1 LOS ANGELES, CALIFORNIA, APRIL 18, 2005 - 10:05 A.M. 2 3 ADMINISTRATIVE LAW JUDGE BROWN: We'll go on the 4 record. 5 Good morning. This is the time and the place scheduled for the evidentiary hearings in three б 7 complaint cases that have been consolidated for these 8 hearings, C-00-05-010, -011 and -012. 9 And before we actually commence with the 10 evidentiary hearing, I have a handful of little details 11 to take care of: number one, to put on the record the 12 fact that Grassroots requested permission to videotape 13 the evidentiary hearing, and SoCalGas responded and did 14 oppose the request. Last week I did issue a ruling 15 allowing the videotaping of this proceeding but with a 16 number of limitations, and I would like to make sure 17 those limitations are clearly understood by every one 18 and will be on the start of the videotape. 19 Part of the reason for the limitations is the 20 fact that this is a publicly noticed meeting in a 21 publicly accessible place. So anybody who did want to 22 be here could physically be here, but we also understand 23 people may have time limitations and they may want to 24 see portions of this later. But because that may be 25 exactly what people would be viewing later might be 26 selected portions, the videotape is not the official 27 record of this proceeding and may never be referenced in 28 any context as being a representation of what went on or

1 the official record. We have a court reporter right 2 here who will take down every word, and that is the only 3 official record of what goes on in this hearing room. 4 The videotape may be used for any purpose Grassroots wants to use it for, for entertainment value 5 б to share with people who want to see segments, as long 7 as it is never referenced as the record of the 8 proceedings. And as long as it appears -- so far I have not been bothered by the videographer over there, but if 9 10 at any time it appears that it is interfering with the 11 progress of the proceeding, we will revisit the ruling 12 allowing it. And we're all to conduct ourselves as if 13 it wasn't going on. Not that I think this could turn 14 into a OJ/Judge Ito situation, but I think we all 15 realized that very shortly into that proceeding every 16 one was proceeding on the basis of the cameras rather 17 than maybe necessarily the case. 18 Now, that's number one on the videotaping. 19 And I will also put on the record there was a request 20 right before the hearing started to use a -- what did 21 you call that, Ms. McPherson? 22 An overhead projector. MS. MC PHERSON: 23 An overhead projector. And I declined ALJ BROWN: 24 to allow that on the grounds that there would be no way 25 that the court reporter could accurately reference what 26 was up there, and if we have a witness speaking, the 27 court reporter will be taking down the words the witness 28 is speaking and that will then be the record of the

proceeding. That was why. I couldn't see how it could possibly enhance the record.

3 A few other matters. Some were motions by 4 SoCalGas. We had a motion to exclude documents or, in 5 the alternative, to suspend the procedural schedule. б While we're not suspending the procedural schedule, we 7 are going to progress with the three days of hearings as 8 scheduled. However, out of fairness to SoCalGas, who 9 may not have seen the documents beforehand, the way I 10 will proceed with any exhibits that SoCalGas has not 11 seen, and I will say the same rule applies to any 12 exhibits that Grassroots has not seen, we will mark them 13 for identification purposes so we'll all be able to know 14 what document we're referring to. Then when it's an 15 appropriate time to move it into admission, if either 16 party has an objection, we will not argue the objection 17 at that point in time. We will just not admit it into 18 the record.

19 We will only admit during the course of this 20 proceeding documents that are not objected to. And I 21 will establish a procedure for dealing with documents 22 that at least one party objects to, and that will be, 23 after the hearing, unless it can be done in the course 24 of the hearing, if a party still needs more time to 25 review the document and to kind of solidify their 26 objection, I will set a time schedule whereby they can 27 put in writing why they object to the introduction. The 28 other side will have an opportunity to put in writing

1 why they desperately need that document in the record, 2 and then I will schedule a telephone conference, and we 3 will go over the controversial exhibits and determine 4 their introduction into evidence at that time.

5 So no one should feel bamboozled by a document 6 you have not had adequate time to review. This case has 7 been going on long enough. There is no need to rush 8 through anything at this particular time to deprive any 9 one of ample opportunity on that.

10 SoCalGas also had a motion to dismiss the 11 complaints or, in the alternative, to strike testimony. 12 I appreciate SoCalGas bringing this motion ahead of time 13 because it does allow both myself while I'm conducting 14 the hearing and then the Commission to keep in mind 15 things to focus on, but I will not grant either the 16 motion to dismiss or to strike at this point in time, 17 and that is without prejudice to SoCalGas either 18 bringing a motion to strike during the course of the 19 proceeding when a particular witness is about to 20 testify, and most certainly not to foreclose SoCalGas's 21 ability to argue in post-hearing briefs either a motion 22 to strike or to dismiss.

And this is -- I'm trying to, again, it's me on behalf of the Commission here, to strike a balance between having a fair proceeding for both sides, not being too super-technical so as to prejudice the ability of nonattorneys to bring a case, but I also need a -- I need to protect the record and have a fair hearing for 1 SoCalGas.

2	There is one very important point that
3	SoCalGas did bring up in their motion, and that is, it
4	doesn't really do any one serve any purpose to ask
5	the Commission to do something that is not within their
6	jurisdiction, because we, even if we pretended we could
7	do it, it would be subject to immediate challenge and
8	wouldn't hold up.

9 The best way to explain -- I was trying to 10 think of a simple example. We as a society most 11 probably do not want the California Highway Patrol or 12 the Westchester Police enforcing the IRS rules, knocking 13 on our front door to say: "We just realized you didn't 14 file your taxes." We like agencies and governmental 15 entities to -- we like to be able to understand the 16 parameters of their jurisdiction, and therefore, we 17 don't want the local police working for the IRS. All 18 right.

19 Other agencies don't appreciate it if the 20 Public Utilities Commission start going into their areas of jurisdiction or domain, and they would challenge us 21 22 if we tried to do something outside of our jurisdiction. 23 So within that context, and out of fairness, that's why 24 I don't want to grant any of the SoCal motions now. Ι 25 want you to be able to present your case. But when you 26 focus -- as you focus your testimony and then focus your 27 post-hearing briefs, try and remember to ask us for 28 relief that is within our jurisdiction.

1 All right. Let me see if I wrote anything All right. Now that I've had my initial say, are 2 else. 3 there any housekeeping matters that any other party? 4 Mr. -- oh, and let me just for the record and to make 5 sure I have everyone's name straight, why don't we start б here at my left with Mr. Healy. 7 Yes, correct. MR. HEALY: 8 ALJ BROWN: Would you like to state your name. 9 MR. HEALY: Greq Healy here with SoCalGas. ALJ BROWN: 10 Mr. Gilmore. MR. GILMORE: Dave Gilmore on behalf of SoCalGas. 11 12 ALJ BROWN: And you're Ms. Padleschat? 13 MS. PADLESCHAT: Yes. Joyce Padleschat on behalf 14 of SoCalGas. 15 ALJ BROWN: Thank you. 16 MR. ENDRES: And Bernard Endres on behalf of 17 Complainants. 18 ALJ BROWN: And would you prefer to be referred to 19 as Dr. Endres? 20 MR. ENDRES: Mr. Endres is fine. 21 ALJ BROWN: Okay. Thank you. Ms. McPherson. 22 MS. MC PHERSON: Yes. I'm Patricia McPherson. Ι 23 am president of Grassroots Coalition. I'm a 24 complainant, as well as I represent many of the 25 complainants. 26 ALJ BROWN: Thank you. And I know Ms. Knight is 27 here too. Did you want to state your name for the 28 record?

1 MS. KNIGHT: Yes. Kathy Knight for Complainant. 2 ALJ BROWN: Very good. I think from a procedural 3 perspective, and again, something that SoCalGas 4 mentioned in its motion, I think the cleanest way to proceed is to grant the motion of Grassroots to 5 б intervene in this proceeding. So they may proceed as an 7 intervenor, seeing as you are actually not the 8 complainants themselves, but we will allow you as an intervenor in the proceeding to proceed. All right. 9 So 10 you're officially an intervenor. 11 MS. MC PHERSON: All right. 12 ALJ BROWN: All right. And I'm sorry, Mr. 13 Gilmore. Now let's get back. You had something you 14 wanted to bring up. 15 MR. GILMORE: Well, my first question, your Honor, 16 is, has Grassroots identified a sponsor for the material 17 that was served on March 30th? The material that we 18 were served did not have a witness name, no 19 qualifications, and we're wondering if there is a sponsor to that material. 20 21 ALJ BROWN: Ms. McPherson. 22 MS. MC PHERSON: A silly answer to that would be, 23 we did have a computer glitch that wouldn't allow us to 24 get that out that night at the very end, what we were 25 typing, but yes, certainly, I have an entire list of 26 complainants that the PUC has that we represent. Ι 27 simply don't have it with me at the moment. 28 ALJ BROWN: That's not his question. He wants to

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know who on behalf of Grassroots --1 2 MS. MC PHERSON: Right. 3 ALJ BROWN: -- tell me if I'm wrong -- is going to 4 be standing up here today --5 MS. MC PHERSON: Oh, today. б ALJ BROWN: -- to be sworn in. Today, tomorrow 7 and Wednesday. As part of the evidentiary hearings, who 8 is going to be presenting testimony on behalf of 9 Grassroots for the complainants. 10 MS. MC PHERSON: Th-huh. 11 ALJ BROWN: You identified Mr. Endres, yourself, 12 and Ms. Knight as --13 MS. MC PHERSON: For today, right. 14 ALJ BROWN: For today. Do you know who else 15 you're going to have? 16 MS. MC PHERSON: We believe that we will have Ata 17 Walizadeh. 18 ALJ BROWN: You might need to spell that last name 19 for the court reporter, please, to the best you can. 20 MS. MC PHERSON: Is it right? W-a-l-e-z-i-d-e-y, 21 I believe. 22 MS. KNIGHT: A-d-e-h. 23 MS. MC PHERSON: I-d-e-h. 24 MS. KNIGHT: A-d-e-h. 25 MS. MC PHERSON: A-d-e-h. Thank you, Kathy. 26 ALJ BROWN: Do you know what, at a break maybe if 27 you write it down, we'll make sure the court reporter 28 gets it. And when did you -- is this a gentleman, a

1 Mister? 2 MS. MC PHERSON: Yes. 3 ALJ BROWN: And what subject matter? That's also 4 another -- it's of interest to me, but I'm quite sure 5 it's of interest to SoCalGas, so that they can figure б out what subject matters particular witnesses would be 7 addressing. It helps them prepare their 8 cross-examination. 9 MS. MC PHERSON: At this point in time I am not 10 ready to move with that, only because this has all been quite short notice, and we are pedaling as fast as we 11 12 can is all I can --13 ALJ BROWN: All right. We'll proceed the best we 14 can. And what we need to keep in mind is, if we do --15 if both parties aren't satisfied that these three days 16 of evidentiary hearings has created a complete record, 17 we will come up with a way to either get extra hearing 18 dates, not immediately, not this week, but at a time 19 that's convenient for all, or we'll handle things by 20 post-hearing briefs. We'll come up with a system. But 21 I do -- to the best that you can help me --22 MS. MC PHERSON: Right. 23 -- and anybody else, certainly ALJ BROWN: 24 SoCalGas, and even the court reporter, it helps to know 25 the subject matter and when that witness is going on, 26 especially if the subject matter was part of the package 27 that you served on the -- I believe it was the 30th, March 30th. 28

1 MR. GILMORE: Your Honor, in that regard, as you 2 know, it's standard PUC practice to have a witness 3 sponsor an exhibit. And we need to know, for example, 4 who gets cross-examined on the material that was sent out on March 30th, and so therefore, we will need to 5 have a witness identified by Grassroots to sponsor that б 7 material, and if not, we will object to its admission 8 into evidence. 9 ALJ BROWN: Did you understand what he's saying? 10 That your ten pages that you served on March 30th. 11 MS. MC PHERSON: Yes. This ten-page -- this -- if you want 12 ALJ BROWN: 13 this to come in as exhibit, as an exhibit --14 MS. MC PHERSON: Yes. 15 ALJ BROWN: -- at least one witness, but it 16 doesn't have to be just one witness. 17 MS. MC PHERSON: Right. 18 ALJ BROWN: But at least one witness has to be 19 sworn in to say that they will support -- and you can break it up -- they'll support pages 1 through 3, pages 20 21 5 through 6. 22 MS. MC PHERSON: Okay. 23 That way, SoCalGas can then, when that ALJ BROWN: 24 witness is on the stand, cross-examine them on pages 5 25 through 6 or whatever the appropriate thing is. Because 26 in order for this to come in, there has to be a witness 27 that is sworn and cross-examined on the important stuff 28 in here. There may be a couple of stray paragraphs that

it's perfectly all right if -- that you don't care if 1 2 they come in, or I might grant Mr. Gilmore's motion to 3 strike if there isn't someone to support them, but the 4 majority of this has to be supported. 5 MS. MC PHERSON: And from support you're -- for б instance, Grassroot has done the investigation, has 7 spent 13 years in investigating these issues. 8 ALJ BROWN: But we need a person. Grassroots as 9 an organization --10 MS. MC PHERSON: Right. 11 ALJ BROWN: -- is very difficult to cross-examine. 12 We need a person who can say where this information came 13 from. 14 MS. MC PHERSON: Yes. 15 ALJ BROWN: What studies they relied on, if any, 16 who -- perhaps who did the studies. I'll leave it up to 17 SoCalGas to ask the appropriate questions. But this is 18 normally how you test the veracity of information is 19 that -- okay. 20 MS. MC PHERSON: I believe I understand that. My 21 misunderstanding may have been with, am I asking one of 22 the homeowners up there to be able to back up all this 23 information --24 ALJ BROWN: No. 25 MS. MC PHERSON: -- when we have an expert witness 26 that has all the knowledge to back up every single 27 statement that's in there? 28 That expert witness going to be ALJ BROWN:

1 available here? 2 MS. MC PHERSON: Yes. 3 ALJ BROWN: Fine. Then that's --4 MR. GILMORE: Who is it? 5 MS. MC PHERSON: Dr. Endres. б MR. GILMORE: Thank you. 7 ALJ BROWN: Okay. See, that's fine then. When 8 Dr. Endres gets up on the stand, he can testify to what he wants, and then Mr. Gilmore or Mr. Healy can do their 9 10 best to try and poke holes in it or do whatever. 11 MS. MC PHERSON: Thank you. Now I understand 12 that. Also at this time I should do this. 13 ALJ BROWN: Something about the documents? 14 Because we'll go off the record to pass out documents. 15 MS. MC PHERSON: I would like -- I'd like to 16 identify a document that I have here, and I would also like to submit a motion today. 17 18 ALJ BROWN: Very good. Why don't we wait one 19 second, because we -- it probably makes more sense to 20 have a witness on the stand when we start talking about 21 documents. Okay. 22 All right. MS. MC PHERSON: 23 ALJ BROWN: But not a motion. I'll let you do the 24 motion in a minute, but I'll let Mr. Gilmore finish. 25 MR. GILMORE: Yes. Your Honor, while we're still 26 dealing with procedural matters, before we mark any 27 exhibits, I would ask Grassroots to identify just the 28 general subject matter for the witness who you are

1 expecting to call tomorrow. I don't think that's an 2 unreasonable request, your Honor. 3 ALJ BROWN: No, it's not unreasonable. 4 MR. GILMORE: And I would ask that Grassroots 5 just -- I can't pronounce the person's last name, but б what is the general subject area of that person's 7 testimony? That will be the same information 8 MS. MC PHERSON: 9 that's contained within this document that we would like 10 to give you as soon as we can. 11 MR. GILMORE: Is that person an expert witness? 12 MS. MC PHERSON: Yes. 13 MR. GILMORE: And what is that person an expert 14 in? 15 MS. MC PHERSON: Everything that is contained 16 within this document that he has knowledge regarding. 17 ALJ BROWN: What about -- what about if we share 18 that document today so SoCalGas would have an 19 opportunity to review it --20 MS. MC PHERSON: Right. 21 ALJ BROWN: -- before the expert gets on the stand 22 tomorrow, and then can certainly cross-examine both the 23 qualifications and the testimony. 24 We don't need to be on the record to pass out 25 documents. 26 MR. GILMORE: Your Honor, I would at least ask 27 procedurally how you wish to go about marking the 28 exhibits to be used in this case. We have ready our

exhibits, and they can be marked now if that's your preference, or that can await the time immediately prior to our presentation of our case. But we would ask that any exhibits that Grassroots intends to rely on in this case to support its position be distributed now and marked for identification now.

7 ALJ BROWN: In fact, I believe I did instruct Ms.
8 McPherson that that was the normal course unless it
9 happened to be an impeachment, which is the same for
10 either side. Do you have your documents with you today,
11 Ms. McPherson?

MS. MC PHERSON: Yes, we do, for today. And we would like to able to use the impeachment process of giving the document when we are ready to give the document. And if I could have just a moment.

> ALJ BROWN: Take a break for a second. (Off the record)

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18 ALJ BROWN: We'll go back on the record. MS. MC PHERSON: We have a number of documents 19 20 that we would like to introduce for impeachment 21 purposes. So the documents that we have today we would 22 like to be able to introduce for impeachment purposes. 23 All right. And what is your ALJ BROWN: 24 understanding when you use that term, to make sure we're 25 all on the same page? How does that differ -- you want 26 to use them to impeach one of SoCalGas's witnesses, or 27 did you want to use them to bolster your own testimony? 28 MS. MC PHERSON: Both.

1 ALJ BROWN: All right. Because if they come in 2 for your testimony, they really should be shared, to the 3 extent humanly possible, as early as they can be, 4 because that's going to reduce the objections by SoCalGas, or -- it could potentially reduce the 5 б objections. They need time to see them. Because even 7 if you're going to use them for impeachment, all right, 8 the more of a surprise element there is to the document, 9 the more of a fight there tends to be of it getting in, 10 and it reduces its chance sometimes of it coming into 11 evidence the more intense the fight. And so if it's a 12 document that is a good document, it doesn't need to 13 come in by surprise. 14 MS. MC PHERSON: May I have a moment? 15 ALJ BROWN: Yes. 16 (Off the record) 17 ALJ BROWN: We'll go back on the record. 18 I just want to also clarify, I keep referring 19 to SoCalGas. What I'm -- in terms of it might object or 20 it might not. I'm just using them as the party that is 21 in the respondent's chair. I'm just going historically 22 by what frequently happens at hearings, not necessarily 23 that SoCalGas would or would not object to anything. 24 I'm just telling you that, from my general practice, I 25 know that the more there's an element of surprise, the 26 more there tends to be, you know --27 MS. MC PHERSON: Tiffs. 28 ALJ BROWN: Yes, exactly.

1 MS. MC PHERSON: Our limitation today, I'd like to 2 explain, and that would be that we haven't had the time 3 to prepare a lot of the multiple copies at this point, 4 and we would like to share with you then right now what we brought in today, which we have enlargements of. But 5 б we've brought copies for every one today, and yes, we 7 would be pleased to share them with you right now. 8 ALJ BROWN: Perfect. Why don't we go off the 9 record while you pass them out. 10 (Off the record) 11 ALJ BROWN: We'll go back on the record. 12 While we were off the record, Grassroots 13 circulated exhibits which we are marking for identification now, and without any prejudice to parties 14 15 on either side because SoCalGas also asked us to mark 16 some exhibits. They're not admitted into evidence at 17 this time. They're only marked for identification 18 purposes. So if anybody has any objections, you do not need to raise them now. You can give yourself 19 20 opportunity to review them so that you can carefully 21 articulate your objections if you have any. 22 I will pretty quickly just go through 23 Grassroots No. 1 was Plaintiff's Prepared Grassroots. 24 Testimony. 25 (Exhibit No. GR-1 was marked for identification.) 26 27 ALJ BROWN: Grassroots 2 was Executive Summary. (Exhibit No. GR-2 was marked for 28 identification.)

