe you one, sir. Let me  
11 back up a little bit.

12           Mr. Bach, do you believe that these  
13 references to shoe leaks are talking about  
14 the shoes in the production casing, in the  
15 bottom of the well?

16           WITNESS BACH: Yes.

17           Q And do you believe a surface casing  
18 shoe can leak at all?

19           A So SoCalGas was not running gas  
20 through -- between the annulus of its surface  
21 and production casing so it would only be a  
22 leak insofar that there was already a leak  
23 somewhere in the production casing, and for  
24 some reason it was escaping also through the  
25 surface casing.

26           Q All right. So can we all agree,  
27 all three of us agree, that when this memo  
28 mentions either repair or new shoe leaks,

1 it's referring to the shoe at the bottom of  
2 these 20 wells; correct?

3 A Yes, it appears so.

4 Q All right. And I don't know if you  
5 listened to this part of Dr. Krishnamurthy's  
6 testimony yesterday, but are you aware that  
7 the shoe of a well is typically at the bottom  
8 of the well and typically below the caprock  
9 that keeps the natural gas in the reservoir?

10 A Generally, yes.

11 Q All right. And are you also aware  
12 that at the bottom of a well -- and I believe  
13 Dr. Krishnamurthy talked about this as  
14 well -- that well is cemented at the base;  
15 true?

16 A Yes, I believe so.

17 Q And I want you to tell me if that  
18 shoe were to leak, would you expect that leak  
19 to reach surface a mile and a half above the  
20 caprock?

21 A I don't know.

22 Q Okay. Do you know whether, if a  
23 shoe like that leaks, it typically leaks into  
24 the neighboring strata?

25 A I would assume so but, again, I  
26 don't know.

27 Q Do you know if those types of leaks  
28 typically consist of small amounts of gas?

1           A    I don't know.

2           Q    Okay.  Do you know if most gas  
3 storage operators really don't worry about  
4 casing shoe leaks in the grand scheme of  
5 things?

6           A    I don't know, but I do know from my  
7 experience from SED that some leaks do not  
8 pose an immediate hazard.

9           Q    And was that casing shoe leaks in  
10 specific that you're referring to?

11          A    No, not casing shoe leaks in  
12 particular, but I was just bringing up that  
13 since -- example that since there are other  
14 leaks in distribution and transmission pipes  
15 that did not pose an immediate safety hazard,  
16 I can imagine that can also be the case for  
17 leaks in a well shoe.

18          Q    I understand.  Thank you, sir.  And  
19 are you aware that Dr. Krishnamurthy and  
20 Blade did not count as a casing failure in  
21 its analysis any casing shoe leaks?

22          A    I would have to double check on  
23 that, but subject to check, sure.

24          Q    Subject to check -- well, as of  
25 today sitting here, you're not aware of Blade  
26 considering those casing failures in its  
27 analysis; is that fair?

28          A    I don't recall.

1 MS. BONE: Could we get a  
2 clarification. Are those questions related  
3 to the same shoe leak at the bottom or has  
4 counsel turned to the surface casing shoe  
5 leaks? Which leaks is he asking about here?

6 BY MR. LOTTERMAN:

7 Q Well, in response, it's my view  
8 there is nothing -- there's no such leak as a  
9 surface casing shoe leak because, as  
10 Dr. Krishnamurthy testified yesterday, the  
11 annulus between the production casing and the  
12 surface casing is not pressure bearing. So  
13 that's point 1.

14 Point 2, all of these questions  
15 I've been asking you, since Mr. Taul was so  
16 kind enough to clarify that there might be a  
17 potential misunderstanding, I'm referring to  
18 the shoes at the bottom of the wells.

19 Is that your understanding,  
20 Mr. Bach, as we were talking in the last  
21 couple minutes?

22 WITNESS BACH: Yes, your Honor.

23 MR. GRUEN: Your Honor, may I be heard  
24 on this and note an objection from SED's  
25 perspective?

26 ALJ HECHT: Yes. What is your  
27 objection?

28 MR. GRUEN: The objection would be that

1 this is calling for the witness to speculate  
2 to the extent he did not hear Blade speak  
3 about what Blade said, and then laying  
4 foundation based on limited understanding of  
5 Blade's testimony. So it's calling for  
6 speculation and lack of foundation. Those  
7 are the objections.

8 ALJ HECHT: Mr. Lotterman.

9 MR. LOTTERMAN: Your Honor, let me  
10 withdraw the question and ask it in a  
11 slightly more precise manner.

12 ALJ HECHT: Thank you.

13 BY MR. LOTTERMAN:

14 Q Mr. Bach, upon reading both the  
15 Blade main report -- and I believe you said  
16 you also read Blade's supplemental  
17 Volume IV -- did you reach an understanding  
18 as to whether Blade counted shoe leaks as  
19 casing failures in its analysis?

20 WITNESS BACH: Again, I don't recall.  
21 I'd have to read it again.

22 Q That's fine. And, sir, "I don't  
23 recall" is just fine today. I'm not  
24 suggesting you have memorized the Blade  
25 report. I'm just trying to get your  
26 understanding today, and "I don't recall" is  
27 a perfectly good answer; okay? All right.

28 So going back to this chart, we

1 have laid out 20 wells, the vintage dates,  
2 deliverability, recent workovers, and then a  
3 bunch of comments, and then there's the  
4 priority.

5 Do you see that?

6 A Yes, I do see that.

7 Q If you go down to the bottom of  
8 page 267, let's go with SS-11, do you see  
9 the -- do you see that where they talk about  
10 a new temp anomaly at the shoe?

11 A Yes, I do see that.

12 Q What priority did SoCalGas give  
13 that problem?

14 A It gave the well as a whole the  
15 priority of low.

16 Q Okay. What about the next one,  
17 SS-17, do you see where the comments say,  
18 "Well has a shoe leak"?

19 A Yes, I see that.

20 Q What priority did SoCalGas give  
21 that well?

22 A Low.

23 Q Okay. Next page. Look at SS-25.  
24 Do you see in the comments where it says that  
25 a temp log -- or there appeared to be a temp  
26 anomaly at the shoe?

27 Do you see that?

28 A Yes.

1           Q    What priority did SoCalGas give  
2   that well?

3           A    Low.

4           Q    What about the next one, SS-29,  
5   "Well has a shoe leak"?  Again, we're  
6   assuming these are all at the bottom the  
7   well.  What priority did SoCalGas give that  
8   well?

9           A    Low, and I'd like to clarify that  
10   it's not clear of the priority.  It's bas --  
11   in relative to the other wells that SoCalGas  
12   has (inaudible) identified or if it's -- if a  
13   well has a low risk in general.

14          Q    I don't understand that  
15   question(sic).  Would you mind explaining  
16   that to me.

17          A    So in this exhibit, the priority  
18   column says, "low, medium," and "high," so  
19   it's clear to me that SS-25 and other wells  
20   that you've indicated that have low priority  
21   did have lower priority than the wells  
22   indicated as medium or high, but considering  
23   that these wells were identified to have logs  
24   and pressure tests done, that would imply  
25   that there was some level of concern on these  
26   wells, and so I don't know if these wells  
27   were -- they're a low priority, it means that  
28   they had low risk in general or if they just

1 had a low risk relative to the other wells  
2 that were proposed to be looked at.

3 Q Well, let's go back to the cover  
4 memo and see if we can clear that up for you.  
5 As I read this thing, it says, "Attached is a  
6 listing of all" -- and we'll skip the -- "all  
7 wells" -- basically all old wells, '40s and  
8 '50s vintage; right?

9 A Yes.

10 Q And then it says right in the next  
11 paragraph, "The wells included on the  
12 attached list are prioritized based upon" --  
13 and it lists the three factors.

14 Do you see that?

15 A Yes.

16 Q So is it fair to say -- and, again,  
17 this is the memo you're calling out in your  
18 testimony -- is it fair to say that it's your  
19 understanding that someone from SoCalGas  
20 listed all these old vintage '40s and '50s  
21 wells and then prioritized them as either  
22 high, medium, or low?

23 A It's my understanding they  
24 prioritized them relative to each other.

25 Q Fair enough. I'll go with that,  
26 sir. If that's your clarification, I  
27 understand it. But I want to make sure that  
28 you're clear that someone sat down -- and we

1 don't know who it is, probably long gone --  
2 and took all these old wells, lined them up  
3 and gave them a priority vis-à-vis each  
4 other; correct?

5 A Yes, that's my understanding.

6 Q Okay. And if you look at the wells  
7 that have either suspected or existing shoe  
8 leaks, all five of those wells are given a  
9 low priority; true?

10 A As of the ones that you highlighted  
11 right now, I haven't had time to look at this  
12 again thoroughly, but subject to check, yes.

13 Q I appreciate that. And just for  
14 the record, I see P-47, I see SS-11, I see  
15 SS-17, I see SS-25, and I see SS-29. Subject  
16 to check, maybe after lunch, if I'm wrong,  
17 you can clarify; okay?

18 A Okay.

19 Q The other thing that the comments  
20 note -- and I wanted to call this out to your  
21 attention as well -- is in addition to having  
22 been completed in the '40s and '50s and  
23 having workovers -- and it gives the most  
24 recent workovers -- these comments also  
25 indicate that there are a lot of casing  
26 pressure tests going on during that time,  
27 weren't there?

28 Look at the first one on the first

1 page, P-34, "casing pressure tested."

2 See that?

3 A Yes, I agree that there was some  
4 pressure testing there.

5 Q Yeah, and I don't want to belabor  
6 this point, but the bottom line is this memo  
7 was written in 1988 and it's noting that  
8 about 10 to 12 years earlier those wells had  
9 casing -- had their casing's pressure tested.

10 Is that your understanding?

11 A Of the ones indicated -- sorry. So  
12 these appear to indicate that they've  
13 pressure tested recently. The ones that  
14 were -- are not indicated, I'm sure they were  
15 pressure tested when they were converted from  
16 an oil to gas well, but this doesn't seem to  
17 indicate that they were pressure tested  
18 again.

19 Q Okay. Fair enough. Fair enough.  
20 And then the other thing I wanted to get to  
21 you -- and then maybe we break for lunch or I  
22 can keep going -- the other thing I wanted to  
23 ask you is when you look at this list of 20  
24 wells, do you see any mention of any existing  
25 leaks on the casing at all?

26 In other words, let's take shoe  
27 leaks off the table. I want you to skim that  
28 list of 20 real quick for me and tell me if

1 you see any mention of any existing casing  
2 leaks.

3 A I don't see any, no.

4 Q All right.

5 Your Honors, I can keep going or we  
6 can break for lunch.

7 ALJ HECHT: I think this would be a  
8 good time to break for lunch. Before we do  
9 that, I'm going to clarify something from  
10 earlier when I mentioned Ms. Biehl in the  
11 past. I want to clarify that I know that we  
12 can't stop people from listening. This is a  
13 public hearing and we're happy to have people  
14 listening.

15 What troubles me is that somebody  
16 was on the panelist line of the Webex, which  
17 implies they got that information from one of  
18 the parties. So that is where my concern  
19 arises, not that anyone in particular is  
20 listening.

21 Yes, Mr. Stoddard.

22 MR. STODDARD: Thank you, your Honor.  
23 I wanted to briefly address that if you're  
24 able to hear me.

25 ALJ HECHT: Yes.

26 MR. STODDARD: Okay. Yeah. So I  
27 looked into it after you made a statement and  
28 Ms. Biehl is a court reporter working at --

1 for Morgan Lewis, and she's not making any  
2 recordings in terms of video or audio or even  
3 potentially transcripts. It was simply a  
4 realtime feed of the proceedings.

5 ALJ HECHT: Okay. That is helpful to  
6 know. Thank you for letting me know.

7 MR. STODDARD: Thank you, your Honor.

8 MS. BONE: Your Honor, Traci Bone from  
9 Cal Advocates. I don't know what that means,  
10 "a realtime feed," if that's not recording in  
11 some way. She's just observing?

12 ALJ HECHT: Can you clarify, please.

13 MR. STODDARD: Yes. A realtime feed  
14 is -- basically it's just the same thing  
15 that's going on except that it's going --  
16 it's not being recorded. It's showing the  
17 words that are being said but it doesn't  
18 result in any transcript that would be  
19 retained or otherwise, so it's simply a  
20 realtime feed of what's being said during the  
21 proceedings.

22 MS. BONE: So it's not a transcript but  
23 it's a document showing the words that have  
24 been discussed that then you guys can review  
25 at the end of the day?

26 MR. STODDARD: No.

27 MS. BONE: What is the purpose of this?

28 MR. STODDARD: No, and I mean, I didn't

1 actually -- I was not referencing this in my  
2 examination of Ms. Felts. But it's a -- you  
3 don't review it at the end of the day because  
4 at the end of the day it's a website that  
5 disappears.

6 MR. GRUEN: Your Honor, may I be heard?

7 ALJ HECHT: Yes.

8 MR. GRUEN: I have concerns that we're  
9 a hundred percent certain that the  
10 information that does seem to show up as  
11 words on a page or a document does, in fact,  
12 disappear. This seems to me like it may be  
13 akin to your Honor's instructions of  
14 following the letter but not the spirit of  
15 the ruling not to record.

16 I would request at this time that  
17 SoCalGas and Morgan Lewis be instructed to  
18 not provide realtime feed.

19 ALJ HECHT: Mr. Stoddard.

20 MR. STODDARD: Obviously it's at the  
21 discretion of your Honor if that would be  
22 your preference. We can also share the  
23 realtime if you'd like to see how it works at  
24 the end of the day and, you know, confirm  
25 what I've said. But we can also stop doing  
26 it if it's your preference.

27 ALJ HECHT: Thank you. I will take  
28 that under advisement and we will address it

1 after lunch.

2 We will now take a lunch break of  
3 about an hour returning at 1:15. We'll be  
4 off the record.

5 (Off the record.)

6 (Whereupon, at the hour of 12:12  
7 p.m., a recess was taken until 1:25  
p.m.) ]

8 \* \* \* \* \*

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AFTERNOON SESSION - 1:25 P.M.

