## BEFORE THE PUBLIC UTILITIES COMMISSION







ADMINISTRATIVE LAW JUDGES RAFAEL L. LIRAG and ELAINE LAU, co-presiding

	)	EVIDENTIARY HEARING
Application of Pacific Gas and Electric Company for Authority, Among Other Things, to Increase Rates and Charges for Electric and Gas Service Effective on January 1, 2020. (U39M)	) ) ) ) )	Application 18-12-009

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Reported by: Andrea Ross, CSR No. 7896 Rebekah DeRosa, CSR No. 8708

1	IN	DEX	
2	WITNESSES .		DACE
3	WITNESSES:		PAGE
4	ANDREW ABRANCHES MICHAEL KERANS		
5	Direct Examination Cross-Examination	n By Mr. Long	1107
6	Examination By AL Cross-Exam (Resun	ned) By Mr. Long	
7	Examination By Al Redirect Exam By	Mr. Ouborg	1161 1166
8	Recross-Examinati	ton by Mr. Long	1170
9	ANDREW ABRANCHES DAN MENEGUS	an Bu Mar Outhouse	4475
10	Direct Examination Cross-Examination	n By Mr. Long	1178
11	Examination By Al	_J Lau	1211
12	Exhibits: Ic	den. Evid.	
13		1099	
14	44 1	1099 1173 1099 1173	
15	46	1173 1100 1173 1174 1218	
16	48	1174 1218 1174 1219	
17	50	1175 1219 1221 1223	
18	52	1221 1223 1221 1223	
19	54 1	1222 1223 1222 1223	
20		1220	
21			
22			
23			
24			
25			
26			
27			
28			

1 SAN FRANCISCO, CALIFORNIA 2 SEPTEMBER 25, 2019 - 9:40 A.M. 3 4 5 ADMINISTRATIVE LAW JUDGE LIRAG: 6 Let's 7 go on the record. Good morning, everyone. This is day three of our 20 days of hearing. 8 Today we'll have two panels. This will 9 probably be a short day. There won't be any 10 11 lunch break. If we need to go a little bit 12 past noon, then we'll do so. 13 We'll have the first panel, which is 14 Mr. Kerans and Mr. Abranches, then followed 15 by Mr. Abranches, I guess, who will remain 16 there, and then we'll have Dan Menegus as 17 part of our second panel, and then 18 cross-examination by I think it's just 19 Mr. Long, and then let's discuss after that. 20 It looks like we might end a little earlier. 21 If there's still time, we can 22 address some of PG&E's -- probably PG&E's 23 exhibits where there are no cross, but that's 24 assuming we have time. Then we'll discuss --25 towards the end of today's hearing, we'll discuss the schedule for Thursday and for 26 27 Friday. 28 But first let's have both of you

1	
1	gentlemen raise your right hand.
2	ANDREW ABRANCHES, called as a
3	witness by Pacific Gas & Electric Company, having been sworn, testified as follows:
4	as Tullows.
5	MICHAEL KERANS, called as a witness
6	<pre>by Pacific Gas &amp; Electric Company, having been sworn, testified as follows:</pre>
7	TOTIOWS.
8	WITNESS ABRANCHES: I do.
9	WITNESS KERANS: I do.
10	ALJ LIRAG: I assume you have the same
11	first names as was already recorded.
12	WITNESS ABRANCHES: Yes.
13	WITNESS KERANS: Yes.
14	Q So it's Andrew Abranches and
15	Michael Kerans. Same business addresses as
16	you provided before?
17	WITNESS ABRANCHES: Correct.
18	WITNESS KERANS: Correct.
19	ALJ LIRAG: Let's get to the exhibits.
20	These are cross exhibits. I will ask
21	Mr. Long who it's directed to, so I assume
22	this is directed towards the topic and
23	towards the panel. And then you may ask
24	specific questions to each one or you can
25	just direct it to both of them. If you want
26	a specific witness to answer, please direct
27	the question to that witness.
28	So first is Exhibit 43. This is

1	
1	TURN's cross-examination exhibit concerning
2	the Cross Bore Comparisons of Imputed
3	Authorized Units and Cost with Recorded
4	Results for 2017 and 2018, so that's 43.
5	(Exhibit No. 43 was marked for identification.)
6	identification.)
7	ALJ LIRAG: Exhibit 44 is PG&E's
8	Response to TURN Data Request 87-1,
9	Revision 1, and it has a redacted attachment.
10	Exhibit 45 is PG&E's Response to TURN Data
11	Request 87-5. And then Exhibit 46 is a
12	Is this an excerpt, Mr. Long?
13	MR. LONG: This Number 46 is a document
14	that I took off of the San Francisco Public
15	Utilities Commission website. It's an agenda
16	packet and includes the agreements that are
17	identified in the title on the cover page.
18	ALJ LIRAG: It's an agenda from the
19	Commission's website dated for the 6-28-2019
20	meeting.
21	MR. LONG: And that would be the San
22	Francisco Public Utilities Commission
23	Website.
24	ALJ LIRAG: Thank you for the
25	clarification. That is Exhibit 46.
26	(Exhibit No. 44 was marked for identification.)
27	(Exhibit No. 45 was marked for
28	identification.)

1	(Exhibit No. 46 was marked for
	identification.)
2	
3	ALJ LIRAG: Let's proceed with the
4	Direct Examination. I think Mr. Ouborg is
5	ready.
6	MR. OUBORG: Thank you, your Honor.
7	Before we do that, can we take up the
8	suitability of even using Exhibit 43 at all
9	for cross-examination? Our position is that
10	it shouldn't even be used as a cross exhibit
11	because it's a workpaper created by TURN.
12	It's not in their workpapers, our witness
13	didn't prepare it, there's no foundation for
14	the document.
15	MR. LONG: Your Honor, if I could speak
16	to that. The numbers on this workpaper are
17	taken directly from PG&E's testimony and the
	fortunates are muscipled as that the numbers in
18	footnotes are provided so that the numbers in
18 19	the second column, third column, and the
	·
19	the second column, third column, and the
19 20	the second column, third column, and the fourth column
19 20 21	the second column, third column, and the fourth column ALJ LIRAG: All right.
19 20 21 22	the second column, third column, and the fourth column  ALJ LIRAG: All right.  MR. LONG: are all from PG&E's
19 20 21 22 23	the second column, third column, and the fourth column  ALJ LIRAG: All right.  MR. LONG: are all from PG&E's numbers or they are calculated from them
19 20 21 22 23 24	the second column, third column, and the fourth column  ALJ LIRAG: All right.  MR. LONG: are all from PG&E's numbers or they are calculated from them using normal arithmetic calculations.
19 20 21 22 23 24 25	the second column, third column, and the fourth column  ALJ LIRAG: All right.  MR. LONG: are all from PG&E's numbers or they are calculated from them using normal arithmetic calculations.  ALJ LIRAG: Do you object to the
19 20 21 22 23 24 25 26	the second column, third column, and the  fourth column  ALJ LIRAG: All right.  MR. LONG: are all from PG&E's  numbers or they are calculated from them  using normal arithmetic calculations.  ALJ LIRAG: Do you object to the  calculation? Is that the objection?

1 of facts in a certain way for a certain 2 purpose that we've had no opportunity -- I 3 don't know who's even sponsoring these calculations. 4 5 In particular, the last column, your 6 Honor, while those are arithmetically correct 7 numbers, we have no idea what they mean and I 8 just think that without the chance for us to 9 have seen this before, perhaps asked about 10 it, perhaps rebutted it in our rebuttal, this 11 doesn't come from their witness' testimony. 12 It seems inappropriate to enter this in the 13 record without a sponsor of any kind. 14 ALJ LIRAG: All right. Let's do a 15 couple of more exchanges. Would it help if 16 the heading was changed to say this is an 17 excerpt from testimony except for the last 18 column, which will be explained how it was 19 derived, so maybe the document --20 MR. OUBORG: And, your Honor, who would 21 explain -- who -- is Mr. Long the witness on 22 the last column to explain what it's about? 23 ALJ LIRAG: All right. 24 Mr. Long? 25 MR. LONG: Your Honor, if I could speak to the objection. As I was preparing my 26 27 cross, I realized that there are a lot of

numbers that relate to the issue we're going

to talk about. 1 2 ALJ LIRAG: Okay. 3 And I thought, well, I could MR. LONG: ask a question, I could ask the question for 4 5 the row that's units and the first number, and I could ask him that question and that 6 could be a number on the record. 7 8 ALJ LIRAG: Right. 9 MR. LONG: And then I could ask him the number below that and that could be a number 10 11 on the record. 12 ALJ LIRAG: Okay. 13 And I could ask him to do MR. LONG: 14 the division. 15 ALJ LIRAG: Correct. 16 MR. LONG: And that would be the third 17 number there or we could have it in my handy 18 reference place so that everybody could 19 follow along better. 20 So the purpose of this is to make 21 the cross-examination a little bit easier to 22 understand for everybody involved and to put 23 the numbers that I was going to ask about in one place so that we could all see them and 24 25 have them as a reference. And then the last column that 26 27 Mr. Ouborg is speaking to is arithmetic

operations. It's just a matter of

subtraction and division. And we can -- I can ask the witness if he agrees that that's what those numbers are, and --

ALJ LIRAG: So I understand that these are questions that you can directly ask and this table helps as a sort of guide, but isn't it better to have it as sort of a reference exhibit rather than a full exhibit, if I may call it that, which is not sponsored by any witness because there's -- I understand Mr. Ouborg's point that most of it is lifted from someone's testimony.

But then there's this last column wherein it's not lifted from their testimony. This is more TURN's testimony. But then since no witness is sponsored -- is sponsoring it, they can't be process to how these numbers were derived. But I believe you can ask based on these numbers and then we'll get to the same thing.

So I would prefer using this as a reference document. We, the Commission, will keep it just so we have it and so we don't have to -- I understand the ease of not having to forge through the records to try and find this exact number. This way it's -- I mean it's already identified. If it's denied, it's easily available to us and we

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1
     can reference it once we get to that part,
 2
     perhaps in your briefs where you're arguing
 3
     about it.
           MR. LONG: I'm fine with that
 4
 5
     arrangement, your Honor, thank you.
 6
           ALJ LIRAG: All right.
 7
               Is that fair enough?
 8
           MR. OUBORG: So just so I understand
 9
     what a reference exhibit is, your Honor, that
     would then not be in the record?
10
11
                      Not be in the record.
           ALJ LIRAG:
12
     it can't be cited as for factual purposes.
13
     But if it's in the transcript, there's also a
14
     way to cite to the transcript, this is what
15
     was said, this was the question, and this was
16
     how the witness answered.
17
               So it's up to Mr. Long to find a way
     to put this in briefs that that is the
18
19
     purpose. So it will depend, I guess, on how
20
     the question and answer progresses.
21
           MR. OUBORG: Okay, your Honor, thank
22
     you.
23
                      All right. So having dealt
           ALJ LIRAG:
24
     with that, let's go off the record for a
25
     little bit.
26
               (Off the record.)
27
           ALJ LIRAG: Let's go back on the
28
     record.
```

1	Mr. Ouborg.
2	MR. OUBORG: Thank you, your Honor.
3	DIRECT EXAMINATION
4	BY MR. OUBORG:
5	Q Good morning, Mr. Kerans.
6	WITNESS KERANS: Good morning.
7	Q Previously when you testified, I
8	believe it was yesterday, we identified all
9	the testimony and exhibits that you were
10	sponsoring. Does that body of testimony
11	include testimony on deferred work that would
12	be the subject of today's panel?
13	A Yes, it does.
14	Q And yesterday you answered that
15	there were no corrections, no further
16	corrections to that testimony.
17	Is that still true today?
18	A That's still true today.
19	Q Thank you.
20	Mr. Abranches, good morning.
21	WITNESS ABRANCHES: Good morning.
22	Q Yesterday, Monday, I believe we
23	identified all the exhibits and workpapers
24	that you've adopted in this proceeding. Does
25	that testimony include the testimony on
26	deferred work that in your understanding will
27	be the subject of today's cross?
28	A It does.

1	Q And on Monday you answered that you
2	had no additional corrections or changes to
3	that testimony. Is that still correct?
4	A That is still correct.
5	Q Thank you.
6	Your Honor, Mr. Kerans and
7	Mr. Abranches are available for
8	cross-examination.
9	ALJ LIRAG: All right. Just to
10	clarify, we already had testimony and cross
11	regarding the cross bore program. Is there a
12	specific topic in the cross bore program that
13	we're concentrating on for today?
14	MR. OUBORG: Yes, your Honor. Cross
15	bore has its own issues related to number of
16	units, PG&E's forecast, and the total ask.
17	In addition, TURN identified cross bore as a
18	program that had deferred work under the 2017
19	settlement.
20	With respect to SCADA, which is the
21	next panel, the same thing, the topic would
22	be the portion of the SCADA testimony that
23	TURN identified as deferred work.
24	ALJ LIRAG: So we're focusing on the
25	deferred work aspect of these topics,
26	Mr. Long?
27	MR. LONG: That's correct, your Honor.
28	ALJ LIRAG: All right. Just so we can

1	determine beforehand what we're going to
2	discuss. With that, let's proceed with the
3	cross exam by Mr. Long.
4	CROSS-EXAMINATION
5	BY MR. LONG:
6	Q Good morning, gentlemen.
7	WITNESS KERANS: Good morning.
8	WITNESS ABRANCHES: Good morning.
9	Q This panel is about cross bore. As
10	we just discussed, the focus of this panel is
11	about deferred work issues. So I want to
12	begin with the work that PG&E was authorized
13	to do under the cross bore program in the
14	last GRC.
15	To help us with that, I would like
16	you to look at what's been marked as
17	Exhibit 43. It's the reference document that
18	we were just talking about, the judge was
19	just talking about. The first three words in
20	the title page are "Cross Bore Comparison."
21	Do you have that in front of you?
22	WITNESS KERANS: Was it this one that
23	was
24	Q No, actually. I'm sorry. I think
25	I it's a different document. It's
26	actually the one we were just talking about.
27	WITNESS KERANS: Oh, the table.
28	WITNESS ABRANCHES: Yeah, this one.

Q Yes.

ALJ LIRAG: So right now it's still Exhibit 43. And to clarify, it's only been identified. Whether or not it's admitted based on discussions will be considered once we get into whether these documents, these exhibits, will be admitted.

Right now I think we can still refer to this as Exhibit 43 for reference purposes, unless we want to address the admissibility of it now to settle the issue. I think when you look at the record you can see already. What is your preference?

I'll direct that to Mr. Ouborg since he's objecting to this.

MR. OUBORG: My preference, your Honor, is for the reasons I stated earlier, mainly that it is a workpaper without a sponsor that we have not seen before, that it simply be a reference exhibit for purposes of the cross, and that any points that Mr. Long would like to make regarding this exhibit be made through his cross-examination.

The record would then reflect the witness' testimony in response to his questions, but the exhibit itself would not be included.

ALJ LIRAG: All right. So there's only

one page and there's no need to get into the 1 2 full cross to determine what is included in the document, plus we had a fairly lengthy 3 discussion about it and so I won't ask 5 Mr. Long whether he wants to move this into the record. I'll simply deny admission of 6 this exhibit, 43. So Exhibit 43 is denied. 7 Instead, we'll use it as a reference exhibit. 8 9 MR. LONG: I will proceed to ask some 10 questions based on Exhibit 43 with that 11 understanding. 12 ALJ LIRAG: All right. 13 BY MR. LONG: 14 Q So the first number I want to make 15 sure we're clear on in the record is the 16 number of units of cross bore inspections that were authorized to be done in 2017 17 18 through 2019. The number on this reference 19 is 123,307. 20 Is that the correct number? 21 WITNESS KERANS: Yes, that's the 22 correct number. 23 I do have a question about that. 24 To ask this question, I first want to ask you 25 to turn to another reference document. Again, this one has not been marked for 26 27 identification but it is an excerpt from

PG&E's testimony in the 2017 GRC, page 4-28.

Do you have that in front of you? 1 2 WITNESS KERANS: Yes, I have it in 3 front of me. And since this will not go 4 0 Okav. 5 into the record, I'm going to just read lines 10 through 15. There's a heading Cross Bore 6 And then after that it reads: 7 Program. 8 The cross bore program will 9 increase the annual number of 10 inspections to identify and 11 resolve cross bores from 33,570 12 inspections in 2014 to 45,000 inspections in 2017. The increase 13 14 in the number of inspections is in 15 recognition of the high risk 16 associated with cross bores and 17 PG&E's desire to inspect for and 18 eliminate them as quickly as 19 possible. 20 My first question is can you 21 confirm that this is a statement that PG&E 22 made in its 2017 GRC testimony? 23 I believe that's correct. It's an Α 24 excerpt from that. 25 Okay. And the number that's referenced for PG&E's forecast inspections 26 for 2017 is 45,000 in that passage. 27 28 Do you see that?

1	A Yes. In the original testimony
2	from there, I see that.
3	Q Okay. Was that the amount that was
4	adopted for 2017, 45,000?
5	A I don't believe that that was what
6	was adopted at the end of the rate case
7	hearings.
8	Q And how did that number get
9	changed, do you know?
10	A I don't have the exact details on
11	how the number was changed. I can provide a
12	high level of my understanding.
13	Q Sure, go ahead.
14	A I believe that after the hearings
15	were settled, there was an adjustment in
16	funding that was agreed to and the units were
17	scaled proportionally to match that.
18	Q Thank you.
19	MR. OUBORG: Your Honor.
20	ALJ LIRAG: Yes.
21	MR. OUBORG: And I believe that we can
22	provide references to the part of PG&E's
23	testimony which explains fully where the
24	imputed units were calculated. That's a
25	different exhibit. Mr. Kerans is not an
26	expert on that.
27	MR. LONG: That's fine. For my
28	purposes, that's what I needed, but thank you

for that. 1 2 All right. That's fine. ALJ LIRAG: 3 We can talk about the reference at the end of this hearing day. Just remind me. 4 5 MR. OUBORG: Okay. ALJ LIRAG: Please proceed. 6 7 BY MR. LONG: 8 Q Now, back to, again, what's 9 been marked as Exhibit 43. So we were looking at the column that's headed "Imputed 10 11 Adopted 2017 through 2019." We went over the 12 units number. And then the cost number shown 13 there is \$59.243 million. 14 Is that the imputed authorized cost 15 for the work that PG&E was authorized to do 16 for 2017 through 2019? 17 WITNESS ABRANCHES: That is correct. 18 And then the bottom row is unit 0 19 cost and the unit cost that was calculated 20 here was determined by dividing the cost in 21 the row above divided by the number of units, 22 and that yields a number of \$480; is that 23 correct? 24 Α That is correct. 25 0 And then going to the next column, 26 that's 2017 recorded, these are numbers that 27 were drawn from PG&E's workpapers. 28 number of units recorded for 2017 was 35,154;

1 is that correct? 2 WITNESS KERANS: Yes, and the reference 3 at the bottom that takes you there is correct as well. 4 5 0 Okay. And then the recorded cost 6 for 2017 was \$22.458 million; is that 7 correct? That's correct as well as the 8 Α reference at the bottom of the page. 9 10 And then deriving unit cost the Q 11 same way we derived unit costs from the prior 12 column, the number would be 639; is that 13 right? 14 Α Yes, that's correct. 15 And then we'll do the same thing Q 16 for 2018 recorded column. And this I got 17 from the spending accountability report. Ιt 18 may be elsewhere, but, anyway, that's where I 19 got it from. The units are 46,050 units for 2018 recorded; is that right? 20 21 WITNESS ABRANCHES: That is correct. 22 And then the cost, recorded costs, Q 23 for 2018 was \$28,579 million; is that 24 correct? 25 Α That's correct. 26 And then the unit cost, again derived the same way, is \$620 for 2018; is 27 that right? 28

25

26

27

28

1 Α That's correct. 2 The next column -- what I want to Q 3 ask you is if you were to take -- focusing on If you were to see how many units 4 units now. 5 PG&E would need to do in 2019 in order to arrive at the number -- the 123,307 units 6 7 shown in the second column, that number --8 taking into account the recorded units for 2017 and 2018, that number would be 42,103; 9 10 is that right? 11 That's correct. 12 And then I'm going to leave the 0 13 other two items. This is not going to get 14 admitted into evidence and I think it's just 15 going to provoke controversy so we'll just 16 leave those. These are the numbers that I 17 think are helpful for the record and to have 18 them in one place, so thank you. 19 So we're going to put that document 20 Then I'm going to ask you to turn to aside. 21 PG&E's workpapers for this program. And I 22 believe maybe, Mr. Kerans, we looked at this 23 a little bit yesterday. This what's been

> marked as Exhibit 12, formerly PG&E Workpapers, page 4-25. So when you find that, could you let me know.

WITNESS KERANS: I'm at that page.

Great. If you look at the bottom Q

1 of that page -- and I think maybe we did do 2 this yesterday with Mr. Kerans, but just to 3 focus us on the issue for today, the last paragraph on that page reads: 4 5 PG&E plans to perform approximately 10,000 UTA 6 7 inspections in San Francisco and 8 approximately 14,000 routine 9 inspections outside of San Francisco in 2020 for a total of 10 11 24,000 inspections. This plan is 12 selected as it allows PG&E to 13 finish performing remaining 14 inspections in San Francisco, an 15 area identified as having the 16 highest risk for cross bores, 17 while continuing to perform 18 inspections in other areas in 19 2020. 20 So now, this was the plan in the 21 forecast that PG&E presented in its direct testimony; is that correct? 22 23 That was the original plan in Α Yes. 24 the original testimony, that's correct. 25 And as the passage showed, it was 26 to do 10,000 UTA inspections in San Francisco 27 in 2020 and approximately 14,000 non-UTA 28 inspections in 2020; is that correct?

1	A Yes, that's correct.
2	Q And it assumed that PG&E would also
3	do 10,000 UTA inspections in 2019; is that
4	correct?
5	A Yeah, the original plan was 10,000
6	UTA inspections in 2019 as well as 10,000
7	inspections in 2020 followed by approximately
8	1,000 inspections in 2021.
9	Q Okay. And for 2019, you were going
10	to do a similar number of this was the
11	plan in the direct testimony you were
12	going to do a similar number of non-UTA
13	inspections, approximately 14,000; is that
14	right?
15	A Yes, that's correct.
16	Q And that plan for 2019 for the
17	2017-through-2019 period was going to leave a
18	shortfall of 21,766 units; is that correct?
19	A Yeah, that's approximately correct.
20	Q So now let's go to your rebuttal
21	testimony. That's been marked as Exhibit 6,
22	formerly PG&E-16.
23	MR. OUBORG: Is this Chapter 4 rebuttal
24	or the
25	MR. LONG: This was PG&E-16.
26	MR. OUBORG: Okay. Thank you.
27	BY MR. LONG:
28	Q In particular if you could turn to

page 2-9 when you get there.
WITNESS KERANS: I'm on 2-9.
Q So at the top of that page right
there at line one, it says that PG&E will
reevaluate its 2019 work plan.
Do you see that?
A Yes, I see that.
Q And PG&E decided to change the plan
somewhere between the submission of your
direct testimony and the submission of this
testimony; is that correct?
A Yes, that's correct. It was
approximately February is when that decision
was made.
Q That's what I was going to ask. It
was a February decision?
A Yeah. I'm sorry. I misspoke. It
was 2019.
Q February 2019, thank you. Let's
turn to another document that we have had
marked. This one has been marked as
Exhibit 44 and this is PG&E's Response to
TURN Data Request 87-1, Revision 1, and
including the attachment to that data request
response which has some redactions in this.
Do you have that in front of you?
A Yes, I have it in front of me.
Q So to make sure we're all clear, in

1 1-C if you look on page one, we asked you to 2 provide any and all documents that discuss 3 changing the work plan for 2019 cross bore inspections. And then the answer on page two 4 5 is to see the attachment that we have in this 6 exhibit for a copy of the work plan approved 7 as of February 2019. So this was the document that shows 8 9 the approved new plan; is that right? Yes, that's correct. 10 Α 11 Now we're going to take a little Q 12 time looking at this document. First, let's 13 look at the top left. There's a heading that 14 says "Decision" in parentheses and then it 15 says "work plan changed." 16 Do you see that? 17 Α Yes. 18 WITNESS ABRANCHES: Yes. 19 WITNESS KERANS: Yes, we see that. 20 Who is the right person to Okay. 21 answer questions about this? Is it both of 22 you? 23 WITNESS ABRANCHES: I'll take the 24 questions primarily and then I might refer to 25 Mike, Mr. Kerans. 26 Okay. All right. So there are two 27 bullets in that section of the document. The 28 first bullet I believe is describing:

The purpose of this document is to 1 2 seek committee approval of the 3 2019 work plan which achieves the 4 GRC 123,307 imputed unit target 5 based on current negotiations with 6 SF. 7 And then there's a redaction. Am I right that that first bullet is stating the 8 9 purpose of this document? WITNESS ABRANCHES: Yes, the first 10 11 bullet is saying the purpose of the document 12 because we're changing the work plan and we 13 are doing more units that was currently in 14 the work plan. 15 Okav. And then the second bullet Q 16 says: 17 Approval of the updated work plan 18 eliminates the \$80 million cross 19 bore SF UTA risk in 2019 and will 20 impact 2020 GRC testimony. 21 I'm going to ask you some questions 22 about this -- first, this bullet is -- let me 23 start again. 24 The -- I want to ask about 25 eliminating the \$80 million cross bore SF UTA risk in 2019. In that regard, that's also 26 27 discussed in the heading below it that says 28 "Justification/background."

1	Do you see that?
2	A Correct. I see that.
3	Q And that first bullet reads: Team
4	has focused on the five levers, see slide
5	two.
6	By the way, slide two is the is
7	the next page.
8	A That is correct.
9	Q Is that all right.
10	A Yeah.
11	Q Yeah. Focused on the five levers
12	to mitigate the known cross bore UTA risk in
13	SF. \$80 million for 2019 equals \$8,000 per
14	unit for 10K UTAs plus additional risk in
15	future years.
16	So, I take it, then, that one of
17	the benefits of the updated work plan that
18	was being proposed here was to eliminate
19	this what's been identified as a
20	80 million-dollar risk. Is that right?
21	A No, that is not correct. Can I
22	explain?
23	Q That's not a benefit? Is that your
24	point?
25	A No. My my point is the the
26	point outlined here is being taken out of
27	context. Can I explain?
28	Q Okay. I guess so. I'm not all

I've done is read -- I haven't taken anything 1 out of context, other than to read the 2 3 bullets. Sure. Let me -- let me explain. 4 Α 5 As I articulated in my testimony on Monday, 6 UTAs can range in cost from \$1000 all the way up to \$10,000. As we put in our testimony 7 8 over here, we said four -- a UTA cost --9 we're going to put a target unit cost of 10 \$2,000. We've shown in our testimony. 11 You've asked me about it. Specifically, the 12 budget we allocated to -- and this was my department and myself. We allocated to the 13 14 cross bore program for UTAs a cost of \$2,000. 15 The risk that existed out there was if they 16 were to do open trench, the cross bores would 17 cost \$10,000. The delta between the -- the 18 10,000 and the 2,000 is \$8,000, which is what 19 is referenced in this document, and if you 20 multiply that by 10,000 UTAs, you get an 80 21 million potential risk. And what they were 22 alluding to over here --23 EXAMINATION 24 BY ALJ LIRAG: 25 I'm sorry. What conditions would 26 present like a 2,000-dollar cost? 27 WITNESS ABRANCHES: This -- we would -we had no idea exactly what the cost was 28

1 going to be. 2 All right. Q 3 Α So we looked at similar methods to identify and thereby clear the cross bore --4 5 presence of a cross bore, and that was the 6 range of one -- 1,000 with a proximity 7 clearance, one was 3,500, where you clear debris, and the other one, if you have no 8 9 other option, you open trench and you clear, 10 which costs about \$10,000. 11 Just to make everything clear, what 12 conditions would present a -- let's go to the 13 extreme, 1,000. What conditions would result 14 in a 1,000-dollar cost? 15 WITNESS KERANS: Yeah. So the -- it's 16 not necessarily the -- the conditions. Ιt 17 would be the type of inspection that's being 18 performed which -- that would --19 Q All right. 20 Α -- result in that. 21 And what --Q 22 Α That type of inspection --23 Q Okay. 24 Α -- or -- that type of inspection we 25 would call a proximity clearance, and a 26 proximity clearance is utilizing locate and 27 mark tools to, number one, locate the gas 28 facilities, and then simultaneously utilizing

1	locate and mark for the sewer facilities.
2	You would need to gain access to the sewer
3	facilities to locate them. You have to put
4	energized tape in there or a camera with a
5	son (phonetic). But, assuming both of those
6	were successful, you'd be able to perform an
7	above-ground evaluation, and then see if they
8	were within a certain proximity to be able to
9	clear it from the risk.
10	Q So I I gather most of the costs
11	would be labor costs.
12	A Yeah, definitely.
13	Q Is that a fair assessment?
14	A That's fair.
15	Q And then the 10,000 is,
16	Mr. Abranches said, an open trench?
17	WITNESS ABRANCHES: Right. You dig
18	Q Dig the hole. Fair?
19	WITNESS KERANS: Yeah. That would be
20	generally the excavation, restoration, labor
21	costs.
22	Q All right.
23	Please proceed, Mr. Long.
24	Thank you for the answer.
25	WITNESS ABRANCHES: Your Honor, can
26	you asked me a question about what's the
27	\$2,000.
28	Q All right. Let's

1 Α The \$2,000 was a target unit cost 2 would be put with the execution arm, 3 realizing that it could range from a thousand to 10,000. The basis was we wanted to ask 4 5 the execution arm to find whatever mechanisms 6 possible to do these cross bores most cost-effectively, which is why it references 7 in the second document the -- what ideas are 8 9 they trying to get to doing these cross bores 10 most cost-effectively. 11 All right. I got a fair idea once 12 I heard the description of what would result 13 in a 1,000-dollar cost, and it's using locate 14 and mark tools. And then I can just 15 extrapolate, you know, in between the --16 there's a whole lot of --17 Α There's a whole range. 18 0 There's a whole range between 19 10,000 and 1,000, but seeing the two 20 extremes, there's -- I get a fair idea. 21 WITNESS KERANS: One other note, just 22 to -- more education than it is. You could 23 pursue a proximity clearance at that 1,000-dollar cost; however, if that failed, 24 25 you would then be required to go into another 26 mode, which would then take you into --27 depending how far you needed to go, you might

So --

end up in the \$10,000.