1 2 ALJ BROWN: Grassroots 3 was Isotech, beginning 3 with a fax cover sheet. (Exhibit No. GR-3 was marked for 4 identification.) 5 б ALJ BROWN: Grassroots 4 was a series of six 7 photographs. 8 (Exhibit No. GR-4 was marked for identification.) 9 10 ALJ BROWN: Grassroots 5 is a one page that has 11 the title Active Oil Well Gas Leakage. 12 (Exhibit No. GR-5 was marked for identification.) 13 14 ALJ BROWN: Grassroots 6 is a map of the area, 15 Location of Playa Del Rey Oil and Gas Fields. (Exhibit No. GR-6 was marked for 16 identification.) 17 18 ALJ BROWN: Grassroots 7 is a multiple-page 19 document that begins with a colored picture that does 20 have a legend in the lower right-hand corner, but I 21 can't read it. 22 (Exhibit No. GR-7 was marked for identification.) 23 24 ALJ BROWN: But page 3 begins with: "Stewart 25 Title of California, Preliminary Report." 26 GR-8 is Playa Vista TPL Option Areas. (Exhibit No. GR-8 was marked for 27 identification.) 28

1 ALJ BROWN: Grassroots 9 is an ex -- document ETI 2 Exploration Technologies, Inc. 3 (Exhibit No. GR-9 was marked for identification.) 4 5 ALJ BROWN: Grassroots 10 is another Exploration б Technology, Inc., document. 7 (Exhibit No. GR-10 was marked for identification.) 8 9 ALJ BROWN: Grassroots 11 reads: "Gas Explosion 10 Hazard." 11 (Exhibit No. GR-11 was marked for identification.) 12 13 ALJ BROWN: Grassroots 12 is a two-page document 14 that says: "Playa Del Rey Oil Field." 15 (Exhibit No. GR-12 was marked for identification.) 16 17 ALJ BROWN: Grassroots 13 references a Commission 18 investigation in the left-hand corner, I.99-04-022. 19 (Exhibit No. GR-13 was marked for identification.) 20 21 ALJ BROWN: And Grassroots 14, Proposition 65 -22 Public Warning. 23 (Exhibit No. GR-14 was marked for identification.) 24 25 ALJ BROWN: And Grassroots also circulated a 26 motion, which will not be marked for identification. 27 It's a motion objecting to the order of the evidentiary 28 hearings for failing to include all CPU studies

1 performed in support of the complaint proceedings. We will not rule on it today to give SoCalGas an 2 3 opportunity to review it, and when we start tomorrow, 4 tell me if you're prepared to proceed on it, and if 5 you're not and need more time, let me know. б Then we identified SoCalGas as SCG, Document 7 100, beginning with the 100 series, the Prepared 8 Rebuttal Testimony of James Mansdorfer. 9 (Exhibit No. SCG-100 was marked for identification.) 10 11 ALJ BROWN: 101 is the Prepared Rebuttal Testimony 12 of John Thompson. (Exhibit No. SCG-101 was marked 13 for identification.) 14 15 ALJ BROWN: 102, Prepared Rebuttal Testimony of 16 Joseph Hower. 17 (Exhibit No. SCG-102 was marked for identification.) 18 19 103 is the Prop. 65 study. ALJ BROWN: 20 (Exhibit No. SCG-103 was marked for identification.) 21 22 ALJ BROWN: 104 is Air Quality Monitoring Study. 23 (Exhibit No. SCG-104 was marked for identification.) 24 25 ALJ BROWN: 105 is a Superior Court case, "Stadish 26 versus SoCalGas." (Exhibit No. SCG-105 was marked 27 for identification.) 28

1 ALJ BROWN: And 106, Court of Appeal case Stadish -- sorry -- "Stadish versus SoCalGas." 2 3 (Exhibit No. SCG-106 was marked for identification.) 4 5 ALJ BROWN: And before we go on any further, I do б believe Mr. Gilmore had requested an opportunity to say 7 something about the videotaping on the record. Mr. 8 Gilmore. 9 MR. GILMORE: Thank you, your Honor. Because of 10 the highly unusual videotaping of this, we'd like to 11 make a statement, but we want the video actually to be 12 Can I confirm that the video is on at this time? on. 13 THE VIDEOGRAPHER: The video is on. 14 MR. GILMORE: Thank you. We just would like to 15 emphasize for anybody who might be watching this video 16 one point in particular from ALJ Brown's ruling, and 17 that is that this video is not the official record in 18 this proceeding. The official record in this proceeding 19 consists of the transcript prepared by our court 20 reporter here, but it also consists of exhibits, 21 including exhibits such as prepared testimony and other 22 written exhibits. 23 Now, the reason we mention this is because 24 much of SoCalGas's case in this proceeding is going to 25 be through the written documents that are submitted for 26 the record in this proceeding which may not even be 27 discussed but will not be read into the record for the 28 purpose of any video.

Now, we did receive on March 30th a ten-page document from Grassroots, and our testimony, our rebuttal testimony, our exhibits, including studies of health risks in the Playa Del Rey area, will be submitted in writing to the Commission and will not be read into the record.

7 Now, Grassroots has indicated that it intends 8 to spend, I think it was four and a half hours in verbal 9 testimony. Well, if that verbal testimony is simply 10 restating the allegations that were made in its ten-page 11 document of March 30th, allegations that we've seen 12 before, then we believe we have completely responded to 13 those allegations, and in fact, it's our belief that we have refuted them, but the video might not reflect that 14 15 evidence.

16 So what we ask is, anybody who's watching this 17 video, please, do not form any conclusions or any 18 opinions based upon what you see in this video because 19 it does not reflect the entire record in this 20 proceeding. We ask that you wait for the Commission to 21 issue its decision in this proceeding. It's our belief 22 that if the Commission does not dismiss the complaints 23 entirely, that it will agree with the evidence of 24 SoCalGas, not what you might see on this video. 25 So with that, thank you, your Honor. 26 ALJ BROWN: Thank you. All right. Ms. McPherson, 27 are you ready to proceed? 28 MS. MC PHERSON: Yes, I am, your Honor.

1 ALJ BROWN: Would you like to call your first 2 witness? 3 MS. MC PHERSON: Yes, ma'am. I would like to call 4 to the witness stand Dr. Bernard Endres. 5 ALJ BROWN: Thank you. Stand, please. And I б believe we're going to try -- where do you want him? 7 Over here. That way the court reporter has a better 8 chance of picking you up. 9 Give yourself a minute while he's getting 10 organized. 11 (Off the record) 12 ALJ BROWN: We'll go back on the record. 13 Good morning, Dr. Endres. 14 THE WITNESS: Good morning, your Honor. 15 BERNARD ENDRES, called as a witness by Grassroots Coalition, having been 16 sworn, testified as follows: 17 ALJ BROWN: Thank you. Please state and spell 18 your name for the record. THE WITNESS: Yes. It's Bernard Endres. That's 19 20 spelled B-e-r-n-a-r-d E-n-d-r-e-s. 21 ALJ BROWN: Thank you. And once you're seated, do 22 you want him to put his microphone on? Would that help, 23 or can you hear him? 24 THE REPORTER: I can hear, but it might --25 ALJ BROWN: Why don't you see when you sit down if 26 you can press that microphone button on. 27 THE WITNESS: I also believe this can be moved 28 around to whatever is suitable for the court reporter.

1 ALJ BROWN: Very good. This may be a little unusual, but in order to allow the proceeding to 2 3 continue, can every one hear me? I don't have mine on? Okay. I think I will begin, unless you were prepared to 4 5 ask Dr. Endres what sections he was going -- do you want б me to --7 MS. MC PHERSON: I would like to just say one or 8 two, and then I would love to have your help. 9 ALJ BROWN: All right. Then I'll allow you to 10 begin. 11 MS. MC PHERSON: Except I just simply stay seated? 12 ALJ BROWN: You can stand, but we prefer that you 13 really don't walk around too much. 14 MS. MC PHERSON: All right. So that I can see 15 you. 16 ALJ BROWN: You can actually stand up there if you 17 wanted and use that microphone. 18 MS. MC PHERSON: All right. Also actually what I 19 would like is --20 ALJ BROWN: And if you could punch your one on. 21 There you go. 22 MS. MC PHERSON: For every one watching that 23 doesn't have one of these diagrams, I think it would be 24 appropriate as we go through this that if I could set 25 these up so that people could actually see, because 26 these are simply blowups of what we passed out. Would 27 that be all right with every one? 28 MR. GILMORE: Your Honor, we don't need that for

1 our purposes. We're satisfied with the documents that have already been previously distributed. In order to 2 3 help the hearing move along, we don't need any blowups. 4 MS. MC PHERSON: This would actually only take a 5 moment for me to lay out for people that we have in the audience. б 7 I'll give you a tiny bit, just a tiny ALJ BROWN: 8 bit. See, but they should also, if they are ever even 9 watching clips from this videotape, you should have a 10 full copy of the transcript there, and then they'd be able to refer to the exhibits, because the exhibits will 11 12 be part of the transcript. MS. MC PHERSON: Yes, I understand that. 13 And I 14 will point out each one as we go through. 15 ALJ BROWN: Well, I'll let you start, and if it becomes too confusing, we'll stop. 16 17 DIRECT EXAMINATION 18 BY MS. MC PHERSON: 19 All right. Mr. Endres, if I may start with 0 20 the Plaintiffs' Prepared Testimony. 21 А Yes. 22 Is this the actual submitted testimony as was 0 23 submitted on -- and filed on May 11th, 2000? 24 Yes, it was. Α 25 And is this what you want submitted? 0 26 Yes, it is. А 27 MS. MC PHERSON: Now, in order to, you know, lay 28 the necessary foundation, I would like to follow your

1 procedures, Judge Brown, and so --2 MR. GILMORE: Your Honor, I'm sorry to interrupt, 3 but I think there's some confusion in the record already 4 here that needs to be clarified. 5 ALJ BROWN: Right. Because this document itself was not filed in 2000. It was filed March 30th, 2005. б 7 MS. MC PHERSON: Oh, I'm sorry. You're right. 8 I'm reading the -- you're correct. It's filed March 9 30th, 2005. You're correct. I'm looking at the old 10 case filing date. 11 ALJ BROWN: Right, right, right. 12 MS. MC PHERSON: Yes. Forgive me. Yes, this is 13 filed on March 30th, 2005. 14 0 Is that correct, Dr. Endres? 15 Α Yes. 16 MR. GILMORE: And, your Honor, just for 17 clarification, when you say "filed," you mean served? 18 ALJ BROWN: I'm sorry. 19 MR. GILMORE: It was not filed with the Commission 20 Docket Office. 21 ALJ BROWN: And that's an error I make all the 22 time. Mr. Gilmore is correct. These documents are only 23 This will not become part of the record unless served. 24 it's admitted as an exhibit. That's why we go through 25 all that -- those extra steps. But any way, thank you. 26 That's a tiny point, but continue, Ms. McPherson. 27 MS. MC PHERSON: All right. And the other 28 document would be the executive summary of the hearing

1 testimony and recommended actions.

2

ALJ BROWN: And who prepared that?

MS. MC PHERSON: Q Grassroots Coalition has been an active participant in everything that has been created here, but as a witness, Dr. Endres, is this what you wanted prepared?

7 A This document was prepared by myself in 8 conjunction with Patricia McPherson primarily, and there 9 were other people that supported the effort, but the 10 most direct answer is is that I would be responsible for 11 any of the opinions and conclusions that would be 12 related to this document.

ALJ BROWN: Thank you. That's very helpful, not only for me in reviewing the record, but it will help Mr. Gilmore know, you know, how to proceed. Thank you. That's the kind of information we were looking for earlier to figure out who is kind of sponsoring and responsible for what. Thank you.

MS. MC PHERSON: I believe we're going to start with GR-2.

ALJ BROWN: Which is the executive summary?
 MS. MC PHERSON: Yes, correct.

ALJ BROWN: Very good. Now, we're not going toread it into the record.

25 MS. MC PHERSON: No. But I would like to go 26 through the items that are set forth in this document 27 and ask Dr. Endres if these are the items that as he's 28 set them forth in this document.

1 And can you go through these as they're set 0 2 forth in this document? Yes, I can. 3 А 4 ALJ BROWN: Do you want to start with the one on 5 page 1? б MS. MC PHERSON: Yes, please. I would like to 7 start with the executive summary. 8 ALJ BROWN: And are we talking about the 9 information that's in the nice little box? Is that what 10 you're focusing in on? 11 MS. MC PHERSON: Yes. 12 Could you explain this for us, Dr. Endres? 0 13 А Yes. The scope of the investigation that I 14 was asked to perform, I have attempted in the most 15 succinct way possible to set forth this, and I 16 personally chose the language set forth by Judge Brown 17 in her scoping memo because, to my knowledge, this in 18 the most precise way explains the nature of the 19 investigations that I have undertaken as a part of this 20 case. 21 Could you read what is inside the box for us, 0 22 Mr. Endres? 23 As set forth in the scoping memo, it states as Α 24 follows: that the complaint cases ask the Commission to 25 conduct an investigation to determine the following, and 26 this was pursuant to the scoping memo --27 ALJ BROWN: Right. 28 THE WITNESS: -- dated March 7th, 2005. So I'm

1 simply quoting verbatim the language as set forth in 2 that document, and that isif 3 If the Southern Cal Gas Playa Del 4 Rey gas storage facility is 5 venting or leaking gas or б depositing carcinogens into the 7 air or soil to the detriment of 8 the health or safety of the 9 neighboring community. 10 And I chose to emphasize with the notation 11 below, "emphasis added." I've underlined the word 12 "venting." I've underlined the phrase "leaking gas," 13 and I've underlined the phrase "depositing carcinogens," 14 because those are the precise issues that I addressed as 15 part of my investigations. 16 MS. MC PHERSON: Q As it states on page 1: 17 In conjunction with this 18 undertaking, Grassroots Coalition 19 has sponsored a comprehensive 20 systems engineering study that has 21 addressed these same issues. 22 Could you explain to us what a systems 23 engineering study is? 24 A systems engineering study is one where А Yes. 25 there would be a multiplicity of engineering and 26 scientific disciplines that are brought to bear in the 27 study of a particular problem area, and a systems 28 engineering study is especially characterized by where

1 there has been a combination of the totality of 2 engineering data that has been gathered, studied and 3 generated by competent sources and utilized to form the 4 ultimate opinions and conclusions that are to be drawn 5 by the systems engineering study.

Q Thank you. How long has this study taken7 place over time, please?

8 Α I personally first began the investigations 9 largely in support of Grassroots Coalition on or about 10 the year 1992. It's conceivable that may have even 11 predated that time period, but that would be at least a 12 definitive time period in which I had substantial 13 participation in the evaluation of major issues regarding the Southern California Gas storage facility. 14 15 If I could add one additional statement.

16

Q Yes, please.

17 А The reason 1992 or thereabouts was significant 18 is because that was the time period in which there was direct interface with the, as I understood, the most 19 20 competent engineers assigned to the Southern California 21 Gas storage project by Southern California Gas Company, 22 and those meetings were held at the company facilities 23 in Playa Del Rey. And there would have been, to my 24 recollection, perhaps as many as five to ten of the 25 engineers directly associated with the operation of the 26 gas storage facility present at that time.

27 And I could further add that there was another 28 scientist that was brought in at that time, and his name

1 was Dr. Kaplan, and there was significant interface with 2 various study issues at that time that are relevant 3 directly to these hearings. 4 Q All right. And during this timeframe, the 5 Playa Vista development has been developed and there б have been many studies that encompass that site area 7 which is part of the mineral right and aerial extent 8 area of Southern California Gas Company. Have you been 9 participatory and have knowledge of those studies, and 10 have you interfaced with those experts as well that were 11 the experts on behalf of the City --12 А Yes. 13 0 -- of Los Angeles? 14 Α Yes. Well, thank you for reminding me, 15 because that serves as an additional date of departure, 16 because, as I recall, on or about 1992 or 1993, as a 17 separate and distinct involvement, I was heavily engaged 18 in the review of all of the documentation related to the 19 environmental impact report that was prepared for the Playa Vista project. And if my memory serves me 20 21 correctly, that was around the 1992 time period. 22 And at that time I had very extensive 23 involvement, including with other petroleum geology 24 experts in which we made a thorough evaluation of the 25 conditions known to be present at that time, and those 26 were fully disclosed in documentation that was supplied 27 as part of the environmental impact report process at 28 that time and was made an official part of the record of

those proceedings. That was a very significant
 involvement at that time.

Q And also during that timeframe I believe there were situations within Beverly Hills that involved Dr. Jack West. Were you familiar with those documents and studies as well?

7 Over a period of years and significantly А 8 predating the 1992 time period, I've had significant 9 interface with a petroleum geologist by the name of Jack 10 West. I have worked with him at various times beginning 11 on or about 1985, and that involvement and recognition 12 of the importance of his geological studies has 13 continued up to the present, including the detailed 14 studies that he prepared in support of the Playa Del Rey 15 and Venice oil fields in which he prepared very detailed 16 geological characterizations based upon the totality of 17 drilling records available for both of those oil fields. 18 EXAMINATION 19 BY ALJ BROWN: 20 Could I ask, approximately what timeframe did 0 21 Dr. West produce this report or study? 22 The most recent and the most significant А 23 geological studies that were performed specifically for 24 the Playa Del Rey --25 0 Correct. -- and the Venice old fields, that information 26 А 27 would have been prepared approximately around the 28 2002-2003 time period. These are relatively recent

1 information, and also one of the pieces of exhibit that 2 has already been addressed here actually comes 3 specifically from his report, but there's a very 4 voluminous amount of data that was generated by Jack 5 West and which I relied upon extensively in forming my 6 opinions and conclusions regarding the geology.

7 The drilling records reveal the detailed geological characterization of both these oil fields 8 9 from the surface to a depth of over 6,000 feet. And 10 furthermore, this information is integrated, the 11 totality of all of the drilling records of Union Oil 12 Company, which was responsible for drilling the original wells, and then these are also related to all of the 13 14 historical scientific articles that have been written on 15 these two oil fields, most of them authored by various employees of the Division of Oil and Gas, now referred 16 17 to as DOGGR, in which these compile the -- virtually our 18 complete understanding of what we refer to as the source 19 rock and the origin of the thermogenic oil and gas that 20 resides within these two oil fields.

21 Q And did he -- is it a Dr. West or a Mr. West, 22 do you know?

23

A It's Mr. West.

Q Mr. West. Did he conduct any studies in the 25 2000 to 2002 time frame, or did he just rely upon 26 historical data?

A He conducted very specific studies that weredirectly related to characterizing in as much detail as

possible the entirety of the geology and fault planes of
 the Playa Del Rey and Venice oil fields.

Q And did he -- was that based on already prepared information by other experts, or did he catually physically go out to the sites, do you know?

б А Your Honor, if I could just give a very brief 7 description in terms of how such a study would be 8 undertaken. And first of all, I have a great deal of 9 respect for Jack West because he has maintained perhaps 10 the only original archives of virtually every drilling 11 record that's ever been generated in this city, and 12 particularly for the Playa Del Rey and Venice oil 13 fields.

These are the original drilling records that were generated at the time that the oil wells were drilled. And this is what he uses as his essential input for generating effectively a three-dimensional rendering of the detailed geological characteristics of these oil fields extending from the surface all the way to the depth of the oil deposits at 6,000 feet.

21 Okay. More specifically, my question, which Q 22 is not to foreclose anybody else's question, my question 23 did he sit in a room with documents that were is: 24 already prepared by others and then write his report or 25 did he physically with his -- himself go out to the site 26 and conduct any kind of onsite studies, or was his more 27 like a research paper?

28

A It would have been both, your Honor. He

1 performs an extremely comprehensive evaluation, and he 2 also happens to be the petroleum geologist hired by the 3 City of Beverly Hills in order to characterize every 4 aspect of the oil fields under that city and the 5 adjoining area. In my opinion, he's the most competent б petroleum geologist that would be anywhere in these 7 parts. 8 0 Did the City of L.A. ever retain him to do studies for the Playa Vista, do you know? 9 10 Yes, they have, your Honor. Α 11 DIRECT EXAMINATION (resumed) 12 BY MS. MC PHERSON: 13 0 Moving earlier in a timeframe, were you, and 14 did you have intimate knowledge of the facts surrounding 15 the Fairfax incident where the Ross Dress-for-Less blew 16 up in 1985 in Los Angeles? 17 Α Yes, I did. And that provides a convenient 18 juncture, because I personally hired Jack West in order 19 to perform the same level of detailed geological 20 characterization for the Salt Lake oil field in the 21 Fairfax area as he did later for the Playa Del Rey and 22 Venice oil fields. And he prepared -- there is nothing 23 else that has ever been prepared to the level of detail. 24 And I specifically contracted with Mr. West in order to 25 take not only the slant well drilling records but to 26 combine the old vertical drilling records and take the 27 totality of that information and come up with the most 28 detailed three-dimensional characterization of the oil

1 field that's ever been generated.

I personally engaged him and charged him with the responsibility of doing that, and I interfaced with him on a virtually weekly basis in the nine months to a year that it took him in order to generate that -- that piece of information.

Q And correct me if I'm wrong or please tell me the outcome of that. Was that it was oil field-generated gas that caused the Fairfax explosion?

10 А Well, it was -- the information that was 11 generated by Jack West in characterizing the 12 three-dimensional geometry of the oil field was one of 13 the most important foundational pieces to identify 14 almost in precise detail what were the several most 15 important causative factors of the explosion. And I 16 might add that one of the reasons why I fully respected 17 Jack West for doing that work is because his involvement 18 in that area had already predated the time period that I 19 was directly contracting him by more than 20 years, 20 and --

21 ALJ BROWN: Do you know what, I'm going to 22 interrupt here, and I'll tell you why. You asked a very 23 good question, which was kind of what -- what results 24 came out of these tests. And for the last few minutes 25 we haven't gotten there yet. Okay. Try and answer the 26 question asked because it will help us focus in on like 27 what were his conclusions about what caused that -- the 28 Fairfax explosion.