\* \* \* \* \*

ALAN BACH and MATTHEW TAUL,  
resumed the stand and testified further as  
follows:

ALJ HECHT: We'll be back on the  
record.

All right. While we were off the  
record, we took a lunch break. When we came  
back, we had another brief discussion on the  
topic that we discussed at the end of morning  
session, which is that Morgan Lewis has been  
having some sort of realtime streaming of the  
discussions here using a court reporter that  
we were not aware of.

It is not clear to me whether that  
is a violation of our rules and whether it  
counts as a recording. It certainly looked  
odd.

I understand from the discussion off  
the record that both SED and Public Advocates  
Office has questions about this. We have  
determined that the appropriate procedure to  
follow is for those questions to be served on  
the service list. And we are looking into  
this on the ALJ side, and we will have more  
of a discussion about it tomorrow.

1 Are there any questions?

2 Mr. Gruen?

3 (No response.)

4 ALJ HECHT: You are on mute, Mr. Gruen.

5 MR. GRUEN: I am sorry, your Honor.

6 Pardon me. Can you hear me?

7 Your Honor, if I may amend SED's  
8 statement from prior to break. We noted off  
9 the record that SED had stated something to  
10 the effect that this may have been a  
11 violation of the spirit of your Honors'  
12 ruling not to record and not to have third  
13 parties record these proceedings, if not the  
14 rule.

15 SED would amend that statement at  
16 this point. Our concern is that both the  
17 spirit and the rule of the ruling have been  
18 violated.

19 ALJ HECHT: Do we have a response from  
20 Mr. Stoddard before we go to Ms. Bone?

21 MR. STODDARD: Yes, your Honor. We  
22 discussed this a little bit prior to the  
23 break. I explained my understanding of the  
24 issue at that time.

25 We will -- both SED and Cal  
26 Advocates said they would send us questions  
27 about it, which we'll address tomorrow.

28 Again, it was our understanding here

1 that realtime would not be a violation of the  
2 attestation. However, for purposes of today,  
3 we have agreed not to continue realtime of  
4 these proceedings. And we'll revisit the  
5 issue after tomorrow.

6 ALJ HECHT: Thank you.

7 And, Ms. Bone, did you have a follow  
8 up?

9 MS. BONE: Yes. So I just want to be  
10 clear that your Honors are requiring SoCalGas  
11 to answer the questions that we will be  
12 submitting -- SoCalGas and Morgan Lewis to  
13 answer the questions that we will be  
14 submitting to the service list in the next  
15 few hours by tomorrow morning?

16 (No response.)

17 ALJ HECHT: Now I'm on mute. It is our  
18 intention to get answers to those questions  
19 tomorrow morning.

20 Yes, Mr. Stoddard?

21 MR. STODDARD: Just to confirm what the  
22 direction is, do you want answers to those  
23 questions in writing? Or do you want us to  
24 present them to you?

25 ALJ HECHT: I will reserve judgement on  
26 that, and we will get back to you a little  
27 bit later. At this moment, my preference is  
28 to have you present it rather than provide it

1 in writing.

2 But I will consult with my  
3 co-assigned administrative law judge, and we  
4 will confirm either way.

5 MR. STODDARD: Okay. Thank you, your  
6 Honor.

7 ALJ HECHT: Thank you.

8 All right. Are there any other  
9 issues before we go ahead with the  
10 cross-examination of Mr. Taul and Mr. Bach?

11 MR. LOTTERMAN: Your honor, before we  
12 begin, this is Tom Lotterman. Is the court  
13 reporter able to read the last question and  
14 last answer back?

15 ALJ HECHT: I don't know whether this  
16 is the court reporter who was on before the  
17 break. I know he was able to confirm one  
18 thing about the discussion. But that doesn't  
19 mean he has access to everything. So I would  
20 prefer not.

21 MR. LOTTERMAN: That's fine. Thank  
22 you.

23 ALJ HECHT: All right. With that we  
24 can resume the cross-examination.

25 Thank you.

26 CROSS-EXAMINATION RESUMED

27 BY MR. LOTTERMAN:

28 Q Good afternoon, Mr. Bach. Are you

1 ready to go?

2 WITNESS BACH: Yes, I am.

3 Q All right.

4 Mr. Taul, I think you're on hold  
5 for a while. I was going to save your  
6 portion of the testimony to the end. And,  
7 again, if you wish to clarify something that  
8 Mr. Bach says, please indicate to someone and  
9 I'll be glad to stop and get your  
10 clarification. Otherwise I'm going to  
11 proceed with Mr. Bach today at least for the  
12 next couple minutes.

13 Mr. Bach, I noticed in the exhibits  
14 that you and Mr. Taul attached to your both  
15 opening testimony and sur-reply testimony  
16 that it actually included not only this 1988  
17 memo that we've been talking about this  
18 morning but also at least another memo that  
19 talks about one of the specific wells at  
20 issue. Do you remember that?

21 WITNESS BACH: To refresh my memory  
22 better, refer me to which exhibit it was  
23 based under?

24 Q Sounds good. I'm actually going to  
25 show you the full memo. But the memo that  
26 you cited or that you included in your  
27 exhibits, and this would be under Cal  
28 Advocate Exhibit-401 can be found at I think

1 you call it pin site 283 to 284.

2 ALJ HECHT: We'll be off the record for  
3 a moment while we find that place.

4 (Off the record.)

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

7 BY MR. LOTTERMAN:

8 Q Mr. Bach, do you recognize this  
9 two-page memo that was attached to your  
10 testimony?

11 WITNESS BACH: I remember seeing it. I  
12 don't remember citing directly to it.

13 Q Okay. I actually would like to use  
14 the full memo, and I believe I sent this  
15 document as well as some others that I'm  
16 going to talk about in the next three or four  
17 minutes to your counsel last Wednesday or  
18 Thursday.

19 And what I would like to do --  
20 actually, let me stop.

21 Did you have an opportunity, sir,  
22 before today to review the documents that I  
23 sent to your counsel and designated as  
24 potential cross-exhibits for you and  
25 Mr. Taul?

26 A Yes. Although since CalPA-401 and  
27 also the SCG exhibits required extensive  
28 pages, 2,000 in total combined, some of that

1 was a bit cursory.

2 Q I was actually referring, Mr. Bach,  
3 I believe it was on Thursday as far as I know  
4 because I actually prepared the chart. I  
5 listed the -- I believe it's seven or eight  
6 exhibits that I intended to use. And I put  
7 either your name, Mr. Taul's names, or  
8 Mr. Holzschuh's name next to each one or  
9 initials or something. Did you happen to see  
10 that chart which indicated which specific  
11 four or five documents I wanted to use in  
12 your examination today?

13 A Yes. I saw the list for the  
14 exhibits. I am just saying that some of the  
15 exhibits, particularly the one for SED, that  
16 one alone was almost 2,000 pages. So forgive  
17 me if I am not completely familiar with  
18 everything.

19 Q Okay. Well, that was a  
20 miscommunication, sir. And for that I  
21 apologize. As far as I was concerned, I had  
22 designated five or six rather short  
23 documents. And we'll go through them now for  
24 your review.

25 So to the extent you had to spend  
26 additional time reviewing other documents,  
27 please accept my apology.

28 All right. Let's, Mr. Moshfegh,

1 let's pull up SoCalGas Exhibit-148.

2 Mr. Bach, this is a slightly more  
3 complete version of Cal Advocate Exhibit-401  
4 at 283 and 284. As you can see, it's three  
5 pages and your exhibit was two.

6 And maybe you've already answered  
7 this question, but let me ask you this. Why  
8 did you refer to this document as part of  
9 your testimony and did you find it useful?

10 A I don't remember referring directly  
11 to my testimony.

12 Q All right. Let me ask the question  
13 in a slightly different way then. Why did  
14 you include this exhibit in your testimony,  
15 and did you find it useful?

16 MS. BONE: Objection. The witness has  
17 already said twice that he doesn't think he  
18 included it in his testimony.

19 So if he did, counsel should  
20 identify where in his testimony he referred  
21 to this.

22 MR. LOTTERMAN: I'll withdraw the  
23 question, your Honor, and rephrase.

24 ALJ HECHT: Thank you.

25 BY MR. LOTTERMAN:

26 Q My question, Mr. Bach, is why did  
27 you include this memo in your exhibits to  
28 your testimony?

1 MS. BONE: Objection. If it wasn't in  
2 the exhibit to his testimony, it may have  
3 been in an exhibit to somebody else's  
4 testimony of the three people who are  
5 testifying and whose exhibits support -- the  
6 document supports their testimony as well.

7 ALJ HECHT: I do not know whose  
8 testimony it was supposed to support.  
9 Someone needs to be able to answer questions  
10 about it. We have a panel right now of  
11 Mr. Bach and Mr. Taul, and it appears that  
12 Mr. Taul is able to answer.

13 Please go ahead.

14 MR. LOTTERMAN: Thank you. All right.  
15 Mr. Taul or Mr. Bach, your Honor? I'm sorry.

16 ALJ HECHT: I think right now we can  
17 hear from Mr. Taul.

18 When we have panels, we do go back  
19 and forth among witnesses. And in this  
20 instance if it is something more appropriate  
21 for him to respond to, then we should hear  
22 it.

23 BY MR. LOTTERMAN:

24 Q Mr. Taul, are you available to talk  
25 about SoCalGas Exhibit-148?

26 WITNESS TAUL: Yes. I have it up here.

27 Q Okay. And do you recognize this  
28 document as at least a portion of what one of

1 these Cal Advocate witnesses included as an  
2 exhibit for the testimony as being presented  
3 today?

4 A I wouldn't state that this is an  
5 exhibit for testimony. This is part of a  
6 larger scan of documents from my review of  
7 records in 2019. I believe it was early  
8 November, 2019.

9 This group of documents, the  
10 beginning is the how and why all of these  
11 were chosen. But the larger -- I believe it  
12 is SoCalGas's answer to DR-25, Cal Advocates  
13 DR-25.

14 All of these documents including  
15 maintenance records, including Vertilog,  
16 pressure tests, noise logs, pressure surveys,  
17 as well as a dip into the Maximo software  
18 where maintenance has been captured since  
19 1997 I suppose. All of that is included in  
20 supporting attachments mostly as a way to  
21 show that Cal Advocates wasn't just cherry  
22 picking from the data they found.

23 We included in every document  
24 provided in the response to Cal Advocates  
25 DR-25. Probably about 200 pages worth of  
26 scans from our two-day journey down to  
27 SoCalGas in November, 2019.

28 Q All right. Let me try a different

1 approach, your Honor. This is getting a  
2 little frustrating to be honest with you.  
3 But let me try a different approach.

4 Mr. Bach, as part of your  
5 testimony, you have cited extensively to the  
6 1988 memo; correct?

7 WITNESS BACH: That's correct.

8 Q And as part of that testimony, you  
9 in fact interpreted that memo and the  
10 attachments to it; correct?

11 A Yes. But I was --

12 Q I am sorry. Did you finish your  
13 answer?

14 A Yes. But I used -- I referred  
15 mainly to this portion that I cited.

16 Q Right. I understand. I guess what  
17 I'm asking you is having -- having copied,  
18 reviewed, and interpreted this 1988 memo  
19 which talks about 1940s, 1950s vintage wells'  
20 mechanical condition and all that, do you  
21 feel competent to talk about a similar memo  
22 written two days earlier on the very same  
23 wells?

24 A Is your question: Do I feel  
25 competent?

26 Q Yes.

27 A To --

28 (Crosstalk)

1 Q Okay. Let's give it a try. And if  
2 for some reason you don't feel comfortable,  
3 you let us know, okay?

4 Let's turn to SoCalGas Exhibit-148.  
5 What is the date of this memo?

6 A September 28, 1988.

7 Q Okay. And does it attach a  
8 two-page memo as well?

9 A Yes. It appears so.

10 Q And does it appear to you, sir,  
11 that these two memos written on September  
12 28th, 1988, were written roughly a month  
13 after the 1988 memo that you have referred to  
14 in your testimony?

15 A Yes, it appears so.

16 Q All right. And does it appear to  
17 you that the subject of this SoCalGas  
18 Exhibit-148 is a well called Standard Sesnon  
19 9?

20 A Yes.

21 Q And is that in fact one of the 20  
22 wells that is referred to in the 1988 memo  
23 attachments?

24 A Yes, it is.

25 Q Okay. And I want to turn to page 2  
26 of SoCalGas Exhibit-148. So it's 148.0002.  
27 And there's a memo here from R.M. Hijazi,  
28 H-i-j-a-z-i, do you see that?

1 A Yes.

2 Q And it's to -- there's an e-mail.  
3 Do you see that?

4 A Yes.

5 Q Okay. And her recommendation on  
6 the very first line is to run a casing  
7 inspection survey, or in this case she said:

8 A Vertilog or equivalent. And  
9 pressure test the casing to  
10 determine that well's present  
11 condition.

12 Is that true?

13 A That's true.

14 Q She also says:

15 And by the way, we're going to  
16 perforate through tubing a  
17 particular interval to increase  
18 deliverability.

19 She says that; right?

20 A Yes.

21 Q Okay. Now, let's focus on the  
22 second part of the sentence. Do you have any  
23 idea what she's talking about there?

24 A I assume that that decreased the  
25 portion of the (indecipherable) gas in  
26 contact with the reservoir. But I'm not  
27 intimately familiar.

28 Q Okay. And, again, just to be

1 clear, I understand this is a very technical  
2 document. I'm not asking you to guess or  
3 even assume. Just you don't know, feel free  
4 to say, okay.

5 I want to quickly jump down to the  
6 third paragraph of the memo, or the second  
7 paragraph under "Discussion." Do you see  
8 that?