```
1
           Q
               Right.
                       Once you --
 2
               You'd then be --
           Α
 3
           Q
               Once you start --
           Α
               -- continuing to add that cost --
 5
           0
               Once you start the --
 6
               (Crosstalk.)
 7
           THE REPORTER: I'm sorry. Can --
           ALJ LIRAG: I'm sorry. I'll start
 8
 9
     again.
           THE REPORTER:
10
                           Okay.
     BY ALJ LIRAG:
11
12
               So once you start the inspection,
13
     it may end up to -- it may entail further
14
     inspection methods to be -- that will be
15
     applied?
16
           WITNESS ABRANCHES:
                                Correct.
17
           ALJ LIRAG: All right. All right,
18
     Mr. Long.
19
               CROSS-EXAMINATION (RESUMED)
20
     BY MR. LONG:
21
               So back to this document, the
22
     document is saying that if PG&E went ahead
23
     with the plan that was put forth in the
24
     direct testimony in this case, that is to do
25
     10,000 UTA inspections in San Francisco for
26
     2019, that PG&E was at risk for $80 million
27
     of cost.
               Is that right?
28
           WITNESS ABRANCHES: No, that's not what
```

```
1
     it's saying. It's saying that if PG&E --
 2
     PG&E had -- had put in its original plan to
 3
     do 10,000 UTAs in San Francisco.
                                       That plan,
     as indicated in this document, at least
 5
     alluded to in the document, is that to do
     those UTAs, you have to work in conjunction
 6
     with San Francisco to clear those UTAs.
 7
                                               It's
 8
     not something you can do by yourself. When
 9
     progress was not being made on that plan, we
     asked them to come back -- the execution
10
11
     arm -- we asked them to come back, and said
12
     is -- "If you're not making progress on this
13
     plan of clearing UTAs, what alternative plan
14
     do you propose?" And they brought to this --
15
     to the committee the -- the governance
16
     committee that oversees changes to the work
17
     plan -- they brought this proposal for
18
     approval, which is when we changed the work
19
     plan in February, because we did not see
20
     progress on the UTAs --
21
               Okay. So --
           Q
22
               (Crosstalk.)
23
           THE REPORTER: I'm sorry. I didn't get
24
     the last half of your answer.
25
           WITNESS ABRANCHES: That was originally
26
     set up.
27
           THE REPORTER:
                          Thank you.
28
     ///
```

BY MR. LONG:

Q And again, I'm -- I'm just reading the document, and it sounds like you're not agreeing with what the document says. The document says, in the second bullet on the decision work plan change heading, "Eliminates the 80 million-dollar cross bore asset UTA risk in 2019."

Isn't that what this plan was -- what -- what the decision-makers were being told this plan would do?

WITNESS ABRANCHES: What the decision-makers were being told was it's seeking the approval to adjust the plan, right, and it says approval of that decision to adjust the plan would also have the effect of eliminating an 80 million-dollar -- potentially 80 million-dollar financial risk that exists because of the uncertainty of what exactly the cross bores would cost.

Q Right. But --

A It also says in that statement, the second half, is it impacts the 2020 GRC testimony where we stated in the GRC testimony that we would not meet the full volume of imputed units, but by changing the plan, we then meet the full volume of unit -- of imputed units.

Q And so PG&E was -- the concern was that PG&E was at risk for \$80 million of cost. Is that right?

A That was not the concern. The

concern was if we don't clear the UTAs, if they're delayed in clearing that, we don't eliminate the risk. So rather than not eliminate the risk of a UTA, you redirect the organization to say, "Where can you have access to cross bore inspections and perform them," because every cross bore inspection that you perform eliminates risk. Attempting and not completing does not eliminate any risk.

ALJ LIRAG: So why does the bullet point -- why do you think the heading says eliminate the 80 million cross bore?

WITNESS ABRANCHES: It says eliminate the 80 million in cross bore, because as part of this -- this document, it changes the work plan. But, we also asked them in this document to provide what progress you have made on various attempts to do -- to do UTAs more cost effectively, because a targeted price had been given to the execution team of \$2,000. I'd indicated, you know, it can range. So that's why the purpose of the second. It was given to them as a challenge.

1 And so they said the --2 THE REPORTER: I'm sorry, the lexy? 3 WITNESS ABRANCHES: Legacy. 4 THE REPORTER: Oh, legacy. 5 WITNESS ABRANCHES: Cross bore UTA 6 challenge update. And it says what are the 7 levels, what are the things they were trying to look at to -- our intent was to eliminate 8 9 and complete all the UTAs. There's a further 10 complication that Mr. Kerans might get into 11 about performing UTA work in San Francisco 12 that maybe he should elaborate. 13 BY MR. LONG: 14 Q Wait a minute. Can I -- it seems 15 like we're getting far from my question here. 16 WITNESS ABRANCHES: Sorry. 17 So Mr. Abranches, are you denying 0 18 that financial considerations were not part of this decision? 19 20 Yes, I'm -- what I'm saying is the 21 considerations of this decision were the risk 22 considerations of this decision. 23 And not --Q 24 I'm not denying that there are 25 financial considerations. They were in the back of the mind, but they were not the 26 27 primary consideration. The awareness --28 the -- this -- this committee is work,

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resources and financials, and so we look at 1 changes to the work. When changes to the 2 3 work happen, it has an implication on the resources that have to be deployed to do the 4 5 It also has an implication on the 6 financials. And as towards the business, we 7 want to understand all those dynamics. So was -- were financial 8 0 9 considerations, and specifically financial risk of \$80 million, at all at consideration 10 11

in making this decision?

I -- I can't speculate for the other decision-makers in the room. What I can -- can say explicitly is when we brought -- had them bring this topic to this meeting, it was because the original work plan, updates to that plan, had indicated that they're not making progress on UTAs, and if they're not making progress on UTAs, they're not eliminating risk.

Let's look at -- at this document a little bit more. The bottom left section of the document has a heading "Original S2 Plan/2020 GRC."

> Α Right.

And the first column with numbers 0 in it for 2019 shows the -- the plan that was in this -- this GRC, right, the direct

1 testimony? 2 That is correct. Α 3 Okay. And then the plan that was Q being proposed -- oh, I'm sorry. 4 That --5 that entire section is the plan that was in the GRC. Is that right? 6 WITNESS KERANS: That's correct. 7 WITNESS ABRANCHES: 8 Correct. 9 Okay. And then there's a footnote Q 10 at the bottom of that that applies to SF UTA 11 which says, "At the time of the GRC filing, 12 UTA unit cost was estimated at 10K, but 13 funded at 2K, carrying a significant risk --14 risk to the portfolio." 15 And when it's referring to 16 significant risk to the portfolio, the risk 17 that's being referred to there is a financial 18 risk. Isn't that right? 19 WITNESS ABRANCHES: That is correct. 20 And let's go to the top right. Q 21 heading there is "Financial Summary." Do you 22 see that? 23 Α Yes. 24 WITNESS KERANS: Yes, we see it. 25 Okay. And then the first column with numbers in it is headed "S2 Plan," and 26 27 then it says, "WFR 10-8-18." Can you tell me what WFR stands for? 28

1 WITNESS ABRANCHES: Work, finance and 2 resources. 3 And what does that mean? Q Α That's the name of the committee 4 5 that meets, does the review, progress against 6 work, progress against financials, resource 7 deployment. Okay. In the far right column, it 8 0 has the term "risk." What's being referred 9 to there is financial risk to the company, 10 not safety risk. Is that right? 11 12 Α In this case, yes. 13 And for the -- so the first column 0 14 with numbers in it has the -- the S2 plan. That's the plan that was in the direct 15 16 testimony. Correct? WITNESS KERANS: That's correct. 17 18 And then the next column, revised 19 plan expected case, that's the expected case for the plan that's being proposed here. 20 Is 21 that right? 22 That's, yes, essentially what we're 23 working through in 2019. 24 Okay. And comparing the numbers at Q 25 the bottom for total, the original plan had a total cost of \$29 million, and the revised 26 27 plan expected case cost was \$28.6 million. 28 Do you see that?

1 WITNESS ABRANCHES: Yes, that's 2 correct. 3 Was it important that the revised Q plan come in at \$29 million or less? 4 5 Yes. The -- the funding for the 6 program was provided at \$29 million, so what they were explaining is what they were doing 7 for that \$29 million. 8 9 All right. So let's -- let's go Q 10 over this revised plan expected case column. 11 First, the first number is 5200 for pending 12 2018 units. What is that? 13 WITNESS KERANS: Those are -- those are 14 units that would have been captured late in 15 2018, and then as they've basically done, you know, revised, looking, reviewing, making 16 17 sure those inspections are complete, that 18 they'll be carried over in the next year. So would they account for 2018 or 19 Q 20 2019? 21 Α Those are 2019. 22 And then the next number is SF 0 23 attempts, 16,000. Are those -- could you 24 explain what that -- that line means? 25 Yeah. You have to look at that in 26 relation to the line below it. As my volume paper had cited yesterday, there's a ratio of 27 28 attempts that we believe will be successful

1 in San Francisco versus ones that will fall 2 out either under unsuccessful or UTA. So the 3 line below it puts an assumption of 8000 below it. So that's how you read that 4 5 with -- in relation to the two of them. 6 Okay. And on those attempts and 7 completed, are those -- is the -- was -- was the thinking that those would be -- any of 8 9 those would be UTAs? 10 It doesn't explicitly say that, but 11 it -- it does note that if there was a UTA 12 completed that it would be counted, as is 13 expected for the completion of any unit. 14 It's in the parentheses, I believe, on the 15 left side, the first column. 16 Q Right. So -- so some of those 17 eight -- 8000 might be UTAs, but generally 18 not. Is that fair to say? 19 Yeah, that's fair to say, that it 20 would generally be just standard routine inspections, not the UTAs. 21 22 Q Okay. And then the next -- the next row is SF UTAs dates, but there's -- it 23 24 just says, "pending negotiation," so we'll 25 skip that, and go to the non-UTA line. 26 And the number in the revised plan 27 expected case column is 29,000. Are those

non-UTAs -- first of all, what are those

```
1
     non-UTA -- UTAs referring to?
 2
               Those are just non-UTAs that would
           Α
 3
     be standard routine inspections.
               Where -- where would they be
 4
           0
     outlined?
 5
               They would be outside of
 6
     San Francisco. The -- the columns above
 7
 8
     specify the San Francisco attempts.
           ALJ LIRAG: Well, let's go off the
 9
     record for a little bit.
10
11
               (Off the record.)
12
           ALJ LIRAG: Let's go back on the
13
     record. Let's take our first morning break.
14
     I plan on calling two breaks, because we
15
     might go a little past noon. So let's take a
16
     15-minute break, and be back at 10:45.
17
     the record.
18
               (Off the record.)
19
           ALJ LIRAG: Let's go back on the
20
     record. Let's continue the cross-examination
     of Mr. Long -- or by Mr. Long.
21
22
           MR. LONG: That was a close one.
23
     Although, I guess there is an opportunity for
24
     me to be crossed later in this hearing.
25
     So --
26
               So back to the same document,
           0
27
     follow-up question on the -- the row in
28
     the -- in the financial summary section.
                                                Ιt
```

says, "Pending 2018 units." Are those in 1 2 San Francisco or elsewhere? 3 WITNESS KERANS: I'm sorry. Say that one more time. I was looking --4 5 For the pending 2018 units row, are 6 those numbers for San Francisco or not San Francisco? 7 I -- I believe they're a mix. 8 Α Т 9 don't have exactly where they are, but I think it's a -- in consideration of all the 10 11 inspections we've done. Okay. So let's -- let's look at 12 13 the next column over, the revised plan worst 14 case. Does worst case mean from a financial 15 perspective? 16 WITNESS ABRANCHES: No. The worst --17 worst case means what -- so I'll give you the -- where it says, "Pending 2018 units," 18 19 they said they will take a look at all the 20 work that was attempted in San Francisco that 21 hadn't yet been recorded, the 5,200. Worst 22 case they would say is only 2,800 -- or 2,600 23 of those would be completed cross bore 24 inspections. 25 WITNESS KERANS: And I'll just clarify 26 a little bit with that. The reason why there 27 would be one value versus the other is there's a video QC that's performed on the 28

1	inspections to ensure they meet the criteria
2	for clarity, et cetera, and make sure we're
3	able to observe that the cross bore was
4	actually found in that inspection. If it
5	didn't meet the criteria, then it wouldn't
6	necessarily have counted into this, so that's
7	why you would have a worst case where less
8	are put into that.
9	Q And the worst case number at the
10	bottom, the total at the bottom, is 31.4
11	million. Do you see that?
12	WITNESS ABRANCHES: Yes, that is
13	correct.
14	Q And that's shown as \$2.4 million
15	more than the expected case. Is that right?
16	A Correct.
17	Q And that's in the risk column?
18	A Correct.
19	Q So when the word "worst" is being
20	used there, the word "worst" is referring to
21	worst from a financial perspective. Is that
22	right?
23	A Both.
24	Q Both what?
25	A So in the sections of volume, it
26	ties to volume. In the sections of
27	financials, it ties to financial. It says,
28	"worst case" where what's the worst case

scenario of volume of work that you're going 1 2 to have to do, and then the associated 3 financials with that. Now, let's just -- we'll be 4 0 5 finished with this in a moment. 6 Α Sure. 7 0 But, I do want to understand that some -- one of the bullets below in that 8 9 financial summary section, the second bullet, says, "BPR target." What is that? 10 11 The BPR as referenced, I believe on 12 Monday, is the business plan review. the target that was set in -- for 20 -- for 13 14 the 2019 period was set at approximately 15 37,000 units, realizing there's a lot of 16 uncertainty with what's the exact volume that 17 we did there. 18 And so is that target what's being set by this revised plan or is it a previous 19 20 target? 21 No. The target was higher than the 22 plan. So the plan had given -- the original 23 plan had allocated them fundamentally 10,000 24 UTAs and 14,000 non-UTAs. Right? 25 would -- we wanted to incent the execution 26 arm to get more cross bores done, so we set the BPR target at 37,000 under cross bore 27 28 inspections, as a whole.

And again, I'm asking for -- about 1 Q 2 the timing. 3 Α That target was set around the same time the -- that the original plan was set. 4 5 0 Okay. So that -- that was a target 6 that was set, and that was what was -- the 7 original plan was trying to reach? 8 Α Correct, because it said -- because 9 that 37,000 excludes and indicates later --10 excludes the 2018 pending units. When you 11 had started the work, you had done the 12 majority of the work. You hadn't recorded 13 that work. 14 Q All right. Let's try to sum up 15 here what -- what this document is showing. 16 Is it -- is it fair to say that the 17 work plan that is being adopted here, the new 18 work plan, does not include completing any 19 UTA inspections? 20 Α Correct. And, in fact, that's confirmed by 21 Q the response to -- in the -- in the data 22 23 request that precedes this document we've 24 been looking at, 1-A. At the bottom, answer at the bottom, it says, "PG&E's 2019 current 25 26 work plan does not include completing any UTA 27 inspections." So that's just confirming what

Is that

you've just said, Mr. Abranches.

right?
A That is correct.
Q Okay. So the the new plan was
not to do the 10,000 UTA units in
San Francisco. Is that right?
A The plan was to move away from the
10,000 UTAs. It was not not to do the 10,000
UTAs, move away from the 10,000 UTAs. And
Mr. Kerans can give more clarification as to
why.
Q Okay. And my question wasn't
precise. I meant for 2019, you were not
going to do the 20 the 10,000 UTA units
that you were originally planning to do?
A We did see evidence that they were
going to do those 10,000
Q Is that a "Yes" or a "No," first,
that you were you were not the plan was
to not do the 10,000 UTAs that you were
planning to do in 2019?
WITNESS KERANS: I think, when you look
at this, there's the pending negotiations
line
Q Well, can I get a "Yes" or a "No"
on
ALJ LIRAG: Let's have the question
answered.
WITNESS ABRANCHES: The original plan

```
1
     was to do the 10,000.
                            The revised plan was
 2
     to not do the 10,000.
 3
     BY MR. LONG:
 4
           0
               That was my question. Thank you.
 5
           WITNESS ABRANCHES:
                                Okay.
 6
               All right. So let's look at
 7
     your -- back to your rebuttal testimony,
     Exhibit 6.
 8
 9
           ALJ LIRAG: It's PG&E-16.
     BY MR. LONG:
10
11
               I'm going to ask you to turn to
           Q
12
     page 2-8.
13
           WITNESS KERANS: And that was PG&E-16?
14
           Q
               Yeah.
                      In the -- in the record of
15
     this case, it would be Exhibit 6. And I'd
16
     like to direct your attention to Answer 17.
17
     I'm just going to read the first two
18
     sentences. "Performing the originally
19
     planned 10,000 UTA cross bore inspections in
20
     2019 has proved to be challenging.
21
     complete UTA cross bores necessitates PG&E's
22
     engagement with and support from other
23
     parties, which has been slower than
24
     anticipated."
25
               So are you saying there that PG&E
26
     was being prevented by third parties from
27
     doing the work that PG&E originally planned
28
     to do for 2019?
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UTA locations."

I don't know if "prevented" is 1 Α 2 actually the word. I would say we were 3 engaging them to work on the process by which we would -- could fix the UTAs. 4 5 Well, was there -- were -- were you 6 being barred from fixing the UTAs by any 7 third party? I'm not sure if -- I wouldn't say 8 Α we were barred. I would say that we require 9 10 their engagement to work on their sewer But, I'm not sure that barred is 11 facilities. 12 truly the right word for that. 13 So let's now look at what's 0 Okav. 14 been marked as Exhibit 45. That's PG&E's 15 response to TURN data request 87-5. And this 16 is our effort to understand a little better 17 what was meant by the answer that I just 18 read. 19 So in response to subpart "C," you 20 talk about needing to engage with the City of 21 San Francisco and other third parties on many 22 levels, give examples, and then the next paragraph says, "However, the main activity 23 24 that has taken longer than anticipated is 25 finalizing an amended agreement with the City 26 of San Francisco (San Francisco Public 27 Utilities Commission) on the resolution of

1 Are you suggesting here that the amended agreement you're referring to is 2 3 needed in order to get permission to do a UTA inspection in San Francisco? 4 5 Well, what we're saying is we -- we 6 require their engagement and participation in instances to work through the UTAs. 7 In instances where there's customers involved, 8 9 where they're involved to repair sewers that 10 are their sewers or clear blockages which are 11 in their sewers, we -- we need this agreement 12 to support us in that. 13 So my question was: Do you need 0 14 this agreement in order to get permission to 15 do the UTA work in San Francisco? 16 Α So I'm not quite sure what you mean by permission, because there's a --17 18 0 Absent the agreement -- the question is: Absent the agreement, would you 19 20 be unable to do UTA inspections in 21 San Francisco? 22 Α Yes, I think there are instances 23 where we would need and require their 24 participation, as an example, as I stated. 25 So you're saying if -- you needed 26 this amended agreement in order to do UTAs. Without that, you would not be able to do UTA 27 28 inspections?

Did you say, "a UTA"? 1 Α 2 I said you -- you would not be able Q to do UTA inspections, is what I said. 3 Yeah, we would need this agreement 4 5 to get the support to complete them. 6 Okay. You couldn't do any UTA Q 7 inspections without getting this amended agreement you referred to? 8 9 Α I'm not sure if there would be -it would be fair to say, "any." There's a 10 11 possibility that, as I've stated, there's a 12 range that could be attempted that could 13 range from proximity clearances to 14 excavation. However, when we looked at our 15 2019 plan, prior to February, we realized 16 there's execution risks associated with 17 making those attempts such that as you go 18 into making an attempt via proximity or 19 excavation, you may not be successful, you 20 may require this engagement, and that would 21 take resources away from conducting other 22 inspections that could be completed, which is 23 why this plan was shifted. 24 Q Well, what, in particular, did you 25 need to get resolved in order to be able to 26 do UTA inspections in San Francisco? 27 So I think part "D" to the -- the Α 28 Question 5 we were just responding to answers

1	that question.
2	Q Yeah. That that doesn't help
3	me.
4	Could you answer in your own words
5	now what specific things did you need to get
6	an agreement an agreement from
7	San Francisco that you didn't have already
8	that you needed in order to be able to do UTA
9	
	inspections in San Francisco?
10	A So there's a variety of UTA
11	inspections, of types in San Francisco.
12	Those would involve access issues, and maybe
13	it's best to cite you to my direct testimony
14	to show those.
15	ALJ LIRAG: Let's go off the record
16	while you look.
17	(Off the record.)
18	ALJ LIRAG: Let's go back on the
19	record.
20	WITNESS KERANS: So I'm on page 4-24
21	of this is actually the original
22	testimony.
23	ALJ LIRAG: Which which exhibit is
24	that, Mr. Ouborg?
25	MR. OUBORG: I believe
26	UNIDENTIFIED SPEAKER: It's PG&E
27	Exhibit 3, but I'm not sure
28	MR. OUBORG: I believe it's Exhibit 11.

```
1
           ALJ LIRAG:
                        11?
                             Okay.
 2
           MR. LONG:
                            I think we better go
                       No.
 3
     with 10.
 4
           MR. OUBORG:
                         10.
                              Sorry.
 5
           ALJ LIRAG:
                        Ten.
 6
           MR. LONG: You have your handy blue
 7
     sheet.
 8
           MR. OUBORG:
                         Ten.
 9
           ALJ LIRAG:
                      All right. Exhibit 10.
10
           WITNESS KERANS: Okay. Are we back on
11
     the record or --
12
           ALJ LIRAG:
                        I think we're on.
13
           WITNESS KERANS:
                             Okav. Great.
                                             So,
14
     Tom, your question was what were pieces we
15
     needed to help from the city on this
16
     agreement?
17
     BY MR. LONG:
18
           0
               No.
                    T --
19
           WITNESS KERANS: Clarify it.
                                           I'm
20
     sorry.
21
                      What specifically did you
           Q
               Yeah.
22
     need that you -- so that you would be able to
23
     do UTA inspections in San Francisco, that you
24
     needed to have in an -- in an agreement from
25
     San Francisco?
26
                       So these photographs show
           Α
               Yeah.
27
     you some of those examples that we need as
28
     part of that agreement. They involve sealed
```

They involve debris within 1 manhole covers. 2 sewers to clear out. They involve high water 3 where we could use their help in this agreement to clarify that. What's not in 4 5 here is also the engagement with customers. 6 So sewer customers have laterals, and that's 7 our primary unit of inspection. When those 8 have defects, those are the responsibility of 9 the customers, and also, we have to gain access to sewer laterals via contact with the 10 11 customer. Part of that agreement works with 12 how we engage with the sewer customer, the 13 responsibilities of who can help us with 14 that, and that's what's part of the agreement 15 that's necessary to move forward with many of 16 the UTAs. 17 So you -- for example, you think 0 18 you don't have -- you think you need to have 19 an agreement, a contract, with the city to be 20 able to access a manhole cover, to be able to 21 get in a manhole? You needed that to have --22 that to be in an agreement as opposed to 23 seeking a permit or some other -- going 24 through some other process? 25 So -- so this isn't just a manhole 26 that's getting into. It's --Well, that's one example. That's 27 Q 28 just an example.

Well, for a manhole, that's a 1 Α 2 different -- these are sealed manholes that -- for example, that have welded shut 3 that aren't ours to unweld. So we're working 4 5 through many of these obstacles in that 6 agreement. 7 And all right. Well, let's --Q let's look at the -- the document that has 8 9 been marked as Exhibit 46, and this is what I referred to earlier as -- these are a series 10 11 of agreements and one proposed agreement that were on the San Francisco Public Utilities 12 13 Commission website. So when you get that, 14 let me know, and then we'll -- we'll talk 15 about what -- what I want you to look at. 16 Α I think I'm there. 17 So there already is an agreement in 0 18 place with the City of San Francisco for doing cross bore inspections. 19 Is that 20 correct? 21 There -- there was an agreement Α 22 from 2014 that has expired. 23 You're not a lawyer? Q 24 Α No, but I -- I read it this 25 morning, and looked at it, and I saw the 26 dates on it. And you haven't been involved in 27 Q 28 these negotiations. Right?