1	MS. MC PHERSON: Q And if I may also, if you
2	would like to add more, I would also like to hear with
3	regard to that situation, but as it also involved
4	someone that has also worked with the Playa Vista site
5	was Dennis Coleman and the papers surrounding the
6	Fairfax incident as well?
7	A Correct.
8	ALJ BROWN: Okay. Are we going to be able to tie
9	the Fairfax incident into Playa Del Rey?
10	MS. MC PHERSON: Yes, ma'am.
11	ALJ BROWN: Okay. Then let's focus in, because we
12	only have three days. So try and figure out how to
13	focus the important information so that we can tie it
14	all together. All right.
15	THE WITNESS: If I could answer that in terms of
16	what is the direct relationship between Fairfax and
17	Playa Del Rey. The answer is profoundly twofold, and
18	Jack West was instrumental in the firstfold aspect of
19	it. He possessed all of the necessary documents to be
20	able to accurately characterize the fact that a portion
21	of the oil field that directly was underneath the
22	explosion site had been used many years for gas storage
23	purposes. And so one of the major
24	ALJ BROWN: And was it used by SoCalGas?
25	THE WITNESS: No, it was not used by Southern
26	California Gas.
27	ALJ BROWN: Okay.
28	MS. MC PHERSON: Q But was it used as a storage

1 area as somewhat in the same fashion as SoCalGas uses a 2 storage field in the oil field setting? 3 Α It was taking gas and injecting it down into 4 the oil field formation under high pressure. 5 Q Which is -б Α And that's the similarity of what takes 7 place --Thank you. 8 Q 9 -- at Playa Del Rey. And the second most А 10 important aspect was to identify the exact nature of the 11 casing histories and the leakage of wells that directly 12 contributed to the pathway of migration of the gas to 13 reach the surface. So we were able to identify in exact 14 detail the nature of the casing corrosion and the manner 15 in which the gas migrated up from the deeper formations 16 and entered the shallow zones directly underneath the 17 explosion site. 18 Now, was that a capped and abandoned ALJ BROWN: 19 well? 20 No. One of the primary --THE WITNESS: 21 ALJ BROWN: In Fairfax? 22 THE WITNESS: -- pathways for the gas migration to 23 reach the surface was an active well, and that was 24 identified as Well Metropolitan No. 5. At that time it 25 was an operational well of McFarland Oil Company out of 26 Santa Fe Springs. 27 ALJ BROWN: Thank you. 28 MS. MC PHERSON: Q And unless there's something

1 further that you think is important to add here, I would 2 like to go back to --

A Well, if I could add a connection here with the EIR phase for the Playa Vista. It was very significant that after my involvement, including engaging other very competent petroleum geologists, and we put forth a great deal of effort in making sure that we had a detailed response to the environmental impact perport.

10 Now, the response to our analysis was actually 11 provided by Southern California Gas Company, and they 12 basically denied that there was any relationship 13 whatsoever to leaking wells and that the contention was 14 made that the explosion was caused solely by decomposing 15 organic material located no deeper than 500 feet, which 16 was truly not in any manner or form supportable by the 17 evidence that existed at that juncture in my working 18 with Jack West, but then that led us to the next level 19 of detailed participation, and that was with Dennis 20 Coleman in Isotech Laboratories.

ALJ BROWN: Okay. I've missed a connection here
between Playa Vista.

23

24

MS. MC PHERSON: May I?

ALJ BROWN: Okay.

25 MS. MC PHERSON: I think I can bring this26 together.

27 Q If you would, please, continue with regard to 28 Dr. Coleman and his involvement here as to how it 1 applies to our situation.

_	
2	A Well, we could broadly characterize the
3	analysis of an explosion hazard risk posed by an oil
4	field or gas storage field operation or the combination
5	thereof into two primary subcategories. And in terms of
6	performing a systems engineering analysis, it's
7	absolutely essential that we have as step one a very
8	detailed geological characterization of the entirety of
9	the oil field from the surface all the way to the depth
10	of the oil field reservoir itself.
11	ALJ BROWN: And does that exist?
12	THE WITNESS: Yes.
13	ALJ BROWN: Okay.
14	THE WITNESS: And we have that, virtually an
15	identical analogy between Fairfax and Playa Del Rey is
16	because we have at this point in time generated the same
17	level of fidelity and detail regarding that geological
18	characterization.
19	Now, the second aspect, and this becomes
20	entirely important in terms of, you might say we're
21	reinforcing our understanding of the geology by doing a
22	detailed gas analysis. The gas in the, what we refer to
23	technically as isotopic analysis. This allows us to go
24	in and use the most detailed geochemistry procedures and
25	determine exactly the origin of the gas.
26	So now we can break this down into two
27	categories. We can identify the pathways by which the
28	gas moves from the depth of the reservoir to reach the

1 surface. And the second category is taking all of the 2 chemical information that we know from the profound work 3 that's been done in the field of geochemistry to exactly 4 characterize all of its chemical constituents and then 5 do a further identification through an evaluation of the 6 isotopes of the molecules of the gases themselves.

7 Now, as far as the evaluation, again, we have 8 a virtual 100-percent parallel between Fairfax and what 9 has been done even in a more exhaustive sense at the 10 Playa Del Rey and Venice old fields, namely, because it's been more exhaustive out at Playa Del Rey and the 11 12 Venice oil fields because of the enormity of the money 13 that has spent -- been spent on geochemical analysis, 14 soil gas studies, and the sophistication of the science 15 that has gone into gas fingerprinting.

16 And so the work that has been done at Playa 17 Del Rey and the Venice oil fields have been undertaken 18 by the most competent geochemists to be found anywhere 19 in the world bar none. And I would provide a reasonable 20 estimate that there has been over \$5 million spent just 21 on the effort in order to perform detailed geochemical 22 analysis of the exact nature of the gases that are 23 moving up into the near-surface soils.

So we have a vast amount of data from the deep reservoir, the intermediate reservoir and then in the shallow sands and particularly in the areas where there are very large accumulations of gas within the shallow depths directly underneath this site. These have been

1 analyzed in the most comprehensive and detailed fashion. 2 ALJ BROWN: And who's been underwriting this \$5 3 million? I would estimate that somewhere 4 THE WITNESS: between at least 2 to \$3 million of that money has 5 б actually been paid for either, I would say, it would 7 appear as though this was actually being underwritten by 8 the City of Los Angeles. I suppose the direct answer 9 would be that the City of Los Angeles was responsible 10 for sponsoring at least somewhere between 3 to \$5 11 million of this work. 12 MS. MC PHERSON: Q Dr. Endres, was there a 13 Society of Petroleum Engineers paper, an industry 14 peer-reviewed paper that conclusively determined what 15 was the cause of the Fairfax incident? 16 А Yes, there was. 17 And that would be written by? 0 18 Α It was a article that was coauthored by Dennis 19 Coleman, and there was also a research colleague that 20 worked with him that had formerly worked at a laboratory 21 in Canoga Park referred to as Global Geochemistry, which 22 at that time was headed up by Dr. Kaplan. And the 23 importance of that was that at Fairfax we had -- perhaps 24 I could maybe retreat just slightly on what I said about 25 the most comprehensive geochemical analysis at Playa Del 26 Rey and Venice oil fields. 27 In reality, we had one series of studies that 28 were performed at Fairfax that I have never seen

1	repeated in the scientific literature any time since,
2	because it was Global Geochemistry who performed on or
3	about 1985 and 1986 actually the most comprehensive
4	isotopic analysis of every gas constituent ever found on
5	the Fairfax site. And that those results were
6	incorporated in a voluminous report about 3 inches
7	thick, and that work was actually done by under the
8	sponsorship of the Gas Research Institute located in
9	Chicago.
10	EXAMINATION
11	BY ALJ BROWN:
12	Q All right. Could you summarize in just a
13	sentence or two what caused the Fairfax explosion?
14	A It was thermogenic oil field gas that migrated
15	up from a well-known area within the oil field that had
15	up from a well-known area within the oil field that had
15 16	up from a well-known area within the oil field that had always be almost had been identified as the most
15 16 17	up from a well-known area within the oil field that had always be almost had been identified as the most prolific gas zone within the Salt Lake oil field.
15 16 17 18	up from a well-known area within the oil field that had always be almost had been identified as the most prolific gas zone within the Salt Lake oil field. Q Okay.
15 16 17 18 19	up from a well-known area within the oil field that had always be almost had been identified as the most prolific gas zone within the Salt Lake oil field. Q Okay. A And that prolific zone was located at a depth
15 16 17 18 19 20	up from a well-known area within the oil field that had always be almost had been identified as the most prolific gas zone within the Salt Lake oil field. Q Okay. A And that prolific zone was located at a depth of primarily in the range of 3,000 feet.
15 16 17 18 19 20 21	<pre>up from a well-known area within the oil field that had always be almost had been identified as the most prolific gas zone within the Salt Lake oil field. Q Okay. A And that prolific zone was located at a depth of primarily in the range of 3,000 feet. Q All right. Then why did it explode that day,</pre>
15 16 17 18 19 20 21 22	<pre>up from a well-known area within the oil field that had always be almost had been identified as the most prolific gas zone within the Salt Lake oil field. Q Okay. A And that prolific zone was located at a depth of primarily in the range of 3,000 feet. Q All right. Then why did it explode that day, do they know?</pre>
15 16 17 18 19 20 21 22 23	<pre>up from a well-known area within the oil field that had always be almost had been identified as the most prolific gas zone within the Salt Lake oil field. Q Okay. A And that prolific zone was located at a depth of primarily in the range of 3,000 feet. Q All right. Then why did it explode that day, do they know? A I have brought an illustrated diagram.</pre>
15 16 17 18 19 20 21 22 23 24	<pre>up from a well-known area within the oil field that had always be almost had been identified as the most prolific gas zone within the Salt Lake oil field. Q Okay. A And that prolific zone was located at a depth of primarily in the range of 3,000 feet. Q All right. Then why did it explode that day, do they know? A I have brought an illustrated diagram. Q But just tell me. What I mean what</pre>
15 16 17 18 19 20 21 22 23 24 25	<pre>up from a well-known area within the oil field that had always be almost had been identified as the most prolific gas zone within the Salt Lake oil field. Q Okay. A And that prolific zone was located at a depth of primarily in the range of 3,000 feet. Q All right. Then why did it explode that day, do they know? A I have brought an illustrated diagram. Q But just tell me. What I mean what caused if the Fairfax site was over this oil field,</pre>
15 16 17 18 19 20 21 22 23 24 25 26	<pre>up from a well-known area within the oil field that had always be almost had been identified as the most prolific gas zone within the Salt Lake oil field. Q Okay. A And that prolific zone was located at a depth of primarily in the range of 3,000 feet. Q All right. Then why did it explode that day, do they know? A I have brought an illustrated diagram. Q But just tell me. What I mean what caused if the Fairfax site was over this oil field, why on that particular day did it explode?</pre>

1 No, no. Just tell me, tell me, please. 0 What we had, your Honor, was a large 2 А 3 accumulation of gas that had been trapped --4 Q Trapped. 5 А -- under a retaining and a relatively б impermeable barrier. It was a clay barrier at a depth 7 of approximately 50 feet. 8 0 Okay. 9 It was a large --Α 10 Was that a natural barrier, or was that 0 11 something that had been constructed? It was a natural barrier. It was a natural 12 А 13 clay barrier. 14 Q Okay. 15 Α That was relatively impermeable. 16 Q Good. But still then, why did it explode that 17 day? 18 Suddenly this relatively impermeable clay Α 19 layer cracked, and there was a sudden bursting through 20 of a large volume of gas that surged to the surface and 21 then began burning through the cracks of the sidewalk 22 and also entered the branch of the Ross Department 23 Store. It was actually the employee lounge in which it 24 entered that area. And just at the moment that the 25 employee had clocked out was exactly at 5:00 p.m., and 26 she had put her clock-out card into the electric clock, 27 and that spark ignited it, and there was the incident 28 explosion, and then the gases continued to burn for many

1 days thereafter through the seepage of gas. 2 0 And what caused that -- do they know, did the 3 study find a cause for the -- for that crack that 4 developed? It would have been something that would be 5 А б naturally caused as -- the other major part that was 7 closely evaluated at Fairfax was what we've referred to 8 as oil field subsidence, meaning that any time you have 9 ongoing production of fluids from the oil field itself, 10 you have a settling of the ground all around. 11 And was that still an active oil field at that 0 12 time? 13 А Yes, it was. And so these cracks propagate 14 themselves to the surface and actually cause a 15 subsidence bowl. So the ground is constantly sinking. 16 And wherever we would have -- for example, down at a 17 depth of several thousand feet we have significant 18 faults. For example, the major fault passing through 19 there is the 3rd Street Fault. 20 So the thing that Jack West is most capable of 21 identifying is all of the faults that would pass through 22 the oil field, and those are extremely important in 23 doing any type of petroleum analysis of the migration 24 characteristics of what we say are the -- the oil and 25 gas originates at the source rock and then it moves 26 upward in wherever there are permeable areas, and that's 27 governed largely by the faults that crisscross the oil 28 field. So Jack West's specialty is taking all the

1 drilling records and exactly characterizing the location 2 of the faults which then serve as the migratory pathways 3 for the oil and gas to move up from the deeper source 4 rocks.

5 Q Could the information that was obtained from 6 the Fairfax explosion be used to basically prevent 7 future explosions at other sites?

8 А Profoundly so, your Honor, which is -- leads 9 me directly to our -- I would emphasize, out of all of 10 this prioritization over on page 3 of our executive 11 summary, Roman numeral 3, Roman numeral No. 3 is in my 12 way of thinking the most profound of what we are seeking 13 here, because Fairfax and Hutchinson, Kansas, tells us why a written safety policies and procedures is so 14 15 important. And I could summarize it very briefly as to 16 why such a thing would be important for Fairfax and why 17 it would be so important for Playa Del Rey.

18 Q I don't need to hear about Fairfax at all, 19 because SoCalGas -- we don't regulate whoever is running 20 Fairfax. I really only need to know about Playa Del 21 Rey.

22 Briefly stated, any one who's involved А Okay. 23 in emergency response, and especially the fire 24 department, must know what is going on as far as gas 25 seeps and the potential for the oil field gases and 26 storage gases to reach the surface and create an 27 enormous explosion and fire hazard. That was the 28 significance of Roman numeral 3.

And how would that information be shared 1 0 2 ideally? Would there be yearly meetings, quarterly 3 meetings? Would the fire department and come and sit 4 down with SoCalGas? Let's pretend you -- your idea 5 really had some legs to it and the Commission was interested, how could you -б 7 А Well --8 0 How would you put this together? 9 I might just do a fast-forward, your Honor, А 10 but I just within the last 24 to 48 hours reviewed in 11 some detail an emergency response that occurred related 12 directly to the Playa Del Rey gas storage facility in 13 which there was a total inability on the initial 14 arrivers at the scene to be able to have any clue or 15 understanding as to who was responsible and who they 16 should attempt to contact for this enormous oil and gas 17 spill that occurred directly related to the Playa Del 18 Rey gas storage facility. 19 Good. Now backtrack. In an ideal 0 Okav. 20 world from your perspective, how would the fire 21 department and SoCalGas work together? 22 First of all, it would be essential to have a А 23 map that would identify the pipelines and the surface 24 supporting facilities of this gas storage project made 25 directly available for immediate reference by the fire 26 department and the emergency response teams for those 27 people who are responding to oil spills and gas leaks 28 and pipeline leaks that subtend and go on with great

1 regional extent throughout this entire area of the Playa 2 Del Rey gas storage field. 3 0 Okay. So a map showing the pipelines? 4 А The underground pipelines. 5 0 Anything else? б Α I might add as a subnote, your Honor, that in 7 this most recent oil and gas spill there was no 8 information --9 Could you tell me about the most recent oil 0 10 and gas spill? 11 А Yes. 12 0 Which, when did that happen and where? 13 А It would have been in the year 2004. And in 14 fact, we'll have, within a matter of no more than a day, 15 we will be submitting written documentation to support 16 the exact details and pictorial representation of this 17 spill. 18 0 Just give me just like where, when, the 19 extent, just a very short -- the equivalent of an 20 executive summary of it. 21 А Okay. We have -- actually, there's three 22 primary regions of the Playa Del Rey gas storage 23 facility. 24 No. Tell me about this leak. 0 25 Α Yes. This is out in the area of what we refer 26 to as the Townlot area. 27 Q Which is over in Marina Del Rey? 28 А Yes.

1 0 Okay. 2 Α And what it does, it's an underground pipeline 3 that runs primarily, originates from Southern California 4 Gas Company Playa Del Rey No. 10. 5 Correct. Okay. And there was a leak? Q б Α Yes. 7 In 2004? 0 8 A Right. And what happened is is that the li --9 the pipeline that and the oil line that originates at 10 Playa Del Rey 10 has a rather strange route to it 11 because it first goes north, and it goes up almost as 12 far as Washington Boulevard, and then it's really 13 totally bypassed. It takes a loop to the north, and 14 then it heads east along the alignment of Washington 15 Boulevard, and then it heads south after it's circled 16 the marina area, and then it comes back towards the gas 17 storage facility, and then it goes below the Ballona 18 Creek, and then it comes back up and eventually ends up 19 at the tank farm area at the bottom of the bluffs at the 20 Playa Del Rey gas storage facility. 21 DIRECT EXAMINATION (resumed) 22 BY MS. MC PHERSON: 23 May I interject also, Dr. Endres? 0 How do you 24 know where those pipelines came from? Was that a map 25 provided by Southern California Gas Company, or is it a 26 document or multiple documents? 27 Α It was made eventually a part of an 28 evidentiary hearing carried out by a governmental entity 1 that was very much concerned with the failure to be able 2 to identify in a rapid and swift fashion how they could 3 contact any one who was responsible for this enormous 4 origin of oil and gas that was spilling out onto the 5 street.

Now, as I further understood, and I could б 7 quite rightfully understand, that any one who would be 8 routinely working in the field for Southern California 9 Gas Company immediately recognized and properly 10 characterized what was going on with that pipeline and 11 what its ultimate purposes were. And unfortunately, 12 even though those employees fully understood the purpose 13 of this line, I have found absolutely no evidence 14 anywhere in the record that Southern California Gas 15 Company on an official level had ever notified DOGGR, 16 had notified even the agency that is ultimately 17 responsible for tracing all underground pipelines, and 18 that's an entity that we refer to as DIG-Alert. And the 19 evidence seems to support the fact that even DIG-Alert 20 was not informed of the presence of this gas line and 21 oil line running through such an important area of the 22 city.

23 So I just find it beyond my belief that an 24 entity such as DIG-Alert, which is considered to be the 25 most competent authority of locating underground 26 pipelines, that they did not have this documentation 27 within their records.

28

ALJ BROWN: Okay. We're right up against the noon

1 hour. 2 MS. MC PHERSON: I have a quick question. 3 ALJ BROWN: All right. 4 MS. MC PHERSON: And I think just as a --5 ALJ BROWN: All right. One question. б MS. MC PHERSON: O Dr. Endres, cited in this 7 paper is a systems safety engineering process. Could 8 you give us a very, very brief background as to your 9 involvement with systems safety engineering studies and 10 how you know what one is and how they are -- how they 11 proceed? 12 А Well, as a professional engineer I was trained 13 and was professionally engaged in performing systems 14 engineering studies for a period of at least 23 years. 15 0 And that was with? 16 Α I worked largely directly with the United 17 States Air Force, and I was employed by a company 18 located at El Segundo, California, called the Aerospace 19 Corporation. I was employed there for a period of 23 20 years where I specialized in performing systems 21 engineering studies. 22 MS. MC PHERSON: Thank you. 23 Why don't we take a lunch ALJ BROWN: Great. 24 break, and does 1:30 sound reasonable? 25 MR. GILMORE: Yes, your Honor. 26 MS. MC PHERSON: That's a long time. I would ask --27 MR. GILMORE: 28 Why don't we try and get back here at ALJ BROWN:

about 1:15 so that we can really -- I'll say 1:15. 1 2 We'll split the difference. 3 MS. MC PHERSON: All right. 4 ALJ BROWN: Because I will need to give the court reporter a few breaks this afternoon just so that we 5 have an accurate record and he'll work with me again. б 7 Do you need this on the record, Mr. Gilmore? 8 MR. GILMORE: No. 9 ALJ BROWN: Then why don't I relieve you for the 10 lunch hour till 1:15. 11 (Whereupon, at the hour of 12:00 p.m., a recess was taken until 1:20 p.m.) 12 13 \* 14 15 16 17 18 19 20 21 2.2 23 24 25 26 27 28

1 AFTERNOON SESSION - 1:20 P.M. 2 3 BERNARD ENDRES 4 resumed the stand and testified further as follows: 5 ALJ BROWN: We'll go back on the record We will start our afternoon session. б Dr. 7 Endres, you are still on the stand and you're still 8 under oath, and direct questioning will continue by way 9 of Ms. McPherson. 10 DIRECT EXAMINATION (resumed) 11 BY MS. MC PHERSON: 12 Dr. Endres, in relation to how these different 0 13 oil fields are the same and/or are very different, 14 meaning the Playa Del Rey oil field, Southern California 15 Gas Company and the Fairfax situation and even the 16 Montebello situation, is the Playa Del Rey field, in 17 your opinion and from your background of research for 18 this facility and the geology of this facility, a 19 working oil field? 20 А Yes. 21 0 Thank you. All right. Now I would like to go 22 to the heart of what Grassroots has asked of the PUC 23 during this past five-year timeframe, having asked the 24 Commission to conduct an investigation to determine what 25 Dr. Endres had stated and read from within the box on 26 page 1 and then move on to, in asking for that 27 investigation, to specify in the box on page 2 what we 28 specifically were asking for in that investigation and

1 identifying different conditions that might give rise to 2 the detriment of health or safety of neighboring 3 community and to quantify these hazards as they relate 4 to, as the box states on page 2, 1, 2 and 3, the leaking 5 oil field gases, depositing carcinogens into the air or б soil, and the venting of oil field gases to the air. Dr. Endres, could you take those one by one for us, 7 8 please, and tell me if -- summarize your findings with 9 regard to those issues?

10 And actually, I'm sorry, but I have a question 11 first with regard to specifically Southern California 12 Gas Company and your involvement with them as it relates 13 to these issues within the box. Your -- if you would 14 please summarize for us, please, the -- any internal 15 documents of Southern California Gas Company that you 16 may have viewed and how much time have you viewed those, 17 and if you could just give a brief description of how 18 much review has taken place by you of Southern 19 California Gas Company's documents regarding Southern 20 California Gas Company facility --21 А Yes. 22 -- in Playa Del Rey. 0 23 I will frame my answer in context of the Α 24 written statement that is contained at the bottom of 25 page 3 of the executive summary. And --26 I don't know if your mike is on? ALJ BROWN: Is 27 it? 28 MS. MC PHERSON: The switch, the light on?

