## BEFORE THE PUBLIC UTILITIES COMMISSION

## OF THE





In Attendance: COMMISSIONER LIANE M. RANDOLPH ADMINISTRATIVE LAW JUDGES RAFAEL L. LIRAG and ELAINE LAU, co-presiding

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)

Devidentian

Application
18-12-009

18-12-009

REPORTER'S TRANSCRIPT San Francisco, California September 23, 2019 Pages 816 - 934 Volume - 10

Reported by: Ana M. Gonzalez, CSR No. 11320 Andrea Ross, CSR No. 7896

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1	SAN FRANCISCO, CALIFORNIA
2	SEPTEMBER 23, 2019 - 9:31 A.M.
3	* * * *
4	ADMINISTRATIVE LAW JUDGE LIRAG: We are
5	on the record.
6	Good morning, everyone. This is the
7	time and place for the evidentiary hearings
8	in Application 18-12-009, which is Pacific
9	Gas and Electric Company's, or PG&E's, Test
10	Year 2020 General Rate Case.
11	Good morning, everyone. My name is
12	Ralph Lirag. And beside me is Elaine Lau.
13	We are the assigned administrative law
14	judges, or ALJs.
15	Commissioner Liane Randolph is the
16	assigned commissioner. I believe
17	Commissioner Randolph will join us tomorrow
18	and on other days that she is available. But
19	her advisor should be monitoring the progress
20	of the hearing as it goes on.
21	To my right is Marianne Divina. She
22	will help us with the exhibits and basically
23	keeping this table clean of any clutter.
24	We have court reporters. You will
25	see them walk in and out. I believe you will
26	see our whole roster of court reporters.
27	This is day one of 20 evidentiary
28	hearing days. And for today, our schedule is

1 supposed lead us from 9:30 to around 3:30 to 2 Our reporters would appreciate if it 3 is closer to 3:30. So we will generally start the hearings at 9:30 and end around 4 5 3:30 to 4:00. We will have a one-hour lunch 6 break, close to noon. It could be a little bit longer, depending on how the witness's 7 8 schedule is progressing. We will probably 9 have one break in the morning and one break in the afternoon. We will time it at the 10 11 middle of the morning and middle of the 12 afternoon. If we are finishing up a witness, 13 we might wrap that up and postpone the break 14 a little bit. We could have more breaks, if 15 it is requested. Please take that into 16 consideration when determining time. 17 We will use that clock as our 18 official designation of time. It does not match with the real time, so figure it out. 19 20 So today we will go from 9:30, we did email 21 about a one-hour recess, that is going to 22 occur before 10:00 a.m. 23 Let's go off the record. 24 (Off the record.) 25 ALJ LIRAG: Let's go back on the 26 record. 27 We were discussing that there is 28 going to be a one-hour recess beginning at

days.

10:00 a.m., and then we will resume at 11:00, 1 2 then we will go from 11:00 to around noon, 3 and take our lunch break and then resume at around 1:00. But we will figure that out 4 5 later. So for today we originally had 6 scheduled five witnesses, but I think it is 7 going to be four. And we will let 8 9 Ms. Gandesbery and Ms. Goodson talk about 10 that. 11 First of all, thank you to PG&E and 12 all the parties for preparing that schedule. 13 Thank you, again, for facilitating the 14 discussions that led to the schedule. We 15 will generally stick to that schedule as much 16 as possible in order to ensure that we finish 17 the cross-examinations and all hearing 18 matters within the four weeks that we are 19 allotted. 20 I believe there is about -- I 21 calculated it last night, but I forgot, but I 22 think there is close to 80 hours of hearings. I think it is 77.1, if I recall correctly. 23 24 That may change to be longer, it could be 25 shorter. Anyway, we will determine that as 26 the hearing progresses. I'll let you know 27 about the daily schedule for the next few

PG&E will be in charge of that white board. They will put up three days of -- the schedule for the next three days. Generally it will contain the witnesses, the topic area and then the estimated time for cross-examination.

So for cross-examination, there were cross estimates, please try to follow that, but we are not going to hold you to that exact amount of time. We will determine what amount of time is proper, but I may prod you along to speed things up if we are running behind schedule. The goal is not to rush you when you are doing cross. It is to make sure we are on schedule. So that takes care of the schedule.

So for exhibits, we will number them chronologically as they are identified into the record. So you may retain any pre-numbers that you've done. You may use that to reference the exhibit, but generally we will follow the official designation of the exhibit. This is for purposes of your briefs, will be how we identify the exhibit. So it will just be 01, 02, 03, et cetera. It won't be, perhaps folks are used to, PG&E-1, TURN-1. The reason for that is so we are not trying to remember too many numbers. It will

be one number, which is the last exhibit submitted.

Ms. Gandesbery.

MS. GANDESBERY: Yes, I did want to ask you about that. If it is okay with you, we will use the number that is assigned in the proceeding, also use our exhibit numbers as well. A lot of our testimony cross references those other exhibits by numbers that we provided already. I don't want to create confusion on that.

ALJ LIRAG: Correct. If there is a way to try and maintain the numbers, I'll let you take care of the order in which you are presenting exhibits. For example, if there are exhibits where the witness has no cross, it may be a good time to bring in those exhibits so we at least maintain sort of the general same sequence. But the numbers are going to change because of the cross exhibits that will come in. So let's just figure that out as it goes along.

So for designating -- but when you are cross-examining or referring to exhibits during the hearing, you may refer to it as however you premarked it. And we will make clear that that is going to be available. There is also I believe testimony already

1 that references the exhibit by the 2 pre-numbering that is done, that is fine. Ιt 3 is just that the official designation will be however we identify it. 4 5 Mr. Reid. 6 MR. REID: Yes. When are we going to take up the issue of which witnesses do not 7 In other words, witnesses 8 have to appear? who have no cross and witnesses where the ALJ 9 10 does not have any questions, how their 11 testimony gets into the record? 12 ALJ LIRAG: We are going to discuss 13 that in the next minute. But I guess you 14 have foresight. For witnesses that have no 15 cross scheduled, what we will generally do is 16 first I'm going to ask PG&E to submit a list 17 of all these witnesses that have cross, that 18 have no cross planned. Let me know when that will be available. So basically list the 19 20 witness, and then I'll let you do the list 21 for all the parties as well, since you 22 facilitated the -- is that fine? 23 MS. GANDESBERY: Yes. We will have 24 that today for you, your Honor. 25 ALJ LIRAG: Doesn't have to be today. 26 It could be tomorrow. Please also list the 27 topic that witness was covering. The purpose

of that is to help us determine whether or

not we are going to have questions for these witnesses. So we will try not to make the witnesses appear if no other party is -- has cross planned for that witness. But in case we have questions, we might require the witness's presence. We will try to determine that before the end of the week, but we will base it on the list first.

Any questions, Mr. Reid?

MR. REID: Yeah. I mean, it would seem to me that you can save hearing time. I mean 80 hours is really a lot, because there will be -- there is certain amount of administrative time. Witnesses might say something while they are testifying that -- which will invite more cross. So 80 hours is really not just 80 hours.

It seems that the best way to handle this is to identify the individuals who do not have to testify and order them or their party to file a motion for inclusion of their testimony in the record.

ALJ LIRAG: All right. We will generally take up the exhibits when they are submitted. So we will discuss admission. It has to be in -- during the hearing. That is how we prefer to do it. We can discuss your timesaving tips probably in one of the

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1 breaks. So you can come forward, and we can 2 And then we will bring it up with confer. the rest of the parties, if that is a good 3 idea, then we will try to apply it. 4 5 Generally we will stick to what we had in 6 mind, which is we will find the time every 7 now and then when there is a break, or when witnesses end early. Or if it is proper to 8 9 bring up these exhibits at a certain time in 10 order to maintain a certain sequence, then we 11 will do that. 12 As far as keeping on schedule, we 13

As far as keeping on schedule, we also have other contingencies to maintain the schedule. So rest assured, all parties will have enough time to present their cross-examination and their exhibits and take care of other matters for now.

Mr. Lindl.

MR. REID: Well, I mean, since I don't know when my exhibit would come up, right, it entails another trip. And for me, I'm in a curious position where the party is the witness.

ALJ LIRAG: All right. As for parties that are scheduled to be crossed, that is in the schedule, so you know when that will happen. For parties that have no cross scheduled, we can take care of -- or address

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that witness's exhibits at a convenient time,
 1
 2
     perhaps convenient to the party submitting it
 3
     or convenient to the Commission.
                                        We can
     discuss that as it happens. There is no need
 4
 5
     to account for everything right now.
 6
               Mr. Lindl.
 7
           MR. LINDL: Thank you, your Honor.
     Just to clarify, so PG&E will provide you a
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 9
     list of -- where there is no cross time
10
     estimates?
11
           ALJ LIRAG: Correct.
12
           MR. LINDL: And then we can tentatively
13
     assume that witness will not appear, unless
14
     you let us know by the end of this week that
15
     the ALJs have questions for those witnesses?
16
           ALJ LIRAG:
                       That is probably a good
17
     assumption.
18
               Other questions regarding that,
19
     except for Mr. Reid?
20
           MR. DENEBEIM:
                          Yes, Daniel --
21
           THE REPORTER:
                           I'm sorry.
22
                       Too fast.
           ALJ LIRAG:
23
           THE REPORTER:
                          Can you stand up, I
     can't --
24
25
           MR. DENEBEIM:
                          Daniel Denebeim,
     D-e-n-e-b-e-i-m.
26
27
           ALJ LIRAG:
                      All right.
28
           MR. DENEBEIM:
                          We are a party. We are
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1 not participating in cross-examination. But 2 you are saying we will have to have someone 3 here to the attend all the hearings until this day you are talking about comes about 4 5 where PG&E submits the list, and then we can 6 submit our testimony for the record; is that 7 correct? If you have witnesses or 8 ALJ LIRAG: 9 testimony where no cross is scheduled, we can discuss when to present those exhibits. Are 10 11 you available only today? 12 MR. DENEBEIM: Not only today, but I 13 would like to not have to come to every day 14 of the hearings just to get our testimony 15 onto the record. 16 ALJ LIRAG: All right. You can discuss 17 with PG&E if you're generally -- we will try 18 to handle all of PG&E's witnesses and 19 exhibits first. But that doesn't mean we 20 can't insert any time for other parties' 21 Does that make sense? exhibits. 22 I guess I'm just trying MR. DENEBEIM: 23 to -- when would that time be? 24 ALJ LIRAG: Let's make it whenever you 25 are available, and then let's schedule your exhibits for that time. Fair enough? 26 27 MR. DENEBEIM: Okay. 28 ALJ LIRAG: It will make sense as the

1 hearing progresses, I think. All right. 2 I have a question from the lady 3 behind you. 4 Michelle Schaefer. MS. SCHAEFER: 5 ALJ LIRAG: Ms. Schaefer, good morning. 6 MR. SCHAEFER: Good morning. 7 S-c-h-a-e-f-e-r. I'm with the Office of Safety Advocates. 8 9 And along the lines of entering 10 testimony into the record, we would ask that 11 we can submit our attachments via CD-ROM, if 12 that is okay with parties and with your 13 Honors, as our attachments are very 14 voluminous and I would prefer to not have 15 that many trees wasted. 16 ALJ LIRAG: All right. So to 17 summarize, OSA has exhibits and they have 18 attachments that are voluminous. And OSA's 19 request is to submit a CD for the 20 So I'll let PG&E think about it attachments. 21 for now, and we will discuss it probably when 22 we resume either at 11:00 or after the lunch 23 Let's give them some time to figure break. 24 it out. 25 In the meantime, during the recess 26 you can also converse with them and try to 27 sort out any inconveniences that will occur 28 or that may result because of that.

1	MS. SCHAEFER: Thank you.
2	ALJ LIRAG: Any other questions?
3	Mr. Gondai.
4	MR. GONDAI: Thank you, your Honor.
5	Along those lines, I was just
6	curious. I understand that the rules of
7	the Commission allows for parties to submit
8	documentation double-sided printed. I was
9	wondering if your Honors had any preference?
10	ALJ LIRAG: We are fine with
11	double-sided. We are fine with single-sided.
12	MR. GONDAI: Thank you.
13	ALJ LIRAG: Any
14	MR. STRAUSS: Your Honor, Ariel Strauss
15	on behalf of Small Business Utility
16	Advocates.
17	With respect to the right time to
18	enter exhibits for those parties or
19	intervenors that do not have any witnesses
20	scheduled, would the right time be now before
21	we get started?
22	ALJ LIRAG: No. We are about to go
23	into recess pretty soon, and it will take a
24	much longer time to address all these
25	exhibits. Fair enough?
26	MR. STRAUSS: Yes. Would that then be
27	happening today?
28	ALJ LIRAG: We can handle some exhibits

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1
     today, since we have one witness that was
 2
     scheduled, I think the cross being waived.
 3
     So we can use that time to take care of some
     exhibits that we already have.
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 5
           MR. STRAUSS:
                         Thank you, your Honor.
           ALJ LIRAG: And then we will talk about
 6
 7
     that.
               So for today, we had scheduled
 8
     Mr. Cairns, Mr. Thomason, Jamie Martin,
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10
     Mr. Abranches and Terry White. And then I
11
     believe there is an adjustment to that.
12
     Either Ms. Gandesbery or Ms. Goodson?
13
           MS. GANDESBERY: Yes, your Honor.
                                               Good
14
     morning.
15
               TURN has waived both David Thomason
     and Jamie Martin.
16
           ALJ LIRAG: All right.
17
18
               Ms. Goodson, could you confirm.
19
           MS. GOODSON:
                        Yes, your Honor.
                                            That is
20
               TURN has waived cross. And in lieu
     correct.
     of cross of Mr. Thomason, PG&E has agreed to
21
22
     not object to our introduction of an exhibit,
23
     which we don't have a witness today, but
24
     would request an opportunity to identify that
25
     and seek to move it into evidence later this
26
     week.
           ALJ LIRAG: We will take care of that
27
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later this week, then.