1	A I have not been directly involved
2	with them.
3	Q So let's look at in this packet.
4	If you could turn to the agreement that's
5	probably the pages are not numbered, but
6	this one is it says, "Gas Pipeline Cross
7	Bore Agreement." It's probably 20 pages
8	into into the document. So the heading at
9	the top is "Gas Pipeline Cross Bore
10	Agreement," and it says, "This agreement is
11	entered into by and between PG&E and the City
12	and County of San Francisco," and it also
13	says at the top right "Execution Copy." So
14	are you there?
15	ALJ LIRAG: So that's page 1 of 9 at
16	the bottom.
17	WITNESS KERANS: I believe I'm there.
18	BY MR. LONG:
19	Q Okay.
20	WITNESS KERANS: You can correct me if
21	I'm if I'm on the wrong one.
22	Q So this is an agreement let's
23	let's flip through it to the to the end.
24	It was the last signature was given on
25	October 14th, 2014. Do you see that on the
26	page 9 of 9?
27	A Yes, I see that.
28	Q Okay. So I'm going to call this

```
1
     the October 14th, 2014 cross bore agreement.
 2
           Α
               Okay.
 3
               Hang on just a second.
           Q
 4
               Okav.
                      Now, back on page 1 of this
 5
     agreement, the sixth whereas clause, it says,
 6
     "Whereas, the parties wish to implement a
     formal protocol for promptly identifying and
 7
     repairing existing and future gas pipeline
 8
     cross bores." Do you see that?
 9
               Yes, I see that.
10
           Α
11
           Q
               Okay. And then the next page has a
12
     schedule, schedule for inspection, at the
13
     bottom, page 2 of 9. Do you see that?
14
           Α
               I see that.
15
               Okay. And then PG&E's agreeing to
           Q
16
     provide the city with a schedule for records
17
     review and overall video inspection planned
18
     of all possible gas pipeline cross bores.
19
     And then later in that paragraph, it says,
20
     "PG&E shall complete such inspections no
21
     later than 30 months after the effective date
22
     of this agreement," and then it goes on to
23
     say, "In no event shall the duration exceed
24
     36 months, unless PG&E establishes that the
25
     work cannot be completed within that time
     period."
26
27
           MR. OUBORG: Your Honor --
28
     ///
```

```
BY MR. LONG:
 1
 2
               "PG&E acknowledges that timely
 3
     performance of this agreement --"
           ALJ LIRAG:
 4
                      Yes --
 5
     BY MR. LONG:
 6
               "-- supports public health and
 7
     safety --"
               (Crosstalk.)
 8
 9
           THE REPORTER: PG&E acknowledges?
     BY MR. LONG:
10
11
               "That timely performance of this
12
     agreement supports public health and safety.
13
           ALJ LIRAG:
                      Mr. Ouborg?
14
           MR. OUBORG: I object to the selective
15
     skipping from one sentence -- skipping over
16
     other sentences.
                       I think this -- this
17
     witness is not a lawyer. And I'm not sure
18
     what Mr. Long's question will be, but he's
19
     skipping important sentences in between
20
     the -- the sentences he is reading, and I
21
     just don't want that to confuse the witness,
22
     especially given that he's not a lawyer.
23
               I don't know what your question's
24
     going to be, but --
25
           ALJ LIRAG: Let's let Mr. Long
26
     continue. I believe it is in response to
27
     Mr. Kerans' expressing in his opinion, as a
28
     non-lawyer, that the agreement was expired.
```

1 So I believe Mr. Long is testing that 2 response. So let's continue, but keep note 3 of -- let us alert us if there's any significant items, lines that were skipped 4 5 that would change the meaning of the 6 question. 7 MR. OUBORG: Well, I -- I think by skipping from "PG&E shall complete such 8 9 inspections no later than 30 months after effective date," and then moving straight on 10 11 to a sentence that's two or three sentences 12 later, he is skipping important sentences 13 such as "PG&E acknowledges that it lacks 14 precision in work scope." 15 ALJ LIRAG: So there -- there's no 16 question yet, so there's nothing to object 17 to. So --18 MR. LONG: And your Honor, I'm not 19 trying to play a trick here. I'm just trying 20 to move the -- and we're -- we're over time, 21 I'd like to move -- I was trying to anyway. 22 move things along. But, I don't have an 23 objection if Mr. Ouborg wants to stand and 24 tell the witness what he wants him to hear. 25 That's fine with me. I'm happy to take -- to 26 go off the record and let him talk all he 27 wants with -- with this witness.

try and proceed using Mr. Long's approach, 1 2 and then if things need to be corrected, let's do that. Let's see where this goes 3 first. All right. 4 5 Please continue, Mr. Long. 6 And actually, I believe MR. LONG: the -- the point of this is not to test the 7 8 expiration thing. The point of this is --9 is where my question is now going. 10 So then, the agreement is --Q 11 from -- at a high level is -- is -- the 12 purpose of it is to try to get these cross 13 bores inspected and addressed as quickly as 14 possible. Is that -- is that fair to say? 15 WITNESS KERANS: I think that's a 16 portion of it. I also think it relates to 17 costs associated with the city's sewer work 18 that are attributed to PG&E's cross bore 19 Some of those costs, as I program. 20 understand it, are if the city were doing a 21 routine inspection that identified the cross 22 bore, they would be required to stand by and 23 perform work. This agreement, I believe, 24 goes into kind of discussing how those 25 processes work as well. 26 But as I read this agreement, it 27 looks to me like the City is pressing to get

the work done as quickly as possible. After

1 all, these are cross bores that pose a safety 2 risk as the last sentence I just read and 3 that PG&E agrees poses safety risk. And so it's in the interest of the 4 5 City to get these addressed as quickly as 6 possible; isn't that right? 7 Α I think it's in the interest of 8 both parties to get it done as quickly as 9 possible. 10 All right. So, now, what we just Q 11 read is that the October 14, 2014, agreement 12 said: 13 In no event shall the duration 14 exceed 36 months unless PG&E 15 establishes that the work cannot 16 be completed within this time. 17 So it was a deadline but then it 18 could be extended and based on a showing by PG&E; is that right? 19 20 That's my understanding, yes. Α 21 And that date is -- and that timing Q 22 is still governing; that is, that there's 23 nothing that's been agreed to between the city and PG&E that changes that timing; isn't 24 25 that right? The 36 months? Is that the time 26 Α 27 frame? 28 The 36 months unless PG&E makes the Q

1 showing. 2 If there's nothing changed? Α 3 not quite understanding your question. That it's -- there's been no other 4 0 5 agreement between the city and PG&E that 6 changes that timing; isn't that right? 7 Not that I'm aware of. I believe 8 later on in this package there's some 9 amendments that are probably discussed, but I'm not sure they speak to the timing. 10 11 Q Right. I mean, you know, counsel 12 is free to disagree, but the Amendment 1 13 doesn't change the timing. Amendment 2 is in 14 this, but that was not executed by the City 15 so there's nothing -- there's no executed 16 agreement that changes that timing. 17 Is that fair to say? 18 MR. OUBORG: Your Honor -- sorry. 19 ALJ LIRAG: Are you going to object? 20 MR. OUBORG: I'm going to object to 21 that, yeah, because it doesn't say that the 22 36 months needs to be extended by an It says "unless PG&E establishes 23 agreement. 24 that the work cannot be completed within this 25 time period." ALJ LIRAG: All right. I'll sustain. 26 27 I think it's fairly established that 28 Mr. Kerans is not able to accurately

```
interpret everything that's written in this
 1
 2
     agreement so we can read off it, but he can
 3
     just, you know, agree or disagree.
 4
           MR. LONG:
                      I'll move on.
 5
           ALJ LIRAG: All right.
                      I would like now to go back
 6
           MR. LONG:
 7
     to Exhibit 44, which was the document that
     included the Attachment 1 to Data Request
 8
 9
     87-1.
10
           ALJ LIRAG: All right.
11
     BY MR. LONG:
12
               Do you have that?
13
           WITNESS KERANS: Yes, both Andy and I
14
     have that.
15
               So now I'm going to ask guestions
16
     about the second page. The top item is
17
     referred to as Lever 1. It's about record
18
     review status. And then it says in the
     description "Overview: Used exponent to
19
20
     complete a review of legacy cross bore data
21
     with the goal of eliminating rework."
22
               What's the issue about eliminating
23
     rework that's being referred to there?
24
           Α
               Yes, so that alludes to the video
25
     QC process that I spoke to earlier prior
26
     to -- I don't remember the exact year, but in
27
     previous we were doing more of a statistical
28
     and we wanted to have exponent review more
```

than to ensure that we hadn't perhaps cleared 1 2 an inspection, but we felt necessary that we 3 didn't have the right visibility. So that's what exponent was 4 5 performing for us was a video review and if 6 that cleared all of them because their QC evaluated it. And if they would complete, 7 then we wouldn't have any additional work to 8 9 go out and do, or, if there were inspections that we didn't have the full visibility, we'd 10 11 have to go out and, as this states, I'll call 12 it rework, but I would say reinspect is 13 probably the better term. 14 Q In fact the result -- after the word "result" on the second line there, it 15 16 says "Sound data was not sufficient to 17 mitigate reinspecting locations." 18 Does that mean that -- the question 19 was whether PG&E would have to go back to 20 reinspect locations because the camera 21 quality, the quality of the camera recording, 22 was not sufficiently good to be able to give 23 PG&E confidence that it was an adequate 24 inspection; is that right? 25 Α Yeah. That's my basic understanding of that. 26 27 Q Can you give us an idea of the

scale of this issue? How many reinspections

1	were necessitated by this quality control
2	review?
3	A I don't know the scaling of that
4	exactly, no.
5	Q Do you have the unredacted version
6	of this document?
7	A Actually, no. For both of them, I
8	don't have either. I have the redacted
9	version from both pages.
10	Q Because there's a reference on the
11	first page to a number of a number of
12	MR. OUBORG: Your Honor
13	MR. LONG: a number of additional
14	inspections needed.
15	MR. OUBORG: Could we go off the record
16	for a second?
17	ALJ LIRAG: All right. Off the record.
18	(Off the record.)
19	ALJ LIRAG: Let's go back on the
20	record.
21	BY MR. LONG:
22	Q So we were talking about that
23	Lever 1 on the top of the second page and
24	it's referring to the need to reinspect
25	locations. I asked you about the scale of
26	the number of locations needing
27	reinspections. You said you didn't know. I
28	take it it's not something you have personal

knowledge of, how much reinspection is needed 1 2 for this program? 3 WITNESS KERANS: It's a little bit of a general guestion. I wouldn't say I have a 4 5 specific number of each time we go out how 6 many times we would have to go out and 7 reinspect based on various conditions of the sewer or based on the quality of the videos 8 9 to come back. 10 But I would say there are instances 11 throughout the inspection where you return to 12 a site to reinspect it and it's normal and 13 expected. 14 Q But would it be fair to say that 15 the company has identified a number of 16 reinspections that's over 10,000 that were 17 necessary? 18 Yes. I think, based on what I see 19 here, that that's about correct. 20 0 And that's meaning that's 10,000 21 units more work, more inspections, that have 22 to be redone because the quality of the 23 original inspection was not adequate; is that 24 right? 25 Α Could you say that one more time. 26 That's 10,000 or so more 0 27 inspections that need to be done because the

quality of the original inspection was not

adequate?

A Yeah, those are 10,000 inspections we would go out and reinspect to ensure that there were no cross bores there.

Q Let's go down to the bottom of that second page, Lever 5. It's talking about "A better understanding of sewer camera inspections and more experienced contractors may result in fewer UTAs."

Can you explain what that item is referring to.

A Yeah, so at a high level as sewer inspectors -- these are contractors that perform sewer inspections -- gain more experience with inspecting sewers, they are able to either break through some of the UTA issues that they find on initial and complete them that day or understand that they can come back at a later point when conditions have changed slightly and those wouldn't result in a UTA.

An example might be high water flow, for example, where you might have high water during certain times of the year or during certain periods of the day. A more experienced operator with training would understand that they could come back and clear that. That's basically what that's

1 stating. 2 So it's stating that some 3 inspections that are presumed to be UTAs with a more experienced operator might not turn 4 5 out to be UTAs; is that right? 6 Yeah. So it's speaking to if you 7 were going out to do an initial inspection, 8 you don't know if that inspection would be a 9 UTA or would just be a routine inspection 10 that's cleared that day. But with additional 11 training, you might be able to have those 12 contractors clear them initially without them 13 resulting in a UTA. 14 Q Okay. That is all my questions. 15 Thank you very much. 16 ALJ LIRAG: All right. Judge Lau. 17 EXAMINATION 18 BY ALJ LAU: 19 Good morning. Q 20 WITNESS ABRANCHES: Good morning. 21 WITNESS KERANS: Good morning. 22 So I'm looking at the testimony and 0 23 the testimony seems to say that there are a 24 few units that would not be completed based 25 on the imputed numbers, yet in somewhere, I 26 think in Hearing Exhibit-06 which is the 27 Rebuttal Testimony for the Safety Risk and 28 Integrated Planning, there are mention that

there's a change in work plans such that 1 2 that -- the units that were not expected to 3 be completed would be completed; is that correct? 4 WITNESS KERANS: Yes, that's correct. 5 6 We intend to complete all of the imputed 7 units, the 123,307. 8 Okay. And I remember Mr. Abranches 0 9 was responding to Mr. Long about the new work 10 And one of the things you mentioned plan. 11 the reason why this change was because of 12 safety-related risk; is that correct? 13 WITNESS ABRANCHES: That is correct. 14 Q Can you elaborate how -- why --15 what is the safety-related risk that is being 16 addressed by changing the work plan? 17 WITNESS ABRANCHES: So I think what 18 Mr. Kerans is better able to --19 I think you should turn on your Q 20 mic. 21 WITNESS ABRANCHES: I think Mr. Kerans 22 is better able to answer the question so let 23 me start and let him provide more context. 24 We put together the original work plan to do 25 10,000 UTAs and 14,000 -- 10,000 unable to 26 access and 14,000 regular inspections. 27 Q Okay. 28 Α When progress was not getting made,

1 when we didn't see evidence of progress 2 getting made on the unable to access because 3 of the coordination required, no cross bore inspections were getting cleared. 4 If no 5 cross bore inspections get cleared, then the 6 risk doesn't come out of the system. 7 So we ask them to pivot and says 8 can you please do cross bore inspections. 9 And so we took the unable to access off the 10 plan until they could further the 11 coordination work and perform regular cross 12 bore inspections. Those regular cross bore 13 inspections, as they get done, every one that 14 gets completed takes risk out of the system. 15 So that was the reason for the pivot. 16 Q But there is a plan for PG&E to 17 address the remaining 10,000 UTAs in San 18 Francisco --Yes, I think that --19 Α 20 -- in the 2020 forecast? Q 21 Our best estimate for the Α Yes. 22 remaining UTAs is 21,000. 23 Q Okay. 24 Α 10,000 is what we wanted to do in 25 2019; 10,000 in 2020; and 1,000 in 2021. 26 that was what we -- we filed our testimony 27 stating that would be our plan to remediate

those unable-to-access locations.

1 Q But with the revised work plan, 2 what are the numbers now for 2020, 2021, and 3 2022? WITNESS KERANS: 4 So I think that goes 5 to what we spoke about yesterday with the 6 equation that was in my rebuttal is that 7 range between the 23,000 and 45,000 just 8 depending on how many UTAs we can complete in 9 a given year and then doing a ratio between 10 the two. 11 So I'm looking at a reference and Q 12 these numbers are not sponsored by you so it 13 may not be correct, but I'm looking at the 14 unit costs, what the imputed 2017 GRC imputed 15 cost was, \$480. 16 But for 2017 and 2018, what 17 Mr. Long estimated was around \$639 for 2017 18 and \$620 for 2018. Is there -- are these 19 sort of estimated to be correct? 20 WITNESS ABRANCHES: These numbers are 21 correct. 22 So what is the reason for almost a 0 23 30 percent increase and is that expected for 24 the 2020 forecast to have around a \$600 unit 25 cost? The reason for the increase from 26 Α 27 the imputed numbers was as we got deeper into

the program, the true costs of doing the

program emerged, the coordination that 1 2 requires, the fact that in some cases you've 3 got to go back to the same site as additional costs. These are actual recorded costs, so 4 those are not incorrect. 5 For the forecast that we asked for, 6 I'd originally asked for a blended-unit cost 7 that put UTAs and non-UTAs. 8 In the rebuttal 9 testimony, we conceded if they wanted to 10 separate unable-to-access costs at around 11 \$2,080 and non-UTA costs in the range of 12 around the \$600 range. We said that would be 13 fine as well. 14 Q So but these numbers include -- so 15 the 640 and 620 or 639 and 620, they 16 include -- they're unit costs for both 17 regular inspections and UTA inspections; is 18 that correct? 19 Α No. These are just for regular 20 inspections. 21 Okay. Those are all my Q Okay. 22 questions. Thank you. 23 WITNESS ABRANCHES: Thank you. 24 ALJ LIRAG: Mr. Ouborg, any redirect? 25 MR. OUBORG: Yes, your Honor. Can I 26 have one minute? 27 ALJ LIRAG: All right. Let's go off 28 the record.

(Off the record.) 1 2 ALJ LIRAG: I think we can go back on 3 the record. Any redirect, Mr. Ouborg? 4 5 MR. OUBORG: Yes, your Honor. REDIRECT EXAMINATION 6 7 BY MR. OUBORG: This is directed to Mr. Abranches. 8 Q Mr. Abranches, can you refer back to the 9 slide which describes the decision for the 10 11 revised work plan in 2019 --12 WITNESS ABRANCHES: Yes. 13 -- that Mr. Long was asking you 14 questions on. Let's first talk about there's 15 a second bullet in the decision work plan 16 change box which talks about eliminating the 17 \$80 million cross bore risk in 2019. 18 That 80 million, you explained in 19 your responses, was based on the difference 20 between the \$2,000-per-unit estimate PG&E had 21 for cross bores -- unable-to-access cross 22 bores compared to the potential that those 23 unable-to-access cross bores could cost as 24 much as 10,000, and that that 80 million is 25 kind of an estimate of what that risk of cost 26 overrun could be; is that right? 27 Yes, the upper end of that. Α 28 In your view, has this plan Q Okay.

that's been adopted for 2019 in this slide, 1 2 in your view has that eliminated that risk to 3 PG&E going forward of that cost overrun? No, it has not eliminated that 4 5 risk. In the 2020 period, we've still put 6 forward a unit cost -- if I go with the unit 7 cost of unable to access of about \$2,000. 8 Every time we have to perform an inspection 9 that's on the higher end of the range, that 10 risk exists in the system. So that 80 11 million risk of 10,000 in 2020, that risk 12 still exists, the financial risk. 13 0 Thank you. And Mr. Long asked you 14 several times about what the driving reason 15 was for this decision to change the work 16 plan, whether it was financial or some other 17 reason. 18 In your opinion was the purpose of 19 moving from the 10,000 UTAs in 2019 to 20 performing non-UTAs driven by 21 execution-related difficulties or by 22 financial considerations? 23 It was driven by progress on Α 24 getting unable to access for clear. That's 25 execution focused. 26 And was PG&E making progress? 27 you elaborate on the progress PG&E was or was

not making on UTAs?

1 Α PG&E was not making any progress on 2 UTAs partly because of the discussion that 3 Mr. Kerans has elaborated on in terms of the negotiation and the coordination required. 4 5 PG&E was making progress on the 6 non-unable-to-access locations, the regular 7 inspections. And so we pivoted to doing more 8 regular inspections and clearing those 9 situations. 10 Thank you. Just returning for one Q 11 minute to the \$80 million risk, was PG&E 12 aware of this \$80 million over cost -- the 13 risk of going over the cost of the unable-to-access install? 14 Was PG&E aware of that at the time 15 16 it filed its GRC? And I refer you to the 17 footnote that was discussed during your cross 18 with Mr. --19 Α Yes. 20 -- Long, Footnote 1? Q 21 Α Yes. To answer your question, when 22 we file the GRC, we filed and asked for, in 23 effect, a unit cost of approximately \$2,000 24 for unable to access. We knew about this 25 risk. We still know about this risk. Τt still exists. 26 27 Q Thank you. And finally, in response to some questioning from the ALJ, 28

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1
     you explained -- maybe it was Mr. Kerans --
 2
     that I believe your response for unit
 3
     costs --
 4
           Α
               Right.
 5
           Q
               -- of UTAs.
 6
           Α
               Correct.
 7
           0
               So can you explain given the range
 8
     of costs that you discussed with the ALJ, the
 9
     1,000 to 10,000 potential costs that might be
10
     associated with UTAs, how PG&E selected the
11
     2,080 figure that's in PG&E's forecast for
     UTA unit cost?
12
13
               The 2,000 figure that was selected
14
     was a target unit cost that we asked the
15
     execution on to find ways to address
16
     unable-to-access cross bore locations.
17
     fact that we found a large number of unable
18
     to access, we certainly don't expend $10,000
19
     to do that.
                  Is there a more effective way of
20
     doing it.
21
               We're trying to find more effective
22
     ways to incent the organization to do that.
23
     We set a target cost at the lower end of that
24
     range, which was $2,000.
25
               Thank you.
           Q
               Your Honor, that's my redirect.
26
27
           ALJ LIRAG:
                      Any questions off the
28
     redirect, Mr. Long?
```

1	MR. LONG: Yes, your Honor.
2	RECROSS-EXAMINATION
3	BY MR. LONG:
4	Q Mr. Abranches, the presentation
5	that was made to the decision makers is
6	embodied in this document, Attachment 1 to
7	Exhibit 44; is that right?
8	WITNESS ABRANCHES: That's correct.
9	Q Can you point me to anything in
10	that document that talks about the reason for
11	the change in the plan being execution
12	difficulties?
13	ALJ LIRAG: Let's go off the record.
14	(Off the record.)
15	ALJ LIRAG: Let's go back on the
16	record.
17	Do you have an answer,
18	Mr. Abranches?
19	WITNESS ABRANCHES: Mr. Long, it's in
20	the redacted portion with reference to those
21	execution difficulties. The only reference
22	would be in the financial summary at the
23	bottom of the third bullet where it says
24	"Revised work plan is contingent on finding
25	negotiations with SF."
26	BY MR. LONG:
27	Q Could you tell me where you were
28	referring to again. I missed that.

14

15

16

17

18

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27

28

Sorry. On the financial summary 1 Α 2 section right at the bottom, there are three 3 bullets. The first one starts with "both expected worst case." The second one starts 4 5 with "BPR target." I'm referring to the third one 6 7 which says "Risk: Revised work plan is contingent on final negotiations with SF." 8 9 Q Okav. I'm --That's where it references the 10 11 execution challenges because those 12

negotiations with SF were coordination that we need to do that prevented execution from proceeding as planned.

That's saying that carrying out the revised plan is contingent on final negotiations, but it doesn't say that the change from the original plan to the new plan is because of execution difficulties; isn't that right?

> Α That's true, yeah, sorry.

And as for the risk going forward, 0 PG&E's proposal in the rebuttal testimony for the work it will do in the 2020 to 2022 GRC period does not commit to doing -- commit; that is, PG&E is not proposing a certain number of UTAs that it will do. PG&E is not committing to a definitive number of UTAs;

1	isn't that right?
2	WITNESS KERANS: That's correct. We
3	expect it to range from zero to about 10,000
4	depending on how the negotiations work and if
5	we're able to get through this.
6	Q So it could be that PG&E decides to
7	do as few as zero UTAs in 2020; is that
8	right?
9	WITNESS KERANS: That's correct. And
10	using that equation then, it would substitute
11	that standard inspections for those.
12	Q Thank you. Those are all my
13	questions.
14	ALJ LIRAG: ALJ Lau?
15	ALJ LAU: I have none.
16	ALJ LIRAG: Let's go to the exhibits.
17	Exhibit 43 was denied.
18	Mr. Long moved to admit Exhibits 44
19	to 46 into the record?
20	MR. LONG: Yes, your Honor.
21	ALJ LIRAG: Any objections?
22	MR. OUBORG: Which one is that, your
23	Honor? I'm sorry.
24	ALJ LIRAG: So 44 is the agreement with
25	the redacted portions
26	MR. OUBORG: No objections.
27	ALJ LIRAG: So 44, 45, and 46?
28	MR. OUBORG: No objection to 45. 46 is

1	the San Francisco?
2	ALJ LIRAG: Correct.
3	MR. OUBORG: No objection to that.
4	ALJ LIRAG: All right. Exhibits 44,
5	45, and 46 are received into the record.
6	(Exhibit No. 44 was received into
7	evidence.)
8	(Exhibit No. 45 was received into
9	evidence.)
10	(Exhibit No. 46 was received into
11	evidence.)
12	ALJ LIRAG: That excuses Mr. Kerans.
13	Thank you.
14	WITNESS KERANS: Thank you.
15	ALJ LIRAG: Let's go off the record.
16	(Off the record.)
17	ALJ LAU: Back on the record.
18	Now we have Mr. Andrew Abranches and
10	
19	Dan Mr. Dan Menegus on the stand.
20	Dan Mr. Dan Menegus on the stand.  ANDREW ABRANCHES,
	•
20	ANDREW ABRANCHES,
20 21	ANDREW ABRANCHES, resumed the stand and testified further as
20 21 22	ANDREW ABRANCHES, resumed the stand and testified further as follows:
<ul><li>20</li><li>21</li><li>22</li><li>23</li></ul>	ANDREW ABRANCHES, resumed the stand and testified further as follows: ALJ LAU: Mr. Abranches, you are aware
<ul><li>20</li><li>21</li><li>22</li><li>23</li><li>24</li></ul>	ANDREW ABRANCHES, resumed the stand and testified further as follows: ALJ LAU: Mr. Abranches, you are aware that you are still under oath to tell the
<ul><li>20</li><li>21</li><li>22</li><li>23</li><li>24</li><li>25</li></ul>	ANDREW ABRANCHES, resumed the stand and testified further as follows:  ALJ LAU: Mr. Abranches, you are aware that you are still under oath to tell the truth?
20 21 22 23 24 25 26	ANDREW ABRANCHES, resumed the stand and testified further as follows: ALJ LAU: Mr. Abranches, you are aware that you are still under oath to tell the truth? WITNESS ABRANCHES: I am.

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1	DAN MENEGUS, called as a witness by PG&E, having been sworn, testified as
2	follows:
3	WITNESS MENEGUS: I do.
4	ALJ LAU: Can you please state your
5	name, spelling your last name, and give us
6	your business address?
7	WITNESS MENEGUS: Dan Menegus,
8	M-e-n-e-g-u-s, 6121 Bollinger Canyon in
9	San Ramon.
10	ALJ LAU: So while we were off record,
11	there were a couple of exhibits that were
12	distributed. These are cross-examination
13	exhibits. We will now identify them.
14	First is Exhibit 47, PG&E's response
15	to TURN data request 89-2.
16	(Exhibit No. 47 was marked for identification.)
17	identification.
18	ALJ LAU: Next is Exhibit 48, PG&E's
19	response to TURN data request 89-4.
20	(Exhibit No. 48 was marked for identification.)
21	identification.
22	ALJ LAU: Next is Exhibit 49, PG&E's
23	response to TURN data request 87-7.
24	(Exhibit No. 49 was marked for identification.)
25	raditer roacroin j
26	ALJ LAU: And last is Exhibit 50,
27	PG&E's response to TURN data request 89-6
28	with attachment.

1	
1	(Exhibit No. 50 was marked for identification.)
2	identification.)
3	ALJ LAU: Mr. Ouborg, would you like to
4	start with your direct examination of the
5	witnesses?
6	MR. OUBORG: Yes, your Honor. Thank
7	you.
8	DIRECT EXAMINATION
9	BY MR. OUBORG:
10	Q Good morning, Mr. Menegus. I think
11	it's still morning.
12	WITNESS MENEGUS: Good morning.
13	Q Mr. Menegus, I'd like to confirm
14	the testimony that you are sponsoring in this
15	proceeding.
16	In what has been marked for
17	identification as Exhibit 11 10, sorry,
18	are you sponsoring a portion of Chapter 2,
19	gas distribution forecast summary and
20	investment planning, all of Chapter 9, gas
21	system operations, and the workpapers for
22	Chapter 9, which have been marked as
23	Exhibit 14?
24	A Yes, I am.
25	Q And in what has been marked as
26	Exhibits 6, 15 and 39 in connection with
27	PG&E's rebuttal testimony, are you
28	response are you sponsoring a portion of