1	THE WITNESS: Yes, the light is on.
2	ALJ BROWN: Thank you. Sorry.
3	THE WITNESS: Is that better?
4	ALJ BROWN: That's fine. Yes. Thank you.
5	THE WITNESS: As far as the review of what I've
6	described as internal Southern California Gas Company
7	records pertaining to the Playa Del Rey gas storage
8	field, I performed an extensive and an exhaustive review
9	of those documents which consisted largely of two
10	subphases. Phase 1 consisted of nearly three solid
11	weeks in which every day there would have been a minimum
12	of 8 hours devoted towards reviewing nothing other than
13	the internal documents of Southern California Gas
14	Company, and that document review took place at the Gas
15	Company's headquarters building here in downtown Los
15 16	Company's headquarters building here in downtown Los Angeles.
16	Angeles.
16 17	Angeles. EXAMINATION
16 17 18	Angeles. EXAMINATION BY ALJ BROWN:
16 17 18 19	Angeles. EXAMINATION BY ALJ BROWN: Q And what kind of documents were you looking
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16 17 18 19 20 21 22	Angeles. EXAMINATION BY ALJ BROWN: Q And what kind of documents were you looking at? A These would have been all of the official and original documents contained within the well record
16 17 18 19 20 21 22 23	Angeles. EXAMINATION BY ALJ BROWN: Q And what kind of documents were you looking at? A These would have been all of the official and original documents contained within the well record files of Southern California Gas Company, and what these
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16 17 18 19 20 21 22 23 24 25	Angeles. EXAMINATION BY ALJ BROWN: Q And what kind of documents were you looking at? A These would have been all of the official and original documents contained within the well record files of Southern California Gas Company, and what these documents pertained to would be a description providing an historical framework for the entirety of their gas
16 17 18 19 20 21 22 23 24 25 26	Angeles. EXAMINATION BY ALJ BROWN: Q And what kind of documents were you looking at? A These would have been all of the official and original documents contained within the well record files of Southern California Gas Company, and what these documents pertained to would be a description providing an historical framework for the entirety of their gas storage operations beginning in 1942 and continuing up

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1	control. It included a review of the well records
2	individual wells.
3	It also provided a rather detailed description
4	of the movement of the storage gases within the various
5	reservoir zones and how these gases were moving
6	throughout this zone and what procedures had been in
7	place in order to identify almost an exact
8	characterization, almost a three-dimensional
9	characterization of the movement of both the liquids as
10	well as the gases within this entire region, and that
11	would include the three primary regions that we've
12	previously made reference to.
13	And to be just a little more specific on this,
14	we have three primary areas of the gas storage field.
15	The one area is sometimes referred to as the Bluffs
16	area. The second area is sometimes referred to as the
17	Gas Cap area. And the third area is sometimes referred
18	to as the Townlot area. And it was an important part of
19	this evaluation to determine how these three subregions
20	would interact, particularly at the reservoir level as
21	far as the movement of both liquids, fluids primarily,
22	and gases within this region. And
23	Q Okay. As part of that, let's get down to the
24	box on page 2. What did you determine concerning
25	leaking oil field gases?
26	A That there were numerous wells throughout this
27	area that were leaking gases to the surface. In fact,
28	there were some regions of this field that became so

1	serious in causing gas leakage to the surface that they
2	had to be closed down, And then even after this closure
3	and after a passage of years, Southern California Gas
4	Company attempted to reopen those same regions, and then
5	after they began injecting gas down into the formation,
6	gas was found leaking to the surface, and then even
7	though they had learned all these lessons from the prior
8	experience, it was basically a repeat of their
9	experiences of vertical gas migration to the surface.
10	And then there was an ability to further
11	characterize the wells that had experienced what I would
12	characterize as the worst and the most obvious leakage
13	to the surface. And the most definitive data that
14	characterized this movement to the surface was the
15	repeated use of <mark>barhole studies</mark> . That's the terminology
16	used by Southern California Gas Company.
17	Q And what is that word again?
18	A Barholes.
19	Q B-a-r-h-o-l-d?
20	A B-a-r-h-o-l-e.
21	Q Barhole.
22	A Barhole.
23	Q Okay. And can you put this in any kind of a
24	timeframe? Are you talking historic? Are you talking
25	'70s, '80s, '90s, 2000?
26	A Virtually over the entire period of operation
27	of the gas storage field serious leakage problems to the
28	surface were an integral part of the operations of this
20	Surrace were an incegrar part of the operations of this

1 field. 2 0 Okay. Has that con -- from your perspective, 3 has that continued into the 2000s? 4 А Yes, it has. 5 Q Okay. б Α And the most serious recognition of these 7 problems would have occurred in the early 1980s, and 8 then we had some of the most serious leaks that occurred around the 1992 time period, and this was directly up in 9 10 the Bluffs area, and the wells that were most seriously 11 impacted are referred to as the Big Ben wells. And 12 those leaks -- first of all, there was the most 13 extensive use of barholes, meaning surface probes that 14 were utilized by Southern California Gas Company, which 15 allowed rather detailed characterization of the gas 16 movement from the storage field to the surface by use of 17 these barholes. 18 And then furthermore, there were attempts to 19 identify two things. One was, would be the exact manner 20 in which the well or wells were leaking, and secondly, 21 to come up with estimates in terms of the total volume 22 of storage gas that would have leaked out of the storage 23 reservoir and moved and impacted shallower zones as well 24 as hopscotching to adjoining active wells that were 25 accessible for instrumentation and could be used. For 26 example, sound logs were used in adjoining active wells 27 in order to characterize the regional extent of the 28 movement out from this localized well bore.

1 ALJ BROWN: Okay. 2 DIRECT EXAMINATION (resumed) 3 BY MS. MC PHERSON: 4 Q All right. Dr. Endres, have you shared much of this information with the Public Utilities 5 б Commission, including the Energy Branch, and have you 7 seen any reference to this data within any of the recent 8 Energy Division materials that have been put forth 9 through the Public Utilities Commission? 10 Α Well, just to summarize very briefly that --11 ALJ BROWN: What documents have come forth from 12 the Energy Division? 13 MS. MC PHERSON: The -- all the data within the 14 CEQA documents. 15 ALJ BROWN: Okay. 16 MS. MC PHERSON: Q So what I am referring to is 17 what we are seeing now, and number one is, have you 18 shared this information? I would like you just to state 19 what Grassroots and you have been doing with regard to 20 the information that you've gone through extensively and 21 imparted that to the PUC. And have you seen any 22 evidence within the PUC's documents that have been 23 forthcoming to the public in recent days regarding any 24 of this material that we have shared with them, and in 25 particular, the Energy Branch, which is what we have 26 seen? 27 А I'll try to answer it. It sounds to me like 28 perhaps we have three subparts to respond to. So the

1 first subpart I could relate to the time period in which this complaint phase has actually been venued before the 2 3 Public Utilities Commission, and that's been 4 approximately a five-year time period. 5 Now, during this interval of time, I recall б that shortly after this complaint was filed there was an 7 administrative law judge by the name of Orville Wright 8 that was assigned to the case, and there were several 9 hearings scheduled in San Francisco, and then later 10 there were some hearings that were scheduled down here, 11 and then either during his active participation as 12 administrative law judge or during the transition to 13 Administrative Law Judge Brown, during that period of 14 time there was substantial data and interfacing with the 15 Public Utilities Commission providing a great deal of 16 information. 17 And as I recall, the first significant 18 document that I submitted and has to be a formal record 19 at the Public Utilities Commission, it went into great 20 detail to identify the exact wells that had a great deal 21 of history in leaking gas to the surface. Those were 22 very carefully delineated, and they certainly were in 23 sufficient detail to relate those back to any of the 24 well records to substantiate that, and certainly within 25 the internal documents of Southern California Gas 26 Company, which I had reviewed at that, prior to that 27 time period. 28 So beginning at that earliest point. Then

later there were several environmental contractors that 1 2 were employed by the Public Utilities Commission. And 3 there were actually numerous meetings that were directly 4 held with the personnel with those environmental contractors and their subcontractors as well as 5 б representatives from the Public Utilities Commission who 7 oftentimes directly or indirectly participated in those 8 meetings and technical interchanges.

9 These typically were all-day events. Some of 10 them went on for two to three days in which we met 11 virtually in a shirtsleeve type setting in which we 12 provided literally box loads of information to not only 13 the PUC representatives but also the contractors and 14 their subcontractors.

Is I also spent a substantial amount of time in going throughout the gas storage field with each and every one. Sometimes we went in car caravans, two to three vehicles, in which we went around and actually highlighted the areas that were problem areas.

20 As far as the URS study that has been made 21 reference to and actually set forth as an exhibit, I 22 distinctly recall some significant background relating 23 to that, because when some of these environmental 24 contractors came down, we made sure that we actually 25 went to the stations where these instrumentation were 26 located, and we physically observed it and in terms of 27 their positioning of the instrumentation and what was 28 qoing on.

1 So certainly from that interchange the -- as 2 far as I'm concerned, every environmental contractor and 3 subcontractor that was hired by the PUC in order to 4 carry out environmental studies, we had very substantial 5 interfaces. We provided lengthy meetings, б presentations, briefing charts. Some of this we brought 7 along as subsets today. But this was all fully shared 8 with those contractors and subcontractors. And we 9 further invited them that if they had any further 10 questions, and they certainly were aware of the fact 11 that I had extensively reviewed the internal documents 12 of Southern California Gas Company and was willing to 13 share my knowledge of the operations of this very 14 complex field so that they could gather an 15 understanding, and with the thought in mind that this 16 would allow them to carry out what I would envision to 17 be a proper systems engineering study. 18 MR. GILMORE: Your Honor, I'm going to move to 19 strike that last answer on the grounds of relevance. Ι 20 have absolutely no idea of how it's relevant to this 21 complaint proceeding as to what Mr. Endres claims he did 22 or did not provide to the Commission staff. Moreover, 23 some of this apparently seems to be in connection with 24 the CEQA documents that were prepared in connection with

25 the lots sales, which have been specifically ruled by 26 the assigned commissioner and your Honor to be outside 27 the scope of this proceeding.

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This proceeding here today is the place where

1 Grassroots is supposed to bring whatever evidence it 2 might have of leaks or anything like that before the 3 Commission in this evidentiary record. If they have 4 failed to do so, then, I mean we hear reference to all kinds of studies that have been done. I haven't seen 5 б any of these studies in any of the materials that have 7 been marked for identification by Grassroots. If these 8 materials were provided to the Commission staff, why 9 aren't they being brought here today for this 10 evidentiary proceeding? So I see no relevance at all to 11 this case and would move to strike that answer on that 12 basis. 13 MS. MC PHERSON: And I would like to object to Mr. 14 Gilmore's statement, and may I speak to that or --15 ALJ BROWN: Yes. 16 MS. MC PHERSON: We have -- Grassroots has brought 17 voluminous data to the Public Utilities Commission. And 18 if I may step back in time also to five years ago, Judge 19 Brown, you ordered studies to be done with the Safety 20 Branch in conjunction with the Energy Division, and to 21 our knowledge, those studies were going to take place. 22 And at that time the burden of proof that Mr. Gilmore is 23 addressing right now, we were told we would not have the 24 full burden of proof. 25 And if I may, I would like to quote yourself. 26 If the studies that the Safety Branch and that you're 27 talking about with the CPUC with the Safety Branch and 28 the Energy Branch working together beyond any scope of

1	simply the application as and I'll read you another
2	quote, that the marching orders that you had given them
3	were way beyond the scope of the application and the 36
4	lots, and if and I'm quoting now if our studies do
5	not for support the complaints and the SoCalGas
6	Company's records do not support the complaints, then
7	the burden would be on the complainants to come up with
8	something that would spark more than just a little bit
9	of interest to shift the teeter-totter.
10	Well, that also suggests to us that we do not
11	have and we did not have the full burden of proof to
12	start this investigation. And indeed, we were told that
13	an investigation had been started and that we would be
14	able to utilize all of that data. And what I am looking
15	for now is, as we are here today, which was a bit
16	bewildering and a surprise, that we would be here
17	without any benefit of anything other than the materials
18	from the Energy Division.
19	MR. GILMORE: Your Honor, may I respond?
20	ALJ BROWN: Just a second. I need to ask, did you
21	ever request under a Public Records Act request the
22	documents from the Safety Division?
23	MS. MC PHERSON: We had been interfacing with both
24	the entities, both the Energy Branch and the Safety
25	Branch. There was no apparent need to have to public
26	record request anything. We have been under the
27	assumption, and the public has been as well, which we
28	will provide even the newspaper articles that support

1	that assumption by the press themselves, that there has
2	been an ongoing reservoir investigation, area-wide
3	health risk assessment, all of this, which is beyond the
4	scope of any of the 36 laws, which has been a point of
5	contention all along. And you yourself had said that
6	all the issues, which Mr. Endres has brought up a litany
7	of subsidence issues, of geologic issues, of looking
8	into all of the well bore logs that you said would all
9	be looked into. And even the Energy Branch said: we
10	now have the marching orders from the judge to go beyond
11	this scope, that all of these issues would be looked
12	into.
13	And at this point in time I see no evidence
14	that that has occurred. And but when we received a
15	few weeks ago notice for this hearing and had to
16	respond, suddenly we were simply put back into a
17	position of where we were five years ago at our first
18	hearing where we walked in and were given, not that we
19	weren't going to work with the PUC, and the PUC was
20	ordered to do studies, both the Safety Branch and the
21	Energy Division, and then we were going to see what they
22	came up with that covered a wide array of issues, not
23	just the applications issues, and then see if that
24	little bit of teeter-totter that we would add to that
25	burden of proof.
26	And we have acted in good faith all of these
27	years providing this data. And I know that I personally
28	see a huge posse of that information being inculcated

1	into anything that's been given out to the public. But
2	for us to receive the hearing notice that we did to come
3	here today to start to provide the full burden of proof,
4	Ms. Knight five years ago said to you that she was
5	afraid of a Grassroots entity, of neighborhood people
б	having to have the full burden of proof. And indeed, I
7	object to the fact that the PUC would consider people
8	like us. I mean I'm obviously not an attorney. I am an
9	actor. Ms. Knight is a social worker. We have worked
10	for the past five years in good faith to bring these
11	issues, and we have worked at doing the investigation
12	ALJ BROWN: Okay.
13	MS. MC PHERSON: and we are back where we were
14	five years ago.
15	ALJ BROWN: No, we're not.
16	MS. MC PHERSON: Only being asked now to provide
17	the full burden of proof. And I don't understand that.
18	It is quite bewildering. And if you could explain that,
19	we would appreciate that.
20	ALJ BROWN: We were progressing real well until
21	all of a sudden Dr. Endres was mentioning all the
22	documents he had given the CEQA team and the outside
23	contractors, because this is not the CEQA proceeding.
24	MS. MC PHERSON: No, no, no. As well as the
25	Safety Branch. All of the entities put together we have
26	been working with.
27	ALJ BROWN: Okay. Let's just stay away from the
28	CEQA team, all right, because that does get us into

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MS. MC PHERSON: And then I have a question then.
ALJ BROWN: Okay. Let me. You were progressing
fine while you were focusing in on what you want the
Commission to do as a result of these complaints, which
is, you want further investigation and studies into
these areas.
MS. MC PHERSON: Yes.
ALJ BROWN: All right. What support do you
already have that you could give us to really justify
this?
MS. MC PHERSON: Well, number one, I believe we've
provided that justification throughout the five years.
Number two, to bring up the CEQA documents, I have been
told, and by yourself as well, procedurally speaking in
here that the CEQA documents are all part of this
hearing. I mean the outcome
ALJ BROWN: No. I told you the opposite. In
fact, the scoping memo says we are not, in this in
this particular proceeding we are not fighting over the
CEQA documents.
MS. MC PHERSON: No. But the CEQA documents are a
part of what we can utilize here. I think we're
splitting hairs here.
ALJ BROWN: Okay. We are. But you focus in
on, and when you say you've provided documentation, if
you have documentation, it needs to go into this record.
And I'm not going to foreclose you from being able to
present it later, nor would I foreclose you from having

1	an opportunity to cross on it, but we need it in this
2	record. We need it not just sent to the Energy
3	Division, but we need it sponsored by someone who can
4	substantiate it under cross-examination by the Gas
5	Company.
6	Even if you've already provided it before, all
7	you have to do is pull up something that Dr. Endres
8	could kind of support and say: look, 1976, this
9	happened, 1982, this happened. 1995, there were 12
10	times there were leaking gas fields. And here is the
11	document that shows this. Then that document can come
12	in and be part of this record, subject of course to
13	cross-examination. But to talk in the generalities that
14	all of a sudden we shifted into doesn't really help us.
15	I would love to see some of those documents and have
16	them be part of this record.
17	MS. MC PHERSON: Your Honor, we will be providing
18	specific documents. I think for us today to establish
19	the premise of all of these hearings is important for us
20	to express ourselves, you know, as the public. I
21	represent the public, and what these issues are.
22	The documents are voluminous that we have
23	provided, and I think it is highly burdensome, which if
24	one would go back in these transcripts as I have done,
25	the idea was to not be burdensome. And we have provided
26	so many documents that to have to reprovide box loads of
27	documents.
28	ALJ BROWN: Okay. Box loads is going to be way

1	too much. What we need is
2	MS. MC PHERSON: But all of that information
3	should be inculcated into an assessment for this
4	decision. And what we are saying is that, where is the
5	inculcation of all of that information into this
6	assessment?
7	ALJ BROWN: Okay. I'll tell you exactly what we
8	can do to progress here. Number one, we're talking
9	about leaking oil field gases. You might not have the
10	documents here with you, but if you could with some
11	specificity say: I have a report that was produced in
12	1992 and one that was produced in 2000 and whatever,
13	give me some information. And then you can provide, and
14	maybe we can reduce the burden and I can pick up some of
15	the duplicating responsibility for that, or maybe we can
16	even share them electronically if you have them
17	electronically, but we need some reference to what
18	you're talking about. Maybe we could all go back to our
19	boxes and find some of these documents.
20	MS. MC PHERSON: And we have, for you.
21	ALJ BROWN: But I need to know which ones they
22	are. When you get to, say, No. 2, depositing
23	carcinogens into the air or soil, tell us what study,
24	what report you're relying on for that. All right.
25	Then we'll figure out whether you need to produce it
26	again or whether we already have it.
27	MR. GILMORE: Your Honor, and we would just point
28	out that part of the problem here obviously is that we

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1	have not seen these documents. They were never provided
2	to SoCalGas when they were allegedly provided to the
3	Energy Division. How can we possibly review them and
4	respond to them if we have never seen them?
5	MS. MC PHERSON: All one would have to do would be
б	to go to the PUC and ask for our documents. For
7	instance, in our motion that we have just produced
8	today, we are asking for all the documents that have
9	been produced by the Safety Branch as well as the Energy
10	Branch. We would like to be able to see those
11	documents, as well as you, Mr. Gilmore, in order for us
12	to be able to go forward. So I agree with you.
13	MR. GILMORE: You're talking about something else,
14	I'm afraid. I think
15	MS. MC PHERSON: Am I?
16	MR. GILMORE: you just referred to documents
17	produced by the Energy Division and the Safety Division.
18	What we've been talking about are documents that you
19	have provided to the Safety Branch and the Energy
20	Division. I would frankly like to see any documents
21	that you
22	MS. MC PHERSON: All in the same place, Mr.
23	Gilmore.
24	MR. GILMORE: Why couldn't you have brought
25	MS. MC PHERSON: Let's ask together.
26	ALJ BROWN: No, no, no. Wait a minute. You can
27	only wait a minute. One person at a time. Do not
28	talk over Mr. Gilmore's lines, because he can't create

1	the record. All right? Slow down.
2	Under the Public Records Act any one can ask
3	for any document that is not excluded. There are some
4	exemptions.
5	MS. MC PHERSON: Must we go to that extreme,
6	though, to
7	ALJ BROWN: No.
8	MS. MC PHERSON: Because typically in a Public
9	Record Act request one has to designate what document
10	one is looking for, and if we could review all of the
11	documents that the PUC has created and generated as a
12	result of all of the investigations, that is what I
13	believe that Mr. Gilmore would like to look at and I
14	certainly as Grassroots on behalf of the public would
15	like to review.
16	MR. GILMORE: Your Honor, just to make it clear,
17	all we're looking for is any materials that Grassroots
18	is claiming here today or in this proceeding supports
19	its allegations. That's what we're looking for, any
20	studies, any reports, that support these allegations.
21	We have seen nothing of that so far, and that's what we
22	wanted to see. We're not interested in any internal
23	documents at the PUC. All we want to know is what
24	documents, what records, what studies does Grassroots
25	have in its possession to support these outrageous
26	claims.
27	MS. MC PHERSON: May I ask a question? I'm sorry,
28	but this does get back to the burden of proof being

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1	placed fully on us, and which is why we would like to
2	see all the documents generated by the Public Utilities
3	Commission as we were promised during these hearings.
4	But if I may say
5	ALJ BROWN: Have you ever asked for them?
б	MS. MC PHERSON: I just have a quick, quick
7	question, which is I'm sorry to interrupt you, and I
8	will stop after this. But I would like to ask Mr.
9	Gilmore, has he reviewed all of the Public Utilities
10	Commission documents that are available?
11	MR. GILMORE: I don't even know what you're
12	talking about. What documents are you referring to?
13	MS. MC PHERSON: Any investigation materials that
14	the PUC has generated or any comments or conclusions or
15	reports that the PUC may have. Have you reviewed those?
16	MR. GILMORE: No. And we had no interest in them.
17	We're interested in any reports or studies that
18	Grassroots might have in support of its outrageous
19	allegations. That's what we're interested in. We have
20	seen none so far.
21	MS. MC PHERSON: Well, we will be providing
22	documents as per your request, I believe, and yours as
23	well, Judge, but it strikes me odd that you would not
24	wish to review the investigative materials that the PUC
25	has generated to this point. I don't understand that.
26	ALJ BROWN: That's not part of this hearing. We
27	don't need to argue about that. What we do need to
28	know first off, any time you would you need to ask

1	to see documents. All right. The Energy Division just
2	doesn't willy-nilly send them out.
3	MS. MC PHERSON: No. We would come to you, so to
4	speak.
5	ALJ BROWN: You can do that, normal reasonable
6	business hours any time you request, and the project
7	manager on the project will meet with you and show you.
8	Anything that is not covered by a deliberative process
9	or a handful of other exemptions you would get to see.
10	All right. You just have to avail yourself of that.
11	Okay.
12	MS. MC PHERSON: Well, and that sounds and
13	thank you for that, because we've only just been given
14	this hearing to happen within the past few weeks. So to
15	know that we could needed to rush down and be able to
16	review whatever the PUC had as a result of their
17	investigations, any conclusions, reports from any of the
18	branches, we would like to be able to do that. And
19	that's part of our motion that we submitted today.
20	ALJ BROWN: Okay. The other thing is, progressing
21	on today and for the next few days here, if you can
22	reference something that you know you turned in to the
23	Energy Division, the name of the report, the date,
24	approximately who you gave it to or when or some way
25	that we could track it down, I can then access it, and I
26	need to know I need to know where to look, what you
27	have produced.
28	MS. MC PHERSON: Oh, I see what you're saying.