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1 MS. GOODSON: Thank you. 2 We will take care of the ALJ LIRAG: 3 exhibits from those witnesses today. 4 Yes. 5 MR. PAK: Thank you, your Honor. Αl Pak for Alliance for Nuclear 6 7 Responsibilities. Looking at the schedule prepared by 8 9 PG&E, our one and only witness is scheduled for 20 minutes of cross-examination on 10 11 October 16th. Because my entire team is from 12 out of town, and the witness is from out of 13 town, we are going to request, if you will 14 entertain a request a date certain for that 15 It doesn't matter what time. witness. 16 would just like to have our team here for as 17 limited amount of time as possible. 18 ALJ LIRAG: I believe there are certain 19 witnesses that were marked as date certain, 20 so those are date certains. And then if any 21 change occurs, please discuss with PG&E, or 22 confer with PG&E, and then we can take it up 23 during the hearing. 24 MR. PAK: Thank you, your Honor. 25 ALJ LIRAG: Anything else regarding 26 schedule, exhibits? Generally the exhibits 27 we will handle it per witness. Once the

witness is scheduled, we will take care of

28

that witness's exhibits. 1 Generally that 2 order will be testimony, any supplemental or any revised testimony, supplemental 3 testimony, followed by workpapers, and then 4 5 rebuttal testimony and then cross exhibits 6 And then we will move to the from parties. next witness, and it will generally be that 7 8 same order. 9 So for parties that are scheduled or 10 planning to cross-examine, we generally want 11 you to move forward, especially if you have a 12 soft voice like Ms. Shek and Ms. Liotta. 13 I think if your voice is loud enough, like 14 Mr. Finkelstein, the second row is fine. 15 may ask -- he is not here. 16 (Laughter.) 17 ALJ LIRAG: Generally we may ask parties to vacate the front row or the second 18 19 row temporarily, but I believe Cal PA 20 generally likes this side. And TURN, usually 21 you are at the second row in the middle 22 But feel free to the steal seats portion. 23 from them. PG&E usually takes the first two 24 rows on the left side. But, you know, you 25 can sit there. 26 All right. Any questions before we head off? 27 28 (No response.)

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1 ALJ LIRAG: There is a couple more 2 procedural aspects. Judge Lau and I will 3 take turns presiding. There is no set schedule for when I will preside or when 4 5 Judge Lau will preside. Generally whoever 6 presides for that day will be presiding for the entire day. So please direct any 7 8 objections or issues to the presiding judge. 9 If it is complicated, you may direct it to 10 both of us. Generally I'm much nicer than 11 Judge Lau, but please do not try to develop 12 any preference. 13 For pending issues, we have two 14

For pending issues, we have two motions that are pending right now. One is PG&E's motion regarding interim rates, that will be resolved soon. The other is TURN's motion concerning PG&E's reorganization plan. That one we are still having to talk about a solution, but we will try to come up with a solution or a response to that pretty soon.

I think those are all the procedural matters I wanted to address for the morning, any questions? Yes, Mr. Lindl.

MR. LINDL: Apologies, your Honor.
Two, hopefully, quick clarifying questions.

On the exhibit numbers there will not be PG&E Exhibit 1, just be Exhibit 1 for the entire hearing?

1 ALJ LIRAG: Correct. You can refer to 2 however exhibits are pre-numbered while you 3 are doing your cross. I don't want to break anyone's rhythm. 4 5 MR. LINDL: Understood. Thank you. 6 ALJ LIRAG: When referring to page 7 numbers, some page numbers say, usually it is the witness's exhibit, initials like TL-01. 8 When doing your cross, you can omit referring 9 10 to that. We will just identify -- we will 11 just understand that that is the page number 12 without the initials. It helps the reporters 13 to not have to keep track of these initials, 14 but feel free to do it. If it breaks your 15 rhythm, you can do it however you want. 16 MR. LINDL: Thank you, your Honor. 17 The second one was simply for Ms. 18 Gandesbery and PG&E to ask to consider 19 CD-ROMs for other parties in addition to OSA. 20 We also have a couple of attachments that are 21 Excel spreadsheets that are voluminous when 22 printed out. 23 ALJ LIRAG: For these voluminous 24 spreadsheets or attachments, I suggest you 25 discuss it during this recess that is going 26 to occur, and then we will talk about it when 27 we resume at 11:00.

There is a phone that was turned on.

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This is a listen-only phone.
 1
                                   It is only for
 2
     internal use. It is going to be for the
 3
     Energy Division analyst. Mostly if they are
     not in San Francisco, they are going to be
 4
 5
     listening in on the hearings.
                                    It is a listen
 6
            It is muted. For the most part, just
     only.
 7
     ignore it.
               Any other questions? We're about to
 8
 9
     go into the recess. Hearing none.
                                          Let's
     call a recess until 11:05 a.m. on that clock.
10
11
     Off the record.
12
               (Recess taken.)
13
           ALJ LIRAG: Let's go back on the
14
     record.
15
               We are back from that one-hour
16
     recess to take care of Commission business.
17
               If you notice, there is a new crew
18
     here.
            They are just going to be taking
19
     pictures for their report, and we allowed it.
20
     So I think they are going to be here for the
21
     morning, probably not in the afternoon, but
22
     they are here mostly to take pictures.
23
     won't be in the way.
               This morning, about an hour ago, I
24
25
     was saying that Commissioner Randolph is
26
     going to be here tomorrow. She is actually
27
                      So I'll turn it over to
     here right now.
28
     Commissioner Randolph for some brief remarks.
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1	COMMISSIONER RANDOLPH: I actually
2	really don't have remarks prepared. I will
3	be trying to attend as much of the hearings
4	as possible. I will definitely need to be in
5	and out. Let's get started.
6	ALJ LIRAG: Thank you, Commissioner
7	Randolph.
8	So we have Mr. Cairns; is that
9	right?
10	MR. CAIRNS: That is correct.
11	ALJ LIRAG: Let's have Mr. Cairns'
12	exhibits. Let's go off the record for now.
13	(Off the record.)
14	ALJ LIRAG: Let's go back on the
15	record.
16	While we were off the record
17	exhibits were distributed. And we will
18	identify them in a moment. First, let's take
19	care of Mr. Cairns. Mr. Cairns, please raise
20	your right hand.
21	STEPHEN CAIRNS, called as a witness by Pacific Gas and Electric Company,
22	having been sworn, testified as follows:
23	TOTIOWS.
24	THE WITNESS: I do.
25	ALJ LIRAG: Are you sure?
26	THE WITNESS: I am.
27	ALJ LIRAG: Please state your full
28	name, spell out your last name and provide a

business address.
THE WITNESS: My name is Stephen
Cairns, C-a-i-r-n-s. My business address is
245 Market Street, San Francisco.
ALJ LIRAG: I think folks in the back
would like you to probably speak closer to
the mic, because you have a nice accent but a
soft voice.
All right. Let's go to exhibits.
We will identify the exhibits right now. I
believe there is eight of them. First is
Exhibit 01 will be the Prepared Testimony of
Mr. Stephen Cairns.
(Exhibit No. 01 was marked for
identification.)
MS. GANDESBERY: It is not Mr. Cairns'
testimony. It is actually, PG&E Exhibit 1
is the testimony of witnesses who do not have
any cross-examination.
ALJ LIRAG: Right. I apologize. I
jumped right into Mr. Cairns. I forgot that
I asked for this exhibit to be Exhibit 1.
Let's redo that.
Exhibit 01 will be the prepared
testimony of primarily it is Ms. Ramaiya, but
it is also the testimony of various
witnesses. And this is the overall summary

	1
1	MS. GANDESBERY: Yes, your Honor.
2	ALJ LIRAG: Is that correct, Ms.
3	Gandesbery?
4	MS. GANDESBERY: Yes, your Honor.
5	ALJ LIRAG: I apologize for the
6	mistake. That is Exhibit 1.
7	Exhibit 2 is the prepared testimony
8	of Mr. Steven Cairns on Safety Risk and
9	Integrated Planning. So that is Exhibit 2,
10	correct?
11	MS. GANDESBERY: No, your Honor,
12	Exhibit 2 is the testimony of safety policy
13	of Todd Hohn, Integrated Planning Process and
14	Customer Affordability of Jamie Martin, and
15	Risk Management and Mitigation by Mr. Cairns.
16	The cross has been waived for the first two
17	witnesses.
18	ALJ LIRAG: Okay. So I apologize
19	again. So Exhibit 2 is prepared by various
20	witnesses, but it is all under one exhibit
21	number?
22	MS. GANDESBERY: Yes, your Honor.
23	(Exhibit No. 02 was marked for identification.)
24	identification.
25	ALJ LIRAG: Mr. Cairns is sponsoring
26	Chapter 2?
27	MS. GANDESBERY: Chapter 3.
28	ALJ LIRAG: Chapter 3. All right.
	l la companya di managantan di managantan di managantan di managantan di managantan di managantan di managanta

1	Then another witness today will sponsor
2	Chapter 2?
3	MS. GANDESBERY: Those witnesses'
4	cross-examination have been waived.
5	ALJ LIRAG: Okay. All right. So that
6	is Exhibit 2.
7	MS. GANDESBERY: Yes, your Honor.
8	ALJ LIRAG: Exhibit 3 is the workpapers
9	of this time Mr. Cairns?
10	MS. GANDESBERY: Yes, your Honor.
11	ALJ LIRAG: On Safety Risk and
12	Integrated Planning, Exhibit 3.
13	(Exhibit No. 03 was marked for identification.)
14	identification. )
15	ALJ LIRAG: Exhibit 4 is the so
16	Exhibit 3 is Volume 1 of the workpapers of
17	Mr. Cairns, Exhibit 2 will be Volume 2 of the
18	workpapers to the testimony of Mr. Cairns.
19	(Exhibit No. 04 was marked for identification.)
20	identification. )
21	ALJ LIRAG: And then Exhibit 5 is the
22	rebuttal testimony of Ms. Ramaiya,
23	Mr. Thomason, and we have some appendices; is
24	that correct?
25	MS. GANDESBERY: Yes, your Honor.
26	ALJ LIRAG: Let's go off the record.
27	(Exhibit No. 05 was marked for identification.)
28	130

	(Off the record )
1	(Off the record.)
2	ALJ LIRAG: Let's go back on the
3	record.
4	While we were off the record there
5	was a little bit of a discussion regarding
6	the exhibits. And I believe we cleared
7	everything up. Ms. Gandesbery will enlighten
8	us during the direct examination portion.
9	So let's move on. We have
10	identified Exhibit 5.
11	Next is Exhibit 6, and this should
12	be the rebuttal testimony of Mr. Cairns; is
13	that correct?
14	MS. GANDESBERY: It is. Exhibit 6
15	is what we've marked as PG&E Exhibit 16. It
16	is the rebuttal testimony of safety policy of
17	Todd Hohn rebuttal testimony, integrated
18	planning of various witnesses, and the
19	rebuttal testimony of risk management
20	mitigation of Mr. Cairns.
21	ALJ LIRAG: All right. So it is
22	rebuttal testimony of various witnesses, plus
23	Mr. Cairns?
24	MS. GANDESBERY: Yes.
25	ALJ LIRAG: All right. We are only
26	paying attention to Mr. Cairns right now,
27	apparently.
28	(Exhibit No. 06 was marked for identification.)

1	
2	ALJ LIRAG: Next is Exhibit 07, and
3	this is a cross-examination exhibit. It is
4	the data response to the subject matter is
5	Exhibit PG&E-16, Risk Management and
6	Mitigation. So these are data responses to
7	that topic submitted by TURN. So that will
8	be Exhibit 07, Cal Advocates. Sorry, no, it
9	is TURN. Let's go off the record.
10	(Off the record.)
11	ALJ LIRAG: Let's go back on the
12	record.
13	Apparently I'm getting confused by
14	these exhibits. Must be that one-hour recess
15	that we had.
16	Anyway, Exhibit 7 is identified,
17	except that it is Cal PA's cross exhibit. A
18	little mischaracterization there.
19	(Exhibit No. 07 was marked for
20	identification.)
21	ALJ LIRAG: Exhibit 08 is the PG&E
22	Response to TURN Data Request 58-2 and
23	contains an attachment. So that is
24	Exhibit 08.
25	(Exhibit No. 08 was marked for
26	identification.)
27	ALJ LIRAG: Exhibit 09 is PG&E Response
28	to TURN Data Request 58-2, with Attachments 3

_	through 0 Or that is Fubility 0
1	through 8. So that is Exhibit 9.
2	(Exhibit No. 09 was marked for identification.)
3	
4	ALJ LIRAG: All right. Ms. Gandesbery.
5	MS. GANDESBERY: Thank you, your Honor.
6	Would it help to read the exhibits
7	into the record?
8	ALJ LIRAG: As you identify each
9	exhibit.
10	MS. GANDESBERY: Okay.
11	ALJ LIRAG: That is fine. Do it
12	however you want.
13	MS. GANDESBERY: Okay. So we've
14	introduced as Hearing Exhibit 1, PG&E
15	Exhibit-1; Hearing Exhibit 2 is PG&E
16	Exhibit-2; Hearing Exhibit 3 is PG&E
17	Exhibit 2, first volume of workpapers
18	supporting Chapter 3; Hearing Exhibit 4 is
19	PG&E Exhibit 2 workpapers supporting
20	Chapter 3 Volume 2 of 2; Exhibit 5 is PG&E
21	Exhibit 15 Summary of PG&E's General Rate
22	Case; and Exhibit 6 is PG&E-16 Safety Risk,
23	and Integrated Planning.
24	ALJ LIRAG: Thank you. Please proceed.
25	MS. GANDESBERY: Thank you.
26	DIRECT EXAMINATION
27	BY MS. GANDESBERY:
28	Q Good morning, Mr. Cairns.
Į.	