```
Exhibit 6, Chapter 2, rebuttal testimony on
 1
 2
     integrated planning and affordability, all of
     Exhibit 15, Chapter 9, rebuttal testimony on
 3
     gas system operations, a portion of
 4
 5
     Exhibit 39 containing confidential documents
 6
     related to the rebuttal testimony, and the
     documents in Exhibit 6, Appendix A, and
 7
     Exhibit 15, Appendix A, that relate to a
 8
 9
     sponsored rebuttal testimony?
                       Just a question,
10
           ALJ LIRAG:
11
                  I think that was 39-C.
     Mr. Ouborg.
                                           Right?
12
           MR. OUBORG: Yes, your Honor.
                                           Ι
13
     apologize.
14
           ALJ LIRAG: All right. Thank you.
15
           WITNESS MENEGUS: Yes, I am.
16
     BY MR. OUBORG:
17
               And in what has been marked as
           0
18
     Exhibit 26, PG&E's errata, are you sponsoring
     the pages in that errata that pertain to your
19
20
     previously identified testimony?
21
           WITNESS MENEGUS: Yes, I am.
22
               And finally, are you sponsoring
           Q
23
     your statement of qualifications?
24
           Α
               Yes, I am.
25
           0
               And Mr. Menegus, were these
26
     materials prepared by you or under your
27
     supervision?
28
           Α
               Yes, they were.
```

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1
               And do you have any changes -- any
 2
     further changes or corrections at this time
 3
     to make to your testimony?
 4
           Α
               No.
               And are the facts contained in your
 5
           Q
     testimony true and correct, to the best of
 6
 7
     your knowledge?
 8
           Α
               Yes, they are.
 9
           Q
               And to the extent they represent
10
     opinions, do they represent your best
11
     professional judgment?
12
           Α
               Yes, they do.
13
               Thank you.
           Q
14
               Your Honor, Mr. Menegus is now
15
     available for cross-examination.
16
           ALJ LAU: Mr. Long? You may proceed.
17
           ALJ LIRAG: I -- I think -- sorry.
18
     think we're about to go into our lunch break.
           ALJ LAU:
19
                     Right. Let's go off the
20
     record.
               (Off the record.)
21
22
           ALJ LAU:
                     Back on the record. Let's go
     on a lunch break. We will resume at
23
24
     1:15 p.m. Off the record.
25
               (Whereupon, at the hour of 11:50
           a.m., a recess was taken until 1:18
26
           p.m.)
                                                   1
27
28
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1	AFTERNOON SESSION - 1:18 P.M.
2	
3	* * * *
4	ALJ LAU: Back on the record. We're
5	proceeding with cross-examination by Mr. Long
6	from TURN.
7	MR. LONG: Thank you.
8	CROSS-EXAMINATION
9	BY MR. LONG:
10	Q Good afternoon, gentlemen.
11	WITNESS MENEGUS: Good afternoon.
12	Q I'm going to start by asking you to
13	look at your rebuttal testimony, Exhibit 6,
14	please. And today's panel is about the SCADA
15	visibility program. Is that correct?
16	WITNESS ABRANCHES: That's correct,
17	yeah.
18	Q And so your testimony about that
19	your rebuttal testimony on that issue begins
20	on page 2-13. Is that right?
21	A That is correct.
22	WITNESS MENEGUS: Yes.
23	Q Okay. So just to to give us a
24	little outline of what your rebuttal
25	testimony addresses, as I read it, you're
26	responding to two concerns raised by TURN in
27	your rebuttal. Concern number one is that
28	the SCADA program this is this is

1	TURN's view. The the SCADA program
2	experienced significant cost overruns that
3	PG&E has failed to justify. That's number
4	one. And TURN's second concern is that PG&E
5	deferred work that was authorized and funded
6	in the 2017 to 2019 period, and ratepayers
7	should not have to pay for that work a second
8	time.
9	Do you agree that those were the
10	two main issues raised by TURN that you're
11	addressing in this rebuttal?
12	A Could you repeat the first one?
13	Q Sure. The the SCADA program
14	experienced significant cost overruns that
15	PG&E has failed to justify.
16	ALJ LIRAG: Mr. Menegus, could we have
17	you speak into the mic? Same with
18	Mr. Abranches. It's shared, but please use
19	it, both. There may be other parties that
20	are further back in the room.
21	Sorry to interrupt, Mr. Long.
22	WITNESS MENEGUS: Yes, those are the
23	two.
24	WITNESS ABRANCHES: Yeah.
25	BY MR. LONG:
26	Q Okay. So I'm going to the way
27	I'm going to organize this cross-examination
28	is we'll start by talking about cost overrun

issues, and then after we're finished with 1 2 that, we'll move to the -- the deferred work 3 issues. So on the issue of cost overruns, 4 am I correct that PG&E does not dispute that 5 6 there have been significant cost overruns in 7 the SCADA visibility program in the 2017 to 8 2019 period? 9 WITNESS MENEGUS: Yes, there -- the 10 costs were significantly higher than shown in 11 the GRC. 12 0 Okay. I'd like now to ask you to 13 look at page -- I'm sorry, Exhibit 47, which 14 is PG&E's response to TURN data request 89-2. 15 Let me know --16 Α Okay. 17 -- when you have that in front of 0 18 you. 19 Α Okay. I have it. 20 0 Thank you. The top table on that 21 response is where PG&E is confirming numbers 22 from the 2017 GRC testimony in which PG&E forecasts unit costs, including escalation 23 24 for SCADA units. Is that your understanding? 25 Yes, those are the unit costs with 26 assumed efficiencies that were expected to be 27 realized. 28 Okay. So those were the Q

1 forecast -- the -- that top table, those are 2 the forecast costs that PG&E presented, and 3 those show declining unit costs over the 2017/2019 period for both types of RTU. 4 Is 5 that right? Yes, because of the assumed 6 7 efficiencies. All right. And then in the answer 8 0 9 below, you provide additional information about unit costs, and I wanted to ask you to 10 11 help explain, for the record, a few of these 12 So I'm counting as rows the ones that 13 are -- have numbers in them, dollar numbers. 14 So the third row down says, "Type 3 15 RTU, " and then it says, "NCM." NCM stands 16 for new cost model. Is that correct? Correct. 17 Α 18 And so you've converted the numbers for -- that were shown in the table above 19 20 which are in the old cost model, and you've 21 converted those to the new cost model, is 22 that right, in that -- in that -- what I'm 23 calling Row 3? 24 Α Correct. 25 0 Okay. And you've done that in -in Row 4, as well, for the Type 4 RTU. 26 27 that correct? 28 Α Correct.

28

And the conversion from the 1 Q Okay. 2 new cost model -- I'm sorry, the old cost 3 model to the new cost model did not make significant changes to the cost numbers, it 4 5 looks like. Is that fair to say? 6 Α Yes. 7 Okay. And then what I'm calling 0 Rows 5 and 6 have the word "imputed" added, 8 9 and I wonder if you could just explain what 10 you mean by imputed there? 11 My understanding is imputed is --Α 12 2017's the base year, so then those are just 13 escalation off the base year numbers in 2018 14 and '19. 15 So could you then explain Q Okav. 16 the difference between the forecast unit 17 costs and the -- that are shown in the rows 18 above and those imputed unit costs? As I said, the forecast 19 Α Yes. 20 assume various technology efficiencies were 21 going to be realized throughout the GRC 22 So some of those efficiencies were 23 assumed to be realized going before 2017, and 24 that was the starting point, but then there 25 was other assumed efficiencies, mostly from 26 the wireless technology as it achieved

of units, so that efficiency was going to

greater and greater penetration of the number

testimony?

1 continue to increase. Interestingly, though, the imputed 2 3 numbers in Rows 5 and 6 actually go up over the three-year period, which is different 4 5 from the forecast numbers above that. Α Yeah. My --6 7 Q Does -- go ahead. 8 Α My assumption is the imputed 9 numbers for '17 are the same, and then you're 10 just escalating off that '17 number. So then those -- for 2018 and 2019, 11 12 those are not assuming efficiencies that are -- you say are -- are built into the 13 14 forecast numbers for 2018 and 2019. Is that 15 right? 16 Α Correct. I mean they have a certain amount of efficiencies that were 17 18 based -- baked into the 2017 numbers, but 19 then you were just not having additional 20 efficiencies in those 2018/2019 years. 21 Okay. So now going back to your Q 22 testimony, Exhibit 6, the rebuttal, if you 23 could turn to page 2-18, Answer 36, you say 24 effectively that PG&E built efficiencies into 25 the unit costs that it presented in the 2017 26 GRC, and those -- those efficiencies did not 27 materialize. Is that -- is that your

1 Α Yes. At the time the testimony was 2 put together, there's a number of technology 3 efficiencies that PG&E thought it was going to realize. So that was back first quarter 4 5 of 2015. SCADA, which stands for Supervisory 6 Control and Data Acquisition, is a complex technology project, and there was a lot of 7 8 learnings, as with all technology projects, 9 in those initial years. 10 So then Answer 37 focuses on Q Okav. 11 expected efficiencies from a wireless 12 transmitter design called WiHART, 13 W-i-H-A-R-T. Is that right? Is that what 14 Answer 37's focused on? 15 Α Yes. 16 Q Okay. Now, it -- it turns out that 17 WiHART was an unproven technology for the 18 uses that PG&E wanted to make of it. Is that 19 correct? 20 Well, WiHART had been used in Α 21 certain applications such as, I think, power 22 plants at PG&E, but it hadn't been used for 23 distribution SCADA. 24 Q So in -- I'm sorry. Did I 25 interrupt? 26 Α No. Go ahead. So, in fact, it was unproven for 27 Q 28 the uses that PG&E wanted to make of it in

the SCADA visibility program. 1 Is that right? 2 Α PG&E had started to evaluate it, 3 and those evaluations had looked promising. We hadn't installed any WiHART installations 4 5 at the time that we wrote this testimony. Okay. So I'm going to ask the 6 7 question again. 8 Was it -- was it an unproven 9 technology for the uses that PG&E wanted to 10 make of it in the SCADA visibility program? 11 As I said, we were --Α 12 Could I get an answer, "Yes" or 0 13 "No," and then -- you've explained it, but 14 you haven't -- you haven't given me -- given me a "Yes" or "No" answer. 15 16 Α Well --17 0 Was it unproven or not? 18 Α It gets back to what's the 19 definition of unproven. Certain aspects of 20 it had been proven at that time. Other 21 aspects were unproven, because we were in the 22 evaluation phase of it. 23 Which is why I qualified my Q 24 question with the phrase "for the uses PG&E 25 wanted to make of it in the SCADA visibility 26 program." Was it unproven for those uses? 27 It hadn't been installed for those Α 28 uses yet.

1	Q Okay. Now, is it also correct that
2	the 2017 testimony did not indicate that PG&E
3	was relying on that technology?
4	A The 2017 testimony talked about
5	assumed technology efficiencies. It didn't
6	mention WiHART by name.
7	Q Now, did PG&E, when it was making
8	the decision to rely on the WiHART
9	technology did it think through all the
10	issues with WiHART that it should have
11	thought through?
12	A Say that again, please.
13	Q When PG&E was making the decision
14	to rely on WiHART in its SCADA visibility
15	program, did it think through all of the
16	issues that it should have thought through?
17	A PG&E wasn't relying on WiHART as
18	part of its SCADA program.
19	(Conference line announcement.)
20	ALJ LIRAG: Off the record.
21	(Off the record.)
22	ALJ LAU: Back on the record.
23	WITNESS MENEGUS: PG&E wasn't relying
24	on WiHART for the SCADA program. It was the
25	most likely technology that was going to be
26	used in the 2017 GRC rate case period, so
27	that's what we based the unit costs on.
28	///

BY MR. LONG: 1 2 So the unit costs were based on Q 3 significant adopt -- significant use of WiHART. Is that right? 4 5 WITNESS MENEGUS: Correct. 6 But, you weren't relying on it. Q Is 7 that what you're saying? 8 Α Well, there were technologies to install SCADA monitoring that didn't involve 9 10 WiHART. So if WiHART didn't work out, we 11 were -- still had a technology that we could 12 install visibility using. 13 Okay. It's not like it was I see. 0 14 all or nothing, unless -- I -- I think I 15 understand what you're saying now. 16 But, I guess my -- my question 17 comes back to for purposes of the 2017 GRC 18 forecast, you were assuming significant use of WiHART in your deployments of SCADA? 19 20 Α Yes. 21 Q Okay. Sorry. Maybe we got 22 interrupted when I was asking this question, 23 but I did want to hear whether it's your 24 opinion, based on your experience with this 25 program, whether PG&E thought through all of 26 the issues it should have thought through 27 when it decided to base its 2017 forecast 28 on -- significantly on the use of Wi -- of

WiHART.

A I'd say at the stage we were at, we thought through those -- those issues. We had a whole set of issues we needed to fully think through before we could deploy WiHART. The GRC testimony is due at a certain point in time, so for that point in time where we were at, we hadn't fully vetted the WiHART technology yet.

Q Okay. One of the issues, if I'm recalling correctly from some of the data request responses, is that the -- the wireless transmitters are mounted high on a pole, and could not be easily accessed for maintenance. You needed to get a -- a bucket truck out there to do that. Was that one of the problems?

A Maybe a little bit to explain what WiHART is. So WiHART is wireless technology. So the transmitters that are monitoring pressure in the -- the gas system, we -- we connect those to an RTU, which is a remote terminal unit, basically a commute -- a computer that then communicates to our gas control center. So the prior technology, you had to hard-wire between the two. WiHART uses wireless transmitters that can wirelessly then communicate with that gateway

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1 to our gas control center, and that was being 2 mounted on a pole. So it's not the 3 transmitters that are mounted on a pole. It's that gateway unit. 4 5 And that was -- but, that's part of 6 the WiHART configuration. Is that right? 7 Α Right. 8 Q Okay. 9 Α Correct. 10

And so it was the gateway being Q mounted on the pole that drew complaints from internally that this was much more difficult to maintain and required the use of a bucket truck, which would be much more costly. Is that right?

Α Yes. A gateway has -- doesn't have a lot of equipment in it, so the crews don't have to access it anywhere near as much as the RTU units. So there was lots of different options being evaluated at the time -- potentially mounting that unit up on the pole, and then bringing those wires down to maybe three feet so that the crew only rarely would need a bucket truck -- that hadn't been fully vetted at the time we wrote the testimony. But, yes, that gateway unit mounted up on the pole nine to 15 feet in the air proved to be an issue.

```
1
           Q
               Now, continuing on with your
 2
     rebuttal testimony, page 2-19, Answer 39,
     there you're saying, in the first sentence,
 3
     that PG&E based its forecast for Type 4 units
 4
 5
     on design assumptions that ultimately could
 6
     not be implemented. There in -- and that
 7
     leads me to ask you to look at Exhibit 48,
     which is PG&E's response to TURN data request
 8
 9
           Let me know when you have that in
10
     front of you.
11
           Α
               Okay.
12
               So 4-A asks: Are the design
           0
13
     assumptions on which PG&E based its forecast
14
     discussed anywhere in PG&E's 2017 GRC
15
     testimony or workpapers?
16
               And the answer below for "A" is:
17
     No, PG&E did not discuss the specific design
18
     assumptions that could not be implemented in
19
     the 2017 GRC testimony or workpapers.
20
     that still an accurate answer?
21
           Α
               Yes.
22
               Now, looking at "B" --
23
           THE REPORTER: I'm sorry, looking at
     "D," did you say?
24
25
           MR. LONG: "B," as in boy.
26
           THE REPORTER: Thank you.
27
     BY MR. LONG:
28
               It asked to provide any and all
           Q
```

1 documents in PG&E'S possession discussing 2 design assumptions that could not be 3 implemented for Type 4 units. And the response below in the --4 5 gosh, four or five lines down, it says 6 PG&E -- actually, four lines down, "PG&E uses 7 a design -- decision design matrix to 8 determine which design is appropriate for 9 each location, and as PG&E applied it, fewer 10 locations were determined to be suitable for 11 the WiHART design than previously assumed." 12 So looking at that answer, it seems 13 that again the issue -- the issue that you're 14 raising is the issue with the WiHART 15 technology. Is that right? 16 Α Yes. At the time that the 2017 GRC 17 was filed, PG&E was looking at a whole host 18 of potential technologies to lower cost. 19 WiHART was the most promising and the one we 20 thought was likely to be implemented, so it 21 was the one that we based our unit costs on. 22 But, there were other technologies being 23 looked at, so we didn't specify all the list 24 of technologies as part of the 2017 GRC 25 filing. 26 Okay. All right. That's -- those 0 27 are the questions I wanted to ask about the 28 cost overrun issues. Now I want to move to

the defer -- deferred work issue. And to 1 2 start on that, I wanted to ask you to look at 3 Exhibit 10, which was formerly PG&E-3, particularly page 2-44. Let me know when 4 5 you're there. 6 Α Okay. 7 Q All right. At lines 16 through 19, in summary, it's saying that PG&E was 8 9 authorized to install 1,244 units in 2017 through 2019, but only expects to install 10 536 units. Is that right? 11 12 Α Yes. 13 0 Okay. And is it correct to say 14 that in the current 27 (sic) to 2019 GRC 15 period PG&E is receiving revenue requirement 16 for the cost of the authorized 1,244 units? 17 Α Yes. 18 0 Okay. Now, looking at your 19 rebuttal testimony, that's Exhibit 6, 20 page 2-21, please, I think this gets to 21 your -- your part of the rebuttal, 22 Mr. Abranches. 23 WITNESS ABRANCHES: Yeah. 24 Q Yeah. Let's see. So Answer 42 --25 Question and Answer 42, question states: 26 Does PG&E agree with TURN's contention that PG&E deferred a safety program for budgetary 27 28 reasons? No.

While TURN 1 The answer is: No. 2 contends that PG&E extended the program 3 solely for budgetary reasons, PG&E maintains it was prudent to delay it. 4 5 Were budgetary reasons at least 6 part of the reason for deferring the program? 7 Α Yes. And that's -- let's look 8 Okay. 0 9 then at 87 -- I'm sorry, Exhibit 49, which is 10 PG&E's response to TURN data request 87-7. 11 Α I'm there with you. 12 Okay. And the answer to 7-A is --0 13 talks about two times when PG&E has deferred the SCADA program, first in 2016, and then 14 15 I'm going to skip over that, and then ask you 16 to look at the part that's the second time, 17 in 2017, and the sentence reads: Second, in 18 2017, as part of the 2018 budget-setting 19 process, it was decided to reduce the number 20 of SCADA units planned for 2018 to stay 21 within the budget allocated for 2018, as the 22 unit cost was around \$186,000 per unit as 23 opposed to the \$100,000 per unit originally 24 forecast. 25 So that indeed is a budgetary 26 reason, would -- would you agree? 27 Yes, I would. Α 28 Okay. Okay. Now, those unit costs Q

1	that are mentioned there, the \$186,000 per
2	unit that was experienced versus the
3	100,000-dollar a unit originally forecast,
4	those are blended unit costs for different
5	types of SCADA units. Is that right?
6	And maybe Mr. Menegus, I don't
7	know if you know about this.
8	A Yes. I think
9	WITNESS MENEGUS: Yes, that's a blended
10	unit cost for
11	Q Which which types of units are
12	being blended? And maybe you can provide an
13	answer to that question by reference to your
14	Table 2-2 on page 2-15 of Exhibit 6.
15	A I'm not completely sure, but I'm
16	assuming it's Type 3 and Type 4.
17	Q Okay. And blended for those two
18	types. Okay.
19	Now, back to this data request
20	87-7, Exhibit 49, the decision that's being
21	described there in in 7-A, it was made at
22	a an FIT-gov committee meeting on June 4,
23	2017. Is that right?
24	WITNESS ABRANCHES: That is correct.
25	Q And FIT stands for?
26	A Finance and information technology.
27	Q Thank you. Now, back to the

lines 9 and 10. Actually, beginning at 1 2 line 8, the sentence reads: Rather than 3 continuing to incur the increased costs, PG&E slowed down the program to evaluate options 4 5 for reducing program costs. Do you see that? 6 Α I do. 7 0 Did you have an expectation at that time that that decision was made -- when I 8 say, "you," I should say did PG&E have an 9 10 expectation at the time that that decision 11 was made in 2017 that you were going to be 12 able to reduce unit costs after 2017? 13 Yes, at -- yes. At the time that 14 decision was made, we went back to the SCADA 15 team and asked them to -- to look at ways on 16 which they could more prudently reduce costs and still achieve the same objective. 17 There's -- there's looking, and 18 0 then there's expectation. Did you expect 19 there would be a -- reduced costs achieved 20 21 after -- after the costs that you were 22 experiencing in 2017? 23 The costs we experienced in Α No. 24 2017, as indicated here, was high, right, 25 than we initially --26 \$186,000 --Q 27 Α Right. -- per unit? 28 Q

Yes. 1 Α So when we saw that high unit 2 cost, the question we asked ourselves was if 3 we slow this program down that, first, does it pose any type of safety risk. The second 4 5 piece of it is we asked the program team: 6 Can you find any technologies that you're looking at that can refine? So with asking 7 them to refine, there is an expectation that 8 9 they would be able to find something; but, 10 there was no promise of it. 11 Okay. Now, I think this is back to Q 12 you, Mr. Menegus. I'm -- I'd like you to look at Exhibit 14. That's your workpapers. 13 14 In particular, page 9-12. 15 WITNESS MENEGUS: Okay. 16 Q You're there? 17 Α I'm there. 18 Okay. So basically, what I'm --0 19 what I'm going to ask is whether it worked 20 out that PG&E was able to achieve lower unit 21 costs than what it was experiencing when it 22 made that decision to defer the program in 23 order to evaluate whether lower unit costs 24 could be achieved. And so looking at this 25 workpaper, and it is a little small, let's look at first Row 37. 26 27 Α Okay. That's -- that's, I think, the 28 Q

equivalent of the blended costs we were just 1 2 talking about, major activity code, or MAT, 3 4AM. The unit cost in 2017 that I see is about \$181,000. Is that right? 4 5 Α Yes. 6 Q That --Okay. 7 Α That's not a blended unit cost. That's the Type 3 unit cost. 8 9 I see. Q As we -- as warehouse -- wireless 10 11 didn't turn out to be effective technology, 12 we moved to just installing the Type 3 units. 13 So all of these numbers would be comparable 14 to a Type 3. 15 Okay. Good. Thank you for Q 16 clarifying that. 17 And then comparing that 2017 18 recorded cost of \$181,000 and looking to the forecast cost for 2020, the forecast is 19 20 232,000, roughly. Was that right? 1 21 Α Yes. 22 So the unit costs, you were not Q 23 able to -- the reductions that you were, say 24 you were evaluating -- the evaluation that 25 you were doing to see if you could get low 26 unit costs did not pan out. In fact, the 27 unit costs that you're forecasting are 28 significantly higher than 2017; is that

1 right? 2 Than '17. I think if you look back Α to the -- Table 17 was 180, 2018 was 220, and 3 I believe 2016 was about 220, 230 also. I'm 4 5 just pointing out that every year, depending on the location and the specific sites, that 6 7 unit cost varies between 16 to 18. Probably 8 the unit cost is in that 210, 215 range 9 overall. 10 Is that somewhere we can verify in Q your workpapers? 11 12 2017 and 2018 have an average 13 that's in the SCADA deferred work. It shows 14 a \$202 unit cost versus a 204 unit cost 15 without efficiencies. That's Table 2-3. 16 MR. OUBORG: What page is that, 17 Mr. Menegus? 18 WITNESS MENEGUS: That's 2-17. 19 MR. OUBORG: And this is your rebuttal 20 testimony? 21 That's my -- well, WITNESS MENEGUS: 22 it's Chapter 2, Deferred Work Rebuttal, 23 Table 2-3, page 2-17. It shows the type 3 24 are 2017, '18 recorded average was 202. 2019 25 the forecast without efficiencies was 204. 2016 I don't think is in the testimony 26 27 anywhere. 28 ///

1 BY MR. LONG: 2 I'm trying to catch up to Q Okav. 3 I'm looking at Table 2-3. Were you vou. talking about type 3 units? 4 5 WITNESS MENEGUS: Right, so --6 So --Q 7 Α Yes. 8 So let's take it one step at a 0 9 Type 3 units for the recorded cost in 2017 was \$180,000, right, unit cost? 10 11 Α Correct. 12 And then I was comparing that to Q 13 the 2020 GRC unit cost that you're 14 forecasting now and that's back at the 15 workpaper we were just looking at and that's 16 \$232,000; right? 17 Α Right. What I was trying to point 18 out was depending upon the stage of 19 engineering of projects, where they're 20 located, to get a true understanding of what 21 our unit cost has been, you have to look at a 22 two-, three-year period. You can't just take 23 one year because that takes the unit cost out 24 of context. 25 0 Well, I'll tell you the reason I 26 was asking the question the way I did was 27 because I was looking at the decision that 28 was made. It was made on June 14, 2017.

then the explanation in the testimony was 1 2 that we decided to defer because we wanted to 3 evaluate options to reduce costs. So that's why I was looking at 4 5 2017. And so from that vantage point, the 6 comparison would be to look at the 2017 unit 7 cost and see how that compares to the unit 8 costs going forward; isn't that right? 9 Well, I think when we were looking Α 10 at unit costs, we're looking at what was '15, 11 '16, '17. We weren't just taking one year 12 because depending upon what the units were, 13 that wouldn't be what we were projecting to 14 have as the unit cost. I'm afraid I don't understand that, 15 Q 16 but I'm going to move on to the next 17 question, which is about row 33 on your 18 workpaper, again, page 9-12. I'm just going 19 to ask you the same question for the other 20 type of SCADA device that's the ERX 21 pressuring monitoring device. And there the 22 recorded cost in 20 -- in 2017 was 28,000 23 roughly and the forecast cost in 2020 was 24 approximately \$30,000; is that right? 25 Α You lost me. 26 Q Okay. 27 What I see is the 2017 recorded Α 28 cost --

1	Q Yes.
2	A is 20,000.
3	Q 2017?
4	A Yes. Workpaper 9-10, row
5	Q Oh, I'm on 9-12.
6	A Oh, 9-12.
7	Q Maybe you have a better workpaper
8	page. I don't know. I'm interested in what
9	was the recorded cost for the ERX device for
10	2017 as recorded unit cost?
11	A Okay. 27,000. Is that
12	Q That's what I'm
13	A Row 33?
14	Q Yes. Is that right?
15	A Yes.
16	Q Okay. And then it went up in
17	the 2020 forecast it went up to 30,000; is
18	that correct?
19	A Yes.
20	Q So, again, cost reductions were not
21	achieved; correct?
22	A For the ERXs we weren't really
23	looking at cost efficiency technology so,
24	yes, we're using the same design that we've
25	always used.
26	Q Okay. Back to the rebuttal
27	testimony, page 2-21, Answer 45, about the
28	question of whether this delay of the program

increased risk. Beginning on the third line in that answer row, I'm sorry, line 29, it says:

The critical risks have been addressed through construction of the GDCC and completing at least one SCADA deployment in each HIS of 500 or more customers.

So the critical risks had been addressed. Does that mean then that the work that was deferred is addressing non-critical risks?

A So the first point of visibility in any system reduces the risk by the largest amount and gives us some visibility as to what's going on in that system. So I liken it to putting lights in a house.

The first light you put into each room gives you illumination to that room. Each additional piece of visibility -- you put a light in over the kitchen to wash the dishes gives you some value but it's not the same as the value of that first point of visibility which tells you if there's a significant problem in that area.

So by having visibility of every single system, that addresses the greatest risk. All the other ones help us to become

more proactive in addressing risk, but that first point is the one that gives you information on what's going on in that system.

Q Okay. So in defending the deferred -- the decision to defer, you're saying, well, that didn't increase risks, that didn't increase risk because we already addressed all the critical risks.

Is that a fair summary?

A It doesn't increase risk because unlike replacing copper services or replacing main where there's a risk to that pipe and that risk as it ages gets worse; SCADA, every point you put in decreases risk further. So not putting those points in doesn't increase risk.

Q My question is if you've already addressed the critical risks, and I think that's what you're saying here. You had already addressed the critical risks. Does that mean that the work that was deferred is designed to address non-critical risks? Doesn't that follow?

A Not really because I think we're using a different definition of critical.

Every point you put in after that first point helps you to be more proactive. It's working

on the same risk, but that first point is the greatest risk reduction and tells you what's going on in that system.

Q Okay. So then the deferred work was important and was addressing a critical risk then?

A I think somewhere else in testimony we'd explained it a different way which is by having that single point in every system, we create a base foundation of visibility across the system for risk reduction.

Q Well, it seems like you're trying to have it both ways. When it comes time to defer the risk, you're saying, well, we'd already addressed all the critical risks. But here when you're trying to ask the Commission to give you money to address the risks, you seem to be hesitant to say that those aren't -- you still want to say those are important risks that need to be addressed.

Can you square those two for me?

A The SCADA program helps us to reduce risk, identify risk earlier on. That first point of visibility has the biggest impact. The additional visibility still helps us to reduce risk, it's not as much, helps us to become more proactive.

But that there's an abnormal 1 2 situation going on in any system, the first 3 point of visibility tells us that. So, you know, going along with this FIT-gov decision, 4 5 there was also executive project committee 6 meetings that same summer that closed out the 7 SCADA project and made it a program. The reason we were able to close 8 9 out that project is because the most critical 10 risks identified when we created the project 11 were addressed by that first point of 12 visibility plus our new control center. So 13 that continues, you know, that's in this 14 TURN 33, Question 3 that talks about the 15 slow-down in work. And it talks -- and it --16 Q Excuse me, Mr. Menegus. I think 17 you're way away from my question. Here's 18 what I want to try to understand: You seem 19 to be saying in Answer 45 that there was not 20 a risk issue created by deferring because the 21 critical risks had already been addressed. 22 Let me put the question this way: 23 Is it true that some of that work that was 24 deferred, you are requesting funding to do in 25 this rate-case period, this upcoming 26 rate-case period; is that correct? 27 Α Yes. 28 Now, is that important work that's Q

1 necessary for safety? Yes or no, then you 2 can explain. 3 Okay. Yes, it helps us to be -- to address risk to a deeper level for -- to 4 5 create a core level of safety and 6 reliability. That first point of visibility achieves that. Now we're going above and 7 beyond trying to be more proactive in how we 8 9 address risks, so that has continued safety 10 and reliability impacts. 11 That first point of visibility 12 allowed us to have a basic level of safety 13 and reliability from the program. 14 Q Okav. So the work that you're --15 that you deferred and are asking to have 16 funded again in this rate-case period is 17 important work for safety. 18 That's your testimony? 19 Α Yes. 20 0 So if it's important now, wasn't it 21 also important in the 2017 to 2019 rate-case 22 period? 23 Α Yes. 24 Q Now I'd like to turn to page 2-23. 25 ALJ LIRAG: Hang on, Mr. Long. Let me 26 just ask a follow-up question while we're on 27 that topic. 28 Following your example about the

first point of visibility being sort of 1 2 more -- it addresses more issues than the second, third, and fourth. I'm wondering if 3 that applies progressively, meaning does the 4 5 second point of -- I don't know what you call 6 it. 7 WITNESS MENEGUS: Visibility. 8 ALJ LIRAG: Visibility. Is that 9 more -- does that address more issues than 10 the third point or does it only apply to the 11 first point of visibility? 12 WITNESS MENEGUS: It primarily applies 13 to the first point because that first point 14 is giving you generally visibility of the 15 whole system. Every additional point is kind 16 of a specific point in the system that's 17 providing additional --18 ALJ LIRAG: All right. So it does not apply progressively, it's just that first 19 20 point. And then the second, third, fourth, fifth points are, you know, address specific 21 22 issues and none are more important than the 23 other generally? 24 WITNESS MENEGUS: There may be a 25 priority because there may be one -- you 26 know, a system might be fed by five different 27 stations. 28 ALJ LIRAG: All right.

```
1
           WITNESS MENEGUS:
                             The biggest station
 2
     might have more value than the smallest
     station, but they're all addressing a
 3
     specific --
 4
 5
           ALJ LIRAG: All right. I think I got
 6
     it. Thank you.
 7
     BY MR. LONG:
               Thank you. Now, looking at page
 8
           Q
 9
     2-23, Answer 50.
10
           WITNESS MENEGUS: Yes.
11
               I think this is Mr. Abranches'
           Q
12
     testimonv.
                 In the second paragraph in that
13
     answer it says "PG&E did not restrict its
14
     spending to the forecast adopted in the 2017
15
     GRC." And there's a reference to exceeding
16
     the authorized capital spending.
17
           WITNESS ABRANCHES: Correct.
18
               And then there's a footnote
           0
     referencing Table 203 in Exhibit PG&E-01.
19
20
     that leads us to a data request that's been
     marked as Exhibit 50, which is PG&E's
21
22
     Response to TURN Data Request 89-6.
23
               Do you have that in front of you,
     Mr. Abranches?
24
25
           WITNESS ABRANCHES: I do have that,
26
     yes.
27
           Q
               So this data request asked you to
28
     update that Table 2-3 that's referenced in
```

28

1 that footnote. The attachment is an update 2 and it's also broken out as TURN requested by 3 line of business; is that right? Α That is correct. 4 5 0 So now I want you to turn then to 6 the attachment. There are two sets of 7 The first one is for comparing the tables. 8 adopted -- imputed adopted costs to the 9 recorded and budgeted costs; is that right? 10 MR. OUBORG: Your Honor --11 WITNESS ABRANCHES: It's right, but I 12 do want to say this response and this data 13 request was directed at Shilpa Ramaiya. 14 BY MR. LONG: 15 I'm sorry. Well, it was directed Q 16 at the testimony and PG&E responded with 17 saying that the person who provided the 18 response is Ms. Ramaiya, but it's directed to 19 this testimony. Anyway, I'm not going to get 20 into very complicated things. I think that 21 you're going to know what I'm going to ask 22 you about. 23 So the first page is -- gee, it 24 doesn't say but I think this is -- oh, it does. Wait, that's capital and then second 25 26 page is expense, is that right, or is it the 27 other way around? Oh, the first page is --

WITNESS ABRANCHES: The first page is

1 expenses. 2 Q First page is expense, okay. 3 Α As far as I can tell. Yeah. That's what I figured 4 0 Okav. 5 you knew these amounts. For gas distribution line of business, that's what I'm focused on. 6 It turns out that PG&E's expectation now is 7 that it will not quite spend the full imputed 8 amount for 2017 to the 2019. 9 That will be a 10 variance of \$12 million; is that right? 11 I have not prepared these tables so 12 I can't directly speak to the table. What it 13 does say on the table, which I'm not disputing, is that, yes, it shows a variance 14 15 of \$12 million. 16 Q Okav. That is less than what was 17 imputed and authorized; correct? 18 Based on what it says on this table, correct. 19 20 0 Okay. And then turning to the 21 capital table, the second page, it's showing 22 that PG&E would spend less for gas 23 distribution than its imputed authorized 24 capital for 2017 through 2019 on the amount 25 of \$56 million; is that right? Based on what it shows on this 26 Α 27 table, correct. 28 Those are all my questions. Thank Q

1 you. 2 ALJ LAU: I do have a couple questions. 3 Judge Lirag, do you have questions? Off the record. 4 5 (Off the record.) 6 ALJ LAU: Back on the record. 7 **EXAMINATION** BY ALJ LAU: 8 9 So my first question is back to the Q 10 first point of visibility. How did you 11 define and how is that defined to have a 12 first point of visibility? 13 WITNESS MENEGUS: So our gas 14 distribution system is broken up into 15 independent hydraulic systems. They're 16 independent from one another. So the first 17 point of visibility, which we defined as 18 addressing the critical risk, is we have no 19 visibility of what the pressure is in that 20 So that first point gives us some 21 indication of what the pressure is in that 22 system. 23 And the work that the SCADA units Q 24 that were deferred, what other qualitative 25 visibility other than pressure does it give PG&E if that makes sense? 26 27 Most of the other RTU units Α Yes. 28 are then providing visibility of what the

pressure is at the inlet -- basically the inlet points to that system are our regulator stations so it gives us the pressure right at that regulator station.

So if you have a pressure problem in the system and it's a high pressure, it's coming from one of the regulator stations so you can evaluate more quickly what station is causing the problem.

Q And why is it that that is not -not having information to read those pressure
points at the inlet to the regulating -regulator stations, why is that not a
critical risk?

A We defined it as that first point of having no visibility. As soon as you have some visibility, it's an important but it's not as critical because that first point tells us something is going on. We call out people to identify what the problem is in that system then.

Q So what is I guess -- let me rephrase. What kind of consequence would happen? Is it catastrophic if, let's say, PG&E doesn't have that reading to the inlet -- the pressure of the inlet to the regulator station? What kind of a -- how big of a consequence would that be?