9 A So are you going to start with the  
10 paragraph discussion or the --

11 Q The second paragraph under  
12 "Discussion."

13 A Yes. Okay. Yeah, I see it.

14 Q Okay. Does that read:

15 There are no indications of any  
16 mechanical problems with the well  
17 at the present time?

18 A Yes, I see that.

19 Q Okay. And do you interpret that as  
20 this engineer telling her boss basically,  
21 "I'm recommending a workover. But at the  
22 present time, there are no indications of  
23 corrosion, leaks, or any mechanical issues."

24 The very same issues we talked  
25 about earlier when I asked you what a  
26 mechanical problem might entail?

27 A There -- there are -- so it could  
28 be that it -- that there are no immediate

1 issues. But -- or it could also mean that  
2 there's nothing that they detected at this  
3 time.

4 Q All right. But that would be  
5 speculating. I'm asking you if in this memo  
6 from one of the wells listed on this 1988  
7 memo she says:

8 There are no indications of any  
9 mechanical problems with the well  
10 at the present time.

11 That's what she says; right?

12 A That's what she says verbatim, yes.

13 Q Right. And then she elaborates a  
14 little bit further. Next sentence she says:

15 However, the casing is 42 years  
16 old and could possibly have  
17 suffered external corrosion since  
18 it was last tested 11 years ago.

19 Do you see that?

20 A Yes.

21 Q And then she says basically:

22 Let's run a casing inspection log  
23 and let's pressure test to  
24 determine the current pipe status.

25 Right?

26 A Yes.

27 Q And then she actually includes on  
28 page .003 a diagram of the well; right?

1 A Yes.

2 Q Okay. And then if you go to the  
3 first page of SoCalGas Exhibit-148, her boss,  
4 M.E. Melton, forwards it to his boss, Rudy  
5 Weibel -- who by the way is the director of  
6 storage -- and says:

7 Attached is Rasha's recommendation  
8 to pull tubing, run the casing  
9 inspection log, pressure test, and  
10 perforate SS-9. This is one of  
11 the high priority annular flow  
12 wells of 1940's vintage with high  
13 pressure exposed to the outer  
14 casing.

15 Do you see that?

16 A Yes.

17 Q And he recommends that that well,  
18 SS-9, be included in the casing inspection  
19 program scheduled for the fall of 1988;  
20 right?

21 A Yes.

22 Q Okay. And his boss, R.W. Weibel,  
23 approves that well; correct?

24 A Yes.

25 Q Okay. So I don't want to belabor  
26 the point. But I just want to make sure that  
27 we're all crystal clear.

28 On Exhibit SoCalGas-148, there is a

1 recommendation from a Ms. Hijazi saying there  
2 are no indications of any mechanical problems  
3 with the well at the present time. But she  
4 included in a recommendation to have a casing  
5 inspection run. And her boss gets his boss's  
6 approval; correct?

7 A Yes. That's not to say that they  
8 didn't find any later. But at the time they  
9 were making their recommendation, there  
10 was -- it doesn't appear that there was any  
11 known mechanical conditions.

12 Q Fair enough. Fair enough. I  
13 accept that answer.

14 Let's turn to SoCalGas Exhibit-149.  
15 Also in the package that I sent over on  
16 Wednesday or Thursday of last week. Turn to  
17 page 2 of this document. By the way, this is  
18 -- I'm referring to SoCalGas  
19 Exhibit-149.0002. Okay.

20 Second page --

21 (Crosstalk.)

22 Q All right. So, Mr. Bach, this will  
23 just take a minute, but I want to make sure  
24 we're on the same page here. Here's another  
25 memo from the same woman, on the same date,  
26 the same boss, but this time it's for well  
27 SS-8. Do you see that?

28 A Yes, I see that.

1           Q    Okay.  Let's -- and, again, same  
2    recommendation pretty much.  Same discussion.  
3    I want you to jump down to that second  
4    paragraph under "Discussion."  And read that  
5    first sentence into the record for me.

6           A    Says:

7                    There are no indications of any  
8                    mechanical problems with the well  
9                    at the present time.

10          Q    Right.  And then to sort of follow  
11    up the point, she says:

12                    However, the casing could possibly  
13                    have suffered external corrosion  
14                    since it was last tested in 1977.

15                    Right?

16          A    Yes; that's correct.

17          Q    Okay.  So let's go to the first  
18    page of Exhibit-149.  So here's her boss,  
19    Mr. Melton, forwarding it to his boss,  
20    Mr. Weibel.  And does Mr. Weibel approve it?

21          A    Yes.  It appears so.

22          Q    All right.  One more, sir.  I'd  
23    like to show you SoCalGas Exhibit-150.

24                    All right.  Let's turn to page 2 of  
25    this exhibit, Mr. Moshfegh.  All right.

26                    So we're looking at SoCalGas  
27    Exhibit-150, and we're at page .0002.  You  
28    probably recognize the format by now don't

1 you?

2 A Yes, I do.

3 Q All right. This time looks like  
4 Ms. Hijazi has some help. It's Mr. Horstman.  
5 That's the same fellow that wrote that 1998  
6 memo; right?

7 A It appears so.

8 Q Yep. So Mr. Horstman and  
9 Ms. Hijazi are writing their boss,  
10 Mr. Melton. And this time they're making a  
11 workover recommendation for Porter 37. Do  
12 you see that?

13 A Yes, I see that.

14 Q Okay.

15 MS. BONE: Objection, your Honor.  
16 Where is the question here? We're just  
17 reading text from memos into the record.  
18 What's the question?

19 ALJ HECHT: Are there questions related  
20 to this exhibit, Mr. Lotterman?

21 MR. LOTTERMAN: I was just laying  
22 foundation, your Honor. I'm ready to go.

23 ALJ HECHT: Okay. Please proceed.

24 BY MR. LOTTERMAN:

25 Q So, Mr. Bach, on exhibit SoCalGas  
26 Exhibit-150, what well are they referring to  
27 there?

28 WITNESS BACH: Porter 37.

1           Q    Okay.  Was that one of the wells  
2           that was on Mr. Horstman's 1988 memo list?

3           A    Yes, it was.

4           Q    All right.  And would you read into  
5           the record the -- well, let me ask you this  
6           way.  Is it true that in the second paragraph  
7           of the discussion of the Hijazi-Horstman memo  
8           they write:

9                         There are no indications of any  
10                        mechanical problems with the well  
11                        at the present time?

12          A    Yes, that's correct.

13          Q    All right.  I was wrong.  I've got  
14          one more.  Let's go through it real quickly.  
15          SoCalGas Exhibit-151.

16          MS. BONE:  Again objection.  I still  
17          haven't heard the real question.

18          MR. LOTTERMAN:  I think you'll hear it  
19          in a minute, Ms. Bone.  I'm just trying to  
20          lay a foundation for an overall conclusion  
21          here if I could.

22          ALJ HECHT:  Let's please get to the  
23          question, and the witness should answer to  
24          the extent he can and have knowledge.

25          BY MR. LOTTERMAN:

26          Q    Okay.  Mr. Bach, are you with me on  
27          SoCalGas Exhibit-151?

28          WITNESS BACH:  Yes.  I agree that --

1 that this exhibit is the same SoCalGas  
2 employees --

3 Q Okay.

4 A -- mechanical problems for -- in  
5 this case Porter 46. And, yes, this was a  
6 well. One of the twenty wells listed.

7 Q Okay. And what I wanted to note in  
8 addition to this one, sir, and thank you for  
9 speeding this up. But if you look at the  
10 last sentence in that second paragraph that  
11 -- actually, if you look at the portion of  
12 the memo called "Discussion." And you look  
13 at the second paragraph that begins, "During  
14 the 1977 analysis."

15 Do you see that?

16 A Yes.

17 Q You look at the last sentence it  
18 says:

19 All the leaks were repaired  
20 successfully by squeezing with  
21 cement.

22 So does this appear to you to be  
23 perhaps not a memo that had no mechanical  
24 problems ever. But at some point in time, it  
25 had a leak or leaks and those were repaired  
26 successfully?

27 A Yes. That appears to be the case.

28 Q Okay. So looking at these four

1 memos that we've just gone through, and I  
2 appreciate your patience. SoCalGas  
3 Exhibit 148, 149, 150, and 51, does it appear  
4 to you that all four were chosen because of  
5 their vintage, which is a very diplomatic way  
6 of saying age?

7 A So are you telling me to speculate  
8 on -- so when the memo says:

9 The wells included on the attached  
10 list are prioritized based upon  
11 deliverability, operational  
12 history, the length of time since  
13 their last workover.

14 You're telling me to -- ]

15 Q Let me rephrase the question.  
16 Mr. Bach, let me rephrase the question. By  
17 the way, if I ask you a question you don't  
18 understand, you have my permission to ask me  
19 to rephrase it and I would be glad to. Okay?

20 I am asking you about the four  
21 memos we just went through discussing wells  
22 SS-9, SS-8, Porter 37 and Porter 46. Were  
23 they part of the '40s and '50s vintage wells  
24 that Mr. Horstman recommended having casing  
25 inspection logs run on?

26 A Yes.

27 Q And did any of those memos that we  
28 just looked at, where the specific memo was

1 recommended for a workover and inspection and  
2 was approved, did any of those indicate  
3 existing mechanical problems with those  
4 wells?

5 A They did not indicate existing  
6 mechanical problems at the specific time that  
7 they were indicated in those memos.

8 Q Fair enough. I accept that. But  
9 notwithstanding the fact that they showed --  
10 that they indicated no existing mechanical  
11 problems, those wells nonetheless were put on  
12 Mr. Horstman's list in 1988 for casing  
13 inspections, correct?

14 A That's correct.

15 Q Okay. Now, you note in your  
16 testimony, and it's on page 4, Footnote 19 of  
17 that, out of the 20 wells identified or  
18 listed by Mr. Horstman in the 1988 memo, only  
19 seven casing inspections were performed; is  
20 that right?

21 A Can you repeat that?

22 Q Sure. Let me direct your attention  
23 to Footnote 19 on page 4 of your testimony.

24 A Yes, I am there.

25 Q And do you note at that page of  
26 your testimony that only seven of the 20  
27 wells listed were inspected?

28 A Yes. I see that.

1           Q     Okay. Now I want to go back, and  
2 we're almost done here. I want to go back to  
3 that list in the 1988 memo, the two-page  
4 list, Mr. Moshfegh. And, again, we're at Cal  
5 PA Exhibit-401 at 267 and 268. Okay? And,  
6 Mr. Moshfegh, can you get rid of that  
7 highlighting for me?

8                     Thank you for your patience,  
9 Mr. Bach. That's good for now. We can leave  
10 the upper part. All right.

11                    So, Mr. Bach, I am going to read  
12 off the list of wells that you believe, and I  
13 believe you're correct, were inspected  
14 pursuant to this memo. And then I am going  
15 to ask Mr. Moshfegh to highlight those on  
16 this attachment to the '88 memo, and then I  
17 am going to ask you a couple of questions  
18 about it. Okay?

19                    First one is P-34. First one,  
20 Mr. Moshfegh. And if you wouldn't mind,  
21 Mr. Moshfegh, highlight the well number and  
22 the priority, please.

23                    P-37. Mr. Bach, if you want to  
24 track your footnote, you're welcome to.  
25 P-46, SS-8, SS-9, F-2, which I believe is  
26 Frew 2 and F-4.

27                    Mr. Bach, I know this is a little  
28 bit difficult because we can't do this in

1 person, but if you look at these two pages  
2 that Mr. Moshfegh has highlighted, does that  
3 indicate the seven wells which you believe,  
4 and I believe you're correct, were inspected  
5 vis-à-vis this 1988 memo?

6 A Yes. That's correct.

7 Q All right. And I want you to  
8 confirm for me. Is it true that SoCalGas  
9 inspected all the high-priority wells?

10 A Yes. That is correct.

11 Q Okay.

12 A And to be clear, I'm not saying  
13 that SoCalGas -- I am not necessarily saying  
14 that SoCalGas should have inspected SS-25  
15 prior to choosing the wells. I am saying  
16 based on the results of the inspections that  
17 they should have continued with the  
18 inspections with the other wells.

19 Q We're going to go there in a  
20 minute, sir. Thank you for that  
21 clarification.

22 I just want to make sure the record  
23 is clear. In looking at the 1988 memo,  
24 SoCalGas, as a follow-up to that memo,  
25 inspected all the high-priority wells,  
26 correct?

27 A That's correct.

28 Q And, in fact, if you turn to

1 page 2, it even inspected a medium one and  
2 there is one which has no priority. Do you  
3 see that F-2 and F-4?

4 A Yes. Or F-4 has no indicated  
5 priority.

6 Q Correct, correct. And I want to  
7 look at the flip side of that coin. When you  
8 look at this exhibit on the screen, which is  
9 the attachment to the 1988 memo, do you see  
10 that SoCalGas inspected any low-priority  
11 wells?

12 A They did not.

13 Q Okay. And, in fact, weren't almost  
14 half of the wells on that list listed as low  
15 priorities?

16 A Yes, that's correct.

17 Q Okay. And including SS-25,  
18 correct?

19 A Yes.

20 Q Okay. Now, let me ask you a  
21 question. Did you review the SS-25 well  
22 file?

23 A If we're talking about reviewing  
24 it, doing a review of a schematic of it,  
25 temperature surveys, noise logs, et cetera,  
26 no, I did not.

27 Q Okay. So, you have no way of  
28 telling us today whether in that well file,

1 as of September, October 1988, SoCalGas  
2 somehow missed any warning signs that SS-25  
3 was having corrosion problems, true?

4 A I don't, besides Mr. Horstman or  
5 the SoCalGas employees at the time identified  
6 all 20 of these wells for well inspection.

7 Q No. Yes. I was asking you a  
8 slightly different question. What I am  
9 asking you is that since you did not review  
10 sort of the temp logs and sort of the  
11 operating information in the SS-25 well file,  
12 you have no way of rendering an opinion as to  
13 whether that well had any, for example, red  
14 flags of operational issues, correct?

15 A Nothing in terms of directly, in my  
16 personal opinion, right.

17 Q Right. And were you listening to  
18 the testimony from Dr. Krishnamurthy  
19 yesterday, when he said that Blade actually  
20 did do a deep dive into the SS-25 well file  
21 and found no red flags about operational  
22 issues before the leak that occurred in  
23 October 2015?