A Good morning.
Q I would like you to the confirm the
testimony you are sponsoring in this
proceeding in what has been marked for
identification as PG&E Exhibit 2 and PG&E
Exhibit 9. Are you sponsoring all of Exhibit
PG&E-2 Chapter 3 Risk Management and
Mitigation?
A Yes, I am.
Q And the workpapers for Exhibit 2
Chapter 3 is presented in PG&E Exhibit 2
Workpapers 3 Volumes 1 and 2?
A Yes, I am.
Q And all of the exhibit PG&E-9
Chapter 3 Risk Audit and Insurance
Department?
A Yes, I am.
Q And the workpapers for Exhibit 9
Chapter 3 is presented in Exhibit PG&E-9
Workpapers 1 through 9.
A Yes, I am.
MS. LONG: Excuse me, your Honor.
ALJ LIRAG: Mr. Long.
MR. LONG: I'm confused by reference to
PG&E Exhibit 9. Is that something that
should have been marked?
MS. GANDESBERY: These are exhibits
that will be presented later when Mr. Cairns

reappears to testify. 1 2 Let's identify exhibits by ALJ LIRAG: 3 how I've identified it. So let's go by the 1 through 9. The reference to the 4 5 pre-numbering was only to clarify, for 6 example, that Exhibit 2 is PG&E-2. So that 7 should only be mentioned perhaps one time, or 8 maybe twice or more, if you are 9 cross-examining. But let's try to designate 10 the -- so to avoid this confusion, let's try 11 to designate the exhibits how we've 12 officially identified them. Fair enough? 13 MS. GANDESBERY: Fair enough. 14 ALJ LIRAG: Let's proceed with that 15 directive. Thank you, Mr. Long. 16 BY MS. GANDESBERY: 17 0 Mr. Cairns, you are also sponsoring 18 Hearing Exhibit 6 Chapter 3 and rebuttal 19 testimony on risk management and mitigation? 20 Α Yes, I am. 21 And in Exhibit PG&E -- PG&E-13 he Q 22 will be sponsoring statement of 23 qualifications. And we have not marked that 24 yet, your Honor. 25 ALJ LIRAG: So you bring up a good 26 point. So throughout the hearing we are 27 going to run across exhibits to be submitted 28 but have not yet been identified. So we can

1	refer to that, we will just reference those
2	exhibits and just say, "These are exhibits
3	that have not yet been marked." But you can
4	call them just state how you pre-numbered
5	them, or perhaps probably even better, state
6	the topic that it is covering. This applies
7	also to the rest of the parties, especially
8	when you are using your own witness's
9	testimony in your cross-examination. All
10	right?
11	Please continue, Ms. Gandesbery.
12	MS. GANDESBERY: Thank you, your Honor.
13	Q Mr. Cairns, were these materials
14	prepared by you or under your supervision?
15	A Yes, they were.
16	Q And do you have any changes or
17	corrections or additions to make?
18	A No, I do not.
19	Q Are the facts contained in these
20	exhibits true and correct to the best of your
21	knowledge?
22	A Yes, they are.
23	Q And do the opinions expressed
24	therein represent your best professional
25	judgment?
26	A Yes, they do.
27	MS. GANDESBERY: Thank you.
28	Your Honor, Mr. Cairns is now

1	available for cross-examination.
2	ALJ LIRAG: Thank you. So moving
3	forward for other witnesses, Ms. Gandesbery,
4	if the if there are any corrections to
5	testimony and they are lengthy, I may require
6	you to submit an errata document, and we will
7	identify that the next day. If it is just a
8	few items that need corrections, then you can
9	just correct it from the exhibit that we
10	have.
11	MS. GANDESBERY: Thank you, your Honor.
12	ALJ LIRAG: That is moving forward.
13	I think Mr. Sher wants to go first
14	or Mr. Long?
15	MR. SHER: Thank you, your Honor. I
16	appreciate it, Mr. Long.
17	MS. LONG: Thanks. Go ahead.
18	CROSS-EXAMINATION
19	BY MR. SHER:
20	Q Nicholas Sher on behalf of Public
21	Advocates. Good morning, Mr. Cairns.
22	A Good morning. Thank you.
23	Q If you could turn to page 3-7 of
24	PG&E-16, which is Exhibit 6. If you look at
25	lines 20 through 23, are you there?
26	A I am.
27	Q In here it states that RIBA, Risk
28	Informed Budget Allocation, will be updated

```
1
     to use outputs of quantitative operational
 2
     risk modelling to enable consistent
     data-driven risk, informed decision making
 3
     across LOBs, Lines of Business, in advance of
 4
 5
     the 2023 GRC; is that correct?
 6
           Α
               That is correct.
 7
           Q
               Why is this update to RIBA
 8
     necessary?
 9
               So the current RIBA scoring is
           Α
10
     based on the risk of not performing the work.
11
     We identified that as a shortcoming, as also
12
     been pointed out by others. This is to
13
     improve the consistency of risk scoring
14
     throughout the process. It is also in line
15
     with the SMAP decision.
16
           ALJ LIRAG: Which SMAP decision are you
17
     referring to, is it the first decision or the
18
     second decision?
19
           THE WITNESS:
                         The second decision.
20
           ALJ LIRAG: Thank you.
                                    Please proceed,
21
     Mr. Sher.
22
     BY MR. SHER:
23
               In your direct testimony, which is
           Q
24
     marked as Exhibit 2, do you mention an
25
     updated RIBA to RIBA 2.0?
26
           Α
               We do.
27
           0
               Can you point me to that?
28
           ALJ LIRAG: Let's go off the record.
```

1	(Off the record.)
2	ALJ LIRAG: Let's go back on the
3	record.
4	While we were off the record
5	Mr. Cairns was looking for a particular item
6	in his testimony. Did you find it,
7	Mr. Cairns.
8	THE WITNESS: I did. Thank you.
9	ALJ LIRAG: Where is it?
10	THE WITNESS: It is on page 3-23
11	beginning on line 3. The goal of the RIBA
12	ongoing going forward is to use the
13	outputs of the qualitative operation risk
14	modeling to enable consistent data-driven
15	risk-informed decision making.
16	BY MR. SHER:
17	Q What will PG&E be updating in this
18	new RIBA?
19	A It will be using the output of the
20	risk models as the inputs to the RIBA model.
21	Q Is this when risk spend efficiency
22	comes in?
23	A Risk spend efficiency is the output
24	of the risk model and that will become the
25	input to the RIBA model.
26	Q With regards to risk spend
27	efficiency calculations, are they only
28	calculated for RAMP risk areas?

1 Α So for the RAMP filing the only --2 we only performed risk spend efficiency 3 calculations for mitigations, yes. Is PG&E using risk efficiency 4 0 5 anywhere else other than RAMP? For the new modeling, it is broader 6 7 than RAMP. RAMP was just the top safety 8 We are now looking at all of our top risks. 9 risks, and we're using the RAMP methodology, 10 the bow tie and the risk modeling, with risk 11 spend efficiency. 12 If you can turn to what has been 13 marked as Exhibit 7, which is your Data 14 Response 244. If you can look in particular 15 at Question S(b)(iii) and your response 16 thereto. 17 Α Yes. 18 0 I apologize. It is actually your 19 response to Question 2(b)(iii). Do you mind 20 reading that to yourself? 21 ALJ LIRAG: You want him to read it 22 into the record? 23 MR. SHER: No. He can read it to just 24 himself. 25 ALJ LIRAG: Let's go off the record for 26 that. 27 (Off the record.) 28 ALJ LIRAG: Let's go back on the

1 record. 2 Mr. Cairns has found, has read the 3 Let's proceed, Mr. Sher. passage. 4 MS. SHER: Thank you, your Honor. 5 In your response you mention that 0 6 the current RIBA scoring method will be 7 replaced by the methodology in the SMAP; is that correct? 8 9 Α That is correct. 10 Will the new risk method apply to Q 11 non-RAMP risks, i.e., PG&E's non-top risks? 12 Doesn't sound great, but you know what I 13 mean? 14 Α So at the moment it will only apply 15 to those risks that we are evaluating using 16 the RAMP methodology. We are expanding from 17 top safety risk to include all "top risks." 18 At this time it won't be applied to non-top 19 risks. 20 You just made a distinction between 0 21 top safety risks and all non -- all top 22 safety risks? 23 ALJ LIRAG: Let's clarify. When we say 24 the top risks, we are referring to the top 22 25 risks that were identified in the RAMP 26 report? 27 THE WITNESS: They were the top 22 28 safety risks.

```
1
           ALJ LIRAG: Top 22 safety risks.
 2
               Is that what you are referring to,
 3
     Mr. Sher.
           MS. SHER:
 4
                      Correct.
 5
           ALJ LIRAG: We are referring to
 6
     those --
 7
           MR. SHER: Risks.
 8
           ALJ LIRAG: Please proceed, Mr. Sher.
 9
     BY MR. SHER:
10
               Again, sorry, the updated RIBA will
           Q
11
     address PG&E's non-top risks; is that
12
     correct?
13
           Α
               Can you rephrase the question?
14
           Q
               Sure. Will the updated RIBA
     address PG&E's non-top safety risks?
15
16
           Α
               It will address the -- yeah, the
17
     top risks that are not safety risks, yes.
18
           Q
               Okay.
19
           ALJ LIRAG: Could you repeat that
     statement? It will not address?
20
21
           THE WITNESS: Sorry, will address all
22
     top risks, both safety top risks and
23
     non-safety top risks.
24
           ALJ LIRAG: It did not address non-top
25
     risks?
26
           THE WITNESS:
                         Not at this time.
27
           ALJ LIRAG: Thank you. Mr. Sher.
28
     ///
```

BY MR. SHER: 1 2 If you could turn to Exhibit 6, Q 3 which is your rebuttal, page 3-8 line 30. 4 Α 3-6 line? 5 0 3-8 line 30. You see here it 6 states that PG&E will be working with the Commission and other stakeholders on next 7 steps for determining --8 9 Α Yes. 10 -- risk tolerance for the many 0 11 risks inherent in its business. What does the determination of risk 12 13 tolerance entail? 14 Α So risk tolerance is a concept of 15 at what level is enough mitigation being 16 applied. I guess I should begin with it is 17 not possible to completely eliminate risk. 18 So what other mitigations that you can use to 19 lower the risk down to an acceptable level. 20 So the concept of risk tolerance is how does 21 one determine what is acceptable. 22 Does the determination of risk 0 23 tolerance requirement a comparison of modeled 24 risk observed data? 25 Α That would be helpful, but there are other considerations. What is tolerable 26 to one stakeholder may be intolerable to 27

another stakeholder. That is why we need to

Α

work through the next set of SMAP workshops 1 2 to bring together the stakeholders to 3 determine how one should consider and approach the subject of risk tolerance. 4 5 Regarding PG&E's risk reduction 6 goals, does PG&E have a stated risk reduction 7 goal between years 2020 and 2023? No, we don't. 8 Α 9 Is PG&E trying to achieve -- sorry. Q I'm going to rephrase that. 10 11 What is PG&E trying to achieve in 12 this GRC period in terms of risk reduction? 13 So for each of the risk areas we 14 are seeking to achieve the maximum amount of 15 risk reduction, but we are currently unable 16 to optimize that across each risk. We need to consider for each risk event what we are 17 18 seeking to avoid, understanding the drivers 19 of those events and the effectiveness of 20 current controls. How can we reduce either 21 the probability of that event occurring or 22 the consequence of that event if it were to 23 So we are looking at it through an occur. 24 individual risk lens. 25 0 Has PG&E considered its risk 26 reduction goals given constraints it may 27 face?

That is one of the considerations.

For example, we may see a mitigation that can 1 2 effectively reduce that risk. But there may 3 be constraints in implementing that, such as the ability of qualified labor, long lead 4 5 time for particular parts that may go into 6 that, permitting requirements, the ability to 7 take outages to complete the work, as 8 examples. Thank you. No further 9 MS. SHER: 10 questions. 11 ALJ LIRAG: All right. We have the 12 time, let's proceed to Mr. Long's cross. 13 MS. LONG: Thank you, your Honor. 14 CROSS-EXAMINATION 15 BY MR. LONG: Good morning, Mr. Cairns. I'm Tom 16 Q 17 Long with TURN. 18 Α Good morning. 19 Q I think I saw two titles in your testimony. You are PG&E's Risk and Audit 20 Officer. That is one title you give 21 22 vourself? 23 Α My title is Vice President Internal Audit and Chief Risk Officer. 24 25 0 You joined PG&E in 2006 as the Senior Director of Internal Audit? 26 27 That is correct. Α 28 You were promoted to the Vice Q

```
1
     President position that you are now in in
 2
     2008; is that right?
 3
           Α
               In 2008 I was promoted to the Vice
     President, Controller.
 4
 5
               And then after that how did you get
     to this position?
 6
 7
               After that I was, became Vice
           Α
     President of Internal Audit and Compliance.
 8
 9
               That morphed into Vice President of
           Q
     Internal Audit and Chief Risk Officer?
10
11
           Α
               In 2016, yes.
12
           ALJ LIRAG: Let's pause a little bit,
13
     Mr. Long. Let's go off the record.
14
               (Off the record.)
15
           ALJ LIRAG: Let's go back on the
16
     record.
17
               Sorry to interrupt, Mr. Long.
18
     Please proceed.
19
           MS. LONG:
                      Thank you.
20
               Mr. Cairns, I would like to direct
           0
21
     you to what has been marked as Exhibit 2,
     that is your direct testimony.
22
     particular, I would like you to turn to
23
24
     page 3-2 where you will see Heading B
25
     Philosophy and Organization. And under that
     Subheading 1, Philosophy. Do you see that?
26
27
           Α
               I do.
28
               And just in general terms, you are
           Q
```

describing the value of quantitative risk 1 2 assessment in helping PG&E achieve the 3 Commission's affordability goals? Is that a fair summary? 4 5 Α That is correct. 6 0 Now, by meeting affordability 7 goals, do you mean keeping rates as well as possible consistent with providing safe and 8 9 reliable service? 10 Α That is a correct definition. 11 Q Is that a goal that PG&E goes with? 12 Α Yes, it is. 13 0 And then you go on to say that 14 quantitative risk assessment, I'm 15 paraphrasing, allows us to better identify 16 the largest opportunities for risk reduction 17 and evaluate risk reduction investments 18 across the portfolio. Is that a fair 19 summary? 20 Could you direct me to the Α 21 particular line item that you were 22 referencing? 23 I think it is pretty much lines 26 Q 24 through 28, 26 -- actually, 25 and -- 25 25 through 27, I believe. 26 Α Yes. With that testimony in mind then, 27 0 28 would you agree with the following statement

from PG&E's GRC decision, I'm referring to 1 2 the handout that I distributed, which is an 3 excerpt from page 28 of that decision and that decision number is Decision 14-08-032. 4 5 Do you have that handout in front of you? 6 Α I do. 7 So I'm going to just read the 0 sentence at the first complete paragraph at 8 9 the top of that page and ask you if you agree with that: Virtually everything a utility 10 11 does has some nexus to safety and can be 12 deemed to have some safety impact. But the emphasis should be on those initiatives that 13 14 deliver the optimal safety improvement in 15 relation to the ratepayer dollars spent. 16 My question is: Do you agree with 17 that statement? 18 Α Yes, I do. 19 Just before that sentence there is Q 20 another sentence that reads: It is not enough to merely assert that safety would be 21 22 compromised, absent approval of a particular 23 work effort. 24 Would you agree that to justify its 25 forecasts in this GRC that it is not enough 26 for PG&E to merely assert the safety would be 27 compromised?

A That would be the desire, yes.