```
1
           Α
               Consequence would typically be a
 2
     delayed response to the issue.
 3
           Q
               Okay. How many units were
     deferred?
 4
 5
               Off the record.
 6
               (Off the record.)
 7
           ALJ LAU: Back on the record.
           WITNESS MENEGUS:
 8
                             So it went from 1,244
 9
     to 668 -- oh, no, wait, sorry, to 536.
     BY ALJ LAU:
10
11
               Is there anything in the
           Q
12
     testimony -- can you point me to somewhere in
13
     your testimony?
14
           WITNESS ABRANCHES:
                                Table 2-9.
15
               And in which exhibit?
           Q
16
           Α
               Exhibit PG&E-03. What exhibit is
17
     that?
18
           MR. OUBORG: That's 10.
           WITNESS ABRANCHES: Exhibit 10.
19
20
     BY ALJ LAU:
21
               What page is that?
           Q
22
               It's on page 2-36, Table 9 --
           Α
23
     Table 2-9. There's a table right at the
24
     bottom.
              It tells you how many -- let me go
25
     through the table. The table indicates 1,244
26
     SCADA units. That was the imputed ask at
27
     $103.5 million, and what was installed was
     536 at a cost of $80.3 million.
28
```

So does that mean that there were 1 Q 2 about 700 units that were delayed? 3 Α Approximately. It's 668. 4 Q Okay. 5 Α Approximately 700, yes. 6 And how many of the -- so what is 0 the requested -- what is the amount of 7 requested units for the 2020 forecast? 8 9 WITNESS MENEGUS: Just one --10 Q Off the record. 11 (Off the record.) 12 ALJ LAU: On the record. 13 Just one point first WITNESS MENEGUS: 14 is we didn't do 668 units but also the number 15 of units we needed to do decreased from the 16 2017 GRC to this filing as we learned more 17 about our systems. 18 BY ALJ LAU: 19 Okay. So I guess the guestion --Q 20 let me rephrase my question. How many of the 21 units that were -- that are requested in the 22 2020 GRC are deferred units from the previous 23 GRC and can you point me to somewhere in your 24 testimony that clarifies that? 25 WITNESS MENEGUS: So there's nothing in 26 the testimony that points to how many of 27 those were planned to have been done in the 28 2017 GRC. The total number of units planned

for 2020 through 2022 is 457. And then there
will be 350 remaining after that to complete
the program.
So our total program will require
2,262 units to be installed. Back at the
last 2017 GRC, we were planning on installing
3,275 units as part of this program. So as
we've learned more about our system, more
about risks, we've reduced the program size
by about a thousand units.
Q I am a bit confused. We were
talking about 668 deferred units, and the
numbers do not correspond to the numbers that
you've just given me.
Is there anything that
A I'm using workpaper 9-15, workpaper
Table 9-13.
WITNESS ABRANCHES: Which exhibit?
ALJ LAU: Exhibit 14?
WITNESS MENEGUS: PG&E-3, which
MR. OUBORG: Exhibit 10.
WITNESS MENEGUS: Exhibit 10.
MR. OUBORG: There's workpapers in
Exhibit 10.
ALJ LAU: Off the record.
(Off the record.)
ALJ LAU: Let's go back on the record.
Q I want to clarify that my question

```
1
     is asking of the 429 units that are
 2
     forecasted, which is on page 2-44 in Hearing
 3
     Exhibit 10, how many of those 429 units that
     PG&E is requesting for the 2020 rate case --
 4
 5
     how many of those units were from -- were
 6
     deferred work from the previous 2017 rate
 7
     case?
           WITNESS MENEGUS: So I don't have that
 8
 9
     information.
10
           ALJ LIRAG: You can explain,
11
     Mr. Menegus, how you determine how many --
12
     your forecasting to do, and then --
13
           WITNESS MENEGUS:
                             Right.
14
           ALJ LIRAG: -- if there's a connection
15
     with the deferred work, then indicate that.
16
     But, if that's not how -- the way you plan,
17
     or if you -- that's not the way -- how you
18
     forecast things, then kind of explain how it
19
     is that you do determine the number of work
20
     that has to be done in this GRC.
21
           WITNESS MENEGUS: Right. So we have a
22
     total number of sites that need SCADA, and as
23
     we get more information on each of those
24
     HISes and what's the specific makeup and
25
     where would we need to install units, our
     total number of units decreases. Or if we
26
27
     have another project that installed SCADA,
28
     like a reg (phonetic) rebuild, and that
```