24 A I don't recall his exact wording,  
25 but --

26 Q Was that the spirit of what he  
27 said?

28 A I want to say yes, but.

1 Q Only say yes if you feel  
2 comfortable doing so, sir.

3 MS. BONE: Objection, your Honor,  
4 basically asking for speculation at this  
5 point.

6 MR. LOTTERMAN: That was my point.

7 Q Mr. Bach, if you can't answer my  
8 question, just say "I don't know."

9 WITNESS BACH: I will take your word  
10 for it, but, yeah, I don't know.

11 Q Okay. Let's move on. Nonetheless,  
12 Mr. Bach, even though I think we have  
13 established now that SoCalGas inspected all  
14 the high-priority wells, and even though I  
15 think we have established that the other  
16 wells either had shoe leaks or no mention of  
17 leaks whatsoever, you nonetheless took  
18 SoCalGas to task for not running Vertilogs on  
19 all 20 wells, including SS-25, didn't you?

20 A Yes, more or less.

21 Q Okay. So let me ask you a couple  
22 of questions.

23 In 1988, were casing inspections,  
24 whether Vertilogs or not, required to be run  
25 on storage wells under California Rules and  
26 Regulations?

27 A No. And never did I ever say that  
28 that was the case.

1 Q I understand. I am just making the  
2 record clear, sir. So your answer is no?

3 A That's correct. My answer is no.

4 Q And as far as you know, right up  
5 until 2015, when the incident occurred, were  
6 casing inspections required to be run on gas  
7 storage wells in California?

8 A Not to my knowledge, no.

9 Q Would your same answer be true if I  
10 asked you about industry standards?

11 A Yes. My answer would be the same.

12 Q Okay. So no requirement under  
13 California Regulations or Rules, no  
14 requirements under industry standards, right?

15 A To the best of my knowledge, yes.

16 Q Fair enough. I will accept that.  
17 And I think we have heard testimony elsewhere  
18 and that's fine.

19 Are you aware, sir, when you  
20 prepared your testimony that mechanical  
21 integrity tests were required by DOGGR in  
22 California?

23 A Yes.

24 Q And are you able to tell this  
25 Commission what a mechanical integrity test  
26 in 1988 was?

27 A Yes. So, at the time, it was  
28 mainly pressure testing, but then DOGGR later

1 gave a waiver to SoCalGas to use temperature  
2 surveys and noise logs.

3 Q And whether it's a waiver or not,  
4 as far as you know, in 1989, was SoCalGas  
5 able to comply with DOGGR's mechanical  
6 integrity test regulations by performing  
7 annual temp logs?

8 A Yes. And I would say that's  
9 besides the point of whether SoCalGas --  
10 whether SoCalGas should meet minimum  
11 regulations, there is a duty to operate the  
12 well safely.

13 Q We will get there, sir. We will  
14 get there. Let me ask you my next question.

15 Let's pull up -- this also was in  
16 your exhibits to your testimony.

17 Mr. Moshfegh, would you pull up CalPA  
18 Exhibit-401, pages 486 to 487?

19 Do you recognize this document,  
20 Mr. Bach?

21 A I believe so.

22 Q Is that commonly referred to as a  
23 project approval letter?

24 A I don't recall. I will take what  
25 you have referred.

26 Q Okay. Well, I believe it's been  
27 testified before. It will be testified  
28 again, but let's, if you don't mind, let's

1 just take that subject to check, and if you  
2 find out otherwise, let me know.

3 But I want to just point out one or  
4 two items from this letter; first of all, the  
5 date. Do you see up top there, the top  
6 left-hand corner, it looks like it was issued  
7 on April 18, 1989 and revised about three  
8 months later? Do you see that?

9 A Yes.

10 Q And if you compare that to the 1988  
11 memo that you rely on, as part of your  
12 testimony, that looks like this project  
13 approval letter came out about 11 months  
14 after the 1988 memo. Would you like to check  
15 that or will you take my word for it?

16 A After the revised, yeah.

17 Q Right. So, in fact, if you look at  
18 it more carefully, the 1988 memo came out in  
19 August of 1988 and then in April of '89, this  
20 project approval letter came out and then it  
21 was revised in July of '89. Do you see that?

22 A Yes.

23 Q Okay. And if you turn to the  
24 second page, paragraph 7, it reads as  
25 follows: "A mechanical integrity test" --  
26 that's what we have been talking about today,  
27 right?

28 A Yes.

1 Q "Is made and filed with this  
2 division" -- and that's DOGGR, correct?

3 A Yes.

4 Q "For each injection withdrawal well  
5 within three months after injection and/or  
6 withdrawal has commenced." Do you see that?

7 A Yes.

8 Q And it says, "At least once every  
9 year thereafter." And then it talks about  
10 various other issues. Do you see that?

11 A Yes. I see that.

12 Q Okay. So do you interpret this  
13 project approval letter that was sent to  
14 SoCalGas in both April and then later revised  
15 in July of 18 -- 17 -- 1989, excuse me, to  
16 say that under paragraph 7 "a mechanical  
17 integrity test must be performed at least  
18 once every year after the injection  
19 withdrawal cycle has begun"?

20 A Yes.

21 MS. BONE: Objection, your Honor.  
22 Again, I think that the witness is just being  
23 asked to read and confirm that documents say  
24 what they say.

25 ALJ HECHT: We'll be off the record.

26 (Off the record.)

27 ALJ HECHT: We will be back on the  
28 record.

1                   While we were off the record, we  
2 discussed the need to get through this  
3 testimony as expeditiously as possible. I  
4 also observed that we have a panel and that  
5 at the Commission when we have a panel of  
6 witnesses, that the appropriate witness given  
7 a question should answer that question when  
8 it's appropriate.

9                   And I observed that these days are  
10 very long and I, for one, am very tired. So,  
11 with that, I think that we can continue and  
12 move as expeditiously as possible.

13                   Mr. Lotterman.

14                   MR. LOTTERMAN: Thank you, your Honor.  
15 I will take your admonition to heart.

16                   Q Mr. Bach, just a couple of more  
17 questions on this and then we will move on.  
18 And maybe I can just cut to the chase here.

19                   Is it Cal Advocates' position that  
20 the requirement for mechanical integrity  
21 testing set out in paragraph 7 of Aliso  
22 Canyon Facilities Project Approval letter was  
23 complied with through annual temperature  
24 logs?

25                   WITNESS BACH: Yes.

26                   Q Okay. And that was true as of  
27 1989, correct?

28                   A Yes.

1 Q And it's true as of today -- or I'm  
2 sorry. It's true as of the date of the  
3 incident?

4 A Yes.

5 Q All right. Now you say -- and by  
6 the way, your Honor, I can break any time. I  
7 have some more to do with him, so you decide.  
8 But I will keep going until you tell me  
9 otherwise.

10 Mr. Bach, you say -- I would like  
11 to turn to page five of your testimony. Are  
12 you with me?

13 A Yes, I am there.

14 Q Okay. So, there you talk about the  
15 seven wells that SoCalGas chose to inspect,  
16 right?

17 A Yes.

18 Q And then you talk about "a prudent  
19 manager would also have inspected the  
20 remaining 13 candidate wells," right?

21 A Yes.

22 Q And then you say this -- and I am  
23 looking at line 7:

24 This failure to act demonstrates a  
25 failure of appropriate integrity  
26 management.

27 Do you see that?

28 A Yes, I see that.

1           Q    Okay.  I would like to delve into  
2   that phrase a little bit.

3                    First of all, I don't see any  
4   references or citations in your testimony  
5   after that sentence.  What is your authority  
6   for the proposition that SoCalGas' failure to  
7   inspect the remaining 13 candidate wells at  
8   Aliso Canyon quote "demonstrates a failure of  
9   appropriate integrity management?"

10           A    Well, the type of monitoring that  
11   SoCalGas did to comply with DOGGR Regulations  
12   would only determine if there are issues once  
13   there is -- once something is already  
14   leaking.  And considering that SoCalGas acted  
15   on a majority of the seven wells that they  
16   did inspect, I believe it is prudent to do  
17   some more inspection of the remaining 13  
18   candidate wells to see if the wells are  
19   starting to fail, even if they had not failed  
20   at that point.

21           Q    I understand that's your belief,  
22   sir, because it's here in the testimony.  I  
23   guess what I am asking you is a slightly  
24   different question.  I'm asking you what you  
25   can cite as authority for that belief.

26           A    So, both -- so for one, Blade said  
27   something similar in their -- in their  
28   reports that -- I have to find the exact page

1 number, but I wouldn't say that their  
2 language is as strong as mine, but that they  
3 brought it up as odd that SoCalGas found  
4 issues with the seven wells that they did  
5 look at but did not look at the other 13  
6 wells. And then, generally, in my  
7 experience, there is integrity management  
8 programs for gas transmission and  
9 distribution pipelines that if there are  
10 existing underlying -- there appears to be  
11 existing underlying issues, that it would  
12 seem like a good practice to inspect  
13 additional wells that may also have similar  
14 issues.

15 Q Any other authority?

16 A I don't believe so.

17 Q Did you talk with any experts in  
18 the business?

19 A I did not.

20 Q Did you search the literature for  
21 any analogous or comparable industry  
22 standards?

23 A I just don't (inaudible) this, but  
24 I agree that there is no industry standard  
25 that required casing inspections.

26 Q I'm sorry. I thought you were  
27 done. My apologies. So aside from Blade,  
28 and I think the Blade report will speak for

1     itself.  We don't need to get into that.  And  
2     I am not going to press on your experience,  
3     sir.  With all due respect, I think that is  
4     what it is.  But I just want to make sure the  
5     basis for your statement is solely what you  
6     believe Blade found, although you said your  
7     language was -- that the language in the  
8     Blade report was not as strong as yours and  
9     your experience with integrity management  
10    plans or gas transmission and distributions  
11    systems; is that right?

12           A     Yes.  That's correct.

13           Q     Okay.  Did you look at any  
14    recommended industry practices?

15           A     I did look at some industry  
16    standards, but the industry standards are  
17    more focused on -- they're more focused on,  
18    in general this is what you should do.  And  
19    what I am saying here is it seems common  
20    sense that if you have 20 wells and you have  
21    a plan to inspect all 20 wells and you find  
22    issues on four of the seven wells that you do  
23    inspect, then maybe you should look at the  
24    other 13.

25           Q     All right.  So just to be clear,  
26    your authority for making this statement,  
27    "this failure to act demonstrates a failure  
28    of appropriate industry management" is based

1 on your review of the Blade report, although  
2 you believe the language in the Blade report  
3 is not as strong, your experience with  
4 integrity management plans, and gas  
5 transmission and distribution systems, and  
6 common sense?

7 A Yes.

8 Q Anything else?

9 A I don't believe so.

10 Q All right.

11 ALJ HECHT: This is Judge Hecht. I  
12 think that this is an appropriate time to  
13 take that afternoon break.

14 We will take a break for  
15 approximately 15 minutes, coming back at  
16 2:35. Are there any comments or notes before  
17 we do that?

18 (No response.)

19 ALJ HECHT: No. Seeing none, we'll be  
20 off the record.

21 (Off the record.)

22 (Break.)

23 ALJ HECHT: We will be back on the  
24 record.

25 We are continuing with  
26 cross-examination of the panel of Mr. Bach  
27 and Mr. Taul from the Public Advocates  
28 Office.

1           Mr. Lotterman, you may continue.

2           MR. LOTTERMAN: Thank you, your Honor.

3           Q    Mr. Bach, if at any time when I ask  
4 you some questions, if you don't feel you're  
5 comfortable or confident or capable or ready  
6 to answer them, please let me know. Okay?  
7 And I will save them for another witness.  
8 All right?

9           WITNESS BACH: Okay.

10          Q    Okay. Good. So, I wanted to pick  
11 up on your view that SoCalGas' failure to  
12 inspect the remaining 13 candidate wells at  
13 Aliso Canyon demonstrated a failure of  
14 appropriate integrity management.

15                Are you aware that DOGGR now  
16 requires such casing inspections on  
17 underground storage wells?

18          A    I don't know that -- I don't  
19 remember the exact regulations. I do know  
20 that there are some inspections or some  
21 capacity on the monitoring activities that  
22 DOGGR previously required prior to the leak.

23          Q    Right. I guess what I was asking  
24 you is: Are you aware of whether since the  
25 leak DOGGR has issued any orders requiring  
26 casing inspection logs on underground storage  
27 gas wells?

28          A    No. I believe the Blade report

1 might have mentioned it, but I don't remember  
2 off the top of my head.

3 Q Are you familiar with API  
4 Recommended Practice 1171?

5 A I have some general knowledge but  
6 not, nothing in depth.

7 Q Okay. Do you have any knowledge as  
8 to whether that recommended industry practice  
9 was required at gas storage facilities before  
10 the leak?

11 A It was not required.

12 Q Okay. And do you have a general  
13 sense as to when PHMSA, P-H-M-S-A, added it,  
14 at least portions of it, to its regulations?

15 A I don't remember the exact time,  
16 but it's definitely -- it was definitely not  
17 required until afterward.

18 Q Okay. That's what I wanted to  
19 know. Thank you.

20 Have you looked at API 1171 to see  
21 what it requires underground gas storage  
22 operators to do vis-à-vis mechanical  
23 conditions surveys? ]

24 A I don't recall. I don't recall  
25 specifically, the type of Vertilog or similar  
26 technology.

27 Q Are you testifying that you looked  
28 and you don't remember now or you didn't look

1 at all or you looked in some other context?  
2 I'm trying to figure out a little clarity as  
3 to that answer, sir.

4 A I want to say that I didn't have  
5 access to that -- I may not have had access  
6 to the actual document. I might just read  
7 a -- some other agency's summary of the  
8 requirements.

9 Q Okay. So sitting here today, you  
10 don't have any recollection of reviewing API  
11 1171 and you definitely don't have any  
12 recollection of what it entails vis-à-vis gas  
13 storage; correct?