I'm going to ask you now to turn to 1 Q 2 page 2-4 of that same exhibit. And at lines 3 1 and 2 you refer to something called the Monthly Business Plan Review Dashboard. 4 5 the Business Plan Review is abbreviated as 6 Do you see that? BPR. I do. 7 Α You are familiar with that 8 0 9 dashboard? I'm familiar with the concept of 10 11 the meeting, yes. 12 And this dashboard is provided to 13 the senior management team at monthly 14 meetings; is that right? 15 Α That is my understanding, yes. 16 Q And the senior management team 17 consists of senior vice presidents and above; is that right? 18 19 Α That is correct. 20 Could you clarify for me, an 0 21 executive vice president, is that higher or 22 lower than a senior vice president? 23 Α It is higher. 24 Q So now I would like you to turn to 25 a document that we had asked to be marked and has been marked as Exhibit 7. This is -- I'm 26 27 sorry, it has been marked as Exhibit 8. This is your response, PG&E's response to TURN 28

```
1
     Data Request 58-2. It has Attachment 1,
 2
     which consists of two Excel worksheets that
 3
     have been combined.
               First, do you have that in front of
 4
 5
     you?
 6
               Yes, I do.
           Α
               In this, if you will look first
 7
           0
 8
     before we get into the Excel worksheets, if
 9
     you look at 58-2 Question A, and flipping
10
     through to find the right -- this is actually
11
     on page 1. We asked you to identify each of
12
     the metrics in the BPR Dashboard and to
13
     provide a complete definition what is
14
     measured by each metric. Do you see that?
15
           MS. GANDESBERY:
                            Counsel, for the
16
     record, this was sponsored by Jamie Martin
17
     and not this witness.
18
           MS. LONG: It is asking about his
19
     testimony.
20
           ALJ LIRAG: Let's have Mr. Long
21
     continue. And then if Mr. Cairns cannot
22
     answer, then he can say it is not part of his
23
     testimony.
24
               Let's proceed, Mr. Long.
25
     BY MR. LONG:
26
               I would like you now to -- okay.
27
     So we were looking at 58-2(a). And we asked
28
     you to identify each of the metrics, and then
```

```
the answer is the attachment to the exhibit;
 1
 2
     is that right?
 3
           Α
               That is correct.
               And looking at the attachment then,
 4
           0
 5
     there are numerous pages of Exhibits that are
     the 2018 metric definitions.
                                    Do you see that
 6
 7
     heading at the top of the first page of
     the --
 8
 9
           Α
               I do.
10
           0
               -- attachment?
               If you go to the last page, I don't
11
12
     know if it is on your copy, but I've
13
     handwritten in this -- these are the 2019
     Metric Definitions; is that right?
14
15
           ALJ LIRAG: So there is no page number.
16
     It is the very last page of Exhibit 08.
17
           THE WITNESS: I see that last page.
     BY MR. LONG:
18
19
               Those are the 2019 Metric
20
     Definition; is that right?
               As there is no heading, I don't
21
22
     know.
               I think the copy you have doesn't
23
           Q
     have the -- what I've handwritten in.
24
                                              It is
25
     the worksheet that is 2019 Metric
26
     Definitions. We are on the same page?
27
           Α
               Yes.
               All right. Now, from the Excel
28
           Q
```

worksheets I counted 179 metrics for 2018. 1 2 That is pretty much most of this attachment. Those are the 2019 metrics. And then I 3 counted 26 metrics for 2019. Does that sound 4 about right to you? 5 Without checking the math, it looks 6 7 about right. You can say, "Yes, subject 8 ALJ LIRAG: 9 to check" to answer that. "Yes, subject to check." 10 THE WITNESS: 11 ALJ LIRAG: It is a suggestion. 12 THE WITNESS: Thank you. 13 BY MR. LONG: 14 Q I just used the lines off the 15 number of rows and worked from the Excel 16 version. It made it kind of easier to check 17 that number? 18 All right. So can you explain why 19 there were approximately 179 metrics used for 20 the BPR Dashboard for 2018 and that number of 21 metrics went down to 26 for 2019? 22 I have no hand in that. That Α 23 wasn't under my purview, so I'm afraid I can't. 24 25 MR. LONG: Okay. I'm not aware of any other witness that is testifying or talked 26 27 about the Business Plan Review Dashboard 28 Metrics. So I didn't understand why Jamie

1	Martin was listed as the sponsor when the
2	question related to testimony that was being
3	sponsored by Mr. Cairns. That is my
4	confusion. Anyway, is there a way we can get
5	an answer to that question?
6	ALJ LIRAG: Are you able to answer the
7	question, Mr. Cairns?
8	THE WITNESS: I'm not able to answer
9	that question.
10	MS. LONG: Maybe we can talk about it
11	offline with PG&E.
12	ALJ LIRAG: Let's go off the record.
13	(Off the record.)
14	ALJ LIRAG: Let's go back on the
15	record.
16	While we were off the record there
17	was some discussion regarding whether
18	Mr. Cairns or some other witnesses are able
19	to answer questions relating to a portion of
20	the document of Exhibit 2 that was not
21	sponsored by Mr. Cairns.
22	So the decision was to try, and
23	let's have Mr. Long just ask the questions.
24	And let's see if Mr. Cairns can answer as
25	much as he can.
26	Please proceed, Mr. Long.
27	MS. LONG: Thank you.
28	Q Mr. Cairns, looking at the 2018

```
1
     metrics, and they are organized
 2
     alphabetically?
 3
           ALJ LIRAG:
                      2018.
           MS. LONG: I'm sorry, 2018. Thank you.
 4
 5
               For 2018 I'm going to ask you to
 6
     look at the metrics that begin with the line
 7
     of business showing as Finance and Risk.
     They are not PG&E numbers. But if you can
 8
 9
     turn to that page that shows the finance and
10
     risk metrics where Finance and Risk is at the
11
     top of the page?
12
           Α
               Yes, I have that.
13
           0
               The first metric listed there,
14
     Analyst's Methods Within Projected Range.
                                                  Do
15
     you see that?
16
           Α
               I do.
17
           0
               What is this metric measuring?
18
           Α
               I could only answer based on
19
     reading the definition.
               Do you know what a cell site
20
           Q
21
     analyst is?
22
               It is an analyst that looks at
23
     different stocks, but I don't have any
24
     knowledge of -- that is something that our
25
     investment group looks at.
26
               Okay.
                      If you go down two metrics
27
     on that same page, there is something that is
28
     called "Count of LO to L2 Initiatives."
```

1	you see that?
2	A I do.
3	Q Do you know what this metric is
4	measuring?
5	A I do not.
6	Q Do you know what a CAR initiative
7	is?
8	A I do not.
9	Q I'm going to forgo asking about the
10	other finance and risk metrics, which I think
11	we've established you are not able to answer
12	questions about that; is that right?
13	A Yes. This is under the Integrated
14	Planning Lead, Jamie Martin.
15	Q Okay. But again, it is in your
16	testimony. I don't believe Jamie Martin
17	referred to these metrics. Again, I'm
18	confused about not being able to get answers.
19	Let's now look at the next document
20	I handed out, which has been marked as
21	Exhibit 9. It is the same data request
22	response, but this has Attachments 3 through
23	8. Do you have that in front of you?
24	A I do.
25	Q Can you turn to page 9 of the data
26	request response. It has page 5 in the
27	bottom of the corner.
28	A Mm-mm, yes.

1	Q So the attachments are identified
2	on this page, and these attachments consist
3	of the agendas for the meetings where the
4	executive team or the senior management team
5	would review these metric results; is that
6	right?
7	A That is my understanding, yes.
8	Q So, for example, the first row on
9	that chart on that page says, "July 2018 BPR
10	Executive Agenda." That would be the
11	executive agenda for the meeting to go over
12	the July 2018 business plan review metrics;
13	is that right?
14	A Yes.
15	Q Have you had a chance to look
16	through these agendas?
17	A I have.
18	Q Are you familiar with, generally
19	familiar with these agendas?
20	A Only from reviewing it. I don't
21	attend these meetings. I don't have the
22	materials sent to me in advance.
23	Q Okay. You are not part of the
24	senior management team?
25	A I am not.
26	Q Okay. Because your position is one
27	level below the senior management team?
28	A That is correct.

Q

All right. Let's see if you are 1 Q 2 able to answer some of my questions about 3 Most of the metrics that show up in these. these agendas are not doing well, and that 5 would be because these agendas tend to focus 6 on metrics where the performance is subpar. Is that fair to say? 7 My high-level understanding is 8 Α 9 these meetings focus transparently on the areas that need greatest attention by the 10 11 senior officers. 12 And then sometimes they are 13 reference to metrics that are amber and other 14 times to red. Could you explain those terms? 15 Α So there is three layers of rating 16 performance. Red is off track without a plan 17 to recover, amber is off track but with a 18 plan, and green is on track. Let's focus, for example, let's 19 20 look at the business plan review for -- it 21 will say on the top right corner August 22 Business Plan Review." Can you turn to that 23 Then if you turn to page 4 page, please. 24 within that part of the document in that 25 attachment, you will see a heading that says 26 Compliance. Do you see that? 27 Α Yes.

And the first item listed there is

Compliance Timely Reporting of Injuries. 1 Ιt 2 says "YTD," which I presume is year to date 3 performance, has been red with no calls reported timely all year. 4 5 What does "red" mean in that 6 context? 7 I don't know the answer to that. Α 8 0 Now let's stay with that same page. 9 If you go up the heading above is Finance and There are two metrics at the bottom 10 Risk. 11 Bottom of that box it says "BU," there. 12 which I assume is business unit, "Expense 13 Forecast Accuracy (30 Days Ahead)" and then 14 the same for "Capital Forecast Accuracy" 15 below that. Those are not -- those do not 16 appear in the 2018 metrics in the attachment 17 we just looked at. 18 Are you able to explain that? 19 Α I am not. 20 Do you have an understanding of 0 21 whether sometimes metrics, other than what 22 are in the business plan review metrics that 23 you shared with us, are sometimes used in 24 these meetings? 25 Α I don't know. That is not part of 26 the process that I oversee. 27 Q All right. Let's move on then. 28 ALJ LIRAG: Let's do a little time

settlement.

1 check, right now, Mr. Long. Not to rush you. 2 We have a lot of time in the afternoon. Do 3 you think you will wrap up the next five minutes, or no? Otherwise, let's go 4 5 into the lunch break. MS. LONG: Small chance of 6 five minutes, most likely 10. I don't think 7 8 I plan to go over too much. 9 This is only for purposes ALJ LIRAG: 10 of doing lunch. 11 He may have redirect. MS. LONG: 12 his convenience, he may prefer we go through 13 all the questions now. I'm happy to do that. 14 ALJ LIRAG: Let's go along and do 15 another time check in five minutes. Please 16 proceed. Sorry to interrupt. 17 BY MR. LONG: 18 I would like you to turn now to 19 Exhibit 6 of your testimony and that is your 20 rebuttal testimony. Turn to page 3-10 of 21 that document. This touches a little bit on 22 questions that Mr. Sher was asking you. 23 In Answer 18, as I read that 24 answer, you are agreeing with TURN in saying 25 PG&E will replace the RIBA, R-I-B-A, scoring 26 approach with Risk Spend Efficiency, or RSE. 27 You will do that in accordance with the SMAP

Is that a fair reading of that 1 2 answer? 3 Yes; that is correct. Α I think maybe key terms there is 4 0 5 the phrase "RIBA Scoring Approach." That is 6 what is going to be replaced --7 That is correct. Α -- with the SMAP risk method; is 8 0 9 that right? 10 Α Yes. There are other elements of the 11 Q 12 RIBA process, you say in that answer that 13 PG&E intends to continue to use. 14 describe those in lines 20 to 24; is that 15 right? 16 Α Yes. 17 Is it fair then to say that these 18 elements that you describe are something 19 different from the RSE score? First let's start with that, these other elements --20 21 Α Yes. 22 -- that you are going to keep from 23 RIBA something other than scoring method; is 24 that right? 25 Α Yes. These are the operational constraints. 26 27 So these are elements -- see if I'm 0 28 understanding this -- these are elements

27

28

other than the score that PG&E intends to 1 2 consider, along with the risk spend 3 efficiency score, in deciding what worked to propose in future rate cases; is that right? 4 5 Α That is right. 6 Q On page -- if you can turn to 7 page 3-15, please. Α 8 Yes. 9 Q Answer 30 on that page there you 10 discuss the issue of PG&E using 2016 as the 11 baseline for measuring risk reduction. Do 12 you see that? 13 Α Yes. 14 Q There you are responding to Okay. 15 TURN's position that to calculate risk spend 16 efficiency, correctly for mitigation that are 17 proposed to be implemented beginning in 2020, 18 TURN's position being the baseline should be through the end of 2019. 19 Is that your 20 understanding of TURN's position? 21 Α Yes, it is. 22 Would you agree that the right way Q 23 to measure risk reduction going forward is to 24 use the end of the year before the test year 25 as the baseline?

rate case, 2019 was the forecast.

If that is practical to do, then

But we

But when we put together the general

Α

Yes.

thought using recorded actuals was much more 1 2 robust than a forecast. And you are aware that under the 3 Q settlement that was adopted, the second SMAP 4 5 decision, Decision 18-12-014, that the 6 settling parties, including PG&E, agreed that 7 sometimes it is necessary to use subject 8 matter expertise to make the best estimates 9 that that can be made. Are you familiar with 10 that? I am. 11 Α 12 And that could be one way to 0 13 estimate the -- to use the year prior to the 14 test year as the business line; isn't that 15 right? 16 Α That is one way. 17 0 Okav. I would like you now to turn 18 to -- look at Answer 32, beginning at the bottom of page 3-15, and then Answer 33 at 19 20 the top of page 3-16. If you could just 21 briefly familiarize yourself with those, and 22 I will have a question for you. 23 Α Yes. 24 Q This is about issues and concerns 25 that TURN and others have raised about -including PG&E, about the way that RSE was 26 27 calculated; is that fair?

And would you at least agree that 1 Q 2 the Commission should -- the Commission 3 should take into account the problems with PG&E's first generation RSE if it is thinking 4 5 of relying on RSE values in its decision 6 making in this case? So one of the things that we took 7 Α from the SED feedback was the mitigation 8 9 justification should be clearly outlined. So if it was RSE based, then that would be an 10 11 error to pay attention to the RSE. If it was

12 some subject matter expert based, then the

basis for that subject matter expert will be explained.

15

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I think you answered maybe a Q Okay. different question.

You are aware that TURN and you are responding to TURN's recommendation that RSE values have so many issues with them in the first generation iteration that PG&E has put forward here, that they are not really useful for the Commission's decision-making process. You are aware that is TURN's position?

> Α I am aware of that, yes.

0 I'm asking you if we can at least agree that whether -- maybe not go as far as what TURN said, but we can least agree the Commission should take into account the

```
issues and problems with PG&E's first
 1
 2
     generation RSE calculation in deciding what
 3
     weight to give those RSE calculations.
                                               Is
     that something we can agree on?
 4
 5
               The limitations for the RSE should
 6
     be taken into account, yes.
           MR. LONG:
                      If I could have a moment off
 7
 8
     the record, your Honor. I wanted to see if
 9
     there is a follow-up to one of Mr. Sher's
10
     questions.
11
           ALJ LIRAG: Let's go off the record.
12
               (Off the record.)
13
           ALJ LIRAG: Let's go back on the
     record.
14
15
               Mr. Long.
16
     BY MR. LONG:
17
               Mr. Cairns, in responding to
           0
     Mr. Sher's questions, you were talking about
18
     the use -- what you call the "new risk
19
20
     method" and what it would apply to. Do you
21
     recall that?
22
           Α
               Yes.
23
               And the new risk method is
           Q
24
     basically the settlement that was adopted in
25
     SMAP and that leads to the calculation of
26
     RSE; is that right?
27
           Α
               Yes; that is correct.
28
               And I wanted to just understand
           Q
```

this distinction you were making. You used 1 2 two different terms. You said that of course the RSE will apply to the top safety risks. 3 You said PG&E would also have it apply to top 4 5 risks other than safety; is that right? 6 Α Correct. Could you help us understand what 7 0 is the difference between those two 8 9 categories? Help us understand what that 10 means? 11 The top safety risks are those 12 risks where the event could lead to a safety, 13 either fatalities or serious injuries, but there are other risks that the utility faces 14 15 that don't have the potential. But these also could be very impactful if, for example, 16 17 the ability to serve load. Do you have 18 sufficient gas and power to meet that 19 forecast? That doesn't have a direct safety. 20 It has, I admit, an indirect safety. 21 are risks that we also need to consider as a 22 utility. 23 And often folks refer to the Q 24 inability to serve load as a reliability 25 risk. Is that a term you use as well? 26 Α Yes. Do you have other non-safety risks 27 Q

in mind when you talk about applying this new

risk method to something other than the top 1 2 safety risks? 3 Α Sorry, could you rephrase? I'm trying to figure out what 4 0 5 else -- I have this then diagram idea in my 6 mind. There is a something, a circle that is top safety risks and then there is a circle 7 that is top risks other than safety. 8 9 What is in that circle other than top risks other than safety? You just 10 11 said reliability could be in there. What 12 else? 13 Business model. The nature of the Α 14 environment that the utilities are working in We have things like CCAs, Community 15 changes. 16 Choice Aggregation. The stated goal of 17 California to continue to reduce emissions 18 will have an impact on the gas business. 19 these are other things that are 20 considerations for the utility. 21 So changes in the business Q 22 environment it sounds like you are describing 23 as another category? 24 Α Yes. 25 0 That would be -- those would be 26 risk, because they pose a financial risk to 27 the utility. Is that fair to say? 28 Α That is fair to say, yes.