```
installed SCADA -- that also decreases the
 1
 2
     number of units we need to install.
                                           So for
     the last GRC, pending the numbers that Andy
 3
     showed me, we installed 600 -- or are
 4
 5
     planning on installing 668 units less than we
 6
     had in the forecast, but at the same time
     between those two GRCs, we're installing 1013
 7
     less units that complete the program.
 8
     we don't identify which of those units we're
 9
     going to get installed in which years because
10
11
     of various issues. A lot of times, units
12
     will get deferred -- delayed because of
13
     permitting issues or other issues.
                                          So we
14
     just seek to install a certain number of RTUs
15
     and ERXs in a given year.
16
           ALJ LAU:
                     Okay. That's all the
17
     questions I have.
18
               Mr. Ouborg, do you have any
19
     redirect?
20
           MR. OUBORG: Could I have a minute,
21
     your Honor?
22
           ALJ LAU: Yes. Let's go off the
23
     record.
               (Off the record.)
24
25
           ALJ LAU:
                     Back on the record. We're
26
     going to take a ten-minute recess. Off the
27
     record.
28
               (Off the record.)
```

1	
1	ALJ LAU: On the record. We're
2	proceeding with the redirect from Mr. Ouborg.
3	MR. OUBORG: Your Honor, we have no
4	redirect.
5	ALJ LAU: Okay. Then you guys
6	Mr. Abranches and Mr. Menegus are excused.
7	ALJ LIRAG: Not yet. They need to
8	let's address the exhibits first.
9	ALJ LAU: Okay.
10	ALJ LIRAG: So let's keep them there
11	probably a couple minutes longer.
12	Mr. Abranches has been there all day.
13	WITNESS ABRANCHES: Well
14	ALJ LAU: So Mr. Long, do you want to
15	move the Exhibits Number 46 to 50 and to
16	40 off the record for a second.
17	(Off the record.)
18	ALJ LAU: Back on the record.
19	Mr. Long, do you move to to move
20	Exhibit 47 through Exhibit 50 into the
21	record?
22	MR. LONG: Yes, I do, your Honor.
23	ALJ LAU: Are there any objections?
24	(No response.)
25	ALJ LAU: Hearing none, Exhibit 47, 48,
26	49 and 50 are moved into record.
27	(Exhibit No. 47 was received into evidence.)
28	(Exhibit No. 48 was received into
	(LAHIDIE NO. 40 WAS ICCCIVED INCO

1	evidence.)
2	(Exhibit No. 49 was received into evidence.)
3	(Exhibit No. 50 was received into
4	evidence.)
5	ALJ LAU: Mr. Abranches and
6	Mr. Menegus, you are both excused.
7	Right now, we're going to talk about
8	scheduling. So there are no witnesses
9	scheduled for tomorrow. That is
10	September 26th. So we will not have hearings
11	tomorrow. But, we do have those witnesses
12	which is which are the witnesses for the
13	Community Wildfire Safety Program that is the
14	Community Wildfire Safety Panel that is
15	Sumeet Singh, Matthew Pender and Steve E.
16	Calvert. They will be testifying on Friday,
17	October 4th.
18	ALJ LIRAG: No, it's we're we're
19	looking at the 27th first.
20	ALJ LAU: Okay.
21	ALJ LIRAG: So I think we have Robert
22	Earle and Sandra Cullings.
23	ALJ LAU: Yes, we have Sandra Cullings
24	and Robert Earle for September 27th,
25	tomorrow.
26	ALJ LIRAG: No, on Friday.
27	ALJ LAU: Right, Friday.
28	ALJ LIRAG: Judge Lau is a week ahead.

1	ALJ LAU: Friday, September 27th.
2	Judge Lirag?
3	ALJ LIRAG: Yeah. So that's the
4	schedule for the rest of the week.
5	PG&E, specifically Mr. Arnold and
6	Ms. Gandesbery, please update us if there are
7	any changes.
8	And also, on Friday, we'll go into
9	the schedule for the following week.
10	So now let's spend the next
11	probably the next 20 minutes to take care of
12	exhibits that have no cross scheduled.
13	Mr. Long, you can stick around for
14	that, but we're we're fine, I think, with
15	Ms. Shek speaking on behalf of the other
16	parties.
17	MR. LONG: Ms. Goodson asked me to hang
18	around, just in case.
19	ALJ LIRAG: All right. May as well
20	stay. Who knows? There may be an objection
21	there. All right.
22	So let's go off the record while
23	we while we take care of these exhibits.
24	So off the record.
25	(Off the record.)
26	ALJ LAU: Back on the record.
27	Ms. Gandesbery, do you have any
28	exhibits that you'd like to move into the

	<u> </u>				
1	record?				
2	MS. GANDESBERY: Yes, your Honor.				
3	Thank you. I would like to mark as Hearing				
4	Exhibit 51 PG&E				
5	ALJ LAU: Let				
6	ALJ LIRAG: Excuse me, Ms. Gandesbery.				
7	Let's have Judge Lau				
8	ALJ LAU: Identify.				
9	ALJ LIRAG: identify the exhibits.				
10	MS. GANDESBERY: Okay.				
11	ALJ LAU: We're still on the record.				
12	Right?				
13	So let me identify several records				
14	that PG&E's circulated.				
15	Exhibit 51 is the prepared testimony				
16	statement of qualifications.				
17 18	(Exhibit No. 51 was marked for identification.)				
19	ALJ LAU: Exhibit 52 is the rebuttal				
20	testimony statement statement of				
21	qualifications.				
22	(Exhibit No. 52 was marked for				
23	identification.)				
24	ALJ LAU: Exhibit 53, prepared				
25	testimony post test year ratemaking.				
26	(Exhibit No. 53 was marked for				
27	identification.)				
28	ALJ LAU: Exhibit 54, post test year				

1	ratemaking workpapers supporting Chapters 2
2	and 3.
3	(Exhibit No. 54 was marked for
4	identification.)
5	ALJ LIRAG: All right. Are these for
6	various witnesses? I just wanted to clarify.
7	MS. GANDESBERY: This is for witness
8	Teresa Hoglund.
9	ALJ LIRAG: All right. So if it's a
10	singular witness, let's identify which
11	witness' testimony or rebuttal testimony or
12	workpapers that is. If it's various
13	witnesses, let's also indicate that, for
14	clarity. Thank you.
15	ALJ LAU: Okay. So Exhibit 55 are
16	rebuttal testimony post test year ratemaking.
17	(Exhibit No. 55 was marked for identification.)
18	rucher ruchen,
19	MS. GANDESBERY: Yeah.
20	ALJ LAU: And Exhibit 51 through 55 are
21	sponsored by various witnesses.
22	ALJ LIRAG: Let's go off the record.
23	(Off the record.)
24	ALJ LAU: Back on the record.
25	Ms. Gandesbery, do you want to
26	clarify the witnesses for Exhibit 53?
27	MS. GANDESBERY: Yes.
28	ALJ LAU: Do you want to use the mic

1	for the reporter?
2	MS. GANDESBERY: Yes. Thank you, your
3	Honor. I'm clarifying that, for Exhibit 53,
4	the witnesses are for Chapters 1 and
5	Chapter 2 are is Teresa Hoglund.
6	Chapter 3 is Pei Sue Ong.
7	ALJ LAU: PG&E, do you move the
8	Exhibits 51 through 55 into the record?
9	MS. GANDESBERY: Yes, your Honor.
10	Thank you.
11	ALJ LAU: Are there any objections from
12	the other parties?
13	MS. SHEK: No, your Honor.
14	ALJ LAU: Hearing none, Exhibits 51
15	through 55 are moved into evidence.
16	(Exhibit No. 51 was received into evidence.)
17	(Exhibit No. 52 was received into
18	evidence.)
19	(Exhibit No. 53 was received into evidence.)
20	(Exhibit No. 54 was received into
21	evidence.)
22	(Exhibit No. 55 was received into evidence.)
23	
24	ALJ LIRAG: Let's just clarify for the
25	record that Exhibit 53 for those two
26	witnesses and then all the various witnesses
27	that are sponsoring these exhibits, these are
28	witnesses where cross had been waived. Is

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1	that correct?
2	MS. GANDESBERY: Well, cross has been
3	waived for Teresa Hog Hoglund. Pei Sue
4	Ong does have some cross still.
5	ALJ LIRAG: Right. But, this portion
6	has been waived?
7	MS. GANDESBERY: But, not on these
8	exhibits, correct.
9	ALJ LIRAG: All right. So all the
10	exhibits from various witnesses contain
11	sections wherein cross had been waived?
12	MS. GANDESBERY: Yes.
13	ALJ LIRAG: All right. So I just
14	wanted to clarify that. All right.
15	MS. GANDESBERY: Thank you.
16	ALJ LIRAG: Judge Lau?
17	ALJ LAU: All right. So that concludes
18	today's hearing. Thank you. Off the record.
19	(Whereupon, at the hour of 2:49 p.m., this matter having been
20	continued to 9:30 a.m., September 27, 2019 at San Francisco,
21	California, the Commission then adjourned.)
22	adjourned.)
23	* * * *
24	
25	
26	
27	
28	

1	BEFORE THE PUBLIC UTILITIES COMMISSION
2	OF THE
3	STATE OF CALIFORNIA
4	
5	
6	CERTIFICATION OF TRANSCRIPT OF PROCEEDING
7	I, ANDREA L. ROSS, CERTIFIED SHORTHAND REPORTER
8	NO. 7896, IN AND FOR THE STATE OF CALIFORNIA, DO
9	HEREBY CERTIFY THAT THE PAGES OF THIS TRANSCRIPT
10	PREPARED BY ME COMPRISE A FULL, TRUE, AND CORRECT
11	TRANSCRIPT OF THE TESTIMONY AND PROCEEDINGS HELD IN
12	THIS MATTER ON SEPTEMBER 25, 2019.
13	I FURTHER CERTIFY THAT I HAVE NO INTEREST IN THE
14	EVENTS OF THE MATTER OR THE OUTCOME OF THE PROCEEDING.
15	EXECUTED THIS SEPTEMBER 28, 2019.
16	
17	
18	
19	
20	Andrew Toss
21	ANDREA L. ROSS CSR NO. 7896
22	OSK NO. 7000
23	
24	
25	
26	
27	
28	

1	BEFORE THE PUBLIC UTILITIES COMMISSION
2	OF THE
3	STATE OF CALIFORNIA
4	
5	
6	CERTIFICATION OF TRANSCRIPT OF PROCEEDING
7	I, REBEKAH L. DE ROSA, CERTIFIED SHORTHAND
8	REPORTER NO. 8708, IN AND FOR THE STATE OF CALIFORNIA,
9	DO HEREBY CERTIFY THAT THE PAGES OF THIS TRANSCRIPT
10	PREPARED BY ME COMPRISE A FULL, TRUE, AND CORRECT
11	TRANSCRIPT OF THE TESTIMONY AND PROCEEDINGS HELD IN
12	THIS MATTER ON SEPTEMBER 25, 2019.
13	I FURTHER CERTIFY THAT I HAVE NO INTEREST IN THE
14	EVENTS OF THE MATTER OR THE OUTCOME OF THE PROCEEDING.
15	EXECUTED THIS SEPTEMBER 28, 2019.
16	
17	
18	
19	
20	Debutal & Dhara
21	REBEKAH L. DE ROSA CSR NO. 8708
22	CSK NO. 0700
23	
24	
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	<b>\$80.3</b> 1213:28	<b>14,000</b> 1115:8,27	<b>2-36</b> 1213:22
<b>\$</b>		1116:13 1138:24 1162:25,26	<b>2-44</b> 1192:4 1216:2
<b>\$10,000</b> 1121:7,17	1	<b>14th</b> 1149:25 1150:1	<b>2-8</b> 1141:12
1122:10 1124:28 1169:18	<b>1</b> 1099:9 1117:23	<b>15</b> 1110:6 1175:26	<b>2-9</b> 1117:1,2 1213:14,23
\$100,000 1193:23	1149:15 1150:4 1155:12 1156:8,17	1176:3,8 1189:27	<b>20</b> 1097:8 1138:13
	1158:23 1168:20	1200:10	1140:13 1149:7 1200:22 1220:11
<b>\$1000</b> 1121:6	1170:6	<b>15-minute</b> 1135:16	<b>20,000</b> 1201:2
<b>\$103.5</b> 1213:27	<b>1,000</b> 1116:8 1122:6,13	<b>16</b> 1192:7 1198:7 1200:11	<b>2014</b> 1110:12 1148:22
<b>\$12</b> 1210:10,15	1124:19 1163:25 1169:9	<b>16,000</b> 1133:23	1149:25 1150:1
<b>\$180,000</b> 1199:10	<b>1,000-dollar</b> 1122:14	•	1154:11
<b>\$181,000</b> 1197:4,18	1124:13,24	<b>17</b> 1141:16 1183:9,10 1198:2,3 1200:11	<b>2015</b> 1184:5
<b>\$186,000</b> 1193:22 1194:1 1195:26	<b>1,244</b> 1192:9,16	<b>18</b> 1198:7,24	<b>2016</b> 1193:14 1198:4,26
<b>\$2,000</b> 1121:10,14	1213:8,25	<b>180</b> 1198:3	<b>2017</b> 1099:4 1106:18
1123:27 1124:1	<b>1-A</b> 1139:24	<b>19</b> 1182:14 1192:7	1109:17,28 1110:13,22, 27 1111:4 1112:11,16,
1128:26 1167:7 1168:23 1169:24	<b>1-C</b> 1118:1	<b>1:15</b> 1177:24	26,28 1113:6 1114:9
\$2,000-per-unit	<b>10</b> 1110:6 1146:3,4,9 1175:17 1192:3 1195:1	<b>1:18</b> 1177:25 1178:1	1164:14,16,17 1179:6 1180:7,22 1182:23
1166:20	1213:18,19 1215:21,22,		1183:18,25 1186:2,4,26
<b>\$2,080</b> 1165:11	24 1216:3	2	1187:17,27 1190:14,19 1191:16,24 1192:9
<b>\$2.4</b> 1137:14	<b>10,000</b> 1115:6,26 1116:3,5,6 1121:18,20	<b>2</b> 1150:13 1155:13	1193:17,18 1194:23
<b>\$202</b> 1198:14	1123:15 1124:4,19	1175:18 1176:1	1195:11,12,22,24 1197:3,17,28 1198:12,
<b>\$22.458</b> 1113:6	1125:25 1126:3 1138:23 1140:4,7,8,13,	1198:22	24 1199:10,28 1200:5,
<b>\$232,000</b> 1199:16	16,19 1141:1,2,19	<b>2,000</b> 1121:18 1169:13	6,22,27 1201:3,10 1206:21 1208:14
<b>\$28,579</b> 1113:23	1159:16,20,26 1160:2 1162:25 1163:17,24,25	<b>2,000-dollar</b> 1121:26	1210:9,24 1214:16,28
<b>\$28.6</b> 1132:27	1166:24 1167:11,19	<b>2,080</b> 1169:11	1215:6 1216:6
<b>\$29</b> 1132:26 1133:4,6,8	1169:9 1172:3	<b>2,262</b> 1215:5	<b>2017's</b> 1182:12
<b>\$30,000</b> 1200:24	<b>10-8-18</b> 1131:27	<b>2,600</b> 1136:22	<b>2017-through-2019</b> 1116:17
<b>\$480</b> 1112:22 1164:15	<b>100,000-dollar</b> 1194:3	<b>2,800</b> 1136:22	<b>2017/2019</b> 1181:4
<b>\$56</b> 1210:25	<b>1013</b> 1217:7	<b>2-13</b> 1178:20	<b>2018</b> 1099:4 1113:16,
<b>\$59.243</b> 1112:13	<b>10:45</b> 1135:16	<b>2-15</b> 1194:14	20,23,27 1114:9
<b>\$600</b> 1164:24 1165:12	<b>10K</b> 1120:14 1131:12	<b>2-17</b> 1198:18,23	1133:12,15,19 1136:1, 5,18 1139:10 1164:16,
<b>\$620</b> 1113:27 1164:18	<b>11</b> 1145:28 1146:1	<b>2-18</b> 1183:23	18 1182:13 1183:11,14
<b>\$639</b> 1164:17	1175:17	<b>2-19</b> 1190:2	1193:18,20,21 1198:3, 12
<b>\$8,000</b> 1120:13	<b>11:50</b> 1177:25	<b>2-2</b> 1194:14	<b>2018/2019</b> 1183:20
1121:18	<b>12</b> 1114:24	<b>2-21</b> 1192:20 1194:28	<b>2019</b> 1097:2 1109:18
<b>\$80</b> 1119:18,25 1120:13	<b>123,307</b> 1109:19 1114:6 1119:4 1162:7	1201:27	1112:11,16 1114:5
1125:26 1128:2 1130:10 1166:17	<b>14</b> 1154:11 1175:23	<b>2-23</b> 1206:24 1208:9	1116:3,6,9,16 1117:5, 18,19 1118:3,7 1119:3,
1168:11,12	1196:13 1199:28	<b>2-3</b> 1198:15,23 1199:3 1208:28	19,26 1120:13 1125:26
	1215:19	1200.20	1127:8 1130:27

Index: \$10,000..2019

1132:23 1133:20,21		9 1109:7,10 1112:9	<b>600</b> 1217:4
1138:14 1139:25	3	1172:17	<b>6121</b> 1174:8
1140:12,20 1141:20,28 1144:15 1163:25	<b>3</b> 1145:27 1181:14,23	<b>44</b> 1099:7,26 1117:22 1156:7 1170:7 1172:18,	<b>620</b> 1165:15
1166:11,17 1167:1,19 1179:6 1180:8 1183:11,	1194:16 1197:8,12,14	24,27 1173:4,6	<b>639</b> 1113:12 1165:15
14 1192:10,14 1198:24	1198:23 1199:4,9 1205:14	<b>45</b> 1099:10,27 1142:14	<b>640</b> 1165:15
1206:21 1210:9,24	<b>3,275</b> 1215:7	1172:27,28 1173:5,8 1201:27 1205:19	<b>668</b> 1213:9 1214:3,14
<b>202</b> 1198:24	<b>3,500</b> 1122:7		1215:12 1217:5
<b>2020</b> 1115:10,19,27,28 1116:7 1119:20	<b>30</b> 1150:21 1152:9	<b>45,000</b> 1110:12,27 1111:4 1164:7	7
1127:23 1163:20,25	1164:23	<b>457</b> 1215:1	
1164:2,24 1167:5,11 1171:24 1172:7	<b>30,000</b> 1201:17	<b>46</b> 1099:11,13,25	<b>7-A</b> 1193:12 1194:21
1197:19 1199:13	<b>31.4</b> 1137:10	1100:1 1148:9 1172:19,	<b>700</b> 1214:2,5
1200:23 1201:17 1214:8,22 1215:1	<b>33</b> 1200:17 1201:13	27,28 1173:5,10 1218:15	
1214.8,22 1213.1	1205:14	<b>46,050</b> 1113:19	8
<b>2021</b> 1116:8 1163:25	<b>33,570</b> 1110:11	<b>47</b> 1174:14,16 1180:13	<b>8</b> 1195:2
1164:2	<b>35,154</b> 1112:28	1218:20,25,27	<b>80</b> 1120:20 1121:20
<b>2022</b> 1164:3 1171:24 1215:1	<b>350</b> 1215:2	<b>48</b> 1174:18,20 1190:7	1127:7,17,18 1128:17,
<b>203</b> 1208:19	<b>36</b> 1150:24 1154:14,26, 28 1155:22 1183:23	1218:25,28	19 1166:18,24 1167:10
<b>204</b> 1198:14,25	<b>37</b> 1184:10 1196:26	<b>49</b> 1174:22,24 1193:9 1194:20 1218:26	<b>8000</b> 1134:3,17 <b>87</b> 1193:9
<b>21,000</b> 1163:22	<b>37's</b> 1184:14	1219:2	<b>87-1</b> 1099:8 1117:23
<b>21,766</b> 1116:18	<b>37,000</b> 1138:15,27	<b>4AM</b> 1197:3	1156:9
<b>210</b> 1198:8	1139:9	<b>4th</b> 1219:17	<b>87-5</b> 1099:11 1142:15
<b>215</b> 1198:8	<b>39</b> 1175:26 1176:5 1190:2	5	<b>87-7</b> 1174:23 1193:10 1194:20
<b>220</b> 1198:3,4	<b>39-C</b> 1176:11	F 11.44.00.1100.0	<b>89-2</b> 1174:15 1180:14
<b>23,000</b> 1164:7		<b>5</b> 1144:28 1160:6 1182:8 1183:3	<b>89-4</b> 1174:19 1190:9
<b>230</b> 1198:4	4	<b>5,200</b> 1136:21	<b>89-6</b> 1174:27 1208:22
<b>232,000</b> 1197:20	<b>4</b> 1116:23 1181:26	<b>50</b> 1174:26 1175:1	03-0 1174.27 1200.22
<b>24,000</b> 1115:11	1190:4 1191:3 1194:16,	1208:9,21 1218:15,20,	9
<b>25</b> 1097:2	22	26 1219:3	0 4440:45 00 4450 10
<b>26</b> 1176:18	<b>4-24</b> 1145:20	<b>500</b> 1202:8	<b>9</b> 1149:15,26 1150:13 1175:20,22 1176:3
<b>26th</b> 1219:10	<b>4-25</b> 1114:25	<b>5200</b> 1133:11	1195:1 1213:22
<b>27</b> 1192:14	<b>4-28</b> 1109:28	<b>536</b> 1192:11 1213:9,28	<b>9-10</b> 1201:4
<b>27,000</b> 1201:11	<b>4-A</b> 1190:12	6	<b>9-12</b> 1196:14 1200:18
<b>27th</b> 1219:19,24 1220:1	<b>40</b> 1218:16		1201:5,6
<b>28,000</b> 1200:22	<b>42</b> 1192:24,25	<b>6</b> 1116:21 1141:8,15 1175:26 1176:1,7	<b>9-13</b> 1215:17
<b>29</b> 1202:2	<b>42,103</b> 1114:9	1178:13 1182:8 1183:3,	<b>9-15</b> 1215:16
<b>29,000</b> 1134:27	<b>429</b> 1216:1,3	22 1192:19 1194:14,28	<b>9:40</b> 1097:2
<b>2K</b> 1131:13	<b>43</b> 1098:28 1099:4,5	<b>6-28-2019</b> 1099:19	
-	1100:8 1107:17 1108:3,		

Index: 202..9:40

	acknowledges	1208:14 1209:8	1170:13,15 1172:14,15,
A	1151:2,9 1152:13	affordability 1176:2	16,21,24,27 1173:2,4,
<b>a.m.</b> 1097:2 1177:25	Acquisition 1184:6	<b>afraid</b> 1200:15	12,15,17,23,27 1174:4, 10,18,22,26 1175:3
	activity 1142:23 1197:2	<b>afternoon</b> 1178:1,10,	1176:10,14 1177:16,17,
abnormal 1205:1	<b>actual</b> 1165:4	11	19,22 1178:4 1179:16 1186:20,22 1206:25
above-ground 1123:7	<b>add</b> 1125:4	agenda 1099:15,18	1207:8,18,28 1208:5
<b>Abranches</b> 1097:14,15 1098:2,8,12,14,17	<b>added</b> 1182:8	ages 1203:14	1211:2,6,8 1213:7,10,
1105:20,21 1106:7	addition 1106:17	<b>agree</b> 1156:3 1179:9	20 1214:12,18 1215:19, 25,27 1216:10,14
1107:8,28 1112:17	additional 1106:2	1192:26 1193:26	1217:16,22,25 1218:1,
1113:21 1118:18,23 1119:10 1121:27	1120:14 1157:8	agreed 1111:16	5,7,9,10,14,18,23,25
1123:16,17,25 1125:16,	1158:13 1161:10	1154:23	1219:5,18,20,21,23,26, 27,28 1220:1,3,19,26
28 1126:25 1127:12	1165:3 1181:9 1183:19	agreeing 1127:4	
1128:18 1129:3,5,16,17	1202:20 1204:26 1207:15,17	1150:15	<b>allocated</b> 1121:12,13 1138:23
1131:8,19 1132:1 1133:1 1136:16		agreement 1142:25	
1137:12 1139:28	address 1097:22	1143:2,11,14,18,19,26	allowed 1206:12
1140:28 1141:5	1108:10 1163:17 1169:15 1174:6	1144:4,8 1145:6	alluded 1126:5
1161:20 1162:8,13,17, 21 1164:20 1165:23	1203:23 1204:17	1146:16,24,28 1147:4, 11,14,19,22 1148:6,11,	alludes 1156:24
1166:8,9,12 1170:4,8,	1206:4,9 1207:9,21 1218:8	17,21 1149:4,7,10,22	alluding 1121:22
18,19 1173:18,20,23,26 1178:16 1179:18,24	addressed 1153:13	1150:1,5,22 1151:3,12, 28 1153:10,23,26	alternative 1126:13
1192:22,23 1194:24	1154:5 1162:16 1202:5,	1154:11 1155:5,16,23	amended 1142:25
1208:17,24,25 1209:11,	10 1203:9,19,21	1156:2 1172:24	1143:2,26 1144:7
28 1213:14,19 1215:18	1204:15,21 1205:11,21	agreements 1099:16	Amendment 1155:12,
1218:6,12,13 1219:5	addresses 1098:15	1148:11	13
Abranches' 1208:11	1178:25 1202:27	agrees 1103:2 1154:3	amendments 1155:9
<b>Absent</b> 1143:18,19	1207:2	ahead 1111:13 1125:22	amount 1111:3
access 1123:2 1128:10	addressing 1179:11	1183:7 1184:26	1183:17 1202:15
1145:12 1147:10,20	1202:11 1203:1 1204:5 1208:3 1211:18	1219:28	1210:9,24 1214:7
1162:26 1163:2,9		<b>air</b> 1189:28	amounts 1210:5
1167:7,24 1168:24 1169:18 1189:18	<b>adequate</b> 1157:23 1159:23 1160:1	<b>alert</b> 1152:3	<b>Andrew</b> 1098:2,14
accessed 1188:14	adjust 1127:14,16	<b>ALJ</b> 1098:10,19 1099:7,	1173:18,20
account 1114:8	adjustment 1111:15	18,24 1100:3,21,25	<b>Andy</b> 1156:13 1217:3
1133:19	ADMINISTRATIVE	1101:14,23 1102:2,8,	announcement
accountability	1097:6	12,15 1103:4 1104:6, 11,23,27 1106:9,24,28	1186:19
1113:17	admissibility 1108:10	1108:2,28 1109:12	<b>annual</b> 1110:9
accurate 1190:20	admission 1109:6	1111:20 1112:2,6 1121:24 1125:8,11,17	<b>answers</b> 1144:28
accurately 1155:28	admit 1172:18	1128:15 1135:9,12,19	anticipated 1141:24
achieve 1195:17	<b>admitted</b> 1108:4,7	1140:26 1141:9 1145:15,18,23 1146:1,	1142:24
1196:20	1114:14	5,9,12 1149:15 1151:4,	apologize 1176:13
achieved 1182:26	adopt 1187:3	13,25 1152:15,28	<b>Appendix</b> 1176:7,8
1195:20 1196:24 1201:21	adopted 1105:24	1155:19,26 1156:5,10 1158:17,19 1161:16,18	applications 1184:21
achieves 1119:3	1111:4,6 1112:11	1165:24,27 1166:2	<b>applied</b> 1125:15
1206:7	1139:17 1167:1	1168:28 1169:8,27	1191:9

Index: a.m...applied

<b>applies</b> 1131:10 1207:4,12	attachment 1099:9 1117:24 1118:5 1156:8	<b>based</b> 1103:19 1108:5 1109:10 1119:5	1166:17 1169:16
apply 1207:10,19	1170:6 1174:28 1209:1,	1154:18 1159:7,8,18	<b>bores</b> 1110:11,16 1115:16 1121:16
	6	1161:24 1166:19	1124:6,9 1127:20
approach 1153:1	<b>attempt</b> 1144:18	1183:18 1186:27 1187:2,24 1190:4,13	1138:26 1141:21
approval 1119:2,17	attempted 1136:20	1191:21 1210:18,26	1150:9,18 1153:13
1126:18 1127:14,15	1144:12	<b>basic</b> 1157:25 1206:12	1154:1 1160:4 1166:21, 22,23
approved 1118:6,9	Attempting 1128:12	basically 1133:15	<b>bottom</b> 1112:18
approximately 1115:6,8,27 1116:7,13,	<b>attempts</b> 1128:23	1160:28 1188:23	1113:3,9 1114:28
19 1117:13 1138:14	1133:23,28 1134:6	1196:18 1212:1	1130:22 1131:10
1168:23 1200:24	1135:8 1144:17	<b>basis</b> 1124:4	1132:25 1137:10 1139:24,25 1149:16
1214:3,5	attention 1141:16	<b>begin</b> 1107:12	1150:13 1160:5
<b>area</b> 1115:15 1202:25	attributed 1153:18	beginning 1195:1	1170:23 1171:2 1213:24
<b>areas</b> 1115:18	authorized 1099:3	1202:1	<b>box</b> 1166:16
arguing 1104:2	1107:12 1109:17 1112:14,15 1179:5	<b>begins</b> 1178:19	
arithmetic 1100:24	1192:9,16 1208:16	<b>behalf</b> 1220:15	boy 1190:25
1102:27	1210:17,23	benefit 1120:23	<b>BPR</b> 1138:10,11,27 1171:5
arithmetically 1101:6	average 1198:12,24	benefits 1120:17	break 1097:11 1135:13,
<b>arm</b> 1124:2,5 1126:11 1138:26	<b>aware</b> 1155:7 1168:12, 15 1173:23	<b>big</b> 1212:27	16 1160:16 1177:18,23
<b>Arnold</b> 1220:5	awareness 1129:27	biggest 1204:25	<b>breaks</b> 1135:14
arrangement 1104:5		1208:1	<b>briefs</b> 1104:2,18
arrive 1114:6	В	<b>bit</b> 1097:11 1102:21 1104:25 1114:23	<b>bring</b> 1130:15
articulated 1121:5	hook 1104:07 1110:0	1130:22 1135:10	<b>bringing</b> 1189:22
	<b>back</b> 1104:27 1112:8 1125:21 1126:10,11	1136:26 1159:3 1188:18 1215:11	broken 1209:2 1211:14
asks 1190:12	1129:26 1135:12,16,19,		brought 1126:14,17
<b>aspect</b> 1106:25	26 1141:7 1145:18 1146:10 1150:4 1156:6	<b>blended</b> 1194:4,9,12, 17 1197:1,7	1130:15
<b>aspects</b> 1185:19,21	1157:19 1158:19	blended-unit 1165:7	<b>bucket</b> 1188:15
assessment 1123:13	1159:9 1160:19,27		1189:13,24
<b>asset</b> 1127:8	1165:3 1166:2,9 1170:15 1173:17	blockages 1143:10	<b>budget</b> 1121:12
<b>assume</b> 1098:10,21	1177:22 1178:4	<b>blue</b> 1146:6	budget allocated
1			_
1182:20	1179:20 1183:21	<b>body</b> 1105:10	1193:21
assumed 1116:2	1184:4 1185:18	body 1105:10 Bollinger 1174:8	budget-setting
<b>assumed</b> 1116:2 1180:26 1181:6		•	
<b>assumed</b> 1116:2 1180:26 1181:6 1182:23,25 1186:5	1184:4 1185:18 1186:22 1187:17 1194:19,27 1195:14 1196:11 1198:2	Bollinger 1174:8 bore 1099:2 1106:11, 12,15,17 1107:9,13,20	budget-setting 1193:18 budgetary 1192:27
<b>assumed</b> 1116:2 1180:26 1181:6 1182:23,25 1186:5 1191:11	1184:4 1185:18 1186:22 1187:17 1194:19,27 1195:14 1196:11 1198:2 1199:14 1201:26	Bollinger 1174:8  bore 1099:2 1106:11, 12,15,17 1107:9,13,20 1109:16 1110:6,8	budget-setting 1193:18 budgetary 1192:27 1193:3,5,25
<b>assumed</b> 1116:2 1180:26 1181:6 1182:23,25 1186:5 1191:11 <b>assuming</b> 1097:24	1184:4 1185:18 1186:22 1187:17 1194:19,27 1195:14 1196:11 1198:2	Bollinger 1174:8 bore 1099:2 1106:11, 12,15,17 1107:9,13,20	budget-setting 1193:18 budgetary 1192:27
<b>assumed</b> 1116:2 1180:26 1181:6 1182:23,25 1186:5 1191:11	1184:4 1185:18 1186:22 1187:17 1194:19,27 1195:14 1196:11 1198:2 1199:14 1201:26 1211:6,9 1213:7	Bollinger 1174:8  bore 1099:2 1106:11, 12,15,17 1107:9,13,20 1109:16 1110:6,8 1118:3 1119:19,25 1120:12 1121:14 1122:4,5 1127:7	budget-setting 1193:18 budgetary 1192:27 1193:3,5,25
assumed 1116:2 1180:26 1181:6 1182:23,25 1186:5 1191:11 assuming 1097:24 1123:5 1183:12 1187:18 1194:16 assumption 1134:3	1184:4 1185:18 1186:22 1187:17 1194:19,27 1195:14 1196:11 1198:2 1199:14 1201:26 1211:6,9 1213:7 1215:5,27 1217:25	Bollinger 1174:8  bore 1099:2 1106:11, 12,15,17 1107:9,13,20 1109:16 1110:6,8 1118:3 1119:19,25 1120:12 1121:14	budget-setting 1193:18 budgetary 1192:27 1193:3,5,25 budgeted 1209:9 built 1183:13,24 bullet 1118:28 1119:8,
assumed 1116:2 1180:26 1181:6 1182:23,25 1186:5 1191:11 assuming 1097:24 1123:5 1183:12 1187:18 1194:16 assumption 1134:3 1183:8	1184:4 1185:18 1186:22 1187:17 1194:19,27 1195:14 1196:11 1198:2 1199:14 1201:26 1211:6,9 1213:7 1215:5,27 1217:25 1218:18 1220:26	Bollinger 1174:8  bore 1099:2 1106:11, 12,15,17 1107:9,13,20 1109:16 1110:6,8 1118:3 1119:19,25 1120:12 1121:14 1122:4,5 1127:7 1128:10,11,17,19 1129:5 1136:23 1137:3 1138:27 1141:19	budget-setting 1193:18 budgetary 1192:27 1193:3,5,25 budgeted 1209:9 built 1183:13,24 bullet 1118:28 1119:8, 11,15,22 1120:3 1127:5
assumed 1116:2 1180:26 1181:6 1182:23,25 1186:5 1191:11 assuming 1097:24 1123:5 1183:12 1187:18 1194:16 assumption 1134:3 1183:8 assumptions 1190:5,	1184:4 1185:18 1186:22 1187:17 1194:19,27 1195:14 1196:11 1198:2 1199:14 1201:26 1211:6,9 1213:7 1215:5,27 1217:25 1218:18 1220:26 baked 1183:18	Bollinger 1174:8  bore 1099:2 1106:11, 12,15,17 1107:9,13,20 1109:16 1110:6,8 1118:3 1119:19,25 1120:12 1121:14 1122:4,5 1127:7 1128:10,11,17,19 1129:5 1136:23 1137:3 1138:27 1141:19 1148:19 1149:7,9	budget-setting 1193:18 budgetary 1192:27 1193:3,5,25 budgeted 1209:9 built 1183:13,24 bullet 1118:28 1119:8,
assumed 1116:2 1180:26 1181:6 1182:23,25 1186:5 1191:11 assuming 1097:24 1123:5 1183:12 1187:18 1194:16 assumption 1134:3 1183:8	1184:4 1185:18 1186:22 1187:17 1194:19,27 1195:14 1196:11 1198:2 1199:14 1201:26 1211:6,9 1213:7 1215:5,27 1217:25 1218:18 1220:26 baked 1183:18 barred 1142:6,9,11	Bollinger 1174:8  bore 1099:2 1106:11, 12,15,17 1107:9,13,20 1109:16 1110:6,8 1118:3 1119:19,25 1120:12 1121:14 1122:4,5 1127:7 1128:10,11,17,19 1129:5 1136:23 1137:3 1138:27 1141:19	budget-setting 1193:18 budgetary 1192:27 1193:3,5,25 budgeted 1209:9 built 1183:13,24 bullet 1118:28 1119:8, 11,15,22 1120:3 1127:5 1128:15 1138:9