1	All right.
2	ALJ BROWN: I need some reference point. There
3	are bankers boxes full of things that you have produced.
4	Okay.
5	MS. MC PHERSON: Is that something that we would
б	then have the burden to show again to you as our
7	judge
8	ALJ BROWN: Maybe.
9	MS. MC PHERSON: as opposed to all the work
10	that we have done in the past five years of producing
11	this information?
12	ALJ BROWN: Okay. You need to sift through the
13	information you have produced and decide which really
14	substantiates the Commission doing further investigation
15	and further review. Making allegations, and I know
16	we've had this conversation a few other times, and some
17	of it's because this is not where you live day in and
18	day out, but talking about other sites or explosions
19	that happened in other places doesn't necessarily tie in
20	to, wow, we need to go do a triple, quadruple look at
21	the SoCalGas facility.
22	But if Mr. or Dr. Endres has a study that
23	shows in 1996 there were these well leaks and in 2000
24	there were these well leaks and in 2004 there were these
25	leaks, then I can take that document, go talk to the
26	energy people, go talk to the safety people and say,
27	this document sure looks like we need to pay attention
28	to this. A lot of the documents that you have produced

1	have been very educational, but they're they're
2	academic treatises.
3	MS. MC PHERSON: Actually, if I may. Yes, I
4	believe that we have provided much of that, but we have
5	also provided very, very specific documents to have
6	already proven our point. So we will I'm ready to go
7	ahead.
8	ALJ BROWN: Good. Go ahead. And even if you're
9	not prepared to give me the specificity today, when you
10	get the transcript, all right, after this hearing, you
11	could then go back through, which obviously means we'll
12	need more time later, but you could go back through, and
13	for a particular point Dr. Endres is making now, you
14	could then say: see X document. And if you have a
15	copy, produce it then. If not, you could say: I have
16	already produced this to the Energy Division.
17	MS. MC PHERSON: Great, great, great.
18	ALJ BROWN: I could go down, get a copy of it and
19	make copies for people or send it out electronically so
20	that we're all that we all have the same information
21	in front of us.
22	MS. MC PHERSON: Yes.
23	ALJ BROWN: Because what is sitting in a box in
24	the Energy Division is not something that's in the
25	record before the Commission.
26	MS. MC PHERSON: I don't understand why, but I
27	agree with you, and I will we will try very hard to
28	cooperate with that, and that would mean then that these

1	three days are not the end all to
2	ALJ BROWN: They might not be. They might not be.
3	MS. MC PHERSON: Okay,
4	MR. GILMORE: Your Honor, I just want to go on
5	record that we will object to the late introduction of
б	any studies or reports that Grassroots claims supports
7	its position. Your scoping memo came out on March 7th.
8	It's what, six weeks ago?
9	MS. MC PHERSON: But this has been five years.
10	MR. GILMORE: Your Honor, if I may finish, be
11	allowed to finish my statement, please.
12	What we're asking, all Grassroots had to do,
13	if there are boxes of materials that they provided to
14	the Energy Division, all they had to do was go back
15	through their materials and pick out the studies or
16	reports that support their conclusions. This is not
17	burdensome on Grassroots. They could have looked
18	through their own files and have come out with any
19	studies or reports that support their conclusion. To
20	you know, they've had plenty of time in which to do
21	that. And we will frankly object to prolonging this
22	further if it means that Grassroots just didn't take the
23	time or decide to take the effort to go through its
24	what it had already provided to the Energy Division and
25	pull out what's relevant to support its conclusions.
26	MS. MC PHERSON: And may I speak?
27	ALJ BROWN: Yes. And then let's get on with it.
28	MS. MC PHERSON: And then we'll go on, yes. And I

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	would object to what Mr. Gilmore references as being a
	lot of time. We have had a few weeks. I have other
	lawsuits that I am engaged in. So there are a lot of
	things that this has been a very, very short
	timeframe. So I object
	ALJ BROWN: That's fine.
	MS. MC PHERSON: to his characterization of all
	of this.
	ALJ BROWN: Let's continue on with the evidentiary
	hearing.
	MS. MC PHERSON: Q All right. If we then could
	get back to the listing in the summary. And Dr. Endres,
	if you could let's cut to the chase, please, and go
	into what we would like for an outcome on of these
	hearings and for the days that we have to provide
	further briefs. With regard to No. 1 on page 2, shallow
	gas monitoring and collections systems, page 3, vent
	stack scrubbers, written safety plans and procedures,
	could we please go item by item starting with No. 1 that
	you could give us a quick synopsis of this, of
	ALJ BROWN: Yes. Tell us what you want, and to
	the best that you can remember, what
	MS. MC PHERSON: And the salient issues of each.
	ALJ BROWN: Yes. Salient issues, but also what
	MS. MC PHERSON: And certainly any other special
	things that have come up recently that would also help
	illuminate why each of these things would be important.
	ALJ BROWN: Correct. And if you know there's a

1	study, even if you don't remember its date or whatever,
2	we can fill in details later, but say, as supported by a
3	study you read last year or a month ago or something
4	like that, any information you can remember about it
5	that would support this.
б	THE WITNESS: To begin with, if I'm permitted to
7	speak at this point.
8	ALJ BROWN: Yes.
9	THE WITNESS: To begin with, I'd make an overall
10	general and simple statement as follows. Within this
11	three-day interval that would be allowed by the
12	hearings, I would be prepared to supply all of the
13	salient documents by specific reference that would
14	support the opinions and conclusions that I have reached
15	in here. I have no problem in doing that. And now it's
16	simply a matter of taking the most important documents,
17	making sure that those are made available within this
18	three-day period, and then being allowed, if necessary,
19	and I'm certainly open to the possibility that if
20	there's a request to provide further detailed
21	information to support these opinions and conclusions, I
22	would be more than willing to supply that. I would be
23	more than willing to appear for testimony to support
24	whatever documents have been submitted.
25	My second overall comment is as follows.
26	This I went through the efforts to try to reduce the
27	time period involved here today so that perhaps we could
28	visualize it as a pyramid

ALJ BROWN: Okay.

1

2 THE WITNESS: -- shape in terms of how we're 3 looking at this information, and within the limited time 4 period that I anticipated that I would have available to express my background and all the information. 5 First of б all, I knew and presumed that I would be prevented from 7 spending time in going into significant detail. I went 8 to great effort to reduce the time of my testimony --ALJ BROWN: We appreciate that. 9

10 THE WITNESS: -- by preparing this paper. This is 11 the tip of the pyramid. Now, if we're going to work slightly back from the tip of the pyramid, we're going 12 13 to effectively, on one side of this pyramid, we could 14 visualize that we've got the four Roman numeral issues 15 here, which is in essence my ultimate opinions and 16 conclusions, but on the other side of this pyramid going 17 down would be the following, beginning at the bottom of 18 page 3 and continuing all the way to the middle of page 19 б.

20 So the reason I subcategory -- subcategorized each of those is because they in and of themselves 21 22 somewhat in a pigeonhole fashion provided a very, very 23 profound piece of evidence to support two things. One 24 is that I was under the responsibility of supporting my 25 overall opinions and conclusions, and in parallel with 26 that effort, responding at the same time to the rebuttal 27 testimony, particularly of James Mansdorfer and Mr. 28 Thompson, John Thompson, and we have the third element,

1 Mr. Hower, which is really in a category somewhat 2 distinct in and of itself. 3 Now, what I'm going to do here today, if I'm 4 permitted to do so, is work perhaps halfway down this pyramid and show how all of this interrelates in order 5 б to bring us back to the ultimate reasons as to why I 7 feel, this is a personal conviction by me, aside from 8 who are the people that I have been interfacing on, but it is my personal conviction beyond any question, beyond 9 10 any scientific question, of the absolute need to 11 implement each and every one, particularly of the first 12 three Roman numerals. And the fourth Roman numeral has 13 only aris -- only arisen as a result of the rebuttal 14 testimony of James Mansdorfer. 15 Now, I was placed -- Roman numeral 4, really, 16 I came fully prepared here today to address not only 17 James Mansdorfer's testimony but to show unequivocally 18 why the ultimate disposition of this facility may be to 19 shut it down, and we already have very profound evidence 20 of the situation and what would be the circumstances that would at least provide the framework for looking 21 22 into the possibility of Roman numeral 4. 23 So if I could provide a brief summary of those 24 issues at this moment and then work backwards, but I'll 25 basically take your guidance, your Honor. 26 EXAMINATION 27 BY ALJ BROWN: 28 All right. So why don't you -- all right. 0

Start with No. 1, the shallow gas monitoring and
 collection system.

3 Α Okay. Now, as far as the documentation, I'm 4 going to tell you pretty closely what documentation I 5 plan on producing here fully substantiated over the next б three days. I will attempt my best efforts to have 7 multiple copies of this available no later than 8 tomorrow, but if I need the additional time, I will 9 provide it on the third day, and if there's some 10 expression that maybe there would be the need to see 11 additional data, then I'm more than willing to provide 12 that.

13 Item No. 1 has, of all of these, has been the 14 most significantly quantified on a scientific basis. I 15 have been personally involved in the valuation of that 16 data from the very moment that it was generated.

17

Q And this is for Playa Del Rey or Montebello?

18 Α This would pertain to the totality of 19 scientific soil gas testing that has been performed 20 throughout the region of the Southern California Gas storage facility. And when I performed my evaluation 21 22 under Item 1, I also integrated the knowledge that I had 23 of all of the barhole studies that had been performed by 24 Southern California Gas Company, and also that, and a 25 very important part of that was having available not 26 only isotopic gas characterization test results, but 27 also, profoundly, helium pounds.

28

So what were the primary scientific data that

I could conclusively arrive with 100-percent scientific 1 2 certainty as to what I was observing experimentally 3 within the test results and the soil gas testing and the 4 barhole results that were produced throughout this total 5 region. I integrated the totality of that information and determined not only a regional description but б 7 determined nearly the exact pathways by which this oil 8 field gas was reaching the surface. 9 And did you commit those observations and 0 10 opinions to writing? 11 А Yes. 12 0 Okay. And do you have something that you 13 could either refer us to or that you could produce in 14 the next handful of days? 15 А Yes. 16 Q Or within a --17 А As I sit here, I'm going to name documents, 18 and whoever from Southern California Gas Company could 19 make a recording of these documents and hold me 20 accountable for making sure that they're provided with 21 the number of copies that they need to convince 22 themselves that we have thoroughly reviewed these 23 documents. 24 So Document No. 1, you can put this on your 25 list. This was a study that was performed by Geoscience 26 Analytical, and it was performed specifically to 27 identify and characterize the hazards posed by the 28 identified leakage from certain wells in the Townlot

1	area, and these wells were specifically identified by
2	number as being Townsite No. 2 and Townsite No. 3 wells.
3	We have a specific individual within the
4	Geoscience Analytical organization. His name is Fleet
5	Rust. He is a geochemist. He went out to the site and
6	he performed a multiplicity of near-surface soil gas
7	studies. I have reviewed that study in meticulous
8	detail. I have interfaced personally with Dr. Fleet
9	Rust, and I have personally interfaced with his
10	colleague, and I have personally interfaced with that
11	organization, and the multiplicity of other
12	correspondence that has occurred between that company
13	and Southern California Gas Company and other studies
14	that were provided, including to the DOGGR.
15	Some of this information was provided to the
16	DOGGR. The individual from the DOGGR organization, his
17	name was Mr. Sanchez. I have spent considerable time in
18	reviewing this information with not only the DOGGR but
19	Mr. Sanchez. I have personally had conferences with
20	him. He is the person who I believe is the most
21	personally knowledgeable of what has happened over a
22	long period of time with the Townsite lots, the Townlot
23	wells and their serious leakage problems.
24	Basically, in order to come up with a more
25	complete understanding of what was going on, we begin
26	with the carpet plots that were generated by Geoscience
27	Analytical. And what those carpet plots reveal
28	unquestionably would be the enormity of thermogenic gas

1	that leaked directly to the surface under those Townsite
2	lots, Townsite No. 2 in particular, and what was done
3	was to generate what's referred to in the scientific
4	literature, and especially by Fleet Rust and Geoscience
5	Analytical, is what we refer to as isopleats. And I
6	will be more than willing to provide those isopleats
7	over the next several days. I will provide a copy of
8	what I view as being the most important document
9	generated by Geoscience Analytical establishing
10	conclusively that not only the Townsite 2 but the
11	Townsite 3 well were profusely leaking.
12	Q All right. Do you have any information about
13	any other wells, or is it just 2 and 3?
14	A Yes. No. There's a multiplicity of other
15	wells out there that I have examined in detail. And the
16	other one the well that stands out beyond any others
17	would be the Troxel well, and the Troxel well is
18	significant for several reasons. One is because of its
19	long history of documented information, which I have
20	available, and also the fact that the Troxel well and
21	the lot where that well is located is indeed, it's part
22	of the 32 wells that have been made a part of the Public
23	Utilities Commission CEQA study. I know we're
24	supposedly not to talk about CEQA-related issues, but in
25	terms of the relevancy
26	Q Sure.
27	A of the gas seepage problems, Troxel
28	delineates the most salient features of what is

1 happening within this gas storage field in order to 2 create enormous dangers for the overlying residential 3 area. So I could just very briefly summarize --4 Q Okay. What would be helpful, though, is, based on your analysis of those studies and the work 5 that you've done yourself, what in particular in an б 7 ideal world would the Public Utilities Commission do 8 with that information? The information basically is to reveal, number 9 А 10 one, that there has been a total nondisclosure on the 11 part of Southern California Gas Company that what is 12 taking place as an extreme danger out in the Townlot 13 area has, their portrayal of this area is, to the public 14 at least and to the general, even if someone attempted 15 to be generally well informed, is that that area, at 16 least to the present day, has nothing to do whatsoever 17 with their gas storage field. 18 All right. So but back to the question, what 0 19 would you like us -- what would the Public Utilities 20 Commission do in response to this, scold the Gas 21 Company, tell them to put a billboard up? I mean I -- I mean what -- what could --22 23 MS. MC PHERSON: Could we --24 THE WITNESS: Your Honor, just a minute here. 25 ALJ BROWN: See, because --26 THE WITNESS: I would refer to the -- our first 27 exhibit called Plaintiffs' Prepared Testimony. 28 ALJ BROWN: Q Correct. Okay. Now, wait a

> PUBLIC UTILITIES COMMISSION, STATE OF CALIFORNIA SAN FRANCISCO, CALIFORNIA

1 minute. What I did like is when you can focus things on When you say, installation of a shallow gas 2 specifics. 3 monitoring and collection system, all right, where --4 are you talking about that as part of the gas storage 5 facility or are you talking about it in reference to the lots? б 7 А I am speaking of it, the Roman numeral 1, 8 shallow gas --9 0 Yes. 10 Α -- monitoring and collections system would 11 have to be at least tailored to suit the unique 12 geological characteristics of two distinct subsurface 13 geological conditions throughout this area and that 14 underlie the gas storage operations. 15 0 So that would be the gas storage operation. 16 Okay. 17 Α Okay. 18 What we don't want to spend time on is any 0 19 problem with the lots because we most probably are going 20 to have hearings on the application, and that would be a 21 time to bring up whatever information you think was 22 faulty about the information on the lots. 23 Α Okay. 24 Okay? What I would like to focus on is what 0 25 the Commission could do in response to this. So here 26 you're talking about that maybe we could --27 А Right. 28 -- do gas, shallow gas monitoring and a 0

1 collection system on the gas storage facility. Do you 2 have any idea, just as you sit there today, how 3 extensive that would be? 4 А Almost exactly, your Honor. Like what would you envision? 5 0 б Α Yes. To begin with, the Roman numeral 1 is 7 fashioned to address what I view as being by far the 8 most serious hazard out there. 9 Okay. 0 10 Α And we have a very unique geological condition 11 that underlies a large portion of the area that is 12 encompassed by the Playa Del Rey gas storage facility, 13 and that has been referred to in the scientific 14 literature as the 50-foot gravel. I did not invent that 15 term. It was actually invented by a scientist by the name of Poland, who was the chief hydrologist for the 16 17 State of California. 18 Well, like how many monitoring systems? 0 Is it 19 just one? I know that gas storage facility is giant. 20 I'm just trying to envision what you're envisioning. I could -- if I could make reference to 21 А Okay. 22 the exhibits that we've already marked, your Honor. 23 That would be very helpful. 0 Sure. 24 And I can just quote some salient language А 25 from that document. 26 MS. MC PHERSON: Here. Are you referencing this? 27 THE WITNESS: No. Just one of the exhibits. 28 ALJ BROWN: Go off the record for a moment.

1 (Off the record) 2 ALJ BROWN: We'll go back on the record. 3 THE WITNESS: Okay. What I would like to key in 4 on under Roman numeral 1 is, I did not invent gas 5 monitoring and collection system. б ALJ BROWN: Sure, sure. 7 THE WITNESS: That term was developed as part of 8 virtually the same and identical problems that developed at the Montebello facility. So what we're looking at 9 10 here is a public utilities document, although it's part 11 of an investigation which, that's not the importance of 12 why I have relied upon this document. The main reason 13 I've relied upon it is the language that's set forth on, 14 particularly on page 21, and it's about halfway down, 15 and here is the statement: 16 Southern California Gas Company 17 installed 24 gas monitoring wells 18 as well as a shallow qas 19 collection system due to problems 20 with gas leakage from the ground 21 into homes. 22 I'd like to focus just on that precise 23 language. 24 Sure, sure. ALJ BROWN: 25 THE WITNESS: What have I done to evaluate the 26 feasibility of using that concept at Playa Del Rey? 27 First of all, I reviewed an extensive amount of data on 28 file with the Division of Oil and Gas and also other

1 documents relating to the Montebello facility. Ι personally have extensively investigated the subsurface 2 3 conditions. I've also investigated documents on file 4 with the City of Montebello in which Southern California Gas Company came to the City of Montebello and requested 5 б permitting approval for the drilling of these wells that 7 are discussed here. Within that documentation, it 8 delineates in great scientific detail to the City of 9 Montebello as to how and why this is going to be an 10 effective means in order to control the upward leaking 11 qases. 12 ALJ BROWN: Q Okay. So basically, one of your 13 wish list items would be for SoCalGas to do the same 14 thing for the Playa Del Rey field? 15 A Well, particularly within the 50-foot gravel 16 zone, which has been highly characterized both 17 vertically as well as regionally in the Poland reports, 18 which are historical documents. The document itself 19 published by Mr. Poland around the year 1954 is 20 approximately 120 pages long in itself. It's perhaps 21 the most detailed hydrological study performed anywhere 22 within the state of California, and fortunately, it 23 characterizes the exact zone that we would be dealing 24 with the number one fire and explosion hazard that has 25 been created that directly overlies the gas storage 26 facility. So. 27 0 Okay. So if, again, this is all part of your 28 wish list, if this was to happen in Playa Del Rey to

1 cover the 50-foot space, that would address some of your 2 concerns?

It would address the most imminent and current 3 А 4 dangers posed, and which, just within the last several weeks I have been involved in some of the most 5 б convincing investigations which would heighten my 7 enormous concerns and worries, really, over at what 8 point we could have a fire or explosion or someone 9 becoming injured by the enormous, what I would 10 characterize as millions of cubic feet of thermogenic 11 gas that's leaking to the surface right at this moment 12 which I have detailedly characterized.

Q And maybe you could help me out with this since I've had nothing to with Montebello at all. What, from your research and studies, what is the size comparison between Montebello and Playa Del Rey? Are they the same size? Is Playa Del Rey twice as big?