Would there be other financial 1 0 2 risks that would be in the same category that 3 is not included in top safety risks? Sorry. Could you rephrase that 4 Α 5 question? 6 Financial risks you just said Q 7 changes the business environment, would be an Are there other financial 8 example of one. 9 risks that would be something that PG&E would 10 include as a top risk other than safety? We linked all of these under what 11 12 we call "business model risk." So what are 13 the drivers that could impact the utility's 14 business and the longevity of that. How do we know -- where is the 15 Q 16 cutoff between top and not the top for this 17 exercise? 18 So we follow the methodology, and we look at the potential of the risk. 19 20 Understanding the event that you are seeking 21 to avoid, the drivers to those events, we 22 understand which one has the biggest impact 23 on the potential for that risk to occur, the 24 consequences on the left-hand side, the 25 right-hand side of the bow tie, and what 26 mitigations could reduce the impact of those 27 And ultimately it is a subsequences. 28 judgment call, does this rise to the level

1 that it is a potential that could be 2 significant to the organization's ability to 3 use objectives. And I'm familiar, having been 4 5 involved in developing the SMAP settlement, 6 that there is a way in the settlement to identify what -- figure out what the top 7 risks are that will be addressed under the 8 9 settlement. 10 But my question is: For these 11 other risks that are not safety risks, how 12 are you distinguishing between top and not 13 top? 14 Α Judgment. 15 MS. LONG: All right. That is all my 16 questions. 17 EXAMINATION 18 BY ALJ LIRAG: 19 Let me just clarify something. 20 the mitigation programs, activities, et 21 cetera, for the top safety risks, they are 22 not all safety related, just to clarify? 23 For the top safety risk they are Α all safety related, yes. 24 25 All activities relating to the 26 top -- the 22 risks in the RAMP report, they 27 are all safety? 28 All safety related. Α

1	ALJ LIRAG: Any questions?
2	EXAMINATION
3	BY COMMISSIONER RANDOLPH:
4	Q Just to clarify, there is 22 top
5	safety risks and then there is 22 top risks?
6	A No.
7	Q I'm sorry. 27 top risks. So it is
8	two different categories, 27 top risks, 22
9	top safety risks?
10	A 27 top risks of which 22 are
11	safety.
12	Q Okay. That helps clarify.
13	ALJ LIRAG: The 22, those are what is
14	in the RAMP report?
15	THE WITNESS: That is correct.
16	ALJ LIRAG: Some of those are not
17	addressed in this GRC. I think there is one
18	that is FERC, then there is one for the I
19	believe it is the storage transmission GT&S
20	proceeding; is that correct?
21	THE WITNESS: That is correct.
22	ALJ LIRAG: Any further questions?
23	MS. LONG: Can I just ask a follow-up?
24	ALJ LIRAG: Yes, Mr. Long.
25	CROSS-EXAMINATION RESUMED
26	BY MR. LONG:
27	Q Where are the 27 risks that include
28	the 22 safety risks? Where have you

1	identified the 27?
2	A Can I ask counsel? I can't
3	remember.
4	MS. LONG: Absolutely.
5	ALJ LIRAG: Let's go off the record.
6	(Off the record.)
7	ALJ LIRAG: Let's go back on the
8	record.
9	Mr. Cairns, do you have an answer?
10	THE WITNESS: If I can refer you to
11	Workpaper 3-1 and Workpaper 3-2.
12	ALJ LIRAG: Are you looking at Volume 1
13	or Volume 2?
14	THE WITNESS: Volume 1 of 2.
15	ALJ LIRAG: So Exhibit 3 of 3?
16	THE WITNESS: Workpaper 3-1 shows the
17	top risks and which ones are identified as
18	enterprise risks.
19	COMMISSIONER RANDOLPH: I think, isn't
20	this sorry, I'm making sure I have the
21	right exhibit. Okay.
22	ALJ LIRAG: Please proceed, Mr. Cairns.
23	THE WITNESS: So Workpaper 3-1
24	identifies all top risks and which are
25	identified as enterprise risks. And over on
26	Workpaper 3-2 it shows which rate proceeding
27	these risks are applicable to.
28	MS. LONG: I apologize. I don't happen

```
1
     to have those pages in front of me. Does it
 2
     identify the five that are top risks but not
 3
     top safety risks?
           ALJ LIRAG: There is no one-to-one
 4
     correlation? We are trying to extract the
 5
     five risks in the 27 risks that are not
 6
     safety related. I think that is what we are
 7
 8
     trying to extract.
               Let's go off the record.
 9
10
               (Off the record.)
11
           ALJ LIRAG: Let's go back on the
12
     record.
               While we were off the record we were
13
     discussing the schedule, and so we've decided
14
15
     we are going to take our lunch break right
16
     now.
          Let's return back here at 1:30 on that
17
     clock.
18
               But before we go, Commissioner
     Randolph, do you have any remarks or
19
20
     questions?
21
           COMMISSIONER RANDOLPH:
                                    No.
22
           ALJ LIRAG: This is in the event that
23
     you are not here in the afternoon.
24
           COMMISSIONER RANDOLPH:
                                    No.
                                         Thank you.
25
           ALJ LIRAG: We will follow-up on that.
     Let's take our break right now. Off the
26
27
     record.
28
               (Off the record.)
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(Whereupon, at the hour of 12:11 p.m., a recess was taken until 1:30
 1
 2
       p.m.)
                                                             ]
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AFTERNOON SESSION - 1:34 P.M. 1 2 ALJ LIRAG: Let's go back on the 3 record. We're back from our lunch break. 4 5 We'll continue with Mr. Cairns who remains 6 under oath. 7 STEPHEN CAIRNS, resumed the stand and testified further as 8 9 follows: 10 11 ALJ LIRAG: We had a lot of questions 12 for you, but then we had lunch so it's 13 shortened the number of questions. 14 digress. 15 Mr. Long, any other questions? 16 MR. LONG: We were just going to give 17 Mr. Cairns an opportunity to just explain for 18 us the difference between the 22 RAMP risks 19 and then the 27 top risks and how we can 20 figure out which ones are which. 21 ALJ LIRAG: All right. Let's proceed 22 with that, Mr. Cairns. 23 THE WITNESS: Thank you. If we could 24 turn to Hearing Exhibit 03 and page WP3-1, 25 here you'll see a list of the 27 top risks that existed at the time we did our RAMP 26 27 filing, risk number 1, 6, 7, 13, and 27 are 28 non-safety related risks.

```
1
           ALJ LIRAG: Could you repeat that, 6,
 2
     7 --
 3
           THE WITNESS:
                          Risk number 1.
           ALJ LIRAG: Number 1.
 4
 5
           THE WITNESS:
                          Risk 6, risk 7, risk 13,
 6
     and risk 27.
 7
           ALJ LIRAG:
                       Thank you.
                       Could I ask one more
 8
           MR. LONG:
 9
     question following up on this morning's
     discussion?
10
11
           ALJ LIRAG: Of course.
12
           MR. LONG:
                      Thank you.
13
               RECROSS-EXAMINATION RESUMED
14
     BY MR. LONG:
               Your testimony, Exhibit 6, Answer
15
16
     18 on page 3-10 said you were replacing the
17
     RIBA scoring method with the RSE calculated
18
     in accordance with the SMAP settlement;
19
     right?
20
               That's correct.
           Α
21
               So the RIBA -- my understanding of
           0
22
     RIBA is that it was used to score all the
23
     programs that were -- that are proposed in a
24
     GRC; is that right?
25
           Α
               Correct.
               So does that mean then that the RSE
26
           0
27
     calculated in accordance with the SMAP
28
     settlement will be used to score all the --
```

in the future will be used to score all of 1 2 the proposed programs in the GRC? 3 All of the proposed programs that are safety related. 4 5 And is that how -- and RIBA is now 6 confined to safety-related programs? 7 Rephrase. So this is still under Α development. This is our intent and we 8 9 haven't ironed out all of the details behind 10 that, but we will be using the output from 11 the new risk models to feed into the RIBA 12 model. 13 And I'm focused on the scoring part 0 14 of it and, again, this concept that the RIBA 15 score is going to be replaced with an RSE 16 score? 17 That's correct. Α 18 0 So for everything in the past when 19 you've been doing a RIBA score, there will 20 now be an RSE score; is that right? 21 Where we have that RAMP-based model Α 22 that's based on the SMAP decision, that will 23 At the present time, I'm trying to think 24 about could there be certain items that go 25 into the GRC where we don't have that model. That's my hesitation in giving you an 26 27 affirmative answer to that. 28 But the general intent is to use Q

1 RSE to replace the RIBA score and you just --2 what you're sticking on here is just that 3 there may be some minor exceptions where that wouldn't be the case? 4 5 If there was something we didn't 6 have a model, then we wouldn't have an RSE. 7 Q Okay. That's my hesitation in answering 8 Α 9 the question. 10 But for the most part, you will be Q 11 using RSE to replace the RIBA scores where 12 you now do a RIBA score? 13 That's correct. Α 14 Q Thank you. 15 ALJ LIRAG: Just to add to that, so 16 once you've replaced the RIBA scores with the RSE scores, there would still be items that 17 18 would contain a RIBA score? 19 THE WITNESS: That was my hesitation in 20 giving that complete answer. I don't know 21 off the top of my head if there could be 22 items that would not have been risk models. 23 All right. Fair enough. ALJ LIRAG: 24 So I have a couple questions. I'm not sure if you're the one who sponsored this 25 26 testimony. I think it's part of Ms. Ramaiya's testimony, but I'll ask you. 27 28 So this relates to how the Camp Fire affects

1	activities.
2	So according to the testimony,
3	PG&E's GRC testimony does not take into
4	account the Camp Fire events when the
5	testimony was prepared. Is that your
6	understanding or am I asking the wrong
7	witness?
8	THE WITNESS: I'm not the appropriate
9	witness to answer that question.
10	ALJ LIRAG: Let's go off the record.
11	(Off the record.)
12	ALJ LIRAG: Let's go back on the
13	record. While we were off the record, I
14	asked some clarifying questions on which
15	witness to ask and so I guess Mr. Cairns
16	doesn't have to answer any more questions
17	from me.
18	ALJ Lau, do you have any questions?
19	ALJ LAU: I don't.
20	ALJ LIRAG: Any of the other parties
21	have any questions?
22	(No response.)
23	ALJ LIRAG: Ms. Gandesbery, any
24	redirect?
25	MS. GANDESBERY: No, your Honor, but I
26	would like to move our exhibits into
27	evidence.
28	ALJ LIRAG: All right. Let's go off
	1