14 A That's correct.

15 Q Okay. Thank you. So I want to ask  
16 you a couple of big-picture questions and  
17 then we'll go to the last area before I think  
18 we turn to Mr. Taul. Are you suggesting in  
19 your testimony, sir, that any underground  
20 storage operator who didn't run a casing  
21 inspection before 2015 somehow violated  
22 DOGGR's rules?

23 A I'm definitely not suggesting that.  
24 So there's a couple things to unpack there.  
25 The first is whether they're violating  
26 DOGGR's rules because DOGGR didn't require  
27 casing inspection logs as a -- as some type  
28 of mechanical integrity tests, which they

1 included temperature surveys as was done.

2 And another thing to unpack there  
3 is whether it -- I'm forgetting the question,  
4 but I was going to respond along the lines  
5 that even if it -- even -- it's -- I'm also  
6 not suggesting that for every potential well  
7 that had issues that they had to do casing  
8 inspection logs, although it would have been  
9 helpful to.

10 What I'm saying is that based on  
11 the results of those that SoCalGas did log  
12 that, as they appeared to have a high percent  
13 of wall loss, that SoCalGas should have  
14 extended their program to the other 13 wells.

15 Q All right. Understood. I  
16 understand your position. Let's move on to a  
17 slightly different topic. And then I'm going  
18 to ask this question slowly and then we'll  
19 revisit it maybe a little bit later, but in  
20 your view is it appropriate integrity  
21 management to run a casing inspection tool  
22 that gives unreliable results?

23 Shall I ask that again? Go ahead.

24 A Yeah. I would say that it wouldn't  
25 be prudent to have a tool that had unreliable  
26 results, but I would contest whether the  
27 circa 1988 Vertilogs were unreliable, at  
28 least at a qualitative level.

1           Q    Okay.  So if I understood that  
2   answer correctly, you are not contesting the  
3   overall proposition that it's not good  
4   integrity management to run casing inspection  
5   logs that give unreliable results.  You're  
6   just questioning that proposition's  
7   application here; correct?

8           A    Yes, that's correct.

9           Q    Okay.  All right.  So let's talk  
10   about Vertilogs for a minute.  Are you  
11   familiar with the technology?

12          A    I'm familiar that it's a mechanical  
13   flexible gauge technology.

14          Q    And are you familiar with how it  
15   works with electric coils and that type of  
16   thing?

17          A    I'm familiar that the electric  
18   coils sends a magnetic field and then wall  
19   thickness -- or variations of wall thickness  
20   would create perturbation to that magnetic  
21   field that could be detected.

22          THE REPORTER:  Mr. Bach, it's the court  
23   reporter.  Could I get you to please keep  
24   your voice up.  Thank you.

25          WITNESS BACH:  Yes.  Sorry.

26          ALJ HECHT:  Thank you, sorry.

27   BY MR. LOTTERMAN:

28          Q    And are you familiar with what the

1 Vertilog tool or technology could do in 1988,  
2 which was 33 years ago?

3 WITNESS BACH: Sorry, could you clarify  
4 what you mean by what it could do.

5 Q Yeah. How reliable its results  
6 could be in 1988.

7 A As far as I'm aware, it was less  
8 reliable than current technology but it, if  
9 used properly, likely could have provided at  
10 least qualitative results of whether it had  
11 issues.

12 Q And what's your authority for that  
13 statement, sir?

14 A Mainly the attestations of Blade.

15 Q Any other authority?

16 A No, I don't believe so.

17 Q Are you personally rendering an  
18 opinion in this proceeding as to the  
19 reliability of the Vertilog tool in 1988?

20 A In terms of whether my opinion is  
21 independent of Blade -- I would say mainly  
22 I'm agreeing with Blade in terms of -- in  
23 terms of the accuracy, although I believe  
24 Blade focuses particularly on the -- just the  
25 1988 Vertilog and other iterations of  
26 Vertilog or MFO or technologies that could  
27 have -- that could do similar functions.

28 Q Okay. And when you say you mostly

1 agree with Blade's opinions, did you kick the  
2 tire on those opinions at all?

3 A Sorry, what do you mean by "kick  
4 the tires"?

5 Q Did you -- good question. I  
6 withdraw. Good question. I withdraw my  
7 question.

8 Did you attempt to verify or assess  
9 Blade's views on Vertilogs?

10 A I did not attempt to look at  
11 different logs myself and compare results of  
12 1988 Vertilog versus the results with  
13 different technologies if that's what you're  
14 asking.

15 Q I am. Are you aware that an expert  
16 in this case, Rob Carnahan, did make that  
17 comparison?

18 A Yes, I did, although I'm not clear  
19 whether those results were representative of  
20 a 1988 Vertilog as a whole.

21 Q So I guess what I'm wondering is  
22 did you undertake an independent analysis to  
23 challenge his analysis?

24 A In my sur-reply testimony I mention  
25 that I challenge his statements of accuracy,  
26 but I merely just (inaudible) Blade.

27 Q Right. I think that's the point I  
28 was trying to get to. Leaving aside Blade

1 for a minute, did you, Mr. Bach, as the  
2 utility engineer and spokesperson for Cal  
3 Advocates on Vertilogs, did you undertake an  
4 independent analysis to challenge  
5 Mr. Carnahan's findings?

6 A Not in sur-reply testimony, but I  
7 could expound right now if you want of why  
8 I'm not clear that Mr. Carnahan's analysis  
9 was representative of 1988 Vertilog.

10 Q Well, if it's not in your  
11 testimony, sir, I'd just as soon move on and  
12 you can give that view under some other  
13 context. But I'd rather not exceed your  
14 testimony at this time; okay?

15 A Okay.

16 Q All right. So the next question I  
17 have for you is -- and you may be the wrong  
18 person for this so let me just ask. Would  
19 you turn to the exhibit CalPA's sur-reply,  
20 which is CalPA Exhibit 403. I want you to go  
21 to the pincite 597.

22 A Sorry, do you mean the supporting  
23 attachments for CalPA's sur-reply?

24 Q Yes, sir. Yeah, the supporting  
25 attachments to your team's sur-reply dated  
26 June 30, 2020, and the pincite, when you're  
27 ready, which is 597.

28 A Yes, I'm there.

1 ALJ HECHT: We'll be off. Let's give  
2 him some time to find the document. Let me  
3 know when you're ready to go back on.

4 (Off the record.)

5 ALJ HECHT: All right. We'll be back  
6 on the record, just a brief break to find the  
7 part of the testimony.

8 Go ahead, Mr. Lotterman.

9 MR. LOTTERMAN: Thank you, your Honor.  
10 Mr. Moshfegh, would you scroll to  
11 the last full paragraph on page 597. Thank  
12 you.

13 Q Mr. Bach, I want to make sure  
14 you're the right person to ask this, but this  
15 data response was included in the supporting  
16 exhibits to your team's testimony. And to  
17 give you a little clarity, I believe it was  
18 Blade's response. Yes, it's Blade's response  
19 to SED's Data Response -- Data Request 58.

20 And, Mr. Moshfegh, would you  
21 highlight the sentence that begins "log  
22 data" -- right in the middle of the  
23 paragraph -- "log data has to be compared to  
24 truth data."

25 So this was included in your  
26 exhibits, Mr. Bach. I'd like to ask someone  
27 about that sentence. I guess the threshold  
28 question I need to ask is are you that

1 person?

2 ALJ HECHT: It is --

3 WITNESS BACH: Yes.

4 ALJ HECHT: -- perfectly fine to defer  
5 to another witness if this is not part of  
6 your testimony's basis.

7 BY MR. LOTTERMAN:

8 Q Did you say "yes, sir"?

9 WITNESS BACH: Yes, this is.

10 Q Okay.

11 A Yes, I'm the witness referred to  
12 for this.

13 Q Okay. Good. And the reason why I  
14 ask is when I printed out your exhibits, that  
15 actual sentence was highlighted in the  
16 exhibits.

17 Is that accurate or did -- or was  
18 there a processing issue that I missed?

19 A I don't recall it being  
20 highlighted.

21 Q Okay. Not a big deal. If you're  
22 the right witness, then let's go forward. So  
23 if you look at the sentence above it, Blade  
24 writes, "In general it's a flawed concept to  
25 compare one log tool to another and  
26 automatically claim one is more accurate than  
27 the other."

28 Do you agree with that?

1           A    Yes, I do.

2           Q    And then Blade goes on to write,  
3 "log data has to be compared to truth data,"  
4 and in parens they write, "(Direct  
5 measurements of defects)" and then close  
6 parens, "to assess log performance."

7                   Do you see that?

8           A    Yes, I see that.

9           Q    Do you agree with that sentence?

10          A    Yes, I do.

11          Q    Okay.  What's your understanding of  
12 the meaning of the phrase "truth data"?

13          A    If you don't actually look at the  
14 actual casing, then you don't know how  
15 inaccurate or accurate the inspection tool  
16 is.

17          Q    Okay.  And is a thought there that  
18 inspection tools -- and, again, whether it's  
19 1988 or 2018 or whatever -- they have their  
20 limitations and really the best way to assess  
21 that limitation is to look at the pipe  
22 itself?

23          A    I would argue against the  
24 characterization, insofar as I get it.  They  
25 could give you some useful information.  But,  
26 yes, I would agree that looking at the pipe  
27 itself will be more accurate, almost  
28 certainly than --

1 Q Okay.

2 A -- using casing inspection log.

3 Q Right. Right. And if I understand  
4 what Blade is saying here -- and I understand  
5 you agree with it -- what Blade is saying  
6 here is, look, it's one thing to kind of sit  
7 back and compare, kind of argue about what  
8 tool is more accurate or reliable and what  
9 tool and whatever, the best way to understand  
10 a log's performance is to compare the data  
11 that that log generates or that tool  
12 generates with the actual direct measurements  
13 of the pipe itself; right?

14 A Yes.

15 Q All right. And that's what Blade  
16 and you call truth data; right?

17 A Yes. That's what Blade calls truth  
18 data and I agree with them.

19 Q All right. Fair enough. Now, are  
20 you aware of there being any such truth data  
21 in 1988 time frame regarding Vertilogs?

22 A I forget if the Exhibit 153 you  
23 sent over, if the --

24 Q Let's pull that one up. Is this  
25 the exhibit you're referring to, Mr. Bach?

26 A Yes, it is.

27 Q Okay. And just so we all  
28 understand what we're looking at here,

1 Mr. Moshfegh, would you mind scrolling to the  
2 top.

3 So this is an interoffice  
4 correspondence from SoCalGas company.

5 Do you see that?

6 A Yes.

7 Q Again, these are foundational  
8 questions. I'm not saying you have to attest  
9 to the accuracy of this, but I just want to  
10 make sure that we're all on the same page.  
11 Does this interoffice correspondence appear  
12 to have been sent on November 15, 1991?

13 A Yes.

14 Q And I am looking trying to find  
15 that, so the 1988 memo, I believe, was sent  
16 in the fall of 1988, so roughly two to three  
17 years after the '88 memo; is that right?

18 A Yes, that's correct.

19 Q And it appears to have been written  
20 by a gentleman named DG Neville.

21 Do you see that?

22 A Yes, I see that.

23 Q Written to RA Skultety; right?

24 A Yes.

25 Q And Neville, for the court  
26 reporter, is N-e-v-i-l-l-e, and Skultety is  
27 S-k-u-l-t-e-t-y. Okay.

28 Have you had a chance to review

1 this memo before this afternoon?

2 A Yes, I have.

3 Q Okay. And does this memo indicate  
4 that SoCalGas had run a casing corrosion  
5 survey or a Vertilog downhole of a well in  
6 its Montebello facility?

7 A Yes, it does.

8 Q And does it also indicate that as  
9 part of an effort that was going on there,  
10 that SoCalGas pulled out that pipe and  
11 inspected it so they ran the downhole to the  
12 Vertilog, which is what we're talking about  
13 today, circa 1988, 1991, they got the  
14 results, they pulled out the pipe, and then  
15 they compared those log results to that truth  
16 data, didn't they?

17 A Yes, they did.

18 Q Okay. I sat and did the math this  
19 morning -- and let's do subject to check  
20 because I actually like that concept -- but  
21 subject to check, Mr. Neville reports that  
22 that Vertilog that was run in 1991 showed 46  
23 joints of corrosion. When they looked at the  
24 pipe itself, how many did they find?

25 A I would have to -- I don't remember  
26 the exact number. I'd have to read this.

27 Q Mr. Moshfegh, it's right in the  
28 second paragraph, about two-thirds of the way

1 down. It says, "The surface inspection  
2 indicated only 6 joints of significant metal  
3 loss to be classified as rejected."

4 Do you see that, Mr. Bach?

5 A Yes, I see that.

6 Q And what struck me about this  
7 memo -- and I'm curious if it struck you the  
8 same way -- what Mr. Neville reported is, he  
9 said, "By the way, of the 6 joints of this  
10 pipe that actually did have corrosion, that  
11 Vertilog tool only identified 2 of them."

12 Isn't that what he says?

13 A Yes, that's what he says,  
14 although --

15 Q So -- I'm sorry, were you finished?

16 A Although then they -- I would like  
17 to expound on why that doesn't necessarily  
18 mean the Vertilog technology in general is  
19 inaccurate.

20 Q No. And, sir -- I'm sorry, I  
21 thought you were finished. Excuse me. Go  
22 ahead and continue.

23 A I think I'm done.

24 Q Yeah. I wasn't, you know -- I  
25 didn't want to show you this document for the  
26 proposition that all Vertilogs in that time  
27 period were bad or whatever. I was showing  
28 you this for the proposition that in 1991,

1 not long after that 1988 memo went out,  
2 SoCalGas had -- was in possession of some  
3 truth data, which showed that the Vertilog  
4 that was being run at one of its sister  
5 facilities largely overexaggerated the degree  
6 of metal loss; is that true?