18 А I would es -- it's approximately the same 19 size. We're talking about roughly a 300-acre area, and 20 we have a very similar urban development that overlies 21 the facility and we have very similar subsurface 22 geological conditions, the hydrology table, the oil 23 In fact, the remarkable analogy is that the fields. 24 same oil field company, which was Union Oil Company, in 25 the 1920s and the 1930s were responsible for drilling 26 the same wells as the well completion practices by Union 27 Oil Company, who drilled the same wells in Montebello. 28 So the well completion practices in comparing the

1 technology that was used is very, very important. So 2 again we have this similarity, very substantial 3 similarity of conditions existing. 4 Q Okay. Anything else on this point No. 1 that needs to be in the record? 5 Point No. 1 is, if I could summarize б А Yeah. 7 what is truly going on within the 50-foot gravel. The 8 50-foot gravel is constantly being recharged by the 9 up-flowing oil field gases that are emerging from below 10 the mineral right interface. So we have a 500-foot 11 interface in which below that Southern California Gas 12 Company owns and possesses all of the mineral rights, 13 and they also have very strangely somehow professed, in 14 legal documentation, professed that they have the right 15 to store storage gases close to the surface as 500 feet. 16 And that seems to me to be a real -- I've gone through 17 that. But I'd rather not digress into that point. 18 Is this at Playa Del Rey? 0 19 Α Yes. 20 Okay. Anything else on point No. 1, the 0 21 shallow gas monitoring and collection system? 22 The collection system really is devoted А 23 towards preventing the buildup of pressure within this 24 50-foot gravel zone. The recharging of the gas from the 25 lower oil field depths continues to move up, and it's 26 millions of cubic feet per day. And no matter what 27 would be done at the present time to attempt to vent 28 these, with the limited number of vents that have been

1 installed to date, they are being totally overconsumed. 2 There wouldn't be enough venting there to be able to 3 vent out the enormity of the gas that's moving into the 4 50-foot gravel. Since it cannot move out as fast as 5 it's moving in, there is a buildup of pressure within б the 50-foot gravel. 7 Now, one of the most important lessons we have 8 learned, especially from Fairfax and all of the 9 subsequent fields, an extreme danger is correlated 10 directly with the level of pressure buildup within this 11 shallow zone. I call it a secondary gas field zone. 12 Now, that pressure buildup is, when it reaches a point 13 in excess of approximately 20 pounds per square inch of 14 pressure, if you were to, for example, not you actually, 15 but if --16 Q Yes, right. 17 A -- someone were to actually take a drill bit 18 and drill 50 feet from the surface into that gravel 19 zone, there's most likely to be an immediate expulsion 20 and well blowout, and the blowout severity is correlated 21 directly with the pressure buildup. 22 Okay. And what would you suggest to address 0 23 that and prevent any problems from that buildup? 24 Well, one methodology that was fully А 25 enumerated by Exploration Technologies and particularly 26 Victor Jones was a method by which you would actually 27 draw out the water from the 50-foot gravel zone by way 28 of surface pumps, and then in the process of that being

brought to the surface, you would take the dissolved gases that would be within that water and you would degas the water, and then you return the water back down to the 50-foot gravel zone. And this would be a continuous process that would have to be implemented on a 24-hour-a-day basis. Now --

7 Q Can that be done from just one site, or do you 8 have to have multiple?

9 The characteristics of the gravel zone are as А 10 follows: It has a generally updip direction as it moves 11 in an easterly direction. The gravel itself is 12 characterized as being highly permeable. The updip 13 direction of the gravel is both an extreme hazard as 14 well as an extreme help. What it means is that you 15 could use fewer numbers of, say, pump and treat 16 locations because you have a continual movement of these 17 gases in an updip direction. So the sphere of influence of the area in which you are drawing out from the 18 19 50-foot gravel zone would be much greater if you --20 because of the presence of that updip location. In 21 other words, if you are removing gases, it's going to 22 provide a space for other gases to naturally migrate 23 into that location and then successively be removed on a 24 progressive basis.

There's one caveat, and it's been clearly identified by each and every location where there has been an actual well blowout as a result of drilling into the 50-foot gravel. This has occurred on repeated

1	occasions. And what I have done is I have gone back and
2	studied very carefully the hydrological records, and it
3	shows that every time there has been a blowout, and what
4	I mean as a drilling well blowout, it's a true blowout.
5	What happens is sometimes it will go on for as long as
6	24 hours, and it will be accompanied by a continuous
7	flow of water and gases that will gush into the air as
8	high as 20 to 30 feet, and that can continue on for a
9	period of 24 hours.
10	Now, sometimes or frequently, when they would
11	repeat the operation, they would not experience a well
12	blowout. So what I did is identified the exact
13	locations where these well blowouts occurred and then
14	study what I knew in all likelihood was the scientific
15	explanation for why that was occurring. And I convinced
16	myself that that indeed was a threat. So cut to the
17	chase.
18	Q Yes.
19	A Why isn't it a foolproof way of simply having
20	a limited number of these collection systems to pump out
21	the gas? We have within the gravel zone there are
22	undulations, and as we talked about before, if we have a
23	clay layer that over it extends over it. Let's say
24	that you had a low
25	ALJ BROWN: You know what, I promised people a
26	break at 2:30. I've had the poor court reporter going
27	for an hour and 15 minutes.
28	We'll pick up from that, and then let's as

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1 succinctly as possible finish with No. 1 if you have 2 anything more to say, and we'll move on to No. 2. 3 MS. MC PHERSON: And also if we could, I'd like to 4 bring up that special circumstance. ALJ BROWN: You're off the record now. 5 б (Recess taken) 7 ALJ BROWN: We'll go back on the record. 8 You're still under oath. And -- yes. Go 9 right ahead. 10 MS. MC PHERSON: Again, to cut to the chase here a 11 little bit, Dr. Endres, if you could bring up those 12 special circumstances just to start us off? 13 THE WITNESS: Yes. Within the last several 14 months, there has been a careful identification of a 15 huge oil field gas leak that is occurring. 16 MS. MC PHERSON: Excuse me. Could you at least --17 or perhaps I need to give you the number, because we do 18 have an exhibit for what you're about to talk about. It 19 is GR -- I'm sorry -- Grassroots 4. 20 ALJ BROWN: Grassroots 4. Okay. 21 MS. MC PHERSON: Grassroots 4. 22 ALJ BROWN: Grassroots 4. Oh, it's got -- that's 23 the one with the picture. 24 MS. MC PHERSON: And actually, Grassroots 8 as 25 well will identify the location. 26 THE WITNESS: Yes. 27 ALJ BROWN: Q When you say within the last few months, is that in 2005 or the end of the -- --28

1 Α Correct. 2 0 Okay. 3 Α And I could more specifically characterize 4 this as an area that has been formerly identified as being the freshwater marsh, and it's located at the 5 б intersection, approximately at the intersection of 7 Lincoln Boulevard and Jefferson Boulevard. It's 8 approximately a thousand, 1500 feet west of the Lincoln 9 Boulevard, and it's also slightly south of Jefferson 10 Boulevard. 11 Okay. 0 12 А Located directly in the freshwater marsh, the 13 water of the freshwater marsh. The water is at that 14 point approximately 7 feet deep, and what is occurring 15 on an ongoing and continuous basis would be the movement 16 of oil field gases to the surface and bubbling in very 17 evident fashion through the water at that point. 18 All right. Now, do you have any studies that 0 19 you relied on that allowed you to determine that it was 20 Gas Company gas? 21 А Yes. 22 ALJ BROWN: Okay. And is there any way that you 23 can produce those or --24 MS. MC PHERSON: That would be -- well, in part is 25 3, No. 3. 26 THE WITNESS: Correct. 27 ALJ BROWN: Q All right. Let's take a look at 28 GR-3. Okay. Dr. Endres, for someone who is a total

1 nonscientist, could you just tell me what these results 2 say to you? 3 Α Okay. Page 2, which is titled Analysis 4 Report. 5 Q Yes. And then page 1, and then at the footnote of б Α 7 page 2 we see that this report, analysis report has been 8 provided by Isotech Laboratories. 9 Yes. 0 10 Α And this is a geochemical research laboratory 11 located in Illinois. It's a very competent laboratory, 12 and it's also been used routinely for performing this 13 type of gas analysis out there and for -- I'm familiar 14 with their testing procedures over a period of many 15 years. 16 Q Okay. Now, tell me what this analysis report 17 actually says in plain English. 18 А The most important line would be, within the 19 analysis report, if we go down about halfway on the page 20 we see the word "methane." 21 Q Yes. 22 And then if we go across the three columns А 23 that are displayed. The first column is we see 95.71. 24 Yes. 0 25 А And then above that we see that that is in 26 mol. percent. This is just a scientific --27 0 Sure. 28 -- description of the method of quantifying А

1 the level of methane that was collected in the gas 2 sample. 3 The next column, which is referred to as Delta 4 C13, that's a very important number. We see that that number is minus 61.59. And then in the next column we 5 б see, very important also is Delta D per mil, and that's 7 minus 201.5. Now --8 Why are those important? 0 9 A That would tell us that, with scientific 10 certainty, that the gas that has been collected, I 11 should say a few words about the method in which the 12 sample was collected, but the gas that's coming out of 13 this seep is pure thermogenic gas. It's oil field gas, 14 and its origin must with scientific certainty come from 15 the depths of the underlying oil field, in contrast to 16 some statements that we see within various reports that this is biogenic or swamp gas. It's often been said: 17 18 Well, we're over wetlands and what else can you expect 19 but swamp gas. 20 This is anything but swamp gas. This is pure 21 thermogenic gas falling within one of the purest samples 22 that we have seen collected out there. And furthermore, 23 I have numerous other samples analyzed by the same 24 laboratory in which we have characterized, the 25 laboratory has characterized the relative degree of 26 thermogenic character of the gas. And we can bring in 27 charts of that type here during these hearings. And the 28 actual color coding is, for the nongeochemist, the color

1 coding for this type of analysis is definitive in and of 2 itself because, as Dennis Coleman has very appropriately 3 done in his evaluations, he has provided a color chart 4 comparison which tells us the degree of thermogenic 5 nature of this gas.

б And this, also within the same region in which 7 this sample was collected there have been other very 8 detailed probes that have been put down, and we have --9 I have diagrams. For example, the one most significant 10 probe would be one that was put down by Sepich 11 Associates. John Sepich placed a soil gas probe down 12 into the 50-foot gravel zone. It's approximately 50 13 feet in depth, and there were very high quality gas 14 samples that were collected from that 50-foot probe, and 15 those were also analyzed at Isotech Laboratories in the 16 same level of detail as what we have here. And what it 17 shows is that we have almost an identical match of the 18 isotopic thermogenic characteristics of the gas samples 19 collected from that 50-foot probe and the gas samples 20 that are collected directly over this seep.

21 Q Now, would your wish list No. 1, shallow gas 22 monitoring and collection system, would that address 23 this potential problem?

24

A Yes, it would.

ALJ BROWN: Okay. Anything else about the monitoring and collection system you think we need to have on the record? Can you think of anything, or Ms. McPherson, did you have anything else.

1	DIRECT EXAMINATION (resumed)
2	BY MS. MC PHERSON:
3	Q I just had another point with regard to
4	perhaps No. 3 within relationship to this situation.
5	Dr. Endres, if you could perhaps give us your opinion
6	with regard to this special situation and No. 3 from a
7	standpoint of, I believe that we are bringing this
8	information to you for the first time, and once again, I
9	think it highlights something in particular, Dr. Endres,
10	with regard to safety and who is watch-dogging what is
11	going on?
12	A Yes. It's clear this has been an historical
13	area, this identical spot has been in an area of
14	historical leakage for a long, long time. Now, we have
15	initially, by "we," I mean Grassroots Coalition in
16	particular and then the follow-up analysis, have really
17	made certain that what we were observing and believe to
18	be occurring was indeed occurring. And so we can
19	conclude and relate this with the historical history of
20	this very location and know that if a proper monitoring
21	program as set forth in Roman numeral 3 were
22	implemented, then this situation would not be occurring
23	at the present time.
24	Q And I just wanted to highlight the fact the
25	proximity of this site to the well University City
26	Syndicate, which this may very likely be an enormous
27	leakage from this well, that it has been SoCalGas's
28	position that it monitors its abandoned wells twice a

2 the person that drew me to this site had observed this 3 for eight months already. 4 ALJ BROWN: Okay. Now, when you say, "Tie this 5 into No. 3," are you talking about written safety plans б and procedures? 7 MS. MC PHERSON: O Yes. And how do you deal with 8 a situation like this should it arise, and has it been 9 dealt with right now. And I think that this is --10 illuminates the situation as it stands right now as to 11 why there needs to be a written safety plan and 12 procedure. 13 А Well, I could address it very specifically, 14 your Honor, in making reference to Mr. Mansdorfer's rebuttal testimony set forth here before us. And he has 15 addressed this exact issue. And when I read his 16 17 testimony, it's clear that he has at least a knowledge 18 that there is a probability or even a significant 19 probability that this well called University City 20 Syndicate is leaking, but then in anticipation of this, 21 he qualifies his rebuttal testimony by saying: well, I 22 think -- excuse me if I'm attempting to -- I'm not 23 trying to mischaracterize. I'm trying to characterize 24 in as simple words as possible Mr. Mansdorfer's 25 testimony, but he can speak to it himself. The words 26 are there. 27 But in essence what he is saying is that 28 University City Syndicate first, he believes, has been

year, and yet we have a situation where, well, certainly

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1	properly abandoned. And if it has however, if it has
2	not been properly abandoned and <mark>if it is leaking, then</mark>
3	there is no responsibility of Southern California Gas
4	Company to do anything about it, and then furthermore,
5	he goes on to draw the conclusion or observation that
6	because, he gives an explanation for why Southern
7	California Gas why he believes Southern California
8	Gas Company is not responsible if the possibility is
9	that it's leaking. He says that the well is not within
10	the influence of the gas storage field. Okay.
11	My first question back to Mr. Mansdorfer if I
12	have the opportunity would be: well, Mr. Mansdorfer,
13	you say that is this not within the influence of the gas
14	storage field. Now, would your opinion and conclusion
15	be the same if I were to ask you if it was within the
16	sphere of influence of the Playa Del Rey oil field?
16 17	sphere of influence of the Playa Del Rey oil field? Now we have put it in a proper context because
17	Now we have put it in a proper context because
17 18	Now we have put it in a proper context because there has never been any time in the many years that
17 18 19	Now we have put it in a proper context because there has never been any time in the many years that Southern California Gas Company's operation of the
17 18 19 20	Now we have put it in a proper context because there has never been any time in the many years that Southern California Gas Company's operation of the so-called Playa Del Rey gas storage field, that their
17 18 19 20 21	Now we have put it in a proper context because there has never been any time in the many years that Southern California Gas Company's operation of the so-called Playa Del Rey gas storage field, that their operation out there has not been an integral part of
17 18 19 20 21 22	Now we have put it in a proper context because there has never been any time in the many years that Southern California Gas Company's operation of the so-called Playa Del Rey gas storage field, that their operation out there has not been an integral part of operating the oil field. So the gas storage field is
17 18 19 20 21 22 23	Now we have put it in a proper context because there has never been any time in the many years that Southern California Gas Company's operation of the so-called Playa Del Rey gas storage field, that their operation out there has not been an integral part of operating the oil field. So the gas storage field is only a subset of their total operations of the Playa Del
17 18 19 20 21 22 23 24	Now we have put it in a proper context because there has never been any time in the many years that Southern California Gas Company's operation of the so-called Playa Del Rey gas storage field, that their operation out there has not been an integral part of operating the oil field. So the gas storage field is only a subset of their total operations of the Playa Del Rey oil field. This is an ongoing producing oil field
17 18 19 20 21 22 23 24 25	Now we have put it in a proper context because there has never been any time in the many years that Southern California Gas Company's operation of the so-called Playa Del Rey gas storage field, that their operation out there has not been an integral part of operating the oil field. So the gas storage field is only a subset of their total operations of the Playa Del Rey oil field. This is an ongoing producing oil field producing very, very large quantities of liquids. And
17 18 19 20 21 22 23 24 25 26	Now we have put it in a proper context because there has never been any time in the many years that Southern California Gas Company's operation of the so-called Playa Del Rey gas storage field, that their operation out there has not been an integral part of operating the oil field. So the gas storage field is only a subset of their total operations of the Playa Del Rey oil field. This is an ongoing producing oil field producing very, very large quantities of liquids. And if you are operating a pure underground gas storage

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1	be processed through this infrastructure called the
2	Playa Del Rey gas storage field, but upon closer
3	inquiry, from day one of the operations, this facility,
4	first of all, was very carefully interfaced with the
5	Union Oil Company, who was operating the Gas Cap area at
6	that time.
7	EXAMINATION
8	BY ALJ BROWN:
9	Q Right. Let's bring you back to point No. 1.
10	Would a monitoring system prevent the kind of potential
11	safety hazards you are concerned about with now, the oil
12	leakage?
13	A Absolutely.
14	Q Okay. So your point No. 1 in a lots of ways
15	captures at least some of your safety concerns if that
16	were implemented?
17	A Well, if I could characterize it a slightly
18	different way. Under Roman numeral 1, going through a
19	proper implementation as clearly blueprinted by the
20	Montebello installation, t <mark>he most significant part of</mark>
21	that is the ongoing monitoring, and the monitoring then
22	is telling you on an ongoing basis what steps you have
23	to take in order to be responsive to changes in
24	condition that are taking place within the shallow water
25	zone, and the water is telling you everything that's
26	going on. It's like it's there wanting to speak out.
27	It's just a matter of taking relatively simple
28	instrumentation and listening to what it has to say to

1 you. It's crying out to tell you, we've got this most 2 important information to tell you about if you would 3 just sit there and listen. And it's pretty simple 4 instrumentation. 5 Okay. Q б Α That would be capable of responding to this ongoing emergency that's occurring right at this time. 7 8 DIRECT EXAMINATION (resumed) BY MS. MC PHERSON: 9 10 I have a question also, just one more with 0 11 regard to No. 3, the written safety plans and procedures 12 and this situation highlighting No. 3. Could you tell 13 me the proximity of the enormously dense Playa Vista 14 project and this leakage spot? 15 Α Well, again, as I promised, and I'll set this 16 out as the documents that --17 Q Excuse me. And also --18 А Yes. 19 -- with the underlying geology that you've 0 just described, the 50-foot gravel zone? 20 21 А Right. 22 Does it not connect directly with across the Ο 23 street? 24 Well, I will promise the following documents А 25 again, and I'll be held accountable for producing the 26 definitive detail on this. But I can highlight this by 27 coming back and to the -- what we've been referring to 28 as the analysis report. And I failed to mention the

1 significance of the 95.71 percent number. Now, to the 2 scientist that makes a great deal of meaning. For 3 someone uninformed with how to read this it wouldn't, 4 perhaps. 5 ALJ BROWN: Okay. What does it say? б THE WITNESS: In layman's terms, I would rather 7 choose the scientific description of count. I'd use the 8 word "count." And how can we characterize this by 9 counts? We can do it by what's referred to as parts per 10 million. What is the equivalent parts per million in 11 counts of 95.71? It is the following: 957,100 parts 12 per million of methane gas. That means that we have 13 something that would be equivalent to a ruptured gas pipeline leak leaking pure pipeline gas to the air in 14 15 millions of cubic feet per day. Now, if that were 16 recognized as a pipeline leak with that magnitude of 17 gas, it would be declared an extreme emergency and a 18 very, very hazardous condition. 19 MS. MC PHERSON: I have another question also. 20 I'm sorry. 21 ALJ BROWN: No. Go ahead. 22 MS. MC PHERSON: I didn't see you doing that until 23 after. 24 ALJ BROWN: It's all right. Go ahead. You might 25 ask it. 26 MS. MC PHERSON: Q Dr. Endres, could you also 27 describe the potential for underground movement in 28 addition for something sight unseen at this point. Ι

1	mean do we know what is going on underground with any
2	other gases from this site that may be moving eastbound?
3	A Well, I would call it freeway conditions that
4	are connecting this area with the areas that are east of
5	that and which, to highlight, the reason I wanted to
б	bring in the count level of 950,000 parts per million is
7	is that there have been virtually an uncountable number
8	of soil gas tests taken at a depth of no greater than 5
9	feet throughout the regional area that have exceeded
10	900,000 parts per million where the maximum theoretical
11	level would be 1 million. That's so staggering that I
12	had to have my own question of the same perplexity I had
13	in my own question. So who did I direct who I thought
14	was the most knowledgeable person that could put this in
15	a relative framework, and that person happened to be
16	Walter Merschat, and he has a scientific consulting firm
17	out of Wyoming, Casper, Wyoming.
18	ALJ BROWN: Okay. And where did tell me again,
19	what geographic area are you talking about right now?
20	Because you were talking about the marsh area.
21	THE WITNESS: Correct.
22	ALJ BROWN: Now, remind me, where did you go to
23	next?
24	THE WITNESS: This seep is occurring directly over
25	the mineral right area that is owned and possessed by
26	Southern California Gas Company.
27	MS. MC PHERSON: Now, I believe I gave you the
28	exhibit for that, which is the it says on there the

1	marsh seep and University City Syndicate. I gave it to
2	you, Bernie.
3	ALJ BROWN: Right. Okay. I thought you had
4	jumped to Playa Vista.
5	MS. MC PHERSON: Well, it is. It's right next to
6	it.
7	THE WITNESS: We're basically if we want to
8	characterize this land, we are in the area of land
9	that's surface land down to a depth of 500 feet. The
10	land is owned by the State of California and it's under
11	the authority of the State Lands Commission. That's the
12	surface regulatory ownership at this point.
13	ALJ BROWN: Is that for the marsh area?
14	THE WITNESS: The freshwater marsh is
15	ALJ BROWN: The freshwater marsh.
16	THE WITNESS: The surface land rights are
17	currently owned by the State of California and under the
18	supervision of the State Lands Commission.
19	ALJ BROWN: Okay. And then, Ms. McPherson, you
20	asked a question that wasn't answered, which was, how is
21	that freshwater marsh connected to the Playa Vista?
22	MS. MC PHERSON: Right. And the proximity of it.
23	ALJ BROWN: The proximity.
24	MS. MC PHERSON: Q And what is the potential
25	hazard of something like that for sight-unseen gas
26	movement,
27	A It's connected, directly connected at a depth
28	of 50 feet by way of the 50-foot gravel zone that moves

1	updip in an easterly direction and causes virtually an
2	immediate opportunity for these leaking gases to move
3	within that 50-feet gravel zone under a highly
4	pressurized condition in a somewhat impermeable sand
5	layer, geological layer
6	ALJ BROWN: Okay.
7	THE WITNESS: that extends above it, which
8	serves again similar to the clay layer we talked about
9	for the Fairfax case. So once it when the gas moves
10	up to the top of the gravel zone, it becomes entrapped
11	in a relatively impermeable zone that extends for
12	approximately 15 to 20 feet upwards until it reaches
13	another sand zone, and we've got some detailed
14	cross-sections that show exactly what that looks like.
15	ALJ BROWN: Okay. I have another question
16	MS. MC PHERSON: Q I think, to cut to the chase,
17	Bernie, the idea that you had just expressed before also
18	with the freeway conditions within the 50-foot gravel
19	for gas movement to occur and that they may be occurring
20	directly from this well area directly underneath the
21	site?
22	A I would simply not agree with your
23	characterization that it may. With 100 percent
24	scientific certainty, they are not only directly
25	connected, but the same pressure levels exist within the
26	gravel zone. The high pressurization of that gravel
27	zone around the vicinity of the University City
28	Syndicate is virtually identical to the high pressure

conditions existing underneath the Playa Vista site and
extending eastbound over a large regional area.
Q So these Southern California oil field gases
are moving in freeway conditions underneath the Playa
Vista site?
A Horizontally and laterally, and they're moving
very dramatically in an easterly direction, and they're
largely being pushed by the repetitive actions of the
Pacific Ocean tides. So we've carefully looked at the
tidal influences. So it's, the tide rises and it pushes
the gas eastward with an increased pressure level. When
the tide goes out, the pressure goes down, and the gas
has ability to more freely flow into the gravel zone,
and now the tide comes back in and it pushes it like a
piston eastbound.
ALJ BROWN: Okay. Now, would also all of this be
captured with your shallow gas monitoring and collection
system?
THE WITNESS: Yes. A properly designed system
ALJ BROWN: Good,
THE WITNESS: would absolutely capture it.
Yes, it would.
ALJ BROWN: All right. Is it time to move on to
our vent stack scrubbers?
MS. MC PHERSON: I would like to bring up a point
to you.
ALJ BROWN: Sure.
MS. MC PHERSON: In Grassroots 7.