```
1
     the record for that.
 2
               (Off the record.)
 3
           ALJ LIRAG: Let's go back onto the
 4
     record.
 5
               Ms. Gandesbery, is there a move to
     admit any of the exhibits we identified thus
 6
 7
     far into the record?
 8
           MS. GANDESBERY: Yes, your Honor, thank
 9
           PG&E would like to move Exhibits 1
     you.
     through 5 into the record.
10
11
           ALJ LIRAG: Any objections from the
12
     other parties?
13
               (No response.)
           ALJ LIRAG: Hearing none, Exhibits 1
14
15
     through 5 are admitted into the record.
               (Exhibit No. 01 was received into
16
               evidence.)
17
               (Exhibit No. 02 was received into
18
               evidence.)
19
               (Exhibit No. 03 was received into
               evidence.)
20
               (Exhibit No. 04 was received into
21
               evidence.)
22
               (Exhibit No. 05 was received into
               evidence.)
23
24
           ALJ LIRAG: And I understand Exhibit 6
25
     is co-sponsored by another PG&E witness so
26
     we're not admitting that today.
27
           MS. GANDESBERY: That's right, your
28
     Honor.
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1
           ALJ LIRAG: Mr. Sher, Exhibit 7.
 2
           MR. SHER: Good afternoon, your Honor,
 3
     yes, if Exhibit 7 can be moved into evidence,
 4
     please.
 5
           ALJ LIRAG: Any objections?
 6
               (No response.)
           ALJ LIRAG: Hearing none, Exhibit 07 is
 7
 8
     admitted into the record.
 9
               (Exhibit No. 07 was received into
               evidence.)
10
11
           ALJ LIRAG: Mr. Long, for 8 and 9?
12
           MR. LONG: Yes, TURN moves those
13
     exhibits into the record.
14
           ALJ LIRAG: Any objections?
15
               (No response.)
16
           ALJ LIRAG: Hearing none, Exhibits 08
17
     and 09 are admitted into the record.
               (Exhibit No. 08 was received into
18
               evidence.)
19
20
               (Exhibit No. 09 was received into
               evidence.)
21
22
           ALJ LIRAG: I guess, Mr. Cairns, you
23
     are excused.
24
           THE WITNESS:
                         Thank you.
25
           ALJ LIRAG: Let's go off the record.
26
               (Off the record.)
27
           ALJ LIRAG: Let's go into the record.
28
     While we were off the record, there was some
```

1	discussion regarding the exhibiting
2	numbering.
3	We'll start with Mr. Abranches.
4	Please raise your right hand.
5	ANDREW ABRANCHES, called as a
6	witness by PG&E, having been sworn, testified as follows:
7	THE WITNESS: Yes, I do.
8	ALJ LIRAG: Please state your name,
9	spell your last name, and provide a business
10	address.
11	THE WITNESS: My name is Andrew, last
12	name Abranches, and my business address is 77
13	Beale Street, San Francisco. My last name is
14	spelled A-b-r-a-n-c-h-e-s.
15	ALJ LIRAG: Thank you. Now let's
16	identify some exhibits pertaining to
17	Mr. Abranches' testimony. First is
18	Exhibit 10. This is the prepared testimony
19	of various witnesses but contains the portion
20	sponsored by Mr. Abranches on gas
21	distribution, so that's 10.
22	(Exhibit No. 10 was marked for identification.)
23	identification.)
24	ALJ LIRAG: Exhibit 11 is the
25	Workpapers Supporting Gas Distribution. It
26	contains the portion being sponsored by
27	Mr. Abranches. This pertains to Chapters
28	2-2A. So that's Exhibit 11.

1	(Exhibit No. 11 was marked for identification.)
2	Tuenci i cacion. )
3	ALJ LIRAG: Exhibit 12, Gas
4	Distribution Workpapers Supporting Chapters 3
5	to 5.
6	(Exhibit No. 12 was marked for identification.)
7	identification.)
8	ALJ LIRAG: Exhibit 13 is Gas
9	Distribution Workpapers Supporting Chapters 6
10	to 8.
11	(Exhibit No. 13 was marked for identification.)
12	ruciicii roacioii. )
13	ALJ LIRAG: Exhibit 14 is the Gas
14	Distribution Workpapers Supporting Chapters 9
15	to 11.
16	(Exhibit No. 14 was marked for identification.)
17	ruciicii roacioii. )
18	ALJ LIRAG: Exhibit 15 is the rebuttal
19	testimony of various witnesses but contains
20	the portion sponsored by Mr. Abranches on gas
21	distribution, so that's Exhibit 15.
22	(Exhibit No. 15 was marked for identification.)
23	Tuener Toucion, )
24	ALJ LIRAG: Exhibit 16 is the prepared
25	testimony of various witnesses containing the
26	portion sponsored by Mr. Abranches on
27	electric distribution, Chapters 1 through 10.
28	(Exhibit No. 16 was marked for identification.)

1	ALJ LIRAG: Exhibit 17 is the prepared
2	testimony of various witnesses on electric
3	distribution, Chapters 11 through 19.
4	(Exhibit No. 17 was marked for identification.)
5	identification. )
6	ALJ LIRAG: Exhibit 18 is the
7	Workpapers For Electric Distribution
8	Supporting Chapters 1 through 10.
9	(Exhibit No. 18 was marked for identification.)
10	identification.
11	ALJ LIRAG: Exhibit 19 is the Electric
12	Distribution Workpapers Supporting Chapters
13	11 through 19.
14	(Exhibit No. 19 was marked for identification.)
15	identification. )
16	ALJ LIRAG: Exhibit 20 is the rebuttal
17	testimony from various witnesses containing
18	Mr. Abranches' portion for electric
19	distribution, Chapters 1 through 19.
20	(Exhibit No. 20 was marked for identification.)
21	Idditel Iddeloni
22	ALJ LIRAG: Exhibit 21 is the Rebuttal
23	Testimony of Various Witnesses For Electric
24	Distribution and contains Appendix A.
25	(Exhibit No. 21 was marked for identification.)
26	
27	ALJ LIRAG: Exhibit 22 is the Electric
28	Distribution Rebuttal Testimony for
	l la companya di managantan di managantan di managantan di managantan di managantan di managantan di managanta

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Workpapers, Chapters 7, 16, and 19.
 1
                                           So
 2
     that's Exhibit 22.
 3
               (Exhibit No. 22 was marked for
               identification.)
 4
           ALJ LIRAG: Let's proceed and identify
 5
     the exhibits from the Joint CCAs.
                                         These are
 6
 7
     cross exhibits for Mr. Abranches.
                                         First is
 8
     Exhibit 23. These are excerpts from PG&E
     Rule 21.
               (Exhibit No. 23 was marked for
10
               identification.)
11
12
           ALJ LIRAG: Next is Exhibit 24, PG&E
13
     Response to Joint CCA's Data Request 15,
14
     Question 1.
15
               (Exhibit No. 24 was marked for
               identification.)
16
17
           ALJ LIRAG: Finally, Exhibit 25 is the
18
     PG&E Data Response to Joint CCA's Data
19
     Request 18, Question 2.
20
               (Exhibit No. 25 was marked for
               identification.)
21
22
           ALJ LIRAG: All right,
23
     Ms. Gandesbery -- sorry, Mr. Ouborg.
24
                        Thank you, your Honor.
           MR. OUBORG:
25
     Are we on the record?
26
           ALJ LIRAG: Yes.
     ///
27
     ///
28
```

1	DIRECT EXAMINATION
2	BY MR. OUBORG:
3	Q Good afternoon, Mr. Abranches.
4	A Good afternoon.
5	Q Mr. Abranches, I'd like to confirm
6	the testimony that you're sponsoring in this
7	proceeding in what has been marked as
8	Exhibit 10, also known as PG&E-03 and
9	Exhibit 16, also referred to as PG&E-04.
10	Are you sponsoring the portion of
11	Exhibit 10, Chapter 2, Gas Distribution
12	Forecast Summary and Investment Planning; all
13	of Exhibit 10, Chapter 2A, Gas Distribution
14	Cost Forecasting Methodology; all of
15	Exhibit 10, Chapter 11, Gas Operations
16	Technology and Other Distribution Support;
17	A portion of Exhibit 16, Chapter 1,
18	Electric Distribution Operations Policy and
19	Introduction and the Workpapers presented in
20	Exhibit 10 related to Chapters 2 and 2A that
21	I just referred to and marked as Exhibit 11;
22	the Workpapers relating to Chapter 11 of
23	Exhibit 10, which has been marked as
24	Exhibit 14;
25	And, finally, the workpapers in
26	Exhibit 18 related to Chapter 1 of
27	Exhibit 18, this is your Electric Workpapers
28	related to Chapter 1 of your opening

```
1
     testimony?
 2
               That is true.
           Α
 3
               In addition, in what has been
           Q
     marked Exhibits 6, 15, and -- your Honor, can
 4
 5
     we go off the record?
           ALJ LIRAG: All right, off the record.
 6
               (Off the record.)
 7
           ALJ LIRAG: Let's go back on the
 8
 9
     record.
           MR. OUBORG:
10
                        Thank you, your Honor.
11
               Mr. Abranches, in what have been
           Q
12
     marked Exhibits 6, 15, and 21, are you
13
     sponsoring a portion of PG&E -- of Exhibit 6,
14
     Chapter 2, Rebuttal Testimony on Integrated
15
     Planning and Affordability?
16
           Α
               I am.
17
               All of Exhibit 15, Chapter 2,
18
     Rebuttal Testimony on Gas Distribution
19
     Forecast Summary and Investment Planning; all
20
     of Exhibit 15, Chapter 2A, Rebuttal on Gas
21
     Distribution Cost Forecasting Methodology;
22
     all of Exhibit 15, Chapter 11, Rebuttal
23
     Testimony on Gas Operations Technology and
24
     Other Distribution Support;
25
               All of Exhibit 20, Volume I,
     Chapter 1, Rebuttal Testimony on Electric
26
27
     Distribution Summary; and the documents in
28
     Exhibit 6, Appendix A, Exhibit 15,
```

```
1
     Appendix A, and Exhibit 21, Volume II,
 2
     Appendix A that relate to your sponsored
 3
     rebuttal testimony?
               I am.
           Α
 4
 5
           MR. OUBORG: Can we go off the record
 6
     for a second, your Honor?
 7
           ALJ LIRAG: All right, off the record.
 8
               (Off the record.)
 9
           ALJ LIRAG: Let's go back on the
10
     record. Mr. Ouborg, you were mentioning
11
     about errata.
12
           MR. OUBORG: Yes, your Honor, there are
13
     two volumes of errata that PG&E has submitted
14
     to date in this proceeding. They are quite
15
     lengthy, numerous of those pages of that
16
     errata would pertain to Mr. Abranches'
17
     testimony, but those documents have not been
18
     numbered or entered or provided at this
19
     point.
20
           ALJ LIRAG: Let's give a general
21
     description of the errata, what is contained
22
     in these errata volumes.
23
           MR. OUBORG: Can we go off the record,
24
     your Honor?
25
           ALJ LIRAG: Off the record.
26
               (Off the record.)
27
           ALJ LIRAG: Let's go back on the record
28
     and let's continue.
```

1	Mr. Ouborg, per our discussion while
2	we were off the record, there was a lot of
3	discussion regarding schedule and the errata
4	exhibits. The decision is to identify these
5	errata exhibits right now so we'll do that.
6	So Exhibit 26 would be errata for
7	the various exhibits that we just identified.
8	It's labeled Exhibit PG&E-14, so this is
9	errata. I think it should be Errata 1 to
10	make it clear. So that's Exhibit 26.
11	(Exhibit No. 26 was marked for
12	identification.)
13	ALJ LIRAG: Exhibit 27 will be errata
14	documents. Again, this will be Errata
15	Volume II.
16	Is that correct, Mr. Ouborg?
17	MR. OUBORG: Yes, your Honor.
18	(Exhibit No. 27 was marked for identification.)
19	identification. )
20	ALJ LIRAG: These errata are various
21	erratas to testimonies and tables and numbers
22	for exhibits that we just identified.
23	Is that an accurate description?
24	MR. OUBORG: Yes, your Honor.
25	ALJ LIRAG: All right, let's proceed
26	with the Direct Examination.
27	MR. OUBORG: Thank you, your Honor.
28	///

1	DIRECT EXAMINATION RESUMED
2	BY MR. OUBORG:
3	Q Mr. Abranches, in what has been
4	just marked as Exhibit 26 and Exhibit 27,
5	PG&E's errata submissions, are you sponsoring
6	those pages of those errata submissions that
7	pertain to the testimony that we have
8	identified that you are sponsoring?
9	A I am.
LO	Q And, finally, are you sponsoring
L1	your statement of qualifications that were
L2	submitted?
L3	A I am.
L4	Q Mr. Abranches, were these materials
L5	prepared by you or under your supervision or,
L6	to the extent they were not prepared by you
L7	or under your supervision, do you
L8	nevertheless adopt them as your sworn
L9	testimony?
20	A I do.
21	Q And do you have any aside from
22	the Errata 1 and Errata 2 documents we just
23	identified, do you have any other changes or
24	corrections to make at this time to your
25	testimony?
26	A I do not.
27	Q Are the facts contained in these
28	exhibits true and correct to the best of your

1	knowledge?
2	A They are.
3	Q And to the extent they represent
4	opinion, do they reflect your best
5	professional judgment?
6	A They do.
7	Q Thank you.
8	Your Honor, Mr. Abranches is now
9	ready for cross-examination.
10	ALJ LIRAG: Thank you. Let's take our
11	afternoon break right now. So let's do a
12	10-minute break and be back at 2:35.
13	Any preference, Mr. Lindl or
14	Mr. Long, on who goes first?
15	MR. LONG: I would like to go first,
16	your Honor.
17	ALJ LIRAG: Is that fine, Mr. Lindl?
18	MR. LINDL: No problem here.
19	ALJ LIRAG: When we come back from
20	break, we'll have cross-examination by
21	Mr. Long. Let's go off the record.
22	(Off the record.)
23	ALJ LIRAG: Let's go back on the
24	record. We're back from our afternoon break.
25	We'll start with the cross-examination
26	conducted by Mr. Long of Mr. Abranches.
27	Mr. Long.
28	MR. LONG: Yes, thank you, your Honor.

1	CROSS-EXAMINATION
2	BY MR. LONG:
3	Q Good afternoon, Mr. Abranches.
4	Nice to see you again.
5	A Good afternoon, Mr. Long.
6	Q I want to first clarify what I'm
7	asking you about and the scope of what you're
8	testifying on and what is going to be
9	addressed at later times. So my questions
10	will all relate to the issue of the cross
11	bore program.
12	A Okay.
13	Q And my understanding is that you're
14	testifying today with respect to the cross
15	bore program about unit costs for the cross
16	bore program; is that fair?
17	A That is fair.
18	Q Okay. And then tomorrow I'll have
19	an opportunity to ask questions of another
20	PG&E witness, Mike Kerans, about other
21	aspects of the cross bore program. And then
22	on Wednesday, we'll have another opportunity
23	to ask more questions about the cross bore
24	program from the perspective of deferred
25	work; is that fair?
26	A That's correct.
27	Q Okay, good. So today it's about
28	unit costs for the cross bore program. To

1 get us focused on that, I would like you to 2 look at the hand-out I gave you, which I 3 believe is a couple of pages from Exhibit 11, the Workpapers for Chapter 2A. 4 5 Α That's correct. So and specifically those are pages 6 0 7 Workpaper 2A-36 and 2A-37. 8 Do you have that? 9 Α I do. 10 So this is where you presented the Q 11 unit costs in the direct testimony for cross 12 bore inspections; is that right? That is correct. 13 Α 14 Q And if you'd look on the second 15 page, 2A-37, the bottom line is the forecast 16 unit cost for 2020 of \$1,251.21; is that 17 right? 18 Α That is correct. 19 Q And that's a blended unit cost? Is that fair to say? 20 21 Α That is fair to say. 22 And blended in what respect? Q 23 It's blended with regard to two Α 24 types of cross bore inspections. One is the 25 regular cross bore inspection, and then the 26 second one is more complicated where we've 27 It's considered in the term got to go back. 28 unable to access a UTA inspection.

It's specifically an inspection 1 2 where we attempted to do it before. For some 3 reason we are unable to access the location of the sewer to insert a camera, so then we 4 5 come back -- we've got to come back to that 6 location. 7 0 Okav. So to get to this unit cost 8 of \$1,251, you broke that into two parts. 9 The first -- on your Workpaper, and that is 10 what I'm referring to -- on the Workpaper, vou started with a base unit cost of \$639 11 12 approximately? 13 Α Correct. 14 Q On line six. And then you added to 15 that an adder of \$561 approximately on 16 row nine that's shown on the 2019 column; is 17 that right? 18 Α That is correct. 19 Q That's how you got -- and then you 20 escalate and that's how you got to 1,251? 21 Α That's correct. 22 So the \$561 adjustment you describe 0 23 on the previous page under the heading of 24 Adjustment to Forecasting Methodology; is 25 that right? 26 Α Correct. Is that the only explanation in the 27 Q 28 Workpapers for that \$561 adjustment?