7 A That's true, although it's not  
8 clear to me whether this was an isolated  
9 incident or if it would have also applied to  
10 any Vertilogs that SoCalGas could have run in  
11 Aliso Canyon.

12 Q Understood, sir. I'm just focusing  
13 on the Vertilog tool which you say SoCalGas  
14 should have run on the remaining 13 of 20  
15 wells. And what I'm asking you is isn't it  
16 true that soon after that 1988 memo went out,  
17 SoCalGas had a very unusual opportunity?

18 It was able to compare the results  
19 of that Vertilog tool to the truth data on an  
20 actual pipe. It showed that that tool was  
21 right only 2 of 46 times, which means less  
22 than 4 percent, and, in fact, it missed metal  
23 loss on 4 of 6 spots so it missed 66 percent.

24 A If you --

25 Q So my question --

26 (Crosstalk.)

27 BY MR. LOTTERMAN:

28 Q I'm sorry. I was actually going to

1 go back to my earlier question with a slight  
2 twist to it because -- actually, before we do  
3 that, if you look right at the bottom of that  
4 first page and then we're done with this  
5 document.

6 If you look right at the bottom of  
7 that first page under "Discussion," it talks  
8 about the Montebello well and Mr. Neville's  
9 conclusion that the Vertilog was obviously  
10 inaccurate for its diagnostic capabilities on  
11 the casing string, which is another word for  
12 casing pipe; right?

13 And then he said, "The tool largely  
14 overexaggerated the degree of metal loss in  
15 the casing."

16 Do you see that?

17 A Yes, I see that. And if you scroll  
18 to the next page, I believe that this memo  
19 expounds that that possibly could have been  
20 due to calibration issues with a specific  
21 tool and/or due to eccentricity of the  
22 casings, and also that there may have been --  
23 even if this was the case for all Vertilogs,  
24 that there may have been alternate companies  
25 that SoCalGas could have utilized.

26 Q Right. Right. I understand what  
27 you're saying. All I want to do -- and then  
28 we're going to move on -- all I want to do is

1 focus on the fact that soon after that 1988  
2 memo that you write about in your testimony,  
3 soon after that was sent out and SoCalGas  
4 actually did inspect 7 of the 20 wells, it  
5 learned using truth data that that particular  
6 tool generated largely overexaggerated  
7 results; true? On that well?

8 A On that well, yes, only -- I would  
9 only agree specifically for that well.

10 Q Right.

11 A And it's -- I don't know to what  
12 extent the numbers of 2 and 46 that you  
13 stated, how much of those were completely  
14 false and how much were just exaggerated. I  
15 agree that the results for this well were  
16 definitely not good and not -- what's the  
17 word -- not --

18 (Crosstalk.)

19 ALJ HECHT: Could you please both  
20 repeat that starting with Mr. Bach. What  
21 word were you using?

22 WITNESS BACH: I'm not sure from where,  
23 but if it was from -- I would agree that the  
24 results for this specific well were not  
25 adequate.

26 ALJ HECHT: Okay. Thank you.

27 Mr. Lotterman, did you have  
28 something to add?

1           MR. LOTTERMAN: I'll withdraw my  
2 question and follow up on that answer if I  
3 could, your Honor.

4           ALJ HECHT: Yes. And then I think  
5 we're going to take a short afternoon break.  
6 During that break, probably before we go away  
7 for a bit, I'm going to ask some questions  
8 about how much else you have for the  
9 remaining Public Advocates' witnesses.

10          MR. LOTTERMAN: Sounds good, your  
11 Honor.

12          Q     Mr. Bach, just a quick follow-up  
13 about your "not adequate" answer. And you're  
14 welcome to look at this memo more carefully  
15 during the break or whatever, but Mr. Neville  
16 reports that that tool was wrong 95.6 percent  
17 of the time 2 out of 46 corrosion areas.

18                 Would you consider that more than  
19 not inadequate or more than not adequate?

20          WITNESS BACH: As I already said, I  
21 would say that this tool was not adequate,  
22 but I would disagree of whether it was wrong  
23 except for 2 out of 46 of the times because  
24 there could be cases where it just  
25 exaggerated the amount of corrosion or wall  
26 loss so that it might have detected  
27 something. So it's kind of not black and  
28 white. It might not have been black and

1 white that it was wrong or right. It might  
2 have just, say, if it was like 15 percent  
3 wall loss and it had a 40 percent wall loss  
4 or what have you.

5 MR. LOTTERMAN: This is a good time,  
6 your Honor. Thank you.

7 ALJ HECHT: All right. We'll be off  
8 the record.

9 (Off the record.) ]

10 ALJ HECHT: We will be on the record.

11 While we were off the record, we  
12 took a short afternoon break. And I  
13 understand from Mr. Lotterman that he thinks  
14 he has about 10 or 15 minutes more cross for  
15 this panel subject to check with his client.  
16 So perhaps that has changed.

17 Mr. Lotterman?

18 MR. LOTTERMAN: Thank you, your Honor.  
19 And I'm going to endeavor to do this as  
20 quickly as I can. But no guarantees.

21 Q Mr. Bach, let me ask you, sort of,  
22 a separate question. And you may call this a  
23 hypothetical if you want. But I want to sort  
24 of focus on the Montebello memo here that  
25 we've looked at written by Mr. Neville.

26 If you had a tool, a Vertilog tool  
27 or a casing inspection tool generally, that  
28 exaggerates the corrosion or wall loss on a

1 pipe, wouldn't it be possible in fact likely  
2 that that reliance would prompt an operator  
3 like SoCalGas to make repairs on a well where  
4 none are actually needed?

5 WITNESS BACH: That's true. But it's  
6 dated in the same exhibit. The memo states:

7 At Montebello inner casing strings  
8 could probably still be pulled on  
9 minimum sites at casing corrosion.  
10 The severity of the corrosion  
11 problem, and the fact that we're  
12 still in the process of evaluating  
13 the corrosion mechanism or else  
14 being overly cautious.

15 Q Right. No, I understand. But I'm  
16 asking you more conceptually here. If you  
17 have a tool that's falsely showing corrosion  
18 and significant corrosion on a pipe, might  
19 those results not prompt someone to make  
20 repairs on that well when none are needed?

21 A Yes, that's true.

22 Q Okay. So that brings me to your  
23 argument about the Vertilog's accuracy and  
24 the fact that the accuracy is proven because  
25 of the number of wells SoCalGas remediated  
26 pursuant to that 1988 memo.

27 Let me tell you what I'm struggling  
28 with here. You argue that as part of that

1 1988 memo, SoCalGas inspected only seven  
2 wells; correct?

3 A Yes.

4 Q And then you say:

5 And by the way, SoCalGas performed  
6 remediation on four of those  
7 wells.

8 Right?

9 A Yes.

10 Q And then you note that's more than  
11 half. I don't know what seven divided by --  
12 or four divided by seven is. But obviously  
13 it's more than 50 percent; right?

14 A Yes.

15 Q So my question to you is: What if  
16 those repairs on those seven wells were  
17 prompted by the same false results that  
18 SoCalGas got at its Montebello well?

19 A If you're trying to make me say  
20 that it's possible that less than four of  
21 those wells had critical wall thickness loss,  
22 then, yes. I would say that that is  
23 possible.

24 But that I'm not clear whether --  
25 first whether that was the case. And for  
26 example whether the -- the wells in Aliso  
27 Canyon had similar calibrations and  
28 eccentricity issues with the Montebello

1 logging did. If they're the exact same tool.  
2 And even if even if it was the exact same  
3 tool, SoCalGas could still have checked with  
4 the other options they mentioned in the  
5 Exhibit-153 memo.

6 Q Mr. Bach, I want you to put  
7 yourself in the shoes of SoCalGas for a  
8 minute, okay? So you decide to basically  
9 check the casing -- the well casings of 20  
10 wells that are vintage 1940s and 1950s;  
11 right?

12 A Yes.

13 Q And the memo that we looked at  
14 earlier shows that notwithstanding the fact  
15 that those wells were on the list, those  
16 memos that we looked where Ms. Hijazi  
17 recommended that they be inspected and  
18 Mr. Weibel approved it, those wells showed no  
19 mechanical conditions or problems at the  
20 time; correct?

21 A At the time prior to --

22 Q Right.

23 A -- prior to the Vertilog  
24 discussions.

25 Q 1988 absolutely. You're with me.  
26 We're on the same page. So then SoCalGas  
27 goes out and it inspects the high priority  
28 wells. There's seven of them; right? And it

1 remediates four of them based on those  
2 logging results; right?

3 A Yes.

4 Q Okay. And because those wells are  
5 drilled a mile and a half into the ground,  
6 they don't -- SoCalGas has no truth data as  
7 to whether those Vertilog tools are giving  
8 them accurate quantitative results; true?

9 A That's correct.

10 ALJ HECHT: I'm going to ask the  
11 witness to speak more clearly for the benefit  
12 of our court reporters. Sorry to break in.

13 BY MR. LOTTERMAN:

14 Q Then SoCalGas has the rare  
15 opportunity in the underground storage  
16 business -- and I mean rare, because, you  
17 know, Blade did it obviously. But a rare  
18 opportunity to pull out the piping. Not the  
19 tubing but the inner-strength piping of a  
20 well. Put it on the ground and put the log  
21 data next to the pipe and compare that data  
22 to the truth data in 1991; right?

23 WITNESS BACH: Yes; that's correct.

24 Q And we can quibble with grossly,  
25 whatever, whatever. But even if  
26 Mr. Neville's analysis is off a little bit,  
27 that's a pretty bad batting average; isn't  
28 it? 2 of 46?

1           A    Yes.  But if the tool was  
2 calibrated incorrectly, then it would --  
3 there is a precision error and cause multiple  
4 errors on the well.  It's specific what  
5 casing log line.  I wouldn't say that this is  
6 a statistically significant representation of  
7 Vertilog.

8           Q    I understand.  But missing the  
9 right answer 95 percent of the time is  
10 statistically significant; isn't it?

11          A    No.  I said previously I can test  
12 that it was wrong 95 percent of the time and  
13 that you have significant bias if this is all  
14 done on one single bump.

15          Q    But the problem is as I said when  
16 you're in SoCalGas's shoes, you don't have  
17 any other truth data to compare it to do you?

18          A    You don't have any additional truth  
19 data to compare it to.  But you have -- you  
20 have other ways to look at the well.  And if  
21 you're being conservative in terms of safety,  
22 then you could still act on what you may or  
23 may not know is the actual cause for concern.

24          Q    You know, I mean, isn't the problem  
25 here -- because you mentioned the  
26 transmission and distribution systems.  Isn't  
27 the problem here that in those areas,  
28 operators like SoCalGas and others can

1 validate their logging data because all they  
2 got to do is pull the pipe up; right?

3 A That's true.

4 Q Right. I mean it's basically a  
5 couple feet buried. You see a problem; you  
6 pull up the pipe; logging data's good, let's  
7 go; logging data's bad, we learned a lesson.  
8 I mean, that's kind of how at least in the  
9 transmission and distribution systems  
10 companies like SoCalGas can log and can  
11 validate logging tools like Vertilogs or  
12 anything else; correct?

13 A Yes, that's true.

14 Q But it's a rare, very rare,  
15 situation when a company like SoCalGas or any  
16 of the utilities will pull up a mile and a  
17 half of production casing -- not tubing but  
18 production casing -- and be able to put that  
19 on the ground and compare that pipe to that  
20 logging data; right?

21 A That's what it appears, yes.

22 Q Right. So Mr. Neville had the rare  
23 opportunity in 1991 and Blade was able to  
24 pull up the pipe in 2015 and 2016. And then  
25 there's one other thing that happened here.

26 And that is that after the leak was  
27 stopped, SoCalGas was required by DOGGR to  
28 run more current and more updated logging

1 tools on those very same wells; correct?

2 A I believe so.

3 Q Right. And in 2017, 2018, and  
4 2019, they didn't use that old 1988 Vertilog  
5 tool. They used ultrasonic, or USIT tools,  
6 and they used the MFL version that's now  
7 around and being used called HRVRT; correct?

8 A That's correct.

9 Q And did you hear Dr. Krishnamurthy  
10 say yesterday that Blade post-leak, when it  
11 examined for example well 25-A, it used  
12 HRVRT; right?

13 A Yes. And I believe --  
14 Dr. Krishnamurthy didn't mention it. But in  
15 the site report they also used a microbial  
16 log on the tubing.

17 Q Okay. All right. All right. And  
18 so there's kind of another unique position;  
19 right? Because of course you got the truth  
20 data. The truth data pulls out the real pipe  
21 and compares it to the logging and you can  
22 sort of look at reality versus the data.

23 And by the way, we forgot to talk  
24 about interpreting the data. But we'll leave  
25 that alone for another day.

26 But you also have the situation  
27 where you have old logging data from the 1980  
28 -- late '80s. And then you got the sort of

1 state-of-the-art data in 2017, '18, and '19.

2 And didn't Mr. Carnahan, SoCalGas's  
3 expert, compare that state-of-the-art logging  
4 tool today with a result of Vertilog in 1988?

5 A Yes, he did.

6 Q Yeah. And in fact didn't he  
7 compare it on two of the wells on  
8 Mr. Horstman's 1988 memo?

9 A I don't recall the exact number,  
10 but I believe he did prepare some of them.

11 ALJ HECHT: If you're referring to an  
12 exhibit, can you provide that exhibit,  
13 please?

14 MR. LOTTERMAN: Yes.

15 Q Going Back to CalPA Exhibit-401. I  
16 forget what you call it. Kind of a jump site  
17 267.

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

19 (Off the record.)

20 ALJ HECHT: We'll be back on the  
21 record.

22 Please go ahead.

23 BY MR. LOTTERMAN:

24 Q Mr. Bach, I guess my question to  
25 you is: Do you recall that Mr. Carnahan  
26 actually took the, sort of, recent  
27 state-of-the-art logging data -- or tool and  
28 information and compared it with the logging

1 data that was generated as part of this, a  
2 1988 exercise?