ALJ BROWN: All right.

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2	MS. MC PHERSON: That the document to the back of
3	this. This is a map of the region, and in the blowup
4	you can actually it's not a very big blowup, but the
5	blowup, it is this is oil field methane throughout
б	the region, which is the cover of GR-7. And these are
7	all oil field gases surfacing. But to the back of this
8	exhibit is the mineral right ownership that is directly
9	underneath the Playa Vista site, first phase, and that's
10	what it references. So once again, the oil field gases
11	that are surfacing are the jurisdiction and within the
12	sphere of influence of SoCalGas's oil field, and that is
13	what this document is part of our exhibits for.
14	THE WITNESS: I was remiss in not making one
15	additional comment. So if I can have the opportunity to
16	make that explanation.
17	ALJ BROWN: Okay. Sure.
18	THE WITNESS: What we have within our gas analysis
19	is to determine it's really a two-step process. Step
20	1 is to determine whether we can distinguish between
21	thermogenic and so-called biogenic gas. So we do that
22	through a very sophisticated geochemical analysis.
23	Isotech Laboratories is one of the best and most
24	sophisticated laboratories in the United States. And so
25	that is a very profound way to have this sample
26	analyzed.
27	However, we can go to a further
28	characterization because, as I mentioned, there's

oftentimes a distinction between whether this has a gas 1 storage operation connection or whether it has an oil 2 3 field connection. And as explained in, I believe it's 4 one of the reply briefs. It's probably Mr. 5 Mansdorfer's, and I would give him high marks. I'm б sorry for characterizing it that way. But he very 7 appropriately has gone through and characterized the 8 different types of gases. So I don't need to elaborate 9 on that.

10

ALJ BROWN: Right.

11 THE WITNESS: But what is especially profound 12 without doubt as being the primary discriminator and the 13 primary item that is relied upon by Southern California 14 Gas Company and any other competent scientific 15 evaluation that is being made, and I must say, I didn't 16 mean to criticize the well records, records on file with 17 Southern California Gas Company, because over the years 18 Southern California Gas Company has hired very, very 19 competent petroleum geologists and gas storage field 20 experts, the best to be found anywhere in the world, in 21 my opinion. And those reports I have fully relied upon. 22 I've reviewed them in great deal. I've had personal 23 dialogue with the people. Some of the people have 24 actually generated the most important documents. So I 25 have a high degree of respect for the fact that very 26 competent engineering studies have been performed as to 27 what's going on within this field.

28

But let me lead to the most principal point.

1 How do you track what's going on with gas movement 2 within a gas storage project of the type operated at 3 Playa Del Rey? The answer is helium counts are very, 4 very important. Helium basically allows you to map and 5 distinguish between the transported-in storage gas, б which is also thermogenic, has all the thermogenic 7 characteristics, and the native oil field gas. 8 So Mr. Mansdorfer has properly, and I give 9 great praise to the fact that he has distinguished 10 between those categories. But let me go on to point out 11 what has been missed in the rebuttal testimony, and that 12 is somehow an oversight on the part of their evaluation 13 that somehow has led them to conclude that no helium has 14 been found anywhere that would be of importance. 15 EXAMINATION BY ALJ BROWN: 16 17 Now, do you have a study that disputes that? Q 18 А Absolutely. 19 Okay. And --0 20 I would qualify it, your Honor, by saying it's А 21 not one study. It's a multiplicity of studies. 22 Do they cover the same timeframe that the ones 0 23 SoCalGas relied on do? 24 Α Yes. 25 0 All right. Is there any way you can reference 26 those or produce those? 27 А Yes. 28 Okay. That would be very helpful. 0

1 Α I would like to characterize, though, in maybe 2 one or two words just in the framework that I'm talking 3 about by counts. The reason I chose the word "counts" 4 is because it's especially profound when we talk about helium counts. And we have a relative framework for the 5 б magnitude of the helium count, and it begins as a 7 general reference frame for what is the helium count 8 within the natural gas that's transported into here by 9 pipeline from the Permian basin --10 Q Right. 11 -- in Oklahoma and Texas. А 12 Right. 0 13 А And that's a very distinctive characteristic. 14 So over most of the years of operation of the Playa Del 15 Rey gas storage facility, the vast percentage of gas 16 that has been transported into this facility beginning 17 in 1942 has originated from the Permian basin, and it 18 has this distinctive helium characteristic. 19 Now, contrary to what I've seen stated in some 20 reports, some people are led to believe erroneously that 21 somehow helium is added to the gas as some kind of an 22 It is not added at any point. ingredient. It is a 23 natural and native to that particular basin of huge gas 24 fields of thermogenic and sometimes even taking on the 25 characteristics of biogenic isotopic characterization, 26 even though this gas is being produced from wells that 27 are 3 to 4,000 feet deep. 28 But the main thing is to focus upon the helium

1 and use that to identify that with 100 percent 2 scientific certainty we know that a portion of the gas 3 that's leaking into the 50-foot gravel zone has its 4 origin from the gas storage field proper as opposed to 5 the native oil field gases that reside within the Playa б Del Rey field. 7 Why do you think then there is kind of this 0 8 controversy between experts? 9 I don't think there is a controversy between А 10 experts. 11 0 Okay. 12 А Well, excuse me. The experts that we have 13 analyzed this information and have characterized it from 14 a geochemical standpoint. I have not seen any 15 controversy there. It's perhaps all those people who 16 have read this data, and then they attempt to put their 17 own English on it. I can cite, and I hope I can 18 produce --19 That's good enough. 0 No. 20 А I want to make reference, your Honor, to one 21 very important Southern California Gas Company letter, 22 which I have a copy of, and I could hopefully produce 23 that in the next few days. 24 ALJ BROWN: Okay. That would be helpful. 25 MS. MC PHERSON: The other thing, while we just 26 have Grassroots 7 in hand, is the point of the other map 27 on there, as Bernie was stating, through Exploration 28 Technologies and studies done through the City that were

1 done in part to a great extent because of Grassroots 2 Coalition's involvement in getting those studies done 3 and bringing a lot of these issues to light throughout 4 the area, is that they fully determined, there is no 5 question that the gases surfacing throughout the Ballona б Valley area are thermogenic gases, are oil field gases, 7 and I put just one map in here. There are more that 8 show ethane, propane, butane, are all signatures of 9 thermogenic oil field gas. Biogenic gases do not carry 10 these elements, and the maps that are shown here --

11 THE WITNESS: I'd like to comment on some of the 12 salient health and safety issues about the additional 13 chemical constituents within the gas that's migrating up through the soil and directly into the area that 14 15 overlies this area. It's abundantly clear that the most 16 significant hazardous chemical that is listed on the 17 official state of California Proposition 65 chemicals, 18 this is identified as a reproductive harm chemical, and 19 that chemical is toluene. And it's showing up 20 throughout the soil gas study 5-foot probes throughout 21 the area that has been carried out extensively by 22 Exploration Technology, Inc.

And some of the charts that we're looking at here, the most important chart, one of the most important charts is the level of toluene that is migrating up through the soils and entering the air space over virtually the entirety of this gas storage project. It's like a halo which is continually filling

1 the air space, and it subtends the entirety of the gas 2 storage project. 3 ALJ BROWN: Q Okay. In addition to shallow gas 4 monitoring and a collection system, are any -- would any 5 of your other suggested remedies deal with any of these б problems? 7 Well, I think that I would be remiss if I did А 8 not comment upon the absolute importance of 9 performing -- I'm sorry if that's my microphone. 10 MS. MC PHERSON: I don't know whose it is. 11 THE WITNESS: I would be absolutely remiss if I 12 did not comment upon the absolute importance of 13 performing proper abandonment procedures of these wells. And if I could do a quick fast-forward, your Honor, I've 14 15 got this addressed in a much more succinct fashion when we talk about the methods of the abandonment of these 16 17 wells, and what happens is that there's certainly 18 terminology used within DOGGR referred to as abandonment 19 of the wells to the current DOG standards. 20 Now, unfortunately, what has been repeatedly 21 used throughout the well leakage histories within the 22 Playa Del Rey gas storage project, and I would refer to 23 very specific wells. The one, Matt is in the audience 24 here, but we had a PUC hearing, and I believe it was 25 your Honor, and it was Orville Wright, and we were out 26 in the Westchester community room, and at that time I 27 identified that there was a specific well by the name of 28 Block 11 that was leaking, and I identified this

1 specifically to Administrative Law Judge Orville Wright, and I asked him if he or any one else from his staff --2 3 he was, I believe, still the administrative law judge. 4 ALJ BROWN: Yes, he was. 5 THE WITNESS: So I didn't want to show any б disrespect to you. But I asked him personally, I said: 7 "Would you be interested in actually going out and 8 observing an actual well that's leaking? We're prepared 9 here this afternoon to take you there." And what Mr. 10 Wright told me is that he would actually make an 11 official designation of the person he would select from 12 the Public Utilities Commission to go with me out to 13 that site, and it was Matt here that Mr. Wright had 14 designated. And I said: "Thank you, Mr. Wright." 15 And then shortly thereafter Matt joined me, 16 and we went out, and then when we got to the site, it 17 was a bit unfortunate because we had to climb down this 18 We didn't really come prepared that well. slope. But 19 we were able and I was able to stand there and point to 20 We said, now, you see well identification cover Matt. 21 right here, and it's Block 11, and we're in the Townlot region, and you can see the gas bubbling right out of 22 23 this, this well. 24 And now, that simply set things in motion 25 because I wanted to use that somewhat as an example of 26 what was going to happen with the knowledge that 27 Southern California Gas Company had now that that well 28 was leaking. Well, they assigned a well crew they

1	brought down from Bakersfield, and it was placed over
2	that well for a period of about six weeks. And I was
3	told they had great, great difficulty in reabandoning
4	this well and it kept leaking, and they attempted about
5	six times.
6	Cut to the chase. What has been routinely
7	used, and this also extends out to Townsite Well No. 2,
8	which was found to be leaking in 1998, and virtually all
9	the other wells that were uncovered and found to be
10	leaking in the 1998 time period, they were all
11	reabandoned to the so-called current standards of the
12	Division of Oil and Gas,
13	But as we found out, as I found out later in
14	reviewing the records, the DOGGR actually allowed them
15	to do what's called a washover, and a washover is
16	nothing more than where the drill rig enters the well to
17	a depth of no greater than about 600 to a thousand feet,
18	It's really within the region of what we refer to as the
19	surface casing. And then they reenter the well and they
20	drill out, and then they put in a concrete plug, and
21	that is intended then and it's presumed that into
22	perpetuity that well is never going to leak again.
23	Well, unfortunately, the washover is a very
24	poor way of dealing with problems because they have
25	forgotten one of the most important lessons, and I've
26	got that delineated in here as well as to why wells
27	leak, and it's no matter how much effort you try with a
28	concrete plug, it's not foolproof. Cut to the chase,

1 is --2 ALJ BROWN: 0 Now, how do we deal -- how would 3 the Commission address that? What would you ask on your 4 wish list for the Commission to do? 5 А It is very -- all we're doing is asking the б following: that by any reasonable current standards of 7 monitoring what is going on. 8 So your No. 1, we'll deal with that, shallow 0 9 gas monitoring and the collection system? 10 А No. 11 We need to do --0 No. 12 А Not in the sense that we have to deal with 13 this problem. First of all, is DOGGR likely to change 14 their policies and procedures? Not likely, no. Okay. 15 We know, we have to assume the imperfections of wells 16 leaking. If that is a distinct possibility, then the 17 person who is responsible over determining the hazard 18 and degree of seepage does something very simple and 19 something very basic, and that is, first of all, not 20 using or relying upon barholes. 21 We repeatedly see reference throughout the 22 history of the Playa Del Rey gas storage field in which 23 Southern California Gas Company has relied upon barholes 24 for performing monitoring whether the wells are leaking 25 into the shallow zones and whether the gas is coming 26 right to the surface. Barholes are totally an 27 inappropriate, not scientifically accepted anywhere in 28 any community.

1 What would you suggest? 0 2 Α I would suggest that, to begin with, we have 3 an established procedure used by the City of Los Angeles 4 with the leaking wells in the Fairfax area and we 5 install probes, permanently placed probes down into the б ground. 7 And would this be just for abandoned wells? 0 8 A No. Active and abandoned wells. 9 Okay. For active and abandoned wells. 0 10 А And what you have to do is to set up a matrix 11 within the vicinity of each well and continue to monitor 12 the gas movement into the soil probes that are placed at 13 a depth of approximately 10 to 15 feet below the 14 surface, and they're especially configured in order to 15 capture gas movement into the chamber, and then there's 16 a plastic tube which extends to the surface which 17 facilitates very easily someone come and extract a 18 sample and then have that sample analyzed in either a 19 laboratory or on an onsite gas chromatograph. 20 How often would you suggest a sample should be Ο 21 taken? 22 Once a week was established as a standard by Α 23 the City of Los Angeles. 24 ALJ BROWN: Okay. 25 DIRECT EXAMINATION (resumed) 26 BY MS. MC PHERSON: 27 One last question with regard to No. 4 on your 0 28 list perhaps. Dr. Endres, in your opinion, if the above

1 cannot be accomplished, cannot -- SoCalGas cannot contain its gases, oil field gases, and their movement 2 3 to the surface, in your opinion, what should happen? 4 Α Well, I would be -- as an engineer, quite 5 frankly, I am reasonably confident that a design can be б configured with proper engineering methodology to be 7 able to do this without it being cost prohibitive. What 8 I would question in Mr. Mansdorfer's testimony is that I 9 do not personally believe that such a system would be 10 cost prohibitive. But I would tend to fault Mr. 11 Mansdorfer because I don't see any evidence in his 12 testimony that such a system has ever been costed out. 13 What I would point out is that I have had the 14 opportunity to review detailed internal documents of 15 Southern California Gas Company in which they had made a 16 specific determination of what would be the consequences 17 of their overall gas storage operations that serves the 18 millions and millions of customers here in Southern 19 California area if the Playa Del Rey facility were to be 20 The results of that study, which was rather shut down. 21 extensive, concluded that it was entirely feasible to 22 shut down the Playa Del Rey facility and that all of the 23 customers could be served by the other multitude of 24 underground gas storage facilities currently operated by 25 Southern California Gas Company. 26 Now, that would have a certain cost impact. 27 So the evaluation, to me, is rather obvious, that you 28 simply take that study as a starting point and you come

1 back and you analyze what are the consequences to your overall service of your customers that you have to 2 3 guarantee, and the gas storage facility at Playa Del Rey 4 has a special terminology, and it's primarily there in 5 order to serve a very narrow range of opportunities б where you have a sudden and short-term demand upon the 7 supplies of the entire available gas of Southern 8 California Gas Company, but yet from a mathematical 9 standpoint the Gas Company has to be 100 percent 10 certainty, with 100 percent certainty that they can 11 satisfy all of their customer demands.

So the way that you analyze it then is you say: what is the significance of Playa Del Rey in providing a hundred percent certainty of satisfying that demand? And the answer was, first of all, with consequences, cost consequences, that can be served by the other existing gas storage facilities.

18 However, I had the opportunity, the privilege, 19 the fortunate opportunity, to have taken a trip to the 20 San Francisco office of the Public Utilities Commission 21 for a hearing which was about two hours in the morning, 22 and for the rest of the day I thought, if I'm already up 23 here, I want to take every opportunity to examine the 24 records at the Public Utilities Commission offices 25 pertaining to these gas storage operations, particularly 26 Playa Del Rey and Montebello. And I came up with some 27 very remarkable information.

28

First of all, I discovered there was enormous

1	controversy between Southern California Gas Company and
2	Southern California Edison, and Edison was strongly
3	protesting the sale or even anything to do with the
4	closure of the Montebello gas storage facility, had a
5	concern over what would happen with the Playa Del Rey
6	facility. And then as I looked into that problem, I
7	realized, wow, there's a whole new thing that's coming
8	in.
9	The reality of it is this: Beginning at the
10	deregulation stage of natural gas in or about 1993, it
11	set into motion the fact that a utility such as Southern
12	California Edison Company, which was very, very heavily
13	reliant upon natural gas, was now for the first time
14	allowed to go out on the open market and enter into
15	contracts with gas suppliers anywhere they could find
16	them and now provide delivery into their needs here in
17	Southern California.
18	The problem is, you can't buy, as Southern
19	California Edison Company, large supplies of natural gas
20	on the open market at the lowest possible cost unless
21	you have a place to store it. It's like a garage that
22	you've got to store a car in once you bring it to
23	California.
24	So the reality is that the most the largest
25	economic gain to be realized by Southern California Gas
26	Company, in a business standpoint, I can't fault them at
27	all, but Sempra Energy obviously is deriving huge profit
28	revenues by taking the Playa Del Rey gas storage fill

1	and using it to store gas that doesn't belong or own to
2	them but is actually owned by the Edison, the utility
3	companies that are burning it in their power plants,
4	including scattered to the plant down in Redondo Beach.
5	That was formerly owned by Edison, and then with the
6	energy deregulation, those plants were required to be
7	sold. But the operator of that plant, which is probably
8	an out-of-state company, with 100 percent certainty is
9	storing significant quantities of their natural gas that
10	they have bought somewhere in the open market. It's
11	been transported in, and they're paying Southern
12	California Gas Company in order to store their gas in
13	the Playa Del Rey gas storage facility.
14	So is Playa Del Rey truly a facility serving
15	the peak-shaving needs of Southern California Gas
16	Company? That's the term of art used for Playa Del Rey
17	for many years. It's a peak shaving gas field. The
18	answer is, in my mind, absolutely not.
19	So it comes back to the economic realities or
20	necessities under Roman numeral 4 is I believe the
21	numbers would show that there may in fact be a cost
22	trade-off between shutting down the facility and
23	actually implementing the gas collection and monitoring
24	system. It's probably in \$15 million per year category.
25	So you might have a close trade-off here.
26	EXAMINATION
27	BY ALJ BROWN:
28	Q All right. What about your suggestion for

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1

vent stack scrubbers?

2 А Okay. Here I find it to be very disturbing. 3 I don't want to use this terminology, but we've seen 4 this big stack of information, and I look at the title Well, if I had quite a bit of time, I'd probably 5 URS. б go back and reread that document from cover to cover in 7 order to point out what are the shortfalls within that 8 study. But I have previously reviewed all of the 9 technology used in carrying out the URS study.