1	A That is the only explanation in the
2	workpapers. We did respond to Public
3	Advocates with a data request to provide a
4	basis for this.
5	Q And is it correct that this
6	Workpaper in the direct testimony does not
7	give separate unit costs for regular
8	inspections and UTA inspections?
9	A It does not.
10	Q All right. Now let's turn to your
11	rebuttal testimony. That has been marked as
12	Exhibit 15, otherwise known as PG&E-17.
13	Do you have that?
14	A Give me a minute.
15	ALJ LIRAG: Let's go off the record.
16	(Off the record.)
17	ALJ LIRAG: Let's go back on the
18	record.
19	Mr. Long.
20	MR. LONG: Thank you.
21	Q Mr. Abranches, you're sponsoring
22	Chapter 2A of Exhibit 15; is that right?
23	A That is correct.
24	Q And so this is your rebuttal on the
25	issue of cross bore unit cost; correct?
26	A Correct.
27	Q Is PG&E still proposing that the
28	blended cost of \$1,251 that we just looked

at, is that still PG&E's proposal for the 1 2 unit cost for the cross bore work? 3 Α That is correct, yes. So you're not proposing separate 4 0 5 unit costs then for UTA and non-UTA work? 6 Α No, we are not. 7 0 So you want the Commission to just affirm -- if PG&E had its way, then the 8 9 Commission would just affirm that 1,251 is the unit cost that it should adopt for each 10 11 unit of work, whether it be a UTA or a 12 non-UTA unit of work; is that right? 13 That is correct. Α 14 Q Okay. Then I'm a little bit 15 confused, especially in relationship to your 16 colleague Mr. Kerans who seems to be 17 proposing a methodology that uses two 18 different unit costs. And then if I could direct you to page 2A-4, Answer 15. Let me 19 20 know when you are there. 21 Are you at Answer 15 now? 22 Α Yes. 23 Q There you say PG&E used a separate 24 unit cost for UTA units \$2,080 and non-UTA 25 units \$655 to determine the blended unit cost of 1,251. 26 But still that is not your 27 proposal for the Commission to use two

separate unit costs. PG&E's proposal is to

use the blended unit cost. 1 2 Is that what you're saying? 3 Α Yes, that's PG&E's proposal. What I just stated was our proposal is to use 4 5 blended unit cost. We accept the recommendation to use two separate unit costs 6 7 in my answer. PG&E recommends that they use one unit cost, the blended unit cost. 8 9 I'm sorry, the two components of Q 10 that blended unit cost, those two different 11 cost numbers I just read --12 Α Right. 13 \$2,080 for UTA and 655 for non-UTA, 0 14 those were not in the direct testimony? 15 Α Those are not in the direct 16 testimony. That was in the rebuttal. 17 I will have some 0 All right. 18 questions, I think, for Mr. Kerans about how 19 his proposal works if PG&E is just proposing 20 a single-unit cost, but I think -- should I 21 save those for Mr. Kerans? 22 Yeah, I think it would be best Α 23 saved for Mr. Kerans and myself on Wednesday. 24 Q Let's just look at this in 25 Answer 25-15, the \$2,080 unit cost for UTA 26 Is it fair to say that that \$2,000 -units. 27 2008 dollar figure is not based on costs for 28 any real-life work that has actually been

performed?

A That is not correct. It is not based on any actual UTA work that has been performed. It is based on similar work that's close enough to a UTA to provide us a basis.

The range for a UTA could range anywhere from a thousand dollars up to \$10,000 depending on the method that we need to use to remediate or discover whether cross bore exists at that location. So we had proposed for UTAs approximately the \$2,000 cost on the lower end of the scale.

- Q Okay. So PG&E has not actually done any UTA inspections yet; is that right?
  - A That is correct.
- Q So you don't have actual experience doing UTA inspections and determining the cost of that work; is that right?
  - A That is correct.
- Q Now, on page 2A-1 -- I'm going to skip that and move on. You just referred to the range of costs and I think you speak to that also at the top of page 2A-3 where you're quoting from a response to a data request from Cal Advocates; is that right?
  - A That is correct.
  - Q I quote you and I think you just

1 repeated it a moment ago, you cited a range 2 of unit costs for UTA work -- or, yeah, for 3 UTA inspections from \$1,000 to \$3,500 to as high as \$10,000 or more; is that right? 4 5 Α That is correct. 6 0 Are those numbers that you 7 developed personally? Those numbers I developed in 8 Α No. 9 conjunction with the people who performed the 10 inspections or perform this type of work and 11 the engineers that support it. 12 So you did develop them or somebody 13 else did? 14 Α Members of my team did develop 15 that, and I did oversee that development. 16 Q Okay. Now, you say something 17 called proximity clearance work in this quote 18 at the top of page 2A-3, you say proximity 19 clearance work is expected to cost \$1,000 per 20 Now, proximity clearance work is unit. essentially a locating and marking exercise; 21 22 is that right? 23 Α Not entirely. It's little bit more 24 than locating and marking exercise. Locate 25 and mark is one part of proximity clearance. 26 The other aspect of the proximity clearance 27 work is getting the data records from sewer

locations in geographic space, mapping that

up with the geographic records we have of our 1 2 facilities, checking to see from a location 3 base when you superimpose those, the locating also validates, and you check to see if the 4 potential for a cross bore can exist at that 5 6 location. 7 So it's a matter of 0 Okav. determining the location of the PG&E 8 9 facilities, the PG&E gas lines --Α 10 Correct. 11 -- and the other facilities that Q 12 you're worried that PG&E gas lines 13 penetrated? 14 Α Exactly. 15 And if there's no potential for Q 16 them to intersect, then you're good; is that 17 right? 18 That is correct. Α 19 Okay. And so that's a fairly -- a Q 20 relatively low cost way to determine whether 21 or not you have an issue within a UTA 22 inspection; is that correct? 23 Α That is right. 24 Q Okay. So if it turned out that all 25 or most of the UTA work that PG&E needs to do in the -- or ends up doing in the 26 27 2020-through-2022 period is based on 28 proximity clearance, then the unit cost for

that work would be much less than 2008 dollars; isn't that right?

A If it was all -- theoretically if it was all based on proximity clearance, if you cleared it on a proximity clearance, it would be closer to the \$1,000; however, if I can caveat that, the reason we feel a cross bore exists at that location is because at the time of construction when that gas main was being put in, the technology in use was directional bore technology.

And the directional bore technology creates -- across the industry at that point in time -- created a cross bore, which is why we have this remediation program. We feel in a few cases the proximity clearance will provide us enough data to clear it, but certainly not the majority.

Q So based on the range of unit costs and different types of work that you describe at the top of page 2A-3, would it be fair to say that the unit costs for this work could vary greatly depending upon the mix of UTA work you do?

A That is what I've said specifically in that testimony, yes.

Q Okay. And at this point PG&E is not forecasting what type of UTA work or how

much UTA work it will do 2020 through 2022; 1 2 is that right? 3 At the time we put together the Α initial forecast, we were assuming we would 4 5 do in the San Francisco area roughly 10,000 in 2020 and about 1,000 in 2021. Since then, 6 7 there have been some changes to that 8 forecast. 9 And at this point PG&E is not Q 10 forecasting what type of UTA work or how much 11 UTA work it will do in the upcoming period; 12 is that right? That is 2020 through 2022. 13 That is correct. But if I can add 14 some more context, the fact a UTA exists 15 means we are unable to access the sewer line 16 so it's hard to predict what exact remediation will be done to allow us to 17 18 access the sewer line. So if you're asking 19 me what type of UTA it will fix, I say don't 20 know. 21 That's all my questions. As I say, Q I think we'll be getting into this some more 22 23 with Mr. Kerans tomorrow and then on the 24 deferred work panel on Wednesday. Thank you 25 for now. 26 ALJ LIRAG: Thank you, Mr. Long. 27 Mr. Lindl.

MR. LINDL: Yes, thank you, your Honor.

1	CROSS-EXAMINATION
2	BY MR. LINDL:
3	Q Good afternoon, Mr. Abranches.
4	A Good afternoon.
5	Q My name is Tim Lindl, L-i-n-d-l,
6	with Council for the Joint CCAs. It's nice
7	to meet you. So I wanted to discuss with you
8	just one component of the Community Wildfire
9	Safety Plan. Within that plan, PG&E is
10	proposing what it is calling resilient zones;
11	correct?
12	A That is correct.
13	Q And the purpose of the resilient
14	zones is to provide temporary generation to
15	shelters and other services supporting public
16	safety during a Public Safety Power Shutoff
17	or PSPS; right?
18	A That is correct. I do want to say
19	I'm not the expert on that, but I do
20	understand in general terms what the
21	resilient zone purpose is and what resilient
22	zones are, yes.
23	Q Okay. Can you tell me or do you
24	agree that a core part of those resilient
25	zones is what PG&E calls pre-installed
26	interconnection hubs?
27	A Yes, yes.
28	Q Can you turn to your rebuttal

testimony, please, for electric. 1 I have to 2 say I'm impressed with the breadth of topics 3 you're covering in this GRC. 4 My wife is impressed as well. 5 0 This is exhibit -- it used to be It's now been marked as 21. 6 PG&E-18. Τt 7 will be Chapter 1, page 16. 8 Α Got it. 9 So on lines 19 to 20, you Q Great. state all of this work consists of the 10 11 installation of or support for assets on 12 PG&E's distribution system; is that right? 13 That is correct. Α 14 0 And then below that is a bulletin 15 list of different items that fit within that 16 category; is that right? 17 Α Correct. 18 0 And then on the next page, 19 page seven, lines eight through 13, you 20 describe the resilient zones program and you 21 state that resilient zones will be built 22 around pre-installed interconnection hubs 23 which are permanent plug-and-play 24 infrastructure that will enable temporary 25 generation to connect to the distribution grid at predetermined locations; is that 26 27 right? 28 That is correct. Α

And these are called 1 0 2 interconnection hubs because PG&E would 3 interconnect temporary generation hubs; is that right? 4 5 Α That is correct. 6 0 Okay. And the interconnection hubs 7 would also include some infrastructure that PG&E has called grid isolation and protective 8 9 devices. 10 Does that sound right? 11 Α It sounds right, but I will have to 12 say I'm not the expert on that. The witness 13 Mr. Calvert is. 14 Q Okav. Do you know or do you recall 15 if the purpose of those isolation protective 16 devices would be to allow PG&E to separate 17 targeted loads from the rest of the 18 de-energized grid during a PSPS event? 19 I know specifically that these 20 resilient zones are being created so that we 21 can mitigate the impact from a PSPS event 22 should we exercise that need. The exact 23 technical details of that are stretching my 24 knowledge. 25 0 Okay. So based on your knowledge, 26 would you agree that essentially this 27 infrastructure is necessary to create a 28 small, energized microgrid during a PSPS

1 event? 2 At the high level, yes. Α 3 Q Thank you. If I could add the word 4 5 "temporary," because that is really my 6 testimony. The provision of temporary parts during public safety power shutoff 7 8 operations. 9 It is temporary microgrids during PSP events? 10 11 Α Correct. 12 Do you know if the interconnection 0 hubs will be able to accommodate generators 13 14 around 2 megawatts in size? 15 Α I do not know that answer directly. 16 Q Okay. So I can refer you to PG&E's 17 response to joint CCA-15 Question 1. It has 18 been marked as Exhibit 24 now. 19 Α I have it in front of me. 20 Q Okay. 21 Your Honor, if I may MR. OUBORG: 22 clarify one thing before counsel proceeds on 23 this cross exhibit. I wanted to point out 24 that the sponsor of this cross exhibit is 25 actually a different witness, Steve Calvert. Counsel and I discussed this ahead of time. 26 27 We agreed Mr. Abranches could answer best of 28 his ability. I wanted the record to reflect

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1
     he is in fact not the witness who sponsored
 2
     this response.
 3
           ALJ LIRAG: He will answer to the best
     of his ability, and then Mr. Lindl can
 4
 5
     follow-up with those questions not answered
     with Mr. Calvert.
 6
 7
           MR. LINDL: Thank you, your Honor.
 8
           ALJ LIRAG: Please proceed.
 9
     BY MR. LINDL:
10
           Q
               Do you agree that Question 1(a)
11
     there, the answer is that pre-installed
12
     interconnection hub that has been located in
13
     Angwin, California, is designed to
14
     accommodate approximately 2 megawatts of
15
     temporary generation?
16
           Α
               That is what it says in the answer.
17
     It also says it is a pilot site.
18
               Does it also say that PG&E intends
     to standardize that design?
19
20
           Α
               That is true.
21
           Q
               Thank you.
22
               If a non-PG&E party, we will call
     that a "third party," wanted to develop and
23
24
     install a generation, that party would need
25
     to go through PG&E's interconnection
26
     procedures to interconnect their generation,
27
     right?
28
               To the best of my knowledge,
           Α
```

1 correct. 2 Q Thank you. If a party wants to develop and install a microgrid, that party 3 would need to go through PG&E's 4 5 interconnection procedures, correct? 6 Α That is correct. 7 Q Thank you. For that third party if there were 8 9 interconnection facilities or distribution 10 system upgrades that would need to be 11 installed in order to safely and reliably 12 operate that microgrid generator, the third 13 party would have to pay for those costs; is that right? 14 15 I think -- I don't know the exact Α 16 details of that tariff or that agreement. 17 think Steve Calvert is the best person. 18 Mr. Calvert is the best person who understands the nuances of that agreement to 19 20 answer your question. 21 Q Thank you. 22 So let's take a quick look then at Exhibit 23, which is the pages from PG&E's 23 24 Rule 21. I understand that I may need to 25 follow-up with Mr. Calvert on this. 26 Α Sure. 27 Are you familiar with Rule 21? Q 28 Α I'm not intimately familiar.

don't deal with it on a day-to-day basis. 1 Ι 2 did read it. It is in our documents. 3 Q Thank you. Do you know if Rule 21 governs cost 4 5 allocation for generators or microgrids that 6 are interconnected? 7 As I read through it, it indicates Α 8 that it does, yes. 9 Okay. So then would you agree that Q 10 on Sheet 61 of this exhibit in Section E4, 11 I'll give you a minute to get there. 12 sheet numbers are in the upper right. 13 would agree that in the second sentence under 14 E4 it says: A producer that interconnects to distribution providers' distribution or 15 16 transmission system is responsible for all 17 costs associated with parallel operation to 18 support the safe and reliable operation of 19 the distribution transmission system. 20 Α That is what it says in this 21 document. 22 Generally speaking, Mr. 0 Okay. 23 Abranches, do you know how PG&E recovers 24 costs for interconnection facilities or 25 upgrades for generators or microgrids from third parties? 26 27 I don't. Α 28 Okay. So you are not sure if a --Q

1 a third party interconnecting the 2 microgrid -- strike that. Let me rephrase, 3 please. You are unsure if a third party 4 5 interconnecting a microgrid would have to 6 bear the cost for interconnection facilities 7 or distribution upgrades related to that 8 microgrid? 9 I'm not the expert on that, no. Α 10 I have just a couple more Q 11 questions, please. 12 Α Sure. 13 So currently neither the resilient 0 14 zones or the interconnection hub includes any 15 generating or storage equipment, right, just 16 equipment necessary to interconnect a mobile 17 diesel generator? 18 The intent of the resilient Yes. 19 zone is to connect par. At this point in 20 time from what I do know, we are unclear on 21 what type, what is the source of that par. 22 These are generators that seem to be the most 23 logical one at this point in time. 24 Q Is PG&E planning to own or Okay. 25 source that generation from third parties, do 26 you recall? I can't speak exactly to that. 27 Ι 28 don't know.

1	Q If PG&E owned the generation would
2	you agree that those costs would be
3	functionalized as generation?
4	MR. OUBORG: Objection, your Honor. He
5	is asking the witness to speculate.
6	ALJ LIRAG: I'll allow it. He is a
7	he does many things, plus he is an expert.
8	If it is a question better answered by
9	Mr. Calvert, then please let us know. Let's
10	try to have you try and answer.
11	THE WITNESS: If you can repeat the
12	question.
13	BY MR. LINDL:
14	Q Sure. Let me rephrase that.
15	A Sure.
16	Q So your position in your testimony
17	is that these assets should be allocated to
18	distribution system costs, because they are
19	part of the distribution grid; is that right?
20	A That is correct.
21	Q So part of these assets was
22	generation that was owned by PG&E. Do you
23	think DOOF would make that
	think PG&E would revisit that
24	functionalization of those costs?
<ul><li>24</li><li>25</li></ul>	
	functionalization of those costs?
25	functionalization of those costs?  A If I could clarify. What we are

1 the distribution system so that we have the 2 ability to take in power and allow to the 3 point of a microgrid to get created when a power -- public safety power shutoff event is 4 5 called so that zone can have power, right? We are not speculating in any way that these 6 zones have generation, or we own the 7 8 generation, or someone else owns the 9 generation or type of generation. 10 And in my testimony over here, the 11 reason we are asking that it be included as 12 part of the distribution grid is what we have 13 asked for to -- for the cost to get allocated 14 to the distribution grid, because any costs 15 that are directly distribution type assets to 16 allow the distribution grid to function 17 effectively, to allow us to service that 18 distribution grid and to allow us to operate that distribution grid flexibly, depending on 19 20 the situation, we've allocated those costs to 21 its electricity distribution costs. 22 not speculating anywhere about the generation 23 of energy that will traverse that 24 distribution grid. 25 MR. LINDL: One moment, please, your 26 Honor. 27 ALJ LIRAG: Off the record.

(Off the record.)

1 ALJ LIRAG: Back on the record. MR. LINDL: Thank you, your Honor. 2 3 So if -- going back to the question Q I asked earlier. If a third party was 4 5 interconnecting a microgrid or a generator, 6 would the cost of that interconnection go into distribution rates or would the 7 developer pay for those costs? 8 9 I would be then speculating the Α conditions of the tariff, which I've 10 11 indicated I'm not the expert on that tariff. 12 MR. LINDL: No further questions, your 13 Honor. 14 **EXAMINATION** BY ALJ LIRAG: 15 16 Q All right. I'm not sure if you can 17 answer this. I think it is for Mr. Singh, 18 but since you know a lot of things, let's try it. 19 20 So this has to do with the 21 Community Wildfire Plan. You are familiar 22 with, it is called the Wildfire Mitigation 23 Plan OIR at the Commission R.18-10-007? 24 Α I'm familiar with it. I've heard 25 of it. I am stretching my expertise to say I'm --26 27 My question is very direct. Q 28 Were there any changes to the