3 WITNESS BACH: Yes, I believe so.

4 Q Okay. And do you recall that in  
5 fact when Mr. Carnahan compared the 2018 data  
6 to the 1988 data on those two wells, the  
7 Vertilog showed 6 and 10 joints with Class 2  
8 corrosion. And the 2018 logs showed none.

9 Is that your understanding?

10 A I don't recall the exact number.  
11 But something along those lines, yes.

12 Q Right. So now we have truth data  
13 from a pipe that was actually pulled out of  
14 the ground and compared to the '88 logging  
15 data. We have a 2018 logging, which was  
16 compared to the 1988 data. And both showed  
17 that that Vertilog was either -- in the words  
18 of Mr. Neville -- largely over exaggerated or  
19 in the two wells that 1988 exercise did in  
20 fact inspect that Vertilog showed corrosion  
21 where none existed.

22 So my question to you is: How do  
23 you know or how do we know that the repairs  
24 made on those four wells as a result of this  
25 exercise were really needed?

26 A So first of all when you say they  
27 showed corrosion when there's -- there was  
28 none present. But I don't remember exactly

1 Mr. Carnahan's analysis. But that's not  
2 necessarily the case that there was no  
3 corrosion. Just that it was perhaps less and  
4 perhaps even not significant compared to  
5 what -- what the logs were saying.

6 But there's always that point. I  
7 would agree that you don't know for sure  
8 whether their 1988 Vertilogs were accurate or  
9 not. But that was the best knowledge that  
10 you had at that time. And if it wasn't  
11 accurate, as I mentioned there was possible  
12 troubleshooting issues with the Vertilog and  
13 there were other methods to test -- to  
14 inspect the -- inspect the casing.

15 And even failing that, SoCalGas  
16 could have made a note of -- of potential  
17 issues and looked at the casing for the down  
18 the line prior to 2015.

19 MR. LOTTERMAN: I'd like to turn, your  
20 Honor, to Mr. Taul for a minute. Then I have  
21 a kind of a wrap up question for Mr. Bach.  
22 Then I'm done.

23 ALJ HECHT: All right. Is Mr. Taul  
24 ready?

25 WITNESS TAUL: I'm here, your Honor.

26 ALJ HECHT: Okay. Please proceed.

27 BY MR. LOTTERMAN:

28 Q Mr. Taul, it's my understanding

1 that the portion of your -- the portion of  
2 the testimony submitted by Cal Advocates that  
3 you're sponsoring begins on page 7 of CalPA  
4 400-2, line 7. And it goes through page 9,  
5 line 8. Is that accurate?

6 WITNESS TAUL: To start I believe it's  
7 line 5 page 7. I believe one sentence was  
8 omitted. Perhaps there was dual ownership of  
9 that sentence by Mr. Bach and I. But that is  
10 integral to my point. And then checking -- I  
11 believe the second end point was correct.

12 Q Okay. So give me the sentence  
13 that's starts your beginning point, please.

14 A Let me --  
15 (Crosstalk.)

16 A Beginning point is page 7, line 5.

17 Q Five. The problem I have is  
18 Mr. Taul is my final version line 5 doesn't  
19 have a sentence beginning. In fact there's  
20 -- so if you wouldn't mind just reading into  
21 the record the first four words of the  
22 beginning of your response or testimony on  
23 page 7 then I can mark it.

24 A Yes. Quote, "The Blade report  
25 noted."

26 Q All right. Got it. That's  
27 actually unless I've got the wrong copy.  
28 That's actually line 7.

1           And Ms. -- Ms. Bone, you can  
2 correct me if I'm wrong. But I think what  
3 I've marked is CalPA Exhibit 400-2. That's  
4 line 7. But that's neither here nor there.  
5 I'm not going to ask you about that sentence?

6           I want to ask you about your Table  
7 1, sir, on page 8. Are you there?

8           A    Yes, I'm there.

9           Q    All right. And if I understand  
10 this correctly, you are trying to calculate a  
11 corrosion rate using the 1988 Vertilog well  
12 data; correct?

13          A    I think that's trying to calculate  
14 a corrosion rate is a good way to describe  
15 it, yes.

16          Q    Okay. And in fact, so I have a  
17 couple questions along those lines. If you  
18 look at line 7, because you talk about ODS  
19 and whatever. And we'll get to that in a  
20 minute. But you basically said:

21                   Using this assumption blah, blah,  
22                   blah, it is possible to estimate a  
23                   localized linear corrosion rate in  
24                   units MPY.

25                   Do you see that?

26          A    Yes, I do.

27          Q    Okay. So question No. 1 is: Do  
28 you believe corrosion rates are linear?

1           A    No.  I do not believe corrosion  
2 rates are linear.  I answered more or less to  
3 this very point.  And perhaps your further  
4 questions are going to elaborate this.

5                    In a response to SoCalGas DR-01 as  
6 well as a supplemental response.  I believe  
7 not that the corrosion is linear.  But with  
8 the data given, it is the only analysis that  
9 can be performed.

10           Q    All right.  Let's turn to that  
11 analysis then.  If I understand your  
12 analysis, you compare the wall thickness of  
13 the -- excuse me -- casing, the production  
14 casing, when the pipe was installed in the  
15 1940s.  And you can see you got the dates  
16 there right around '44 to '48.  You compare  
17 that with the Vertilog data that was gathered  
18 in 1988 and '89; right?

19           A    Yes.  I believe that comes from the  
20 Blade report those outer diameter  
21 penetrations at which particular joint they  
22 were set.

23           Q    Got it.  Got it.  So, you know, to  
24 do the math, what you're saying is new pipe  
25 minus corrosion thickness equals corrosion.  
26 Then you divide it by a certain amount and  
27 you get a rate; right?

28           A    Right.  The assumptions are that

1 when the pipe is put in the ground and butted  
2 by that completion date, there will be zero  
3 loss. The outer diameter loss would be a  
4 0 percent. That is assumption one.

5 The second assumption is taking the  
6 most egregious example of outer diameter  
7 penetration found by the 1988 Vertilog.

8 Q Got it. And so, you know, it's  
9 kind of like, you know, we can talk about  
10 minuends and subtrahends and stuff. Let's  
11 just use  $A$  minus  $B$  equals  $C$ .

12 "A" is the thickness of the pipe  
13 when installed; right?

14 "B" is the worst case scenario that  
15 the 1988 Vertilog showed.

16 And "C" is your delta; right?

17 A Yeah. I would not say that  $A$  minus  
18  $B$  equals  $C$ . But, yes.

19 Q Okay. Well, just for illustrative  
20 terms. So here's my question for you. If  $B$   
21 -- if the value  $B$  is inaccurate,  $C$  is  
22 inaccurate too; isn't it?

23 A To the extent that  $C$  is over or  
24 underestimated, the results will also be over  
25 and underestimated.

26 Remember the assumptions here are  
27 both the corrosion begins as soon as the pipe  
28 is put in -- the well is put in the ground

1 which is an assumption we can debate. And in  
2 fact it's a very conservative estimate. In  
3 fact, it would take a little bit of time  
4 before the drilling mud, high pH values, to  
5 be washed away and allow corrosion to even  
6 begin.

7 The other observation is also  
8 conservative. That the Vertilog summary  
9 we're going to take the maximum of the  
10 findings, which is the most conservative  
11 estimate.

12 So we are generating in the mils  
13 per year corrosion rate perhaps the worst of  
14 the worst case kind of scenarios with a  
15 linear approximation.

16 Q Assuming the 1988 logging data is  
17 reliable; correct?

18 A Assuming -- more or less, yes.

19 Q Okay. So, again, to get back to my  
20 question. If that data is unreliable, then  
21 the difference between the manufacturing  
22 thickness and the rates that you've  
23 calculated would be unreliable too. Because  
24 one of the two factors is not valid; true?  
25 Just conceptually?

26 A Dr. Krishnamurthy said yesterday  
27 that engineers don't speak in terms of  
28 reliable and unreliable. We have a range of

1 possibility. So if it's -- is it 10 percent  
2 more exaggerated than reality? Is it  
3 specifically the outer diameter penetration  
4 numbers?

5 What you just asked Mr. Bach about  
6 was, you know, absolute results. Was it  
7 found, was it not found? More of a binary  
8 yes no.

9 What I, as an engineer, find more  
10 interesting is we have here a result for  
11 example Porter 37 outer diameter penetration  
12 of greater than 60 percent in that particular  
13 instance.

14 Is the true value at 40 percent?  
15 Is the true value at 37 percent? What is the  
16 delta? You know, to what extent is it over  
17 exaggerated?

18 I would not, as an engineer, state  
19 that it's -- you know, unless I had a lot of  
20 proof that it's so unreliable to not generate  
21 some analysis from.

22 Q Well, lets talk about that. I'm  
23 not going to go through the Montebello memo  
24 with you. But SoCalGas had data a year or  
25 two later using that very same tool which  
26 showed grossly over exaggerated results at  
27 least in the view of Mr. Neville; correct?

28 A Yes. I heard that conversation,

1 yes.

2 Q Right. And here's what's sort of  
3 surprises me. Because you list five wells  
4 here: Porter 37, Porter 46, SS-8, SS-9, and  
5 Frew-4.

6 Two of those wells, Porter 46 and  
7 SS-9, were the very same wells that  
8 Mr. Carnahan compared current logging tools'  
9 results with old looking tool results and  
10 showed that those old tools over exaggerated  
11 Class 2 corrosion; right?

12 A It's been a while since I've looked  
13 at Mr. Carnahan's testimony. I would have to  
14 take your word, sir.

15 Q All right. So here's my question  
16 for you is you've laid out this table. We  
17 can't say with any sort of engineering --  
18 what's the phrase here? Engineering  
19 certainty adjustment whether that Vertilog  
20 summary data is accurate, reliable, or  
21 whatever the terms you want to use.

22 And in fact two of five of those  
23 wells that you're using for your corrosion  
24 rate had been shown in 2018 to have much less  
25 corrosion than the Vertilog data that you're  
26 relying on; right?

27 A Excuse me. Was there much more  
28 corrosion found in the 2018 version? Is that

1 your statement?

2 Q Yes. Because Mr. Carnahan's study  
3 showed in 1988 that the Vertilog showed 10  
4 joints with Class 2 corrosion. Are you  
5 familiar with Class 2 corrosion?

6 A Can you enlighten me?

7 MS. BONE: Your Honor, I object to  
8 this. Was the Carnahan testimony part of  
9 what the witnesses were asked to review?

10 MR. LOTTERMAN: No. I am attempting to  
11 challenge Mr. Taul's Table 1 with other data.

12 MS. BONE: Okay. But Mr. Taul's Table  
13 1 was exemplary. It was just given as an  
14 example not as a statement of what actually  
15 happened. So why is this relevant? ]

16 MR. LOTTERMAN: Your Honor, do I need  
17 to answer that or can I finish my  
18 examination?

19 ALJ HECHT: You do not need to answer  
20 it, but you do need to put up the exhibit to  
21 which you are referring to show to the  
22 witness. And we will continue to see whether  
23 this is relevant to our discussion.

24 BY MR. LOTTERMAN:

25 Q Okay. All right. Let me move on.  
26 I have a final set of questions for you,  
27 Mr. Taul. I would like to go back to your  
28 table at page 8 and the discussion down

1 below.

2           You chose 5 MPY as your -- as the  
3 result of your -- of your corrosion rate,  
4 why? True?

5           WITNESS TAUL: To answer the question  
6 "why," it wasn't a choice. It was using the  
7 method set out previously, the assessment  
8 that because we only have a single data point  
9 of wall thickness measurement because  
10 SoCalGas only performed one casing inspection  
11 on these five wells in their lifetime to that  
12 point. It's the most analysis that's  
13 possible. I would analogize it to there  
14 could be multiple curves that best fit the  
15 corrosion to these wells. But a curve  
16 requires at least three points to be drawn.  
17 With only the two data points of -- the  
18 assumption being that the zero percent wall  
19 loss when the wall was butted and the  
20 estimate of corrosion found in the 1998  
21 program, those are two data points that best  
22 fit that linear approximation. And the  
23 foregoing five that you're referencing or 4.6  
24 for group four is the outcome of that  
25 methodological analysis.

26           Q I understand. I guess what I am  
27 wondering is you've got five rates there,  
28 4.5, 1.4, 3.0, 1.5 and 4.6. Do you see that?

1           Mr. Moshfegh, would you pull that  
2 table up, please? There you go. So,  
3 right-hand rates. Do you see that? You  
4 calculated with whatever data points  
5 available five corrosion rates, right?

6           A That is correct.

7           Q And you chose 5 as your rate,  
8 correct?

9           A Again, I would not agree with the  
10 term "I chose 5." That implies that I'm  
11 plucking the numbers from the air. These are  
12 the -- from this back-of-the-envelope kind-of  
13 estimate of calculation, the results show  
14 something around 5 MPY, with the assumptions  
15 given.

16          Q So, at the bottom of page 18 you  
17 say, "Given the almost 5 MPY corrosion rate  
18 and an existing wall thickness loss exceeding  
19 60 percent," and then you go on to  
20 extrapolate. So, whether you chose it or  
21 not, you used 5 MPY, correct?

22          A That is the result of this  
23 particular analysis, yes.

24          Q Okay. Even though there is no rate  
25 there that is 5, correct?

26          A Well, I am reading here. I think I  
27 see the term "almost 5" on the screen.

28          Q No, no. I am trying to decide

1 whether there is a better number than 5. Let  
2 me come at it this way: Did you consider  
3 using the average rate?

4 A That is an interesting question.  
5 By the linear assumption, because we only  
6 have two data points again, the rate is the  
7 average rate. Right? A linear assumption  
8 means that you're drawing a line between two  
9 points and that is -- the rate is the slope  
10 of that line. So that would be the average  
11 for a linear assessment.

12 Q Right. I am asking you if you --  
13 why didn't you choose the average of the  
14 average?

15 A Oh, you're suggesting taking an  
16 average of five distinct wells with different  
17 properties?

18 Q Yes. Because that is what you did.

19 A What do you mean, sir?

20 Q You took five distinct wells and  
21 you came up with an almost 5 MPY. So all I  
22 am asking you is: Why didn't you take those  
23 five wells and use the mean of three or the  
24 median of three?