10 And I could simplify it in the following way. 11 And I would say the Department of Motor Vehicles, if I 12 were to receive a notice from the DMV saying that I have 13 to provide a smog certificate before I can reregister my 14 vehicle, I have to go down to an officially-approved 15 smog station and I have to drive in, and the first 16 conspicuous thing that the technician does is he doesn't 17 just fill up this room with exhaust emissions. What he 18 does is he takes a specially-tailored device and he puts 19 it directly into the exhaust, and he collects this 20 information, and it's recorded electronically on this 21 big box that he cannot override, and then it if it 22 exceeds a certain threshold, it goes immediately to the 23 State, and then it's totally shut down, and basically, 24 you know, you're red-tagged and you got to go through 25 all these --

26

Q All right.

27 A Anyway, to make a long story short, I'm sorry 28 for digressing off the point, but URS study and the data 1 that I have looked into as providing the most 2 appropriate data for analyzing the vent stack emissions 3 are totally different. The vent stack emissions, you 4 have to determine the actual chemicals that are being 5 released from the vent stacks. So you don't go out in б the community of Playa Del Rey and carry out some kind of air samples here and air samples there. You go right 7 8 to the vent stacks, and you know the characteristics of 9 the engines.

Mr. Hower is an expert. In fact, one of his 10 11 first retentions with Southern California Gas Company 12 was to come out and tell them how they should better run 13 these compressor engines so that they can meet and 14 overcome the permit violations that Southern California 15 Gas Company had received from the South Coast Air 16 Quality Management District. So why wouldn't you take 17 all of your engine knowledge, as Mr. Hower had, Hower 18 has, in his specialty and determine what are the actual 19 chemicals that are being released up the vent stacks, 20 the multiplicity of vent stacks, within the very highly 21 urbanized area of the compressor station up on the Playa 22 Del Rey bluffs? The answer is, you know exactly what 23 chemicals are being released up the vent stack.

Now, I would propose the following question on cross-examination of Mr. Hower or any one else who is going to talk about the URS report, my question is going to be real basic. Mr. Hower, or any one from Southern California Gas Company, I'm going to fast-forward here to page 4 halfway down the list under the title Air Quality Management District Records, where are we going to find a direct inventory of the toxic emissions coming from the Playa Del Rey compressor engines? You're going to find it on file with the Air Quality Management District.

7 How many years worth of data are you going to 8 find? You're going to find back to the time that the legislation was adopted by our state legislature under 9 10 the so-called toxic hot spots legislation. This is 11 legislatively mandated that any one such as Southern 12 California Gas Company that is releasing toxic emissions 13 to the air must, under statutory law, provide those 14 emissions to the South Coast Air Quality Management 15 District.

Now, does that mean that the only authority over violations or enforcement of that is the South Coast Air Quality Management District? Well, the answer is that we go to those records to determine what first of all are the chemicals that are going up the vent stack.

Now, I think we even have an emission within Mr. Mansdorfer's rebuttal testimony that at least there's some formaldehyde, or maybe it's Mr. Hower's rebuttal testimony, but that would be the first chemical to start with. There are very, very large quantities of formaldehyde going up the vent stack, and formaldehyde is the Proposition 65 chemical.

1 Now, Mr. Hower somehow thought that we're 2 alleging a Proposition 65 violation. He's totally 3 misguided. We didn't allege a Proposition 65 violation. 4 What we said is the State of California, through their 5 entire health branch hierarchy, the highest level б employs many, many of the best scientists and medical 7 experts on toxicology to be found anywhere. To my last 8 count, there may be as many as 15 or 20 on that stack, 9 at least before the budget crisis hit. And those people 10 are manditorily required under legislative mandate to 11 update and determine what are the chemicals that are to 12 be listed as subjecting the human population to very 13 distinctive types of health hazards, and these are 14 further characterized and subcategorized as cancer risk. 15 We also have reproductive harm chemicals. Those are the 16 two primary categories. 17 So some of these chemicals being released from 18 the vent stack fall into category of cancer-producing 19 chemicals. Some of them fall into category of 20 reproductive harm chemicals, and several of these, some 21 of the most important ones, fall in both categories. 22 So we start out by using the Proposition 65 23 chemicals as the most definitive list of chemicals that 24 are officially recognized by this state, and we find 25 that virtually all those chemicals are being vented up 26 the vent stack of the compressor station. 27 Now, do I stop there? Why do I say that 28 scrubbing of these gases would be very important? Ι

studied that in detail, because I had access to all of 1 2 the work orders that have been implemented within the 3 Playa Del Rey gas storage facility perhaps for the last 4 20 years. And I've studied those work orders very 5 carefully. And in essence, what we have going on in the б Playa Del Rey facility and especially the compressor 7 station vent stacks, it's essentially 1955 technology. 8 That was the last time that this facility had a major 9 upgrade. And so when it comes to vent stack emissions 10 and scrubbers, we're dealing with 1955 technology. 11 What would you like on your wish list for the 0 12 Commission to do about this? 13 А Well, the reason I chose Proposition 65 14 warning provided by Pacific Gas & Electric to the people 15 in the Northern California area under virtually 16 identical circumstances, we have it here in exhibit. 17 Q Okay. 18 Α And one of the chemicals I would like to point 19 out --20 No, no. Tell me what you -- do you Okay. 0 21 want us to order them to do like a billing insert where they tell people what they're venting? I mean are you 22 23 asking the Commission to look into having vent stack 24 scrubbers installed? 25 А I'm looking specifically for vent stack 26 scrubbers to be installed. 27 0 And can you tell me, again, due to my 28 ignorance, how massive of a project is this?

1 Α It may run from relatively minor to more 2 sophisticated. So you have, straightforward, you can 3 realize a virtual immediate improvement by relatively 4 modest cost. And I'm aware that at the present time 5 there are investigations going on even to the extent of б a simplistic step of raising the vent stack height. The 7 other is to install electromagnetically-charged elements 8 within the vent stack that actually absorb or grasp certain chemical elements as they go up to the vent 9 10 stack, but --11 0 Could these be used relatively easy on vent 12 stacks that are as old as you've just referenced? 13 А Your Honor, the area of environmental 14 engineering is replete, there are a multiplicity of 15 companies throughout this United States that have 16 developed off-the-shelf technology that is uniquely 17 tailored to satisfying and solving this problem right 18 now. 19 0 Okay. 20 А This is not anything -- this is no-brainer. 21 And you can go out and find off-the-shelf technology 22 from at least six or a dozen major suppliers across the 23 United States that could solve this problem very 24 quickly. 25 0 Okay. And the problem, where would you refer 26 us or what documents would you refer us to to identify 27 the problem that the scrubbers would fix? 28 The first document would be all of the Α

1	Southern California Gas Company prepared files with
2	on file with the Air Quality Management District which
3	definitizes the individual chemicals and the magnitude
4	of the toxic chemicals that are being released to the
5	atmosphere in the immediate vicinity of the compressor
6	station, and they're all going up the compressor station
7	vent stack,
8	So it's a no-brainer as far as what chemicals
9	you have to deal with, with one exception, and that's
10	the primary reason why I identified Proposition 65 data
11	from Pacific Gas & Electric, because we have one
12	additional chemical that has not been acknowledged in
13	any manner or form by Southern California Gas Company at
14	any time, and that's radon. And that's particularly
15	profound because Southern Pacific Gas and Electric
16	definitively identifies that natural gas, the same
17	natural gas that's being imported by Southern California
18	Gas Company, contains levels of radon, a radioactive
19	gas, and that what has to be addressed in the particular
20	concern that they have is that if we burn large
21	quantities of natural gas in our compressor engines that
22	the vent stack emissions do not consume the radon gas.
23	So it goes up the vent stack. So the first parameter
24	that we look at in the column, I have data on that. I
25	can bring it in in the next day or two.
26	Q And you have data. Do you have data on
27	SoCalGas or only on PG&E?
28	A I have data on virtually PG&E gas? Well,

1 it would be the same thing, because the engines are operating the same way. The engine technology in the 2 3 burning of natural gas is just very well definitized. 4 And so the engine emissions from a compressor, from a large horsepower compressor engine burning natural gas 5 б is very, very well defined. 7 Okay. Would the records that SoCalGas 0 8 provides to the Air Quality Control District show if 9 there was any radon? 10 А No. 11 MS. MC PHERSON: No. 12 THE WITNESS: They've never monitored or even been 13 concerned about the problem at Playa Del Rey. 14 MS. MC PHERSON: That's not their jurisdiction. 15 THE WITNESS: Never been an acknowledgement that 16 it even exists. 17 ALJ BROWN: All right. Let's make sure we've 18 covered the important things on --19 THE WITNESS: If I could add just one more quick 20 comment, your Honor. 21 ALJ BROWN: Yes. 22 THE WITNESS: Is that the emissions from the 23 combustion of natural gas, the quantification of those 24 chemicals are directly related to the quantity of 25 natural gas that is consumed by those engines over any 26 particular year. That number is exactly quantified 27 within the records of Southern California Gas Company 28 provided to the Air Quality Management District. So

1 with that singular number, there are direct mathematical 2 computations to determine the exact quantities of 3 formaldehyde, the exact quantities of benzene, the exact quantities of the other hazardous, toxic chemicals 4 identified as Proposition 65 chemicals, all directly 5 б mathematically quantifiable and computable using 7 standard techniques. In fact, they're so standard that 8 the South Coast Air Quality Management District allows 9 what we call exchange coefficients to be used, and 10 that's perhaps another --

ALJ BROWN: Q That's another subject for another
 day, but let's -- okay.

13 So on your wish list we have shallow gas 14 monitoring and a collection system, which would address 15 an awful lot of your safety concerns with migrating and 16 potential leaking and vent stack scrubbers, which might 17 be able to capture some of the carcinogens and other 18 things.

19

A Or reduce.

20

Q Or reduce.

A Or reduce the level of health hazards posed to the surrounding community, taking into account the additional large data of -- we would call meteorological data. Meteorological data is showing, for example, what times of the day we have the largest hazard posed to surrounding urban communities.

27 So a very simple step, initial step is to, 28 without any cost in hardware or anything else, we 1 already have detailed meteorological data existing for 2 the exact location of this compressor station location 3 that would allow almost a precise mathematical 4 computation to determine when these compressor engines should be operated to perform their function within any 5 б 24-hour data and select the time period that would have 7 the minimal impact upon the surrounding urban 8 population.

9 For example, the two most predominant wind 10 patterns directly over the compressor station are that 11 during the daytime we have prevailingly offshore to 12 onshore air movements, which any emission going up the 13 vent stack or coming off the tank farm is going to be 14 carried eastbound and it's going to largely collect in 15 the area of Virago Drive, which is immediately up on the 16 bluffs.

17

Q Okay.

18 Α Now, nighttime and past midnight, totally 19 reverses on a statistical basis, and what happens is is 20 that the air currents totally reverse and the air 21 currents move almost counterclockwise and they move 22 prevailingly almost back to a offshore direction. 23 Now, is -- oh, on that -- okay. 0 Okay. 24 In summary, I could synopsize it this way. Α 25 Any --26 MS. MC PHERSON: I'm sorry. I know where you're 27 going. 28 THE WITNESS: -- mathematical analysis, as we're

1 routinely taught to do in systems engineering work, will simply say, you integrate the meteorological data with 2 3 the time period that you have decided to use your 4 compressor engines to take the gas and use it to be 5 compressed down into the gas storage reservoir. That's б the reason for the compressor engine's usage is you're 7 taking the gas that's at low pressure --8 ALJ BROWN: Right. 9 THE WITNESS: -- and you're pumping it up to about 10 1700 pounds per square inch of pressure, and you're 11 using natural gas in order to carry out that compression 12 stage. 13 ALJ BROWN: Q Do the compressor engines make any noise? 14 15 А They have it very -- in all due respects, they 16 probably have done a very good job in soundproofing the 17 interior of the compressor station. When those engines 18 are running, it probably -- I've heard and I've talked 19 to people up there that they've got sharp ears, and 20 especially quiet at night, they can hear them running, 21 but by and large, they do an effective job of

22 soundproofing the interior of the compressor station.

ALJ BROWN: Okay. Anything else for your witness,Ms. McPherson?

MS. MC PHERSON: I think we're covered, unless my
witness can think of something I've forgotten.

ALJ BROWN: Okay. We have this executive summary,which I tell you I really appreciate. And it kind of

1 helped us focus today on exactly what --2 MS. MC PHERSON: Yes. 3 ALJ BROWN: -- Grassroots as an intervenor, if 4 they had a wish list, what things the Commission, if 5 it's within their jurisdiction and the record supports б it, what you feel would ameliorate some of your health 7 and safety concerns. 8 MS. MC PHERSON: Yes. This document provides 9 that. 10 ALJ BROWN: Okay. Let me just see. And why don't 11 you take a quick -- you can go off the record for a 12 moment. 13 (Off the record) 14 ALJ BROWN: Why don't we go back on the record. 15 While we were off the record, Mr. Gilmore did 16 make a request. Could you repeat it for the record? 17 MR. GILMORE: Yes, your Honor. In Mr. Endres's 18 testimony, he makes the allegation that SoCalGas's 19 storage reservoir loses approximately a hundred million 20 cubic feet per year of natural gas. He says that's 21 based on studies. We have not seen those studies, as 22 Mr. Mansdorfer pointed out in his testimony served a 23 And so we would request that those studies be week ago. 24 brought to the hearing room tomorrow so that we can 25 review them. 26 ALJ BROWN: Very good. And I also have a request, 27 because I was operating in terms of preparing my own 28 questions from the Plaintiffs' Prepared Written

Testimony served March 30th, 2005. And I've wondered if 1 2 the executive summary has kind of taken the place of the 3 five requests or conclusions as they're put forth on 4 page 10 of that or --5 MS. MC PHERSON: Supplanted it? No. I think it would be in addition to. б 7 ALJ BROWN: Some of them are duplicative. 8 MS. MC PHERSON: Yes. 9 ALJ BROWN: And others --10 MS. MC PHERSON: Yes. 11 ALJ BROWN: Because what I would -- that's what I 12 would appreciate knowing so that I don't accidentally 13 not focus on something you still wanted me to focus on, 14 okay, for tomorrow. 15 MS. MC PHERSON: No. We've -- well, as my 16 witness, do you firmly stand behind both of these 17 documents and what is written within these documents? 18 THE WITNESS: To the extent that I have relied 19 upon what I believe to be very competent experts and to 20 the extent that they have rendered analyses and opinions 21 and conclusions, to that extent, there have been limited 22 circumstances in which I have relied upon that 23 information, but I'm prepared not only to substantiate 24 the information that was provided to me, the identity of 25 the experts that I relied upon, but what I would -- what 26 would give me the maximum advantage of satisfying the 27 request of Southern California Gas Company would be to, 28 within the extent that I cannot put together all of the

1 documents tomorrow, that I actually have the third day 2 somewhat as a reserve, and this would only impact when 3 and under what circumstances the cross-examination --4 ALJ BROWN: Correct. 5 THE WITNESS: -- would begin. I basically have no б problems with cross-examination occurring at any time. 7 It's just that I would prefer and feel it would be more 8 appropriate if we were to take all of the documents that 9 we're going to actually -- I would want to lay the 10 foundation for, that those be brought in, and then to 11 whatever extent they want to cross-examine me on --12 ALJ BROWN: Good. 13 THE WITNESS: -- they're welcome to. 14 ALJ BROWN: Mr. Gilmore. 15 MR. GILMORE: Thank you, your Honor. The most, 16 from our standpoint, the most important study to which 17 you've referred and is one that we need not just for 18 cross-examination but in order to prepare our case is 19 the study that you claim shows that the storage 20 reservoir is leaking 100 million cubic feet of gas per 21 year. So in terms of prioritizing the review of your 22 records, if you could find us that study by tomorrow, it 23 would be most helpful. 24 THE WITNESS: Okay. If I could say a few words on 25 that, your Honor. 26 ALJ BROWN: Only on -- you don't need say anything 27 about the study, because you'll bring it in either 28 tomorrow or Wednesday and then --

> PUBLIC UTILITIES COMMISSION, STATE OF CALIFORNIA SAN FRANCISCO, CALIFORNIA

1 THE WITNESS: Well, I just want to emphasize here, 2 and I'm sure that Southern California Gas Company is 3 well, well aware of the source of this information. The 4 inventory, the most detailed inventory analysis that's 5 ever been made on the Playa Del Rey gas storage facility was made and conducted on behalf of Southern California б 7 Gas Company by the most preeminent expert on underground 8 gas storage inventory analysis to be found anywhere in 9 the world, and that person's name is Racine Tek. And I 10 have had --11 ALJ BROWN: Q And when was that study done 12 approximately? 13 А It was done over two significant time 14 intervals. There was a time period in which Southern 15 California Gas Company was actually being sued by the 16 Federal Government, and it related to the manner and 17 usage of their accounting procedures of the -- a portion 18 of the storage gas, and the Internal Revenue Service was 19 contending that Southern California Gas Company had used 20 inappropriate procedures. 21 And so as part of that litigation which was 22 undertaken in the Federal Court here in the central 23 district, Southern California Gas Company retained the 24 services of Racine Tek to perform a comprehensive

25 inventory analysis in which he was provided all of the, 26 to all practical extents the totality of the data that 27 Southern California Gas Company had on performing 28 inventory analyses over 15 or 20 years, and he performed

1 a comprehensive analysis using that data. 2 0 Approximately when did he perform this 3 analysis? 4 Α That particular study was performed back at the time of that -- I believe it was in the early 1980s, 5 around 1982 or thereabouts. Now -б 7 Do you have anything that's more up to date? 0 8 А Yes, your Honor. Basically, it was around the 9 2002 time period in which I worked with him personally, 10 Mr. Racine Tek, and it was for the specific purpose of 11 analyzing the inventory within the Pacific -- the Playa 12 Del Rey gas storage facility. So what he did is he 13 still retained within his files the totality of 14 information that he had used when he was directly 15 retained by Southern California Gas Company to perform 16 an inventory analysis. In the, approximately the 2002 17 time period, he went back and he performed another 18 detailed update of the inventory analysis and reached 19 certain conclusions based upon also updated knowledge 20 that he was provided regarding this facility. 21 And is that in a written form? Q 22 А To what extent? Yes. I would say the most 23 definitive written form is is that he prepared a 24 declaration under penalty of perjury regarding the 25 results of his studies and definitized it within that 26 declaration under penalty of perjury. 27 0 In 2002? 28 I would say that we would have the exact --А

1 I'm pretty sure I'd have a copy of the exact declaration 2 that he --3 0 Okay. That will be fine, especially for --4 А Just to simplify it, your Honor, I believe, 5 since I routinely perform expert testimony, I'm well aware of the laws of the State of California regarding б 7 what experts can rely upon, and certainly other experts 8 in the same field have prepared definitive reports that 9 are well based upon foundational material, and 10 especially in this case if he prepares a declaration 11 under penalty of perjury stating his conclusions, then 12 that's something I'm relied to allow -- I'm allowed to 13 rely upon as an expert myself after I've thoroughly 14 analyzed --15 0 Sure, right. 16 А -- the data. And so I don't have to do my own 17 total independent analysis. I've done very, very 18 extensive evaluation of all inventory records, and I 19 also can very conveniently summarize several of the most 20 profound problems that exist within this storage field 21 as far as performing inventory analysis, and I've even 22 come up with a convenient way of describing this. So 23 that's how I can --24 ALJ BROWN: Okay. What we need is --25 MR. GILMORE: Your Honor, we can stipulate to, 26 that Dr. Tek performed the analysis to which Mr. Endres 27 is referring. There's no need to produce Mr. Tek's 28 declaration. We have it. We're aware of it. We just

1 did not know prior to that statement that Mr. Endres was 2 relying on the work done by Dr. Tek. So that's fine for 3 our purposes. So that you don't need to produce 4 anything more than that. MS. MC PHERSON: Actually, it is -- is that all 5 б right? I would like --7 THE WITNESS: Well, with this caveat. 8 MR. GILMORE: Well, we will stipulate that he 9 performed that analysis. 10 THE WITNESS: Okay. I have no problem with that. But with the additional caveat that if there is any 11 12 inconsistency between the opinions and conclusions that 13 I have rendered in any manner or form within this 14 documentation, that whatever I have stated regarding inventory volume and loss of gases, that the actual 15 16 official numbers, by "official," I mean declared under penalty of perjury by Racine Tek, that I would say that 17 18 those preempt everything else. That becomes the definitive number to use. 19 20 And if I have, hopefully not, somehow 21 inadvertently not properly quoted his information, I 22 would say that I would gladly correct my testimony if 23 there is such a difference. 24 MR. GILMORE: Your Honor, let me cut through this, 25 please. We'll stipulate that Dr. Tek concluded that the 26 storage field was losing 100 million cubic feet of gas 27 per year. 28 Okay. Perfect. ALJ BROWN:

1 MS. MC PHERSON: And I have just a couple of 2 finishing points here also before we run out of time, 3 that I wanted to respond also and raise an issue with 4 Mr. Gilmore regarding data. 5 Again going back to the transcripts from 2001 б in August when we had our hearings, Judge Brown, you had 7 said that we would provide data to back up our comments 8 and SoCalGas would also have to provide the data to 9 prove their point. And I believe that Grassroots would 10 like to see the data that backs up SoCalGas's position 11 that the reservoir isn't leaking in addition to, I mean 12 certainly this air study that we believe has no merit to 13 the issue. Also we would like again as to the motion --14 MR. GILMORE: Your Honor, before we get to the 15 motion --16 MS. MC PHERSON: May I finish, please? 17 MR. GILMORE: Well, you asked --18 MS. MC PHERSON: No, no. I was just going to 19 quote. 20 ALJ BROWN: Stop. 21 MS. MC PHERSON: May I please finish? 22 MR. GILMORE: But you asked me to provide certain 23 information. I'd like to address that. 24 MS. MC PHERSON: Well, I'm