```
Community Wildfire Plan as a result of the
 1
 2
     decision in this OIR that you know of?
 3
     asking you about general changes to the
     wildfire plan.
 4
 5
               To answer your question honestly,
 6
     my function in electric operations is to
 7
     manage the investment planning process and
     manage actually all changes to our plans.
 8
                                                 So
 9
     on an ongoing basis there are changes.
10
     hard for me to say there are no changes.
                                                Ι
11
     have a hard time specifically explaining
12
     which changes, but I'm sure there are
13
               I wouldn't describe it as no
     changes.
14
     changes.
           ALJ LIRAG: That is fair. Let me go
15
16
     off the record.
17
               (Off the record.)
18
           ALJ LIRAG: Let's go back on the
19
     record.
20
               All right. Mr. Abranches, thank
21
           I thought Mr. Singh had no cross
     vou.
22
     scheduled, but I will ask Mr. Singh then.
23
     Thank you.
24
               ALJ Lau.
           ALJ LAU: Nothing.
25
           ALJ LIRAG: Any other questions for
26
27
     parties?
               Hearing none.
28
               Ms. Gandesbery, any redirect?
```

1 Sorry. Mr. Ouborg, I keep ignoring you, that 2 is because your name tag is not up. 3 Any redirect, Mr. Ouborg? MR. OUBORG: May I confer the witness? 4 5 Is that your practice to allow that, or not? 6 ALJ LIRAG: That is fine. Let's take a five-minute break. Let's go off the record. 7 (Off the record.) 8 ALJ LIRAG: Let's go back on the 9 10 record. 11 Mr. Ouborg, any redirect? 12 MR. OUBORG: Yes, your Honor. REDIRECT EXAMINATION 13 14 BY OUBORG: 15 Mr. Abranches, a short while ago Q 16 when Mr. Long was cross-examining he referred 17 you to Question and Answer 15 in your 18 rebuttal testimony at page 2(a)(iv). Do you have that in front of you? 19 20 Α I do. 21 He specifically asked you about 0 22 whether PG&E is utilizing a single blended 23 unit cost for cross bores, or whether PG&E is using two separate unit costs. And I wanted 24 25 to ask you if you would like to clarify to your knowledge how PG&E is proposing to 26 27 utilize these two separate unit costs that 28 are stated here in this answer? In other

words, the \$2,080 for UTA cross bores that PG&E is basically estimating, and the \$655 a unit for the non-UTA units?

A I think the witness Mr. Kerans will be on the stand on Wednesday, will be explaining a formula that he is proposing to allow us. Because we don't know what the volume of UTAs that we will find to use the UTA unit cost with that, with the volume we find for UTAs and use the remainder of the forecasted amount that we get for non-UTAs to balance it between that formula.

Q Thank you.

The second thing I wanted to ask you about was Mr. Long asked you whether PG&E was forecasting to do any unable-to-access cross bores in the current rate case. And did you want to clarify your response to Mr. Long?

A Yes. In the coming rate case we do propose to do UTAs.

Q How many UTAs?

A The exact amount of UTAs we don't -- we have -- we know we've got about 21,000 UTAs that we know of. As we do other cross bore inspections, we may encounter other locations that are unable-to-access situations. Forecasting the exact number is

1 challenging. 2 Is it fair to say that PG&E will do 3 as many as they reasonable can, UTA inspections? 4 5 Α Yes. 6 MR. OUBORG: Thank you. That is the end of my redirect, your Honor. 7 8 ALJ LIRAG: Any questions on that, 9 Mr. Long? 10 MR. LONG: Yes, your Honor. 11 RECROSS-EXAMINATION 12 BY MR. LONG: 13 First, I'm still a little bit 0 14 confused about PG&E's proposal. You were 15 asked questions about what PG&E would 16 utilize. I want to know what you are 17 proposing. Are you proposing a single 18 blended unit cost, or are you proposing two 19 separate unit costs? 20 Α In my original testimony I proposed 21 a blended unit cost. In rebuttal we provided 22 the opportunity to have two unit costs. We 23 said in the rebuttal that we accept the 24 recommendation to use two unit costs. But if 25 you ask for my proposal, I would prefer to 26 stay with one unit cost. 27 Q Which means then you are proposing 28 a certain number of units that are going to

28

1 be done, and then you want to multiply that 2 by the unit cost to the get to the forecast 3 cost; is that right? Α That is correct. 4 5 What is the number of units then 0 6 you are going to multiply by the blended 7 cost? Because we can't forecast the 8 9 volume of UTAs, as I just indicated where we 10 do UTAs, we will use the rough unit cost of 11 \$2,000 per UTA. When we do the others, we do 12 a -- we spend a lower amount, but we do a 13 higher volume of non-UTAs. So the volume 14 issue is not -- we are asking for a set 15 amount on the cross bore program to alleviate 16 cross bores on a consistent basis year over 17 year. 18 0 So where I'm still struggling is 19 the second line of questions from your 20 counsel were about forecasting UTAs in this 21 rate case. And you said, I think you said 22 yes, you are proposing to do UTA inspections 23 as many as you -- as PG&E reasonable can. 24 But you still don't have a forecast number of 25 UTA inspections that PG&E will be doing; is 26 that right? 27 Α That is correct. The nature of --

nature are unable -- when you go do an

1 inspection you get -- you may or may not be 2 able to access the sewer line. That creates 3 the situation of unable to access. I think Mr. Kerans in his testimony 4 5 will provide more descriptions on what are unable-to-access locations and the level of 6 coordination that it requires to remediate 7 that situation. So the ability to forecast 8 9 the volume is extremely challenging. 10 Let's leave it there. Again, we Q 11 will get back to these issues tomorrow and 12 Wednesday, I believe. 13 Α Thank you. 14 ALJ LIRAG: All right. Thank you. 15 Mr. Ouborg, are there any exhibits that we can move into the record? 16 17 MR. OUBORG: Your Honor, I don't 18 believe they are any where there is not also 19 other material. 20 ALJ LIRAG: Let's leave all the 21 exhibits then. 22 Mr. Lindl, move to admit Exhibits 23 23 to 25? 24 MR. LINDL: Yes, your Honor. Joint 25 CCAs request Exhibit 23, 24 and 25 be moved 26 into the record. 27 ALJ LIRAG: Any objections? 28 MR. OUBORG: No, your Honor.

1	ALJ LIRAG: Hearing none, Exhibits 23,
2	24 and 25 are received into the record.
3	(Exhibit No. 23 was received into
4	evidence.)
5	(Exhibit No. 24 was received into
6	evidence.)
7	(Exhibit No. 25 was received into evidence.)
8	evidence.)
9	ALJ LIRAG: Thank you, Mr. Abranches.
10	You are excused for today.
11	I think that is all the witnesses we
12	have today. We had a lot of, or several,
13	waivers of cross. We will talk more about
14	that.
15	For parties that want to move
16	exhibits into the record, let's try and
17	arrange with PG&E if you have a specific day
18	that you want to do that. Otherwise, we will
19	just fit it into the schedule whenever is
20	convenient, meaning towards the beginning of
21	the hearing there is usually not a lot of
22	time. But then as we move into the latter
23	weeks of the hearing, that is when we usually
24	have more waivers of cross as the record
25	becomes more fully developed. If there is a
26	date certain that you have to that you are
27	unable to make it other than that day, please
28	arrange with PG&E. So this is regarding the

```
1
     schedule, and so we can take care of that and
 2
     spend a specific time for that. Or PG&E
     can -- we will make an allowance to address
 3
     these exhibits, if there is a date certain.
 5
     But otherwise, we will just take it up
     whenever there is time to do so.
 6
 7
               Any questions?
 8
           MR. DENEBEIM: Is there a time right
 9
     now, your Honor?
           ALJ LIRAG: I believe no.
10
               Off the record.
11
12
               (Off the record.)
13
           ALJ LIRAG: Let's go back onto the
     record. While we were off the record,
14
15
     exhibits were distributed. These are
16
     exhibits for which witnesses have no cross
17
     schedule and, due to scheduling conflicts, we
18
     are taking these up right now.
19
               So, first, Exhibit 28 is the direct
20
     testimony of Alison Lechowicz.
21
           MR. DENEBEIM: Lechowicz.
22
           ALJ LIRAG: Lechowicz.
23
           MR. DENEBEIM: Yes. That's just the
24
     trigger line.
25
           ALJ LIRAG: All right. It is. So that
     is Exhibit 28.
26
               PG&E, have you had a chance to
27
28
     review this document?
```

1	MS. GANDESBERY: Yes.
2	ALJ LIRAG: Is there a move to have
3	this admitted into the record?
4	MR. DENEBEIM: Yes, your Honor, Daniel
5	Denebeim for the California City Council
6	Streetlight Association. We'd respectfully
7	request that you move Exhibit CalSLA 1 into
8	the record on evidence in this proceeding.
9	ALJ LIRAG: We've designated that as
10	Exhibit 28.
11	Any objections?
12	MS. GANDESBERY: No objection, your
13	Honor.
14	ALJ LIRAG: Hearing none, Exhibit 28 is
15	admitted into the record.
16	MR. DENEBEIM: Thank you, your Honor.
17	ALJ LIRAG: You're welcome.
18	(Exhibit No. 28 was received into evidence.)
19	evidence.)
20	ALJ LIRAG: Next is Exhibit 29, the
21	Direct Testimony of Michael Brown for SBUA.
22	Exhibit 30 is the rebuttal testimony of
23	Mr. Brown.
24	Same question to PG&E, have you had
25	a chance to review these documents?
26	MS. GANDESBERY: Yes, we have, your
27	Honor.
28	ALJ LIRAG: Is there a move,

1	Mr. Strauss, to move this into the record?
2	MR. STRAUSS: Yes, your Honor.
3	ALJ LIRAG: Any objections?
4	MS. GANDESBERY: No objection, your
5	Honor.
6	ALJ LIRAG: All right, Exhibits 29 and
7	30 are received into the record. Thank you.
8	(Exhibit No. 29 was received into evidence.)
9	(Exhibit No. 30 was received into evidence.)
11	ALJ LIRAG: So tomorrow we'll have
12	testimony by Mr. Kerans, Mr. Calvert,
13	Mr. Dashner, Mr. Nagra, Mr. Wetzel, and
14	Mr. White. So we'll have those witnesses
15	tomorrow, we'll take up their exhibits, and
16	then we'll address any other issues that are
17	pending.
18	All right. Any other concerns?
19	Hopefully none. All right, let's call a
20	recess for today we'll continue tomorrow.
21	Off the record oh, Ms. Gandesbery, did you
22	want something in the record?
23	MS. GANDESBERY: Yes. Your Honor, we
24	have a schedule change on Thursday.
25	ALJ LIRAG: All right.
26	MS. GANDESBERY: Which is just a
27	Community Wildfire Safety Program panel.
28	It's not available. We will discuss this

```
1
     with the parties.
                          We have had discussions
                          We'll have additional
 2
     with the parties.
 3
     discussions tonight and send a new calendar
     around by e-mail tonight.
 4
            ALJ LIRAG: Okay. Let's take that up
 5
 6
     tomorrow. No need to get that into the
 7
     record.
 8
            MS. GANDESBERY: All right.
                                           Thank you.
 9
            ALJ LIRAG: Off the record.
10
                (Whereupon, at the hour of 3:30 p.m.
            this matter having been continued to
            Tuesday, September 24, 2019, at 9:30 a.m., in Francisco, California, the
11
12
            Commission then adjourned.)
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1	BEFORE THE PUBLIC UTILITIES COMMISSION
2	OF THE
3	STATE OF CALIFORNIA
4	
5	
6	CERTIFICATION OF TRANSCRIPT OF PROCEEDING
7	I, ANA M. GONZALEZ, CERTIFIED SHORTHAND REPORTER
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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 23, 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 24, 2019.
16	
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21	ANA M. GONZALEZ CSR NO. 11320
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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
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14	EVENTS OF THE MATTER OR THE OUTCOME OF THE PROCEEDING.
15	EXECUTED THIS SEPTEMBER 24, 2019.
16	
17	
18	
19	
20	Andrew Toss
21	ANDREA L. ROSS CSR NO. 7896
22	OSK NO. 7030
23	
24	
25	
26	
27	
28	

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