25 ALJ HECHT: All right. We're going to  
26 pause for a moment now. I think we have  
27 established that the witness provided this  
28 table as an example. And I think we

1 understand about that and slopes, and I think  
2 my son just got home from his geometry class,  
3 where he was surely talking about slopes of  
4 lines.

5 If there is a way to move forward  
6 with that understanding, I would appreciate  
7 it. We are getting on towards 4 o'clock.  
8 That doesn't mean I am going to cut off this  
9 cross, but we are not going to go much past 4  
10 o'clock with our court reporters.

11 MR. LOTTERMAN: Your Honor, I will move  
12 along as quickly as I can. I am trying. I  
13 promise. I have just a handful of questions  
14 left. I am just asking what I think are  
15 simple observational questions and I will  
16 keep trying. Okay.

17 Q So, Mr. Tall, do me a favor and  
18 just sort of humor me for a second. If you  
19 were to use the average of those averages  
20 that you talked about here, it would be 3.0  
21 MPY, correct?

22 WITNESS TAUL: I see what you're  
23 driving at. Yes. It would be something  
24 around there.

25 Q Yeah. And you can trust me on that  
26 one. And if you would use the median,  
27 obviously that middle one there, SS-8, that  
28 would be your candidate, right?

1           A    SS-03.

2           Q    Right.  And I believe that -- I  
3    Googled this, one MPY is one one-thousandth  
4    of an inch, right?

5           A    That is correct.  One MPY would be  
6    one one-thousandth of an inch per year, a  
7    mil-inch per year.

8           Q    Right.  And so I actually Googled  
9    that.  I said.  "What is thick enough to be  
10   three mils a year?"  And my answer was, "The  
11   human hair."  Do you believe that?

12          A    Sure.

13          Q    And, in fact, the Google answer  
14   also said that a razor's edge is actually 4  
15   mils thick.  So if you use the mean or the  
16   median of three, you're looking at something  
17   thinner than a razor's edge.  Okay?

18          MS. BONE:  Objection, your Honor.  This  
19   is the second time that counsel has referred  
20   to Google and internet research, and it seems  
21   entirely inappropriate.

22          ALJ HECHT:  I agree that that is not  
23   information that is in front of us and I  
24   don't want to start relying on sources that  
25   we have not verified.  I would like to stick  
26   with the testimony that we have.

27                Please continue, but without those  
28   sorts of examples.

1 MR. LOTTERMAN: Fair enough, your  
2 Honor. I have just one or two more questions  
3 for Mr. Taul.

4 Q Mr. Taul, if you were to humor me  
5 and use the average or the median rate of 3.0  
6 milligrams per MPY, shall we say, and if you  
7 look at the production casing wall thickness  
8 of that pipe, right out of the factory into  
9 the ground, and when I do that math, it  
10 indicates it would take 105 years at 3 MPYs  
11 to corrode all the way through that pipe. Is  
12 that true?

13 A Two very important points would be  
14 extrapolation that you have just performed.

15 One, we must take into account that  
16 the pipe will fail before the pipe is  
17 entirely eroded through. I believe for the  
18 instance of SS-25 the corrosion depth reached  
19 (audio interference - inaudible) six-ish  
20 percent and I could be off here. My memory  
21 is not perfect. But that meant at 13 percent  
22 remaining wall thickness, that was enough to  
23 burst through the SS-25 pipe, despite the  
24 fact that the operating pressure that day,  
25 something on the order of high 2,700 psig,  
26 was far below its MAOP, which I believe I  
27 also testified to in this testimony.

28 The MAOP, the maximum allowable

1 operating pressure, is partially a function  
2 of the wall thickness of the pipe. So as the  
3 wall thickness continues to proceed as  
4 corrosion continues to eat at the pipe, to  
5 what it is able to stand up to pressure-wise  
6 increases.

7           So, that's why I don't in my  
8 testimony drive to that 100 percent  
9 conclusion. I believe you pointed out line  
10 2, on page 9. And I do apologize. I  
11 apparently have a different version of my --  
12 the numbering is a little bit off here. But  
13 the line stating that the wall thickness  
14 would be reduced to 80 percent in as few as  
15 "X" years.

16           We do not like to drive it all the  
17 way to that 100 percent loss because the pipe  
18 will likely rupture before that.

19           Q Right. And if we use -- let's use  
20 85 percent wall loss. Okay? By my math,  
21 that would take 89 years to corrode at 3 MPY;  
22 is that right?

23           A Again, I don't have a calculator in  
24 front of me, but I will take your word.

25           Q All right. Thank you. And so for  
26 SS -- my last question for you. For SS-25,  
27 which was drilled in 1953, if we use a  
28 corrosion rate of 3.0 MPY, it would have

1 breached that pipe at 85 percent in the year  
2 2058, correct?

3 A Again --

4 MS. BONE: Objection, your Honor. He's  
5 just got to take the attorney's word for it.  
6 He --

7 (Crosstalk.)

8 ALJ HECHT: Yeah --

9 MR. LOTTERMAN: All right. That's  
10 fine, your Honor. I have five or six  
11 questions for Mr. Bach and I am done.

12 WITNESS TAUL: I would say, if I could  
13 answer, that is partially why at the end of  
14 this testimony I speak to the fact that the  
15 linear corrosion, at least in terms of the  
16 example presented here, is not entirely  
17 accurate because there is some assumption  
18 that go in to it. The pipe starts corroding  
19 immediately. We assume it takes longer for  
20 the pipe to start corroding. Then the rate  
21 increases. I believe Blade described it as  
22 more likely 5 to 10 MPY. And I would agree  
23 with Mr. Krishnamurthy and in Blade's  
24 assessment there.

25 This was a back-of-the-envelope  
26 kind-of calculation to describe that SoCalGas  
27 in our DRs to them could not provide any  
28 similar estimation of corrosion rates on any

1 of their pipes using the data.

2 ALJ HECHT: All right. We are going to  
3 assess for a moment and then we need to wrap  
4 up. We'll be off the record.

5 (Off the record.)

6 ALJ HECHT: Back on the record.

7 And with that, we are going to  
8 finish a couple of questions from  
9 Mr. Lotterman. And then we will adjourn for  
10 the day, picking up tomorrow with redirect by  
11 Ms. Bone.

12 Mr. Lotterman.

13 BY MR. LOTTERMAN:

14 Q Excuse me. Mr. Bach, I wanted to  
15 ask you about one sentence on page 9 of your  
16 testimony. It begins at line 21. Let me  
17 know when you're ready.

18 WITNESS BACH: I am there.

19 Q All right. So, if I understand  
20 correctly, the sentence at one point read:

21 Had SoCalGas' management properly  
22 administered the program, the  
23 corrosion issues on SS-25 would  
24 have been timely identified.

25 And I believe this most recent  
26 version changed "would" to "may." So, before  
27 it said that the corrosion issues at SS-25  
28 "would have been timely identified." And now

1 you have changed the language or the phrase  
2 to "may have been timely identified." I am  
3 wondering why you made that change.

4 A Yes. So what I wrote the first  
5 draft was this. I think the word was "could  
6 have been timely identified." And I think it  
7 was just added "may" along the line. Somehow  
8 it got changed to "would have timely -- been  
9 timely identified," which we don't know for  
10 certain if that is true or not. So the "may"  
11 is more accurate. And I forget which  
12 footnote it is, but somewhere in my testimony  
13 it says that I quote Blade in saying that we  
14 don't know for sure what Vertilog and SS-25  
15 would have identified, but it's possible it  
16 could have identified something.

17 Q And when you say "may," you mean  
18 it's possibly, correct?

19 A Yes.

20 Q And not likely?

21 A I can't speak to how likely or not  
22 likely it is. But definitely it's less than  
23 100 percent, greater than zero percent.

24 Q And the bottom line is you just  
25 don't know where from zero to 99 percent that  
26 lands, correct?

27 A Yes. That's correct.

28 MR. LOTTERMAN: Okay. Your Honor, this

1 is a good time to stop for the day.

2 ALJ HECHT: All right. I will ask:  
3 Will you have more cross for this panel  
4 tomorrow, understanding that you will have  
5 more cross for each of the witnesses  
6 individually?

7 MR. LOTTERMAN: I would hope not, but  
8 if I do, it would be less than five minutes.

9 ALJ HECHT: All right. Are there any  
10 questions or housekeeping things that we  
11 should address?

12 Yes, Mr. Gruen.

13 MR. GRUEN: Your Honor, just if I may  
14 revisit the total time estimate. I believe  
15 the initial estimate of cross-examining  
16 Public Advocates Office was to end today. I  
17 am gathering that we're going to go into  
18 tomorrow and I am wondering if there is a  
19 reassessment, in light of the facts that have  
20 transpired today.

21 ALJ HECHT: We discussed earlier in the  
22 day that we did want a reassessment of the  
23 schedule. I am looking at the example  
24 schedule that was sent with the case  
25 management statement. It had  
26 cross-examination of Public Advocates Office  
27 witnesses through all day tomorrow. There  
28 was a point in time when we thought that it

1 would go more quickly than that, but it looks  
2 like we haven't. I will ask the parties to  
3 work together and propose a schedule for the  
4 remainder of the proceedings and try to be as  
5 accurate as possible, but I have to say that  
6 the time is what the time is.

7 ALJ POIRIER: Your Honor, if I may,  
8 this is ALJ Poirier.

9 To the extent -- it looks like  
10 witness Kitson will be the first person on  
11 for SoCalGas. So I guess I would ask if  
12 SoCalGas, in case we do finish earlier, that  
13 that witness is available.

14 I think, Ms. Patel, you had  
15 something to say?

16 MS. PATEL: Yes. Ms. Kitson will be  
17 available if she's ready to go up tomorrow.

18 And Judge Hecht, it was hard for me  
19 to hear. Did you say when we should serve a  
20 schedule?

21 ALJ HECHT: How about 9:30 a.m.  
22 tomorrow.

23 MS. PATEL: To revise this schedule in  
24 accordance with the time estimates or meet  
25 and confer with the parties again to see if  
26 they've revised their estimates?

27 ALJ HECHT: Quickly confer with the  
28 parties to see if they have revised their

1 estimates and serve that tomorrow before  
2 9:30.

3 Yes, Mr. Gruen.

4 MR. GRUEN: Your Honor, we may be in a  
5 -- with Cal Advocates, we may be in a  
6 slightly different situation than SoCalGas,  
7 in that we haven't had a chance to hear the  
8 answers of SoCalGas' witnesses. So our  
9 estimates are our best estimates at this  
10 point.

11 Having said that, in the spirit of  
12 ALJ Poirier's input, might I suggest that  
13 both Ms. Kitson and Mr. Sera be available  
14 tomorrow in case -- we will do our best, in  
15 case we're -- you have a chance to get  
16 through Ms. Kitson and perhaps Mr. Sera part  
17 or all and we'll certainly do our best and  
18 perhaps that might help expedite things as  
19 well.

20 ALJ HECHT: All right. Thank you.  
21 Yes, I agree with the suggestion I think, at  
22 least the first two SoCalGas witnesses should  
23 be prepared to go on tomorrow and I do hope  
24 that we will get that far. We will see what  
25 happens.

26 Please do confer briefly and send an  
27 updated schedule tomorrow morning. I will  
28 change it from 9:30 until 10:00 a.m., before

1 the hearing begins, to give a little bit more  
2 time.

3 Are there any other housekeeping  
4 matters?

5 (No response.)

6 ALJ HECHT: Okay. And Judge Poirier,  
7 do you have anything before we conclude?

8 ALJ POIRIER: Nothing further. Thank  
9 you.

10 ALJ HECHT: Great. Thank you. Many  
11 thanks to everybody. I appreciate  
12 everybody's time today.

13 We'll be off the record. We are  
14 adjourned.

15 ALJ POIRIER: Your Honor, it looks like  
16 Ms. Bone has something before.

17 ALJ HECHT: Okay.

18 ALJ POIRIER: Sorry.

19 ALJ HECHT: We will be back on the  
20 record, which indeed if we managed to go off  
21 of it, which we probably didn't.

22 MS. BONE: I guess I wasn't waving hard  
23 enough to get your attention.

24 ALJ HECHT: No. Actually my screen is  
25 not showing you. So I believed that you had  
26 dropped off. But that is just a technical  
27 glitch that I can fix by reloading.

28 MS. BONE: Okay. So we just wanted to

1 make your Honors aware and SoCalGas aware  
2 that we did file and serve the questions that  
3 we expect for SoCalGas and its attorneys to  
4 answer by tomorrow morning regarding the  
5 recording incident.

6 ALJ HECHT: Thank you. I will call on  
7 Mr. Gruen.

8 MR. GRUEN: Thank you for your  
9 indulgence and patience, your Honor. I know  
10 it's been a long day.

11 There was an inadvertent  
12 identification of CPED on the filing, but  
13 just noting for the record that SED has  
14 joined Cal Advocates for the -- excuse me,  
15 not the filing, for the service of those  
16 questions.

17 ALJ HECHT: Thank you very much.  
18 Tomorrow morning I expect that the first  
19 thing that we will do are reassess the  
20 schedule and then discuss what I won't call  
21 the recording incident because I do not know  
22 if there was a recording, but the issue that  
23 we had today with participants.

24 With that, we are adjourned. We  
25 will be off the record.

26 (Off the record.)

27 (Whereupon, at the hour of 4:13  
28 p.m., this matter having been continued  
to 10:00 a.m., March 25, 2021, the  
Commission then adjourned.) ]

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BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE  
STATE OF CALIFORNIA

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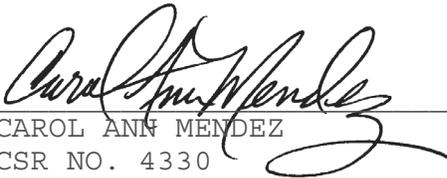
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