Index: applies..bullets

1138:8 1171:3 **cetera** 1137:2 **cleared** 1157:1,6 complete 1129:9 1161:10 1163:4,5 1133:17 1141:21 **business** 1098:15 challenge 1128:28 1144:5 1150:20 1152:8 1130:6 1138:12 1174:6 1129:6 **clearing** 1126:13 1156:20 1157:7 1209:3 1210:6 1128:6 1168:8 challenges 1171:11 1160:17 1162:6 1164:8 close 1135:22 1205:8 1215:2 1217:8 challenging 1141:20 C closed 1205:6 **completed** 1134:7,12 **chance** 1101:8 1136:23 1144:22 **code** 1197:2 calculated 1100:23 **change** 1117:8 1127:6 1150:25 1154:16 1111:24 1112:19 column 1100:19,20 1155:24 1161:24 1152:5 1155:13 1162:1, 1162:3 1163:14 11 1166:16 1167:15 1101:5,18,22 1102:26 calculation 1100:26 1170:11 1171:18 1103:13 1112:10,25 completely 1194:15 calculations 1100:24. 1113:12,16 1114:2,7 **changed** 1101:16 28 1101:4 completing 1128:13 1130:26 1131:25 1111:9.11 1118:15 1132:8,13,18 1133:10 1139:18,26 1202:6 CALIFORNIA 1097:1 1126:18 1155:2 1134:15,27 1136:13 completion 1134:13 1160:20 **call** 1103:9 1122:25 1137:17 1149:28 1157:11 **complex** 1184:6 changing 1118:3 **columns** 1135:7 1207:5 1212:19 1119:12 1127:26 complicated 1209:20 1162:16 Commission 1099:15. **called** 1098:2,5 1174:1 complication 1129:10 22 1103:22 1142:27 1184:12 **Chapter** 1116:23 1148:13 1204:17 1175:18,20,22 1176:1,3 **computer** 1188:24 **calling** 1135:14 1198:22 Commission's 1181:23 1182:7 conceded 1165:9 1099:19 cite 1104:14 1145:13 Calvert 1219:16 concentrating commit 1171:25 cited 1104:12 1133:27 camera 1123:4 1106:13 committee 1119:2 1157:20,21 1160:7 city 1142:20,25 1146:15 concern 1128:1,4,5 1126:15,16 1129:28 1147:19 1148:18 1178:27 1179:4 **Canyon** 1174:8 1132:4 1194:22 1205:5 1149:11 1150:16 **concerns** 1178:26 capital 1208:16 committing 1171:28 1153:20,27 1154:5,24 1209:25 1210:21,24 1155:5,14 conditions 1121:25 communicate 1188:28 1122:12,13,16 1159:7 **captured** 1133:14 city's 1153:17 communicates 1160:19 care 1220:11,23 clarification 1099:25 1188:24 conducting 1144:21 1140:9 **carried** 1133:18 **Community** 1219:13, conference 1186:19 clarifies 1214:24 14 **carrying** 1131:13 confidence 1157:23 1171:15 **clarify** 1106:10 1108:3 commute 1188:23 1136:25 1146:19 confidential 1176:5 case 1111:6 1125:24 company 1098:3,5 1147:4 1215:28 1132:12,19,27 1133:10 1132:10 1159:15 configuration 1189:6 1134:27 1136:14,17,22 clarifying 1197:16 comparable 1197:13 confirm 1110:21 1137:7,9,15,28 1141:15 **clarity** 1137:2 1175:13 1171:4 1186:26 1216:4, **compared** 1166:22 7 1220:18 **clause** 1150:5 confirmed 1139:21 compares 1200:7 cases 1165:2 **clear** 1109:15 1117:28 confirming 1139:27 comparing 1132:24 1122:4,7,9,11 1123:9 1180:21 catastrophic 1212:24 1197:17 1199:12 1126:7 1128:5 1143:10 1209:7 confuse 1151:21 catch 1199:2 1147:2 1160:28 1161:12 1167:24 comparison 1107:20 confused 1215:11 causing 1212:9 1200:6 **clearance** 1122:7,25, conjunction 1126:6 center 1188:25 1189:1 26 1124:23 Comparisons 1099:2 1205:12 connect 1188:22 clearances 1144:13 complaints 1189:11

Index: business..connect

<b>connection</b> 1175:26 1216:14	<b>correct</b> 1098:17,18 1101:6 1102:15 1106:3,	<b>costs</b> 1113:11,22 1122:10 1123:10,11,21	1160:4 1163:3,5,8,11, 12 1166:17,21,23
consequence 1212:23,28 1213:1	4,27 1109:20,22 1110:23 1112:17,23,24 1113:1,3,7,8,14,21,24,	1153:17,19 1164:14,28 1165:4,10,11,16 1169:3,8,9 1180:10,23,	1168:17 1169:16 1220:12
consideration 1129:27 1130:10 1136:10	25 1114:1,11 1115:22, 24,28 1116:1,4,15,18, 19 1117:11,12 1118:10 1120:2,8,21 1125:16	25 1181:2,3,10 1182:17,18 1183:25 1186:27 1187:2 1191:21 1193:28	cross-examination 1097:18 1099:1 1100:9 1102:21 1106:8 1107:4 1108:23 1125:19
considerations 1129:18,21,22,25 1130:9 1167:22	1131:2,7,8,19 1132:16, 17 1133:2 1137:13,16, 18 1139:8,20 1140:2	1194:4 1195:3,5,12,16, 20,21,23 1196:21,23 1197:1,22,26,27	1135:20 1174:12 1177:15 1178:5,8 1179:27
considered 1108:5	1148:20 1149:20	1200:3,8,10 1209:8,9	<b>crossed</b> 1135:24
construction 1202:5	1159:19 1162:4,5,12,13 1164:13,19,21 1165:18 1169:6 1170:8 1172:2,9	counsel 1155:11 counted 1134:12	<b>Crosstalk</b> 1125:6 1126:22 1151:8
contact 1147:10	1109.0 1170.8 1172.2,9 1173:2 1177:6 1178:15, 16,21 1180:5 1181:16,	1137:6	<b>Cullings</b> 1219:22,23
contends 1193:2	17,24,27,28 1183:16	counting 1181:12	<b>current</b> 1119:5 1139:25 1192:14
contention 1192:26	1184:19 1186:1 1187:5 1189:9 1192:13	County 1149:12 couple 1101:15	customer 1147:11,12
<b>context</b> 1120:27 1121:2 1162:23 1199:24	1194:24 1199:11 1201:18,21 1205:26 1208:17 1209:4	1174:11 1211:2 1218:11	<b>customers</b> 1143:8 1147:5,6,9 1202:8
<b>contingent</b> 1170:24 1171:8,16	1210:17,19,27 <b>corrected</b> 1153:2	<b>cover</b> 1099:17 1147:20 <b>covers</b> 1147:1	D
<b>continue</b> 1135:20 1151:26 1152:2 1153:5	<b>corrections</b> 1105:15, 16 1106:2 1177:2	create 1204:10 1206:5 created 1100:11	<b>Dan</b> 1097:16 1173:19 1174:1,7
1183:1	correctly 1188:11	1205:10,20	data 1099:8,10
continued 1206:9	correspond 1215:13	<b>crew</b> 1189:23	1117:23,24 1139:22 1142:15 1156:8,20
continues 1205.13  continuing 1115:17 1125:4 1190:1 1195:3	<b>cost</b> 1099:3 1112:12, 14,19,20 1113:5,10,22, 26 1121:6,8,9,14,17,26,	crews 1189:17 criteria 1137:1,5	1157:16 1174:15,19,23, 27 1180:14 1184:6 1188:11 1190:8
contract 1147:19	28 1122:14 1124:1,13, 24 1125:4,27 1127:20 1128:3,24 1131:12	<b>critical</b> 1202:4,9 1203:9,19,21,26	1193:10 1194:19 1208:20,22,27 1209:12
contractors 1160:8,13 1161:12	1126.3,24 1131.12 1132:26,27 1164:15,25 1165:7 1166:23,25	1204:5,15 1205:9,21 1211:18 1212:14,18	<b>date</b> 1150:21 1152:10 1154:21
<b>control</b> 1158:1 1184:6 1188:25 1189:1	1167:3,6,7 1168:12,13, 23 1169:12,14,23	<b>cross</b> 1097:23 1098:20 1099:2 1100:10	<b>dated</b> 1099:19
1205:12	1179:2,14,28 1180:4,6	1101:27 1105:27 1106:10,11,12,14,17	dates 1134:23 1148:26
controversy 1114:15	1181:16,20,21 1182:2, 3,4 1191:18,28 1192:16	1107:3,9,13,20 1108:20	<b>day</b> 1097:8,10 1112:4 1160:18,25 1161:10
conversion 1182:1	1193:22 1194:10 1196:2 1197:3,7,8,18,	1109:2,16 1110:6,8,11, 16 1115:16 1118:3	1218:12
converted 1181:18,21 coordination 1163:3,	19 1198:7,8,14 1199:9,	1119:18,25 1120:12 1121:14,16 1122:4,5	<b>days</b> 1097:8
11 1165:1 1168:4	10,13,21,23 1200:7,14, 22,23,28 1201:9,10,20,	1124:6,9 1127:7,20	deadline 1154:17
1171:12	23 1213:28	1128:10,11,17,19 1129:5 1136:23 1137:3	dealt 1104:23
copper 1203:12	cost-effectively 1124:7,10	1138:26,27 1141:19,21 1148:19 1149:6,9	debris 1122:8 1147:1
<b>copy</b> 1118:6 1149:13	, -	エエテロ・エジ エエテジ・ひ・ジ	gooldod 1117:0
<b>core</b> 1206:5	<b>costly</b> 1189:14	1150:1,9,18 1153:12, 18,21 1154:1 1156:20	<b>decided</b> 1117:8 1187:27 1193:19

Index: connection..decided

1200:2	deny 1109:6	1141:16 1145:13	drawn 1112:27
decides 1172:6	denying 1129:17,24	1175:4,8	<b>drew</b> 1189:11
decision 1117:13,16	department 1121:13	<b>directed</b> 1098:21,22 1166:8 1209:13,15,18	driven 1167:20,23
1118:14 1127:6,15 1129:19,21,22 1130:11	<b>depend</b> 1104:19	directly 1100:17	<b>driving</b> 1167:14
1166:10,15 1167:15	depending 1124:27	1103:5 1149:1 1210:12	<b>due</b> 1188:6
1170:5 1186:8,13 1191:7 1194:20 1195:8, 10,14 1196:22 1199:27	1164:8 1172:4 1198:5 1199:18 1200:12	<b>disagree</b> 1155:12 1156:3	<b>duration</b> 1150:23 1154:13
1203:6 1205:4	<b>deploy</b> 1188:5	discuss 1097:19,24,26	dynamics 1130:7
decision-makers	deployed 1130:4	1107:2 1118:2 1190:17	
1127:10,13 1130:13	deployment 1132:7	discussed 1107:10	E
declining 1181:3	1202:7	1119:27 1155:9 1168:17 1169:8	<b>Earle</b> 1219:22,24
decreased 1214:15	deployments 1187:19	1190:14	earlier 1097:20
<b>decreases</b> 1203:15 1216:26 1217:1	<b>derived</b> 1101:19 1103:18 1113:11,27	<b>discussing</b> 1153:24 1191:1	1108:17 1148:10 1156:25 1204:24
deeper 1164:27 1206:4	deriving 1113:10	discussion 1109:4	<b>ease</b> 1103:24
defects 1147:8	describes 1166:10	1168:2	easier 1102:21
defending 1203:5	describing 1118:28	discussions 1108:5	easily 1103:28 1188:14
defer 1192:1 1196:22	<b>description</b> 1124:12 1156:19	dishes 1202:22	education 1124:22
1200:2 1203:6 1204:14		dispute 1180:5	effect 1127:16 1168:23
<b>deferred</b> 1105:11,26 1106:18,23,25 1107:11	<b>design</b> 1184:12 1190:5, 12,17 1191:2,7,8,11	disputing 1210:14	effective 1150:21
1179:5 1180:2 1192:1,	1201:24	distributed 1174:12	1152:10 1169:19,21
27 1193:13 1198:13,22 1202:11 1203:6,22	designed 1203:23	<b>distribution</b> 1175:19 1184:23 1210:5,23	1197:11
1204:4 1205:24	<b>desire</b> 1110:17	1211:14 1211:14	<b>effectively</b> 1128:24 1183:24
1206:15 1211:24 1213:4 1214:22	<b>details</b> 1111:10	divided 1112:21	efficiencies 1180:26
1215:12 1216:6,15	determine 1107:1	dividing 1112:20	1181:7 1182:20,22,25
1217:12	1109:2 1191:8 1216:11, 19	division 1102:14	1183:12,17,20,24,26 1184:3,11 1186:5
<b>deferring</b> 1193:6 1205:20	determined 1112:20	1103:1	1198:15,25
define 1211:11	1191:10	document 1099:13 1100:14 1101:19	efficiency 1182:28
defined 1211:11,17	device 1200:20,21	1100:14 1101:19	1201:23
1212:15	1201:9	1109:3,25 1114:19 1117:20 1118:8,12,27	effort 1142:16
definition 1185:19	<b>difference</b> 1166:19 1182:16	1117.20 1118.8,12,27	<b>elaborate</b> 1129:12 1162:14 1167:27
1203:26	difficult 1189:12	1124:8 1125:21,22 1126:4,5 1127:3,4,5	elaborated 1168:3
definitive 1171:28	difficulties 1167:21	1128:20,22 1130:21,23	<b>Electric</b> 1098:2,5
<b>delay</b> 1193:4 1201:28	1170:12,21 1171:19	1135:26 1139:15,23	eliminate 1110:18
<b>delayed</b> 1128:6 1213:2 1214:2 1217:12	dig 1123:17,18 direct 1098:25,26	1148:8 1149:8 1156:7 1158:6 1170:6,10	1120:18 1128:7,8,13, 17,18 1129:8
delta 1121:17	1100:4 1105:3 1108:14	<b>documents</b> 1108:6 1118:2 1176:5,7 1191:1	eliminated 1167:2,4
<b>denied</b> 1103:28 1109:7 1172:17	1115:21 1116:11 1117:10 1125:24 1130:28 1132:15	dollar 1181:13	eliminates 1119:18 1127:7 1128:12

Index: decides..eliminates

eliminating 1119:25	<b>estimated</b> 1131:12	1171:11,13,19	<b>expense</b> 1209:26
1127:17 1130:20 1156:21,22 1166:16	1164:17,19	execution-related	1210:2
	evaluate 1185:2	1167:21	expenses 1210:1
embodied 1170:6 emerged 1165:1	1195:4 1196:23 1200:3 1212:8	executive 1205:5	<b>experience</b> 1160:15 1187:24
<b>end</b> 1097:20,25 1111:6	evaluated 1157:7	<b>exhibit</b> 1098:28 1099:1, 5,7,10,11,25,26,27	experienced 1160:8,
1112:3 1124:28	1189:20	1100:1,8,10 1103:8	26 1161:4 1179:2,14
1125:13 1149:23	evaluating 1197:24	1104:9 1107:17 1108:3,	1194:2 1195:23
1166:27 1167:9	evaluation 1123:7	9,20,22,26 1109:7,8,10	experiencing 1195:22
1169:23	1185:22 1197:24	1111:25 1112:9 1114:24 1116:21	1196:21
energized 1123:4	evaluations 1185:3	1114.24 1110.21 1117:22 1118:6 1141:8,	<b>expert</b> 1111:26
<b>engage</b> 1142:20		15 1142:14 1145:23,27,	•
1147:12	event 1150:23 1154:13	28 1146:9 1148:9	expiration 1153:8
engagement 1141:22	evidence 1114:14	1156:7 1170:7 1172:17	<b>expired</b> 1148:22
1142:10 1143:6	1140:15 1163:1 1173:6, 8,10 1218:27 1219:1,2,	1173:6,8,10 1174:14, 16,18,20,22,24,26	1151:28
1144:20 1147:5	6,10 1216.27 1219.1,2, 4	1175:1,17,23 1176:1,3,	explain 1101:21,22
engaging 1142:3	<b>exact</b> 1103:26 1111:10	5,7,8,18 1178:13	1120:22,27 1121:4
engineering 1199:19	1138:16 1156:26	1180:13 1183:22	1133:24 1160:10 1169:7 1181:11 1182:9,
ensure 1137:1 1157:1		1190:7 1192:3,19 1193:9 1194:14,20,28	15 1188:18 1206:2
ensure 1137:1 1157:1 1160:3	<b>exam</b> 1107:3	1196:13 1208:19,21	1216:10,18
	examination 1100:4	1213:15,16,19 1215:18,	explained 1101:18
entail 1125:13	1105:3 1121:23 1161:17 1166:6 1175:4,	19,21,22,24 1216:3	1166:18 1169:1
enter 1101:12	8 1211:7	1218:20,25,27,28 1219:2,3	1185:13 1204:8
<b>entered</b> 1149:11	examples 1142:22		explaining 1133:7
<b>entire</b> 1131:5	1146:27	<b>Exhibit-06</b> 1161:26	explains 1111:23
<b>equals</b> 1120:13	excavation 1123:20	<b>exhibits</b> 1097:23 1098:19,20 1105:9,23	explanation 1200:1
equation 1164:6	1144:14,19	1108:7 1172:16,18	explicitly 1130:14
1172:10	<b>exceed</b> 1150:23	1173:4 1174:11,13	1134:10
equipment 1189:17	1154:14	1175:26 1218:8,15	<b>exponent</b> 1156:19,28
• •	exceeding 1208:15	1220:12,23,28	1157:4
equivalent 1197:1	<b>excerpt</b> 1099:12	existed 1121:15	expressing 1151:27
<b>errata</b> 1176:18,19	1101:17 1109:27	existing 1150:8	extended 1154:18
<b>ERX</b> 1200:20 1201:9	1110:24	<b>exists</b> 1127:19	1155:22 1193:2
<b>ERXS</b> 1201:22 1217:15	exchanges 1101:15	1167:10,12 1168:26	<b>extent</b> 1177:9
escalating 1183:10	<b>excludes</b> 1139:9,10	<b>expect</b> 1172:3 1195:19	extrapolate 1124:15
<b>escalation</b> 1180:23 1182:13	<b>Excuse</b> 1205:16	<b>expectation</b> 1195:7, 10,19 1196:8 1210:7	extreme 1122:13
essentially 1132:22	<b>excused</b> 1218:6 1219:6	<b>expected</b> 1132:19,27	extremes 1124:20
established 1155:27	<b>excuses</b> 1173:12	1133:10 1134:13,27 1137:15 1159:13	F
establishes 1150:24	<b>executed</b> 1155:14,15	1162:2 1164:23 1171:4	-
1154:15 1155:23	execution 1124:2,5	1180:26 1184:11	facilities 1122:28
estimate 1163:21	1126:10 1128:25	<b>expects</b> 1192:10	1123:1,3 1142:11
1166:20,25	1138:25 1144:16	<b>expend</b> 1169:18	fact 1139:21 1157:14

Index: eliminating..fact

3cptclibe1 23, 201			
1184:27 1197:26	1196:6,9	forge 1103:25	gas 1098:2,5 1122:27
facts 1101:1 1177:5	<b>finding</b> 1170:24	formal 1150:7	1149:6,9 1150:8,18 1175:19,20 1176:4
factual 1104:12	fine 1104:4 1111:27	<b>forward</b> 1147:15	1188:21,24 1189:1
<b>failed</b> 1124:24 1179:3,	1112:2 1152:25 1165:13 1220:14	1167:3,6 1171:22 1200:8	1210:5,22 1211:13  gateway 1188:28
fair 1104:7 1123:13,14,	finish 1115:13	<b>found</b> 1137:4 1169:17	1189:4,10,16,26
18 1124:11,20 1134:18,	finished 1138:5 1180:1	foundation 1100:13	gather 1123:10
19 1139:16 1144:10 1153:14 1155:17	<b>FIT</b> 1194:25	1204:10	<b>GDCC</b> 1202:6
1155:14 1155:17 1159:14 1182:5 1203:10	FIT-GOV 1194:22 1205:4	<b>fourth</b> 1100:20 1207:3, 20	gee 1209:23
fairly 1109:3 1155:27	<b>fix</b> 1142:4	frame 1154:27	general 1159:4
fall 1134:1	<b>fixing</b> 1142:6	Francisco 1097:1 1099:14,22 1115:7,10,	<b>generally</b> 1123:20 1134:17,20 1207:14,23
<b>February</b> 1117:13,16,	<b>flip</b> 1149:23	14,26 1125:25 1126:3,7	gentlemen 1098:1
19 1118:7 1126:19 1144:15	flow 1160:23	1129:11 1134:1 1135:7, 8 1136:2,6,7,20 1140:5	1107:6 1178:10
<b>fed</b> 1207:26	focus 1107:10 1115:3	1142:21,26 1143:4,15,	<b>give</b> 1136:17 1140:9 1142:22 1157:22,27
feet 1189:23,27	focused 1120:4,11	21 1144:26 1145:7,9,11 1146:23,25 1148:12,18	1174:5 1178:23
felt 1157:2	1167:25 1184:14 1210:6	1149:12 1163:18 1173:1	1204:17 1211:25 giving 1207:14
fewer 1160:9 1191:9	focuses 1184:10	free 1155:12	goal 1156:21
figure 1169:11,13	focusing 1106:24	Friday 1097:27	good 1097:7 1105:5,6,
figured 1210:4	1114:3	1219:16,26,27 1220:1,8	20,21 1107:6,7,8
file 1168:22	follow 1102:19 1203:24	front 1107:21 1110:1,3	1157:22 1161:19,20,21 1175:10,12 1178:10,11
<b>filed</b> 1163:26 1168:16, 22 1191:17	<b>follow-up</b> 1135:27 1206:26	1117:26,27 1180:17 1190:10 1208:23	1197:15
filing 1131:11 1191:25	footnote 1131:9	full 1103:8 1109:2	Goodson 1220:17
1214:16	1168:17,20 1208:18 1209:1	1127:25,27 1157:10 1210:8	<b>gosh</b> 1191:5
<b>final</b> 1171:8,16	footnotes 1100:18	fully 1111:23 1188:4,8	governance 1126:15
finalizing 1142:25	forecast 1106:16	1189:25	governing 1154:22
finally 1168:27 1176:22	1110:26 1115:21	fundamentally	<b>GRC</b> 1107:14 1109:28 1110:22 1119:4,20
finance 1132:1	1163:20 1164:24	1138:23	1127:23,24 1130:24,28
1194:26	1165:6 1169:11 1175:19 1181:1,2	<b>funded</b> 1131:13 1179:5 1206:16	1131:6,11 1164:14 1168:16,22 1171:24
financial 1127:18	1182:16,19 1183:5,14	funding 1111:16	1180:11,22 1182:21
1129:18,25 1130:8,9 1131:17,21 1132:10	1187:18,27 1190:4,13 1193:24 1194:3	1133:5 1205:24	1183:26 1186:26
1135:28 1136:14	1197:19 1198:25	future 1120:15 1150:8	1187:17 1188:6 1190:14,19 1191:16,24
1137:21,27 1138:9 1167:12,16,22 1170:22	1200:23 1201:17 1208:14 1214:8		1192:14 1199:13
1171:1	1216:18 1217:6	G	1208:15 1214:16,22,23, 28 1215:6 1216:20
financials 1130:1,6	forecasted 1216:2	gain 1123:2 1147:9	1217:3
1132:6 1137:27 1138:3	forecasting 1197:27	1160:14	<b>GRCS</b> 1217:7
<b>find</b> 1103:26 1104:17 1114:25 1124:5	1199:14 1216:12	Gandesbery 1220:6,	<b>Great</b> 1114:28 1146:13
1160:17 1169:15,21	forecasts 1180:23	27	greater 1182:27

Index: facts..greater

greatest 1202:27 higher 1138:21 1167:9 implement 1150:6 inspected 1153:13 1204:2 1180:10 1197:28 implemented 1190:6, inspecting 1160:15 guess 1097:15 1104:19 highest 1115:16 18 1191:3,20 inspection 1122:17, 1120:28 1135:23 HISES 1216:24 implication 1130:3,5 22,24 1125:12,14 1187:16 1212:22 1128:11 1137:4 1143:4 1214:19 hole 1123:18 important 1133:3 1147:7 1150:12.17 1151:19 1152:12 guide 1103:6 Honor 1100:6,15 1153:21 1157:2,24 1204:5,20 1205:28 1101:6,20,25 1104:5,9, 1159:11,23,28 1161:7, guys 1218:5 1206:17,20,21 1207:22 8,9 1167:8 21 1105:2 1106:6,14,27 1212:17 1108:16 1111:19 inspections 1109:16 Н **imputed** 1099:2 1123:25 1150:27 1110:10,12,13,14,26 1152:18 1155:18 1111:24 1112:10,14 1115:7,9,11,14,18,26, 1158:12 1165:25 1119:4 1127:26,28 half 1126:24 1127:23 28 1116:3,6,7,8,13 1166:5 1169:26 1170:1 1161:25 1162:6 1118:4 1125:25 hand 1098:1 1173:28 1172:20,23 1175:6 1164:14,27 1182:8,10, 1128:10 1133:17 1176:12 1177:14 11,18 1183:2,8 1209:8 handy 1102:17 1146:6 1134:21 1135:3 1209:10 1217:21 1210:8,17,23 1213:26 1136:11.24 1137:1 hang 1150:3 1206:25 1218:3,22 inappropriate 1101:12 1138:28 1139:19,27 1220:17 host 1191:17 1141:19 1143:20,28 incent 1138:25 1169:22 **happen** 1130:3 1144:3,7,22,26 1145:9, hour 1177:25 1212:24 11 1146:23 1148:19 include 1105:11,25 house 1202:17 1150:20 1152:9 1157:9 1139:18,26 1165:14,16 happy 1152:25 1158:14 1159:21,27 hydraulic 1211:15 **included** 1108:27 hard-wire 1188:26 1160:2,8,14 1161:3 1109:2 1156:8 1162:26 1163:4,5,8,12, headed 1112:10 includes 1099:16 13 1165:17,20 1168:7,8 ı 1131:26 1172:11 including 1117:24 **heading** 1101:16 idea 1101:7 1121:28 inspectors 1160:13 1180:23 1110:6 1118:13 1124:11,20 1157:27 1119:27 1127:6 install 1168:14 1187:9, incorrect 1165:5 ideas 1124:8 1128:16 1130:23 12 1192:9,10 1216:25 increase 1110:9,13 1131:21 1149:8 1217:2,14 identification 1099:5, 1164:23,26 1183:1 health 1151:6,12 26.28 1100:1 1109:27 installations 1185:4 1203:7,8,11,16 1174:16,20,24 1175:1, hear 1152:24 1187:23 installed 1185:4,27 increased 1195:3 17 1213:27 1215:5 1202:1 heard 1124:12 identified 1099:17 1216:27 1217:1,4,10 incur 1195:3 1103:27 1105:8,23 hearing 1097:8,25 installing 1197:12 1106:17,23 1108:4 1112:4 1135:24 independent 1211:15, 1215:6 1217:5,7 1161:26 1216:2 1115:15 1120:19 1153:21 1159:15 1218:25 **instances** 1143:7,8,22 indication 1211:21 1176:20 1205:10 1159:10 hearings 1111:7,14 information 1181:9 **identify** 1110:10 1219:10 integrated 1161:28 1194:26 1203:3 1122:4 1174:13 1176:2 **helpful** 1114:17 1212:11 1216:9,23 1204:24 1212:20 intend 1162:6 1217:9 helps 1103:6 1203:28 initial 1160:17 1161:7 1204:23,27,28 1206:3 intent 1129:8 1184:9 identifying 1150:7 **hesitant** 1204:18 **interest** 1154:4,7 **initially** 1161:12 illumination 1202:19 1195:25 high 1110:15 1111:12 interested 1201:8 **impact** 1119:20 1147:2 1153:11 **inlet** 1212:1,2,12,26 1204:26 Interestingly 1183:2 1160:12,22,23 1188:13 **inspect** 1110:17 impacts 1127:23 1195:24 1196:1 1212:6 internally 1189:12

1206:10

interpret 1156:1 1124:21 1129:10 **leave** 1114:12,16 located 1199:20 1131:7,24 1132:17 1116:17 **interrupt** 1179:21 location 1191:9 1198:6 1133:13 1136:3,25 1184:25 **left** 1118:13 1130:22 1140:9,21 1141:13 locations 1142:28 1134:15 interrupted 1187:22 1145:20 1146:10,13,19 1157:17,20 1158:25,26 1149:17,20 1153:15 legacy 1129:3,4 1163:28 1168:6 investment 1175:20 1155:28 1156:13 1156:20 1169:16 1191:10 involve 1145:12 1159:3 1161:21 1162:5, lengthy 1109:3 **Long** 1097:19 1098:21 1146:28 1147:1,2 18,21 1164:4 1168:3 1099:12,13,21 1100:15, 1169:1 1172:2,9 level 1111:12 1153:11 1187:9 22 1101:21,24,25 1173:12,14 1160:12 1206:4,5,12 **involved** 1102:22 1102:3,9,13,16 1104:4, **Kerans'** 1151:27 1143:8,9 1148:27 **levels** 1129:7 1142:22 17 1106:26,27 1107:3,5 1149:1 1108:21 1109:5,9,13 kind 1101:13 1153:24 Lever 1156:17 1158:23 1111:27 1112:7 1166:25 1207:15 issue 1101:28 1108:11 1160:6 1116:25,27 1123:23 1212:23,27 1216:18 1115:3 1156:22 1125:18,20 1127:1 **levers** 1120:4,11 1157:28 1178:19 kitchen 1202:21 1129:13 1135:21,22 1180:4 1189:28 lexy 1129:2 1141:3,10 1146:2,6,17 knew 1168:24 1210:5 1191:13,14 1192:1 lifted 1103:12,14 1149:18 1151:1,5,10,25 1205:20 1213:2 knowledge 1159:1 1152:1,18 1153:5,6 light 1202:18,21 1177:7 1156:4,6,11 1158:13,21 **issues** 1106:15 1162:9 1164:17 1107:11 1145:12 lights 1202:17 1166:13 1167:13 1160:17 1179:10 L liken 1202:16 1168:20 1169:28 1180:1,3 1186:10,16 1170:1,3,19,26 1187:26 1188:3,4,10 lines 1110:5 1152:4 labor 1123:11,20 1172:18,20 1177:16 1191:28 1207:2,9,22 1191:5,6 1192:7 1195:1 1178:5,7,9 1179:21,25 1217:11,13 lacks 1152:13 Lirag 1097:6 1098:10, 1187:1 1190:25,27 item 1156:16 1160:10 19 1099:7,18,24 large 1169:17 1199:1 1206:25 1208:7 1100:3,21,25 1101:14, 1209:14 1218:14,19,22 items 1114:13 1152:4 largest 1202:14 23 1102:2,8,12,15 1220:13,17 1103:4 1104:6,11,23,27 late 1133:14 **Long's** 1151:18 1153:1 J 1106:9,24,28 1108:2,28 **laterals** 1147:6,10 1109:12 1111:20 longer 1142:24 1112:2,6 1121:24 judge 1097:6 1107:18 **Lau** 1161:16,18 1218:11 1125:8,11,17 1128:15 1161:16 1211:3 1172:14,15 1173:17,23, looked 1114:22 1122:3 1219:28 1220:2 1135:9,12,19 1140:26 27 1174:4,10,18,22,26 1144:14 1148:25 1141:9 1145:15,18,23 1175:3 1177:16,19,22 judgment 1177:11 1185:3 1191:23 1146:1,5,9,12 1149:15 1178:4 1186:22 1211:2, 1151:4,13,25 1152:15, June 1194:22 1199:28 6,8 1213:7,10,20 lost 1200:25 28 1155:19,26 1156:5, 1214:12,18 1215:19,25, Justification/ **lot** 1101:27 1124:16 10 1158:17,19 1161:16 27 1217:16.22.25 background 1119:28 1138:15 1184:7 1165:24,27 1166:2 1218:1,5,9,14,18,23,25 1189:17 1217:11 1169:27 1170:13,15 justify 1179:3,15 1219:5,20,23,27,28 1172:14,16,21,24,27 1220:1,26 lots 1189:19 1173:2,4,12,15 **LAW** 1097:6 K low 1197:25 1176:10,14 1177:17 1179:16 1186:20 lawyer 1148:23 lower 1169:23 1191:18 1206:25 1207:8,18,28 **Kerans** 1097:14 1151:17,22 1196:20,23 1208:5 1211:3 1216:10, 1098:5,9,13,15,18 leads 1190:7 1208:20 lunch 1097:11 1177:18, 14 1218:7,10 1219:18, 1105:5,6 1106:6 21,26,28 1220:2,3,19 23 1107:7,22,27 1109:21 **learned** 1214:16 1110:2 1111:25 1113:2 1215:8 list 1191:23 1114:22,27 1115:2 learnings 1184:8 locate 1122:26,27 1117:2 1118:19,25 1122:15 1123:19 1123:1,3 1124:13

Index: interpret..lunch

M	materialize 1183:27	1210:10,15,25 1213:27, 28	multiply 1121:20
M-E-N-E-G-U-S	materials 1176:26 matrix 1191:7	million-dollar 1120:20 1127:7,17,18	N
1174:8	matter 1102:28	mind 1129:26	names 1098:11
made 1108:22 1110:22	<b>Matthew</b> 1219:15		NCM 1181:15
1117:14 1126:9 1128:23 1162:28 1163:2 1170:5 1194:21	meaning 1152:5 1159:20 1207:4	minute 1129:14 1165:26 1168:11 1217:20	necessarily 1122:16 1137:6
1195:8,11,14 1196:22 1199:28 1205:7	<b>means</b> 1133:24 1136:17	minutes 1218:11 1220:11	necessitated 1158:1
main 1142:23 1179:10 1203:13	meant 1140:12 1142:17	missed 1170:28	necessitates 1141:21 needed 1111:28
maintain 1189:13	mechanisms 1124:5	misspoke 1117:17	1124:27 1143:3,25
maintains 1193:3	meet 1127:25,27 1137:1,5	mitigate 1120:12 1157:17	1145:8 1146:15,24 1147:21 1158:14
maintenance 1188:15	meeting 1099:20	mix 1136:8	1159:1 1188:4,15 1214:15
<b>major</b> 1197:2	1130:16 1194:22	<b>mode</b> 1124:26	needing 1142:20
majority 1139:12	meetings 1205:6	model 1181:16,20,21	1158:26
make 1102:20 1108:22	meets 1132:5	1182:2,3	negotiation 1134:24
1109:14 1117:28 1122:11 1137:2 1177:3	Menegus 1097:16	moment 1138:5	1168:4
1182:3 1184:18,28 1185:10,25	1173:19,27 1174:1,3,7 1175:10,12,13 1176:15, 21,25 1177:14 1178:11,	<b>Monday</b> 1105:22 1106:1 1121:5 1138:12	negotiations 1119:5 1140:22 1148:28 1170:25 1171:8,12,17
<b>makers</b> 1170:5	22 1179:16,22 1180:9	money 1204:17	1172:4
<b>makes</b> 1154:28 1211:26	1186:23 1187:5 1194:6, 9 1196:12,15 1198:17, 18,21 1199:5 1205:16	<b>monitoring</b> 1187:9 1188:20 1200:21	non-critical 1202:11 1203:23
makeup 1216:24	1207:7,12,24 1208:1,10	months 1150:21,24	non-lawyer 1151:28
making 1126:12 1130:11,18,19 1133:16 1144:17,18 1167:26,28 1168:1,5 1186:7,13	1211:13 1213:8 1214:9, 13,25 1215:20,22 1216:8,11,13,21 1218:6 1219:6	1152:9 1154:14,26,28 1155:22 <b>morning</b> 1097:7 1105:5,6,20,21 1107:6,	non-unable-to- access 1168:6 non-uta 1115:27
manhole 1147:1,20,21, 25 1148:1	mention 1161:28 1186:6	7,8 1135:13 1148:25 1161:19,20,21 1175:10,	1116:12 1134:25 1135:1 1165:11
manholes 1148:2	mentioned 1162:10 1194:1	11,12 mounted 1188:13	<b>non-utas</b> 1134:28 1135:2 1138:24 1165:8
mark 1122:27 1123:1	methods 1122:3	1189:2,3,11,27	1167:20
1124:14	1125:14	mounting 1189:21	<b>noon</b> 1097:12 1135:15
marked 1099:5,26,27 1100:1 1107:16	mic 1162:20 1179:17	<b>move</b> 1109:5 1140:6,8 1147:15 1152:20,21,22	<b>normal</b> 1100:24 1159:12
1109:26 1112:9 1114:24 1116:21 1117:21 1142:14	Michael 1098:5,15 Mike 1118:25	1156:4 1180:2 1191:28 1200:16 1218:15,19	<b>note</b> 1124:21 1134:11 1152:2
1148:9 1174:16,20,24 1175:1,16,22,25 1176:17 1208:21	<b>million</b> 1112:13 1113:6, 23 1119:18,25 1120:13 1121:21 1125:26 1128:2,17,19 1130:10	1220:28 moved 1172:18 1197:12 1218:26	<b>number</b> 1099:13 1102:5,7,10,17 1103:26 1106:15 1109:14,16,18,
MAT 1197:2 match 1111:17	1132:26,27 1133:4,6,8 1137:11,14 1166:17,18, 24 1167:11 1168:11,12	<b>moving</b> 1152:10 1167:19	20,22 1110:9,14,25 1111:8,11 1112:12,21, 22,28 1113:12 1114:6,

Index: M-E-N-E-G-U-S..number

7,9 1116:10,12 1122:27 1133:11,22 1134:26 1137:9 1158:11,13,26 1159:5,15 1169:17 1171:27,28 1178:27 1179:3 1182:27 1183:10 1184:2 1193:19 1214:14,28 1216:19,22,26 1217:2, 14 1218:15 numbered 1149:5 numbers 1100:16.18. 23 1101:7,28 1102:23 1103:3,18,19 1112:26 1114:16 1130:26 1131:26 1132:14,24 1136:6 1161:25 1164:2, 12,20,27 1165:14 1180:21 1181:13,18 1182:4,13 1183:3,5,9, 14,18 1197:13 1215:13 1217:3

## 0

oath 1173:24

**object** 1100:25,27 1151:14 1152:16 1155:19,20

objecting 1108:15

objection 1100:26 1101:26 1152:23 1172:28 1173:3 1220:20

objections 1172:21,26 1218:23

objective 1195:17

**observe** 1137:3

obstacles 1148:5

October 1149:25

1150:1 1154:11 1219:17

open 1121:16 1122:9 1123:16

operations 1102:28 1175:21 1176:4

**operator** 1160:26 1161:4

opinion 1151:27 1167:18 1187:24

**opinions** 1177:10

opportunity 1101:2 1135:23

opposed 1147:22 1193:23

option 1122:9

options 1189:20 1195:4 1200:3

order 1114:5 1143:3, 14.26 1144:25 1145:8 1196:23

organization 1128:9 1169:22

organize 1179:27

original 1111:1 1115:23,24 1116:5 1126:2 1130:16,23 1132:25 1138:22 1139:4.7 1140:28 1145:21 1159:23,28 1162:24 1171:18

originally 1126:25 1140:14 1141:18,27 1165:7 1193:23 1194:3

Ouborg 1100:4,6,27 1101:20 1102:27 1104:8,21 1105:1,2,4 1106:14 1108:14,16 1111:19.21 1112:5 1116:23,26 1145:24,25, 28 1146:4,8 1150:27 1151:13,14 1152:7,23 1155:18,20 1158:12,15 1165:24,25 1166:4,5,7 1172:22,26,28 1173:3 1175:3,6,9 1176:11,12, 16 1198:16,19 1209:10 1213:18 1215:21,23 1217:18,20 1218:2,3

Ouborg's 1103:11

outline 1178:24

outlined 1120:26 1135:5

overrun 1166:26 1167:3 1179:28 1191:28

overruns 1179:2,14 1180:4.6

**oversees** 1126:16

**Overview** 1156:19

## Р

p.m. 1177:24,26 1178:1 Pacific 1098:2,5

package 1155:8

packet 1099:16 1149:3

pages 1149:5,7 1158:9 1176:19

**pan** 1197:26

panel 1097:13,17 1098:23 1105:12 1106:21 1107:9,10 1178:14 1219:14

panels 1097:9

paper 1133:27

paragraph 1115:4 1142:23 1150:19 1208:12

parentheses 1118:14 1134:14

part 1097:17 1104:1 1111:22 1128:19 1129:18 1144:27 1146:28 1147:11,14 1186:18 1189:5 1191:24 1192:21 1193:6,16,18 1215:7

participation 1143:6,

**parties** 1141:23,26 1142:21 1150:6 1154:8 1179:19 1220:16

partly 1168:2

**party** 1142:7

passage 1110:27 1115:25

past 1097:12 1135:15

pay 1179:7

Pender 1219:15

pending 1133:11 1134:24 1136:1,5,18 1139:10 1140:22 1217:3

Index: numbered..PG&E

penetration 1182:27

**people** 1212:20

percent 1164:23

perform 1115:5,17 1123:6 1128:10,12 1153:23 1160:14 1163:11 1167:8

performance 1151:3, 11

performed 1122:18 1136:28

performing 1115:13 1129:11 1141:18 1157:5 1167:20

**period** 1116:17 1138:14 1150:26 1155:25 1167:5 1171:25 1179:6 1180:8 1181:4 1182:22 1183:4 1186:26 1192:15 1199:22 1205:25,26 1206:16,22

periods 1160:25

**permission** 1143:3,14, 17

permit 1147:23

permitting 1217:13

person 1118:20 1209:17

personal 1158:28

perspective 1136:15 1137:21

pertain 1176:19

**PG&E** 1107:12 1110:21 1112:15 1114:5.24 1115:5,12,21 1116:2 1117:4,8 1125:22,26 1126:1,2 1128:1,2 1141:25,27 1145:26 1149:11 1150:20,24 1151:2,9 1152:8,13 1154:3,14,19,24,28 1155:5,23 1157:19,23

1163:16 1166:20 place 1102:18,24 portfolio 1131:14,16 1156:27 1214:22 1167:3,26,27 1168:1,5, 1114:18 1148:18 1216:6 portion 1106:22 11,15 1169:10 1171:26, plan 1115:11,20,23 1153:16 1170:20 previously 1105:7 27 1172:6 1174:1 1175:18,28 1176:4 1176:20 1191:11 1116:5,11,16 1117:5,8 1179:3,4,15 1180:5,21, 1118:3,6,9,15 1119:3, 22 1181:2 1183:24 **portions** 1172:25 price 1128:25 12,14,17 1120:17 1184:3,18,22,28 primarily 1118:24 1125:23 1126:2,3,9,13, pose 1154:1 1196:4 1185:2,9,24 1186:2,7, 17,19 1127:6,9,11,14, 1207:12 13,17,23 1187:25 **poses** 1154:3 16,27 1128:21 1130:17, 1190:4,13,17 1191:6,9, **primary** 1129:27 27 1131:3,5,26 position 1100:9 17 1192:8,15,26,27 1147:7 1132:14,15,19,20,25,27 1193:2,3,13 1195:3,9 possession 1191:1 1133:4,10 1134:26 prior 1113:11 1144:15 1196:20 1208:13 1135:14 1136:13 1156:25 1188:25 possibility 1144:11 1209:16 1210:22 1138:12,19,22,23 1211:26 1212:25 **priority** 1207:25 potential 1121:21 1139:4,7,17,18,26 1216:4 1220:5 1166:22 1169:9 1140:3,6,18,28 1141:1 **proactive** 1203:1,28 1191:18 PG&E's 1097:22 1144:15,23 1162:10,16, 1204:28 1206:8 1099:7,10 1100:17,22 24 1163:10,16,27 potentially 1127:18 problem 1202:25 1106:16 1109:28 1164:1 1166:11.15.28 1189:21 1212:5,9,20 1110:17,26 1111:22 1167:16 1170:11,24 power 1184:21 1112:27 1114:21 1171:7,16,18 1216:16 **problems** 1188:17 1117:22 1139:25 precedes 1139:23 Plan/2020 1130:24 **proceed** 1100:3 1107:2 1141:21 1142:14 precise 1140:12 1109:9 1112:6 1123:23 planned 1141:19,27 1150:15 1153:18 1153:1 1177:16 1169:11 1171:23 1150:17 1171:14 precision 1152:14 1174:14,18,22,27 1193:20 1214:27,28 proceeding 1105:24 prefer 1103:21 1175:27 1176:18 1171:14 1175:15 planning 1140:14,20 1180:14 1190:8,14 1178:5 1218:2 preference 1108:13,16 1161:28 1175:20 1191:1 1193:10 1176:2 1215:6 1217:5 prepare 1100:13 process 1103:17 1208:21 1210:7 1142:3 1147:24 **plans** 1115:5 1162:1 PG&E-01 1208:19 **prepared** 1176:26 1156:25 1193:19 1210:11 **plants** 1184:22 PG&E-03 1213:16 **processes** 1153:25 preparing 1101:26 play 1152:19 PG&E-16 1116:22,25 professional 1177:11 presence 1122:5 1141:9,13 point 1103:11 1120:24, program 1106:11,12, 25,26 1128:16 1153:7,8 PG&E-3 1192:3 **present** 1121:26 18 1107:13 1110:7,8 1160:19 1170:9 1122:12 1215:20 1114:21 1121:14 1182:24 1188:6,7 1133:6 1153:19 1159:2 presentation 1100:28 **phase** 1185:22 1199:17 1200:5 1164:28 1165:1 1170:4 1202:13,23 1203:2,15, phonetic 1123:5 1178:15,28 1179:1,13 27 1204:1,9,25 1205:3, presented 1115:21 1216:28 1180:7 1185:1,10,26 11 1206:6,11 1207:1,5, 1181:2 1183:25 1186:15,18,24 1187:25 photographs 1146:26 10,11,13,15,16,20 1192:27 1193:2,6,14 **pressing** 1153:27 1211:10,12,17,20 phrase 1185:24 1195:4,5 1196:3,5,22 1212:15,18 1213:12 **pressure** 1188:21 1201:28 1204:23 piece 1196:5 1202:20 1214:13,23 1211:19,21,25 1212:1, 1205:7 1206:13 1215:3. 3,5,6,11,26 pieces 1146:14 pointing 1198:5 4,7,9 1217:8 1219:13 pressuring 1200:21 pipe 1203:13 **points** 1108:21 progress 1126:9,12,20 1203:16 1207:21 1128:22 1130:18,19 presumed 1161:3 **pipeline** 1149:6,9 1212:2,12 1214:26 1132:5,6 1162:28 1150:8,18 prevented 1141:26 1163:1 1167:23,26,27 pole 1188:14 1189:2,3, 1142:1 1171:13 **pivot** 1163:7,15 1168:1,5 11,22,27 **previous** 1138:19 **pivoted** 1168:7 progresses 1104:20

Index: Pg&e's..progresses

progressively 1207:4,	1102:20 1104:19	questioning 1168:28	realize 1184:4
19 <b>project</b> 1184:7 1205:5,	1119:1,9,11 1128:27 1153:12 1167:18	<b>questions</b> 1098:24 1103:5 1108:26	realized 1101:27 1144:15 1180:27
7,9,10 1216:27	purposes 1104:12	1109:10 1118:21,24	1182:21,23
projecting 1200:13	1108:9,20 1111:28 1187:17	1119:21 1156:15 1161:14 1165:22 1166:14 1169:27	realizing 1124:3 1138:15
<b>projects</b> 1184:8 1199:19	pursue 1124:23	1172:13 1191:27	reason 1136:26
promise 1196:10 promising 1185:3 1191:19	<pre>put 1102:22 1104:18   1114:19 1121:7,9   1123:3 1124:2 1125:23   1126:2 1137:8 1162:24</pre>	1210:28 1211:2,3 1217:17 <b>quickly</b> 1110:18	1162:11 1163:15 1164:22,26 1167:14,17 1170:10 1193:6,26 1199:25 1205:8
promptly 1150:7	1165:8 1167:5 1184:2 1202:18,21 1203:15,27	1153:13,28 1154:5,8 1212:8	reasons 1108:17 1192:28 1193:3,5
proportionally	1205:22		
1111:17	<b>puts</b> 1134:3	R	rebuild 1216:28
<b>proposal</b> 1126:17 1171:23	putting 1202:17 1203:16	raise 1098:1 1173:27	rebuttal 1101:10 1116:20,23 1141:7
<b>propose</b> 1126:14		raised 1178:26 1179:10	1161:27 1164:6 1165:8 1171:23 1175:27
proposed 1120:18	Q	raising 1191:14	1171:23 1173:27
1131:4 1132:20		Ramaiya 1209:13,18	19,24,27 1179:11
1148:11 proposing 1171:26	<b>QC</b> 1136:28 1156:25 1157:6	<b>Ramon</b> 1174:9	1183:22 1190:2 1192:19,21 1194:28
protocol 1150:7	qualifications 1176:23	range 1121:6 1122:6	1198:19,22 1201:26
	qualified 1185:23	1124:3,17,18 1128:27 1144:12,13 1164:7	rebutted 1101:10
<b>proved</b> 1141:20 1189:28	qualitative 1211:24	1165:11,12 1167:9	recalling 1188:11
	-	1169:7,24 1172:3	received 1173:5,6,8,10
<b>proven</b> 1185:20	<b>quality</b> 1157:21 1158:1 1159:8,22,28	1198:8	1218:27,28 1219:2,3
provide 1111:11,22 1118:2 1128:22	quarter 1184:4	rarely 1189:24	receiving 1192:15
1150:16 1162:23	•	rate 1111:6 1186:26	recess 1177:25
1181:9 1190:28	<b>question</b> 1098:27 1102:4,6 1104:15,20	1216:4,6	1217:26
1194:12 provided 1098:16	1109:23,24 1110:20 1123:26 1129:15	<b>rate-case</b> 1205:25,26 1206:16,21	recognition 1110:15
1100:18 1133:6	1135:27 1140:11,26	ratepayers 1179:6	record 1097:7 1101:13 1102:7,11 1104:10,11,
1209:17	1141:4 1143:13,19	ratio 1133:27 1164:9	24,26,28 1108:12,24
providing 1207:17	1144:28 1145:1 1146:14 1151:18	reach 1139:7	1109:6,15 1110:5
1211:28	1152:6,16 1153:9		1114:17 1135:10,11,13, 17,18,20 1141:14
<b>provoke</b> 1114:15	1155:3 1157:18 1159:4	read 1110:5 1121:1,2 1134:4 1141:17	1145:15,17,19 1146:11
proximity 1122:6,25,	1162:22 1168:21 1176:10 1185:7,24	1142:18 1148:24	1152:26 1156:17
26 1123:8 1124:23 1144:13,18	1187:16,22 1192:25	1153:26 1154:2,11	1158:15,17,18,20 1165:28 1166:1,3
	1194:13 1196:2	1156:2 1178:25 1212:11	1170:13,14,16 1172:19
prudent 1193:4	1199:26 1200:17,19		1173:5,15,16,17
prudently 1195:16	1201:28 1203:18 1205:14,17,22 1206:26	reading 1127:2 1151:20 1212:25	1174:10 1177:20,21,22, 24 1178:4 1181:11
<b>public</b> 1099:14,22	1211:9 1214:19,20	reads 1110:7 1115:4	1186:20,21,22 1211:4,
1142:26 1148:12	1215:28	1120:3 1193:17 1195:2	5,6 1213:5,6,7 1214:10,
1151:6,12	question's 1151:23	ready 1100:5	11,12 1215:25,26,27 1217:23,24,25,27,28
purpose 1101:2		- 200.0	1211.23,24,23,21,20

Index: progressively..record

1218:1,16,17,18,21,26 referenced 1110:26 remediate 1163:27 responding 1144:28 1220:22,24,25,26 1121:19 1138:11 1162:9 1178:26 remember 1156:26 1208:28 recorded 1098:11 1162:8 response 1099:8,10 references 1111:22 1099:3 1112:26,28 1108:25 1117:22,25 remind 1112:4 1124:7 1171:10 1113:5,16,20,22 1114:8 1139:22 1142:15,19 1136:21 1139:12 remote 1188:22 1151:26 1152:2 referencing 1208:19 1165:4 1197:18 1168:28 1169:2 repair 1143:9 1198:24 1199:9 **referred** 1131:17 1174:14,19,23,27 1200:22,27 1201:9,10 1132:9 1144:8 1148:10 repairing 1150:8 1175:28 1180:14,21 1209:9 1156:17,23 1190:8 1191:4 1193:10 repeat 1179:12 1208:22 1209:12,18 recording 1157:21 referring 1131:15 1213:2 1218:24 rephrase 1212:23 1135:1 1137:20 1143:2 records 1103:25 1214:20 **responses** 1166:19 1158:24 1160:11 1150:16 1170:28 1171:6 1188:12 replacing 1203:12 **RECROSS**responsibilities **refine** 1196:7,8 report 1113:17 **EXAMINATION** 1147:13 reflect 1108:24 1170:2 **REPORTER** 1125:7,10 responsibility 1147:8 1126:23,27 1129:2,4 redacted 1099:9 reg 1216:28 1151:9 1190:23,26 rest 1220:4 1158:8 1170:20 regard 1119:26 1172:25 represent 1177:9,10 restoration 1123:20 regular 1162:26 redaction 1119:7 request 1099:8,11 restrict 1208:13 1163:11,12 1165:17,19 1117:23,24 1139:23 redactions 1117:25 1168:6,8 result 1122:13,20 1142:15 1156:8 regulating 1212:12 1124:12 1157:14,15 redirect 1128:8 1174:15,19,23,27 1160:9,21 1165:24 1166:4,6 1180:14 1188:12 regulator 1212:2,4,7, 1169:26,28 1217:19 1190:8 1193:10 resulting 1161:13 13,27 1218:2,4 1194:19 1208:20,22,27 Results 1099:4 reinspect 1157:12,20 1209:13 redone 1159:22 1158:24 1159:7,12 resume 1177:23 requested 1209:2 1160:3 **reduce** 1193:19 1214:7,8,21 **resumed** 1125:19 1195:12,16 1200:3 reinspecting 1157:17 1204:24,27 1173:21 requesting 1205:24 reinspection 1159:1 1216:4 reduced 1195:20 return 1159:11 1215:9 reinspections require 1142:9 1143:6, returning 1168:10 1157:28 1158:27 23 1144:20 1215:4 reduces 1202:14 1159:16 revenue 1192:15 required 1124:25 reducing 1195:5 relate 1101:28 1176:8 1153:22 1163:3 1168:4 review 1132:5 1138:12 reduction 1204:2.11 1189:13 1150:17 1156:18,20,28 related 1106:15 1176:6 1157:5 1158:2 reductions 1197:23 requirement 1192:15 relates 1153:16 reviewing 1133:16 1201:20 requires 1165:2 **relation** 1133:26 reevaluate 1117:5 revised 1132:18,26 resolution 1142:27 1134:5 1133:3,10,16 1134:26 refer 1108:8 1118:24 1136:13 1138:19 reliability 1206:6,10,13 resolve 1110:11 1166:9 1168:16 1141:1 1164:1 1166:11 rely 1186:8,14 resolved 1144:25 reference 1102:18,25 1170:24 1171:7,16 relying 1186:3,17,23 1103:8,22 1104:1,9 resource 1132:6 Revision 1099:9 1107:17 1108:9,20 1187:6 1117:23 resources 1130:1.4 1109:8,18,25 1112:3 remain 1097:15 1132:2 1144:21 rework 1156:21,23 1113:2,9 1158:10 1164:11 1170:20.21 remaining 1115:13 respect 1106:20 1157:12 1194:13 1208:15 1163:17,22 1215:2 risk 1110:15 1115:16 responded 1209:16

Index: recorded..risk

1119:19,26 1120:12,14, san 1097:1 1099:14.21 1152:11 1154:2 1190:3 1121:10 1137:14 20 1121:15.21 1123:9 1115:7,9,14,26 1125:25 1193:17 1195:2 1180:10 1181:19 1125:26 1127:8,18 1126:3,7 1129:11 1182:17 **sentences** 1141:18 1128:2,7,8,12,14 1134:1 1135:7,8 **shows** 1118:8 1130:27 1151:16,19,20 1152:11, 1136:2,6,7,20 1140:5 1129:21 1130:10,20 1198:13,23 1210:14,26 12 1131:13,14,16,18 1142:21,26 1143:4,15, 1132:9,10,11 1137:17 21 1144:26 1145:7,9,11 **separate** 1165:10 **shut** 1148:3 1154:2,3 1161:27 1146:23,25 1148:12,18 September 1097:2 sic 1192:14 1149:12 1163:17 1162:12,15 1163:6,14 1219:10.24 1220:1 1166:17,25 1167:2,5, 1173:1 1174:9 side 1134:15 10,11,12 1168:11,13,25 **series** 1148:10 **Sandra** 1219:22,23 signature 1149:24 1171:7,22 1196:4 **services** 1203:12 1202:1,14,28 1203:1,8, **SCADA** 1106:20.22 **significant** 1131:13,16 11,13,14,15,17 1204:1, 1178:14,28 1179:1,13 **SESSION** 1178:1 1152:4 1179:2,14 2,6,11,14,24,27 1180:7,24 1184:5,23 1180:6 1182:4 1187:3. **set** 1126:26 1138:13,14, 1205:20 1206:4 1185:1,10,25 1186:14, 18 1202:25 19,26 1139:3,4,6 1211:18 1212:14 18,24 1187:9,19 significantly 1180:10 1169:23 1188:4 1193:14,20 1194:5 risks 1144:16 1202:4,9, 1187:28 1197:28 1195:14 1198:13 sets 1209:6 12 1203:7,9,19,21,23 1200:20 1202:7 **similar** 1116:10.12 1204:15,18,20 1205:10, **settle** 1108:11 1203:14 1204:23 1122:3 21 1206:9 1215:9 1205:7 1211:23 **settled** 1111:15 **simply** 1108:19 1109:6 Robert 1219:21,24 1213:26 1216:22,27 settlement 1106:19 1217:1 simultaneously room 1130:13 1179:20 1122:28 sewer 1123:1.2 1202:19 scale 1157:28 1158:25 1142:10 1147:6,10,12 **Singh** 1219:15 roughly 1197:20 scaled 1111:17 1153:17 1159:8 1160:7, 1200:23 12,14 **single** 1202:27 1204:9 **scaling** 1158:3 routine 1115:8 1134:20 **sewers** 1143:9,10,11 **site** 1159:12 1165:3 scenario 1138:1 1135:3 1153:21 1161:9 1147:2 1160:15 sites 1198:6 1216:22 **schedule** 1097:26 **row** 1102:5 1112:18,21 **SF** 1119:6,19,25 1150:12,16 1220:4,9 situation 1205:2 1134:23 1135:27 1120:13 1131:10 1136:5 1181:14,23,26 scheduled 1219:9 1133:22 1134:23 situations 1168:9 1196:26 1200:17 1220:12 1170:25 1171:8,12 sixth 1150:5 1201:4,13 1202:2 scheduling 1219:8 **shared** 1179:18 size 1215:9 rows 1181:12 1182:8, scope 1152:14 **sheet** 1146:7 17 1183:3 **skip** 1134:25 1193:15 sealed 1146:28 1148:2 Shek 1220:15 **RTU** 1181:4.15.26 **skipped** 1152:4 1188:22 1189:19 section 1118:27 **shifted** 1144:23 **skipping** 1151:15,19 1211:27 1130:22 1131:5 **Shilpa** 1209:13 1152:8,12 1135:28 1138:9 1171:2 **RTUS** 1217:14 **short** 1097:10 **slide** 1120:4,6 1166:10 **sections** 1137:25,26 1167:1 shortfall 1116:18 S seek 1119:2 1217:14 **slightly** 1160:20 **show** 1145:14 1146:26 seeking 1127:14 **S2** 1130:23 1131:26 **slow** 1196:3 1181:3 1147:23 1132:14 **showed** 1115:25 slow-down 1205:15 selected 1115:12 **safety** 1132:11 1151:7, 1217:4 1169:10,13 slowed 1195:4 12 1154:1,3 1161:27 **showing** 1139:15 selective 1151:14 1192:27 1196:4 1206:1, slower 1141:23 1154:18 1155:1 5,9,12,17 1219:13,14 sense 1211:26 1210:21 **small** 1196:25 safety-related **sentence** 1151:15 **shown** 1112:12 1114:7 1162:12,15

Index: risks..small

smallest 1208:2	1194:25	<b>Sumeet</b> 1219:15	talks 1166:16 1170:10
solely 1193:3	start 1119:23 1125:3,5,	summary 1131:21	1193:13 1205:14,15
someone's 1103:12	8,12 1162:23 1175:4	1135:28 1138:9	<b>tape</b> 1123:4
son 1123:5	1178:12 1179:28 1192:2	1170:22 1171:1 1175:19 1192:8	target 1119:4 1121:9 1124:1 1138:10,13,18,
<b>sort</b> 1103:6,7 1164:19	<b>started</b> 1139:11 1185:2	1203:10	20,21,27 1139:3,5
1207:1	starting 1182:24	<b>summer</b> 1205:6	1169:14,23 1171:5
<b>Sound</b> 1157:16	<b>starts</b> 1171:3,4	supervision 1176:27	targeted 1128:24
<b>sounds</b> 1127:3	<b>state</b> 1174:4	Supervisory 1184:5	<b>team</b> 1120:3 1128:25 1195:15 1196:5
speak 1100:15 1101:25 1155:10 1179:17 1210:12	<b>stated</b> 1108:17 1127:24 1143:24 1144:11	<b>support</b> 1141:22 1143:12 1144:5	technologies 1187:8 1191:18,22,24 1196:6
<b>SPEAKER</b> 1145:26	statement 1110:21	supports 1151:6,12	technology 1182:20,
speaking 1102:27	1127:22 1176:23	sustain 1155:26	26 1184:2,7,8,17
1161:6 1220:15	states 1157:11 1192:25	<b>sworn</b> 1098:3,6 1174:1	1185:9 1186:3,5,9,25 1187:11 1188:9,19,25
<b>specific</b> 1098:24,26 1106:12 1145:5 1159:5	<b>stating</b> 1119:8 1161:1, 2 1163:27	<b>system</b> 1163:6,14 1167:10 1175:21 1176:4 1188:21	1191:15 1194:26 1197:11 1201:23
1190:17 1198:6 1207:16,21 1208:4	<b>station</b> 1208:1,3 1212:4,8,27	1176.4 1186.21 1202:14,16,27 1203:4 1204:3,9,11 1205:2	tells 1202:24 1204:2 1205:3 1212:19
1216:24	stations 1207:27	1207:15,16,26 1211:14,	1213:24
specifically 1121:11 1130:9 1146:21 1220:5	1212:3,7,13	20,22 1212:2,6,21 1215:8	<b>Ten</b> 1146:5,8
speculate 1130:12	statistical 1156:27	<b>systems</b> 1211:15	ten-minute 1217:26
spelling 1174:5	<b>status</b> 1156:18	1214:17	term 1132:9 1157:13
spend 1210:8,22	stay 1193:20 1220:20		terminal 1188:23
1220:10	<b>step</b> 1199:8	T	terms 1168:3
spending 1113:17	<b>Steve</b> 1219:15	table 1103:6 1107:27	test 1153:7
1208:14,16	<b>stick</b> 1220:13	1180:20 1181:1,19 1194:14 1198:3,15,23	testified 1098:3,6
<b>spoke</b> 1156:25 1164:5	straight 1152:10	1199:3 1208:19,28	1105:7 1173:21 1174:1
<b>sponsor</b> 1101:13 1108:18	<b>subject</b> 1105:12,27	1210:12,13,19,21,27 1213:14,22,23,25	testifying 1219:16
sponsored 1103:9,16	submission 1117:9,10	1213:14,22,23,25 1215:17	testimony 1100:17 1101:11,17 1103:12,14,
1164:12 1176:9	<b>subpart</b> 1142:19	tables 1209:7 1210:11	15 1105:9,10,11,16,25
sponsoring 1101:3	substitute 1172:10	takes 1113:3 1163:14	1106:3,10,22 1108:25 1109:28 1110:22
1103:17 1105:10	subtraction 1103:1	1199:23	1111:1,23 1115:22,24
1175:14,18,28 1176:18, 22	<b>successful</b> 1123:6 1133:28 1144:19	taking 1114:8 1200:11 talk 1102:1 1112:3	1116:11,21 1117:10,11 1119:20 1121:5,7,10
<b>square</b> 1204:22	sufficient 1157:16	1142:20 1148:14	1125:24 1127:24,25 1131:1 1132:16 1141:7
<b>stage</b> 1188:2 1199:18	sufficiently 1157:22	1152:26 1166:14	1145:13,22 1161:22,23,
<b>stand</b> 1152:23 1153:22 1173:19,21	suggesting 1143:1	1219:7	27 1163:26 1165:9 1171:23 1175:14,27
standard 1134:20	suitability 1100:8	talked 1186:4	1176:1,3,6,9,20 1177:3,
1135:3 1172:11	suitable 1191:10	<b>talking</b> 1107:18,19,26 1158:22 1160:6	6 1178:13,18,19,25 1180:22 1183:22,28
l			1100.22 1100.22,20
<b>stands</b> 1131:28 1181:15 1184:5	<b>sum</b> 1139:14	1179:28 1197:2 1199:4 1215:12	1184:1 1185:5 1186:2,4 1188:6 1189:26 1190:2,

Index: smallest..testimony

thinking 1134:8

15,19 1192:19 1194:28 1198:20.26 1200:1 1201:27 1204:7 1206:18 1208:12 1209:16,19 1213:12,13 1214:24,26 testing 1152:1 thing 1103:20 1106:21 1113:15 1153:8

things 1129:7 1145:5 1152:22 1153:2 1162:10 1209:20 1216:18

thought 1102:3 1184:3 1186:11.16 1187:25.26 1188:3 1191:20

thousand 1124:3 1215:10

three-year 1183:4 1199:22

**Thursday** 1097:26

ties 1137:26,27

time 1097:21,24 1118:12 1131:11 1136:4 1139:4 1150:25 1152:20 1154:16,26 1155:25 1159:5,25 1167:8 1168:15 1177:2 1179:8 1184:1 1185:5, 20 1188:7 1189:21,25 1191:16 1193:16 1195:8,10,13 1199:9 1204:13 1217:6

timely 1151:2,11

times 1159:6 1160:24 1167:14 1193:13 1217:11

timing 1139:2 1154:21, 24 1155:6,10,13,16

title 1099:17 1107:20

today 1097:9 1105:17, 18 1106:13 1115:3

today's 1097:25 1105:12,27 1178:14

**told** 1127:11,13

Tom 1146:14

tomorrow 1219:9,11, 25

tools 1122:27 1124:14

top 1117:3 1118:13 1131:20 1149:9,13 1156:16 1158:23 1180:20 1181:1

topic 1098:22 1106:12, 21 1130:15 1206:27

topics 1106:25

total 1106:16 1115:10 1132:25,26 1137:10 1214:28 1215:4 1216:22,26

**training** 1160:26 1161:11

transcript 1104:13,14

transmitter 1184:12

transmitters 1188:13. 20.27 1189:3

trench 1121:16 1122:9 1123:16

trick 1152:19

truck 1188:16 1189:14, 24

true 1105:17,18 1164:28 1171:21 1177:6 1199:20 1205:23

truth 1173:25

turn 1099:8,10 1100:11 1106:17,23 1109:25 1114:20 1116:28 1117:20,23 1141:11 1142:15 1149:4 1161:4 1162:19 1174:15,19,23, 27 1178:6,26 1179:10 1180:14 1183:23 1190:8 1193:1,10 1197:11 1205:14 1206:24 1208:22 1209:2,5

**TURN's** 1099:1 1103:15 1179:1,4 1192:26

turning 1210:20

turns 1184:16 1210:7

two- 1199:22

**type** 1122:17,22,24 1181:14.26 1190:4 1191:3 1194:16 1196:4 1197:8,12,14 1198:23 1199:4,9 1200:20

types 1145:11 1181:4 1194:5,11,18

typically 1213:1

U

ultimately 1190:5

**unable** 1143:20 1162:25 1163:2,9 1167:7,24 1168:24 1169:17

unable-to-access

1163:28 1165:10 1166:21,23 1168:14 1169:16

uncertainty 1127:19 1138:16

understand 1102:22 1103:4,11,24 1104:8 1130:7 1138:7 1142:16 1153:20 1160:18.27 1187:15 1200:15 1205:18

understanding

1105:26 1109:11 1111:12 1154:20 1155:3 1157:26 1160:7 1180:24 1182:11 1199:20

UNIDENTIFIED

1145:26

unit 1112:18,19 1113:10,11,26 1119:4 1120:14 1121:9 1124:1 1127:27 1131:12 1134:13 1147:7 1164:14,24 1165:16 1167:6 1168:23 1169:2, 12,14 1180:23,25 1181:3,10 1182:16,18 1183:25 1186:27

1187:2 1188:23 1189:4, 21,26 1191:21 1193:22, 23,28 1194:2,3,4,10 1195:12,28 1196:1,20, 23 1197:3,7,8,22,26,27 1198:7,8,14 1199:10, 13,21,23 1200:6,7,10, 14 1201:10

Index: testing..UTA

units 1099:3 1102:5 1106:16 1109:16 1111:16,24 1112:12,21, 28 1113:19 1114:4,6,8 1116:18 1119:13 1127:26,28 1133:12,14 1136:1,5,18 1138:15 1139:10 1140:4,13 1159:21 1161:24 1162:2,7 1180:24 1182:28 1189:19 1190:4 1191:3 1192:9, 11,16 1193:20 1194:5, 11 1197:12 1199:4,9 1200:12 1211:23,27 1213:3,26 1214:2,8,14, 15,21,22,28 1215:5,7, 10,12 1216:1,3,5,25,26 1217:2,5,8,9,11

unlike 1203:12

unproven 1184:17,27 1185:8,17,19,21,26

unredacted 1158:5

unsuccessful 1134:2

unweld 1148:4

upcoming 1205:25

update 1129:6 1208:28 1209:1 1220:6

**updated** 1119:17 1120:17

**updates** 1130:17

upper 1166:27

**UTA** 1115:6,26 1116:3, 6 1119:19,25 1120:12 1121:8 1125:25 1127:8 1128:8 1129:5,11 1131:10,12 1134:2,11 1139:19,26 1140:4,13 1141:19,21 1142:28 1143:3,15,20,27 1144:1,3,6,26 1145:8, 10 1146:23 1160:16,21

1161:9,13 1165:17 1169:12 UTAS 1120:14 1121:6, 14,20 1126:3,6,7,13,20 1128:5,23 1129:9 1130:18,19 1134:9,17, 21,23 1135:1 1138:24 1140:7,8,19 1142:4,6 1143:7,26 1147:16 1160:9 1161:3,5 1162:25 1163:17,22 1164:8 1165:8 1167:19, 28 1168:2 1169:5,10 1171:27,28 1172:7 **Utilities** 1099:15,22 1142:27 1148:12 utilizing 1122:26,28 vantage 1200:5 variance 1210:10.14 **varies** 1198:7 variety 1145:10 verify 1198:10 version 1158:5,9 versus 1134:1 1136:27 1194:2 1198:14 vetted 1188:8 1189:25 video 1136:28 1150:17 1156:24 1157:5 videos 1159:8 **view** 1166:28 1167:2 1179:1 visibility 1157:3,10 1178:15 1180:7 1185:1, 10,25 1186:14 1187:12 1202:13,15,20,24,26 1204:10,25,26 1205:3, 12 1206:6,11 1207:1,7, 8,11,14 1211:10,12,17, 19,25,28 1212:16,17

٧

**volume** 1127:26,27

1138:1.16

1133:26 1137:25.26

W

W-I-H-A-R-T 1184:13

wait 1129:14 1209:25 1213:9

wanted 1124:4 1138:25 1156:28 1163:24 1165:9 1181:10 1184:18,28 1185:9,25 1191:27 1192:2 1200:2

warehouse 1197:10

wash 1202:21

water 1147:2 1160:22, 24

ways 1169:15,22 1195:15 1204:13

website 1099:15,19,23 1148:13

week 1219:28 1220:4,9

welded 1148:3

WFR 1131:27,28

Wi 1187:28

**Wihart** 1184:12,17,20 1185:4 1186:6,8,10,14, 17,24 1187:4,10,19 1188:1,5,8,19,26 1189:6 1191:11,14,19

Wildfire 1219:13,14

wireless 1182:26 1184:11 1188:13,19,27 1197:10

wirelessly 1188:28

wires 1189:22

witness' 1101:11 1108:25

witnesses 1175:5 1219:8,11,12

wondering 1207:3

word 1137:19.20 1142:2,12 1157:15 1182:8

words 1107:19 1145:4

work 1105:11,26

1106:18,23,25 1107:11, 12 1112:15 1117:5 1118:3,6,15 1119:3,12, 14,17 1120:17 1126:6, 16,18 1127:6 1128:20 1129:11,28 1130:2,3,5, 16 1132:1,6 1136:20 1138:1 1139:11,12,13, 17,18,26 1141:27 1142:3,10 1143:7,15 1150:25 1152:14 1153:17,23,25,28

1157:8 1159:21 1162:1, 9,16,24 1163:11 1164:1 1166:11,15 1167:15 1170:24 1171:7,24 1172:4 1179:5,7 1180:2 1187:10 1192:1

1154:15 1155:24

1198:13,22 1202:10 1203:22 1204:4 1205:15,23,28 1206:14, 17 1211:23 1216:6,15,

worked 1196:19

working 1132:23 1148:4 1203:28

workpaper 1100:11,16 1108:18 1196:25 1199:15 1200:18 1201:4,7 1215:16

workpapers 1100:12 1105:23 1112:27 1114:21,25 1175:21 1190:15,19 1196:13 1198:11 1215:23

works 1147:11

worse 1203:14

worst 1136:13,14,16, 17,21 1137:7,9,19,20, 21,28 1171:4

written 1156:1

wrong 1149:21

wrote 1185:5 1189:25

Υ

year 1133:18 1156:26 1160:24 1164:9 1182:12,13 1198:5

1199:23 1200:11 1217:15

Index: UTAS..yields

years 1120:15 1183:20 1184:9 1217:10

**yesterday** 1105:8,14, 22 1114:23 1115:2 1133:27 1164:5

yields 1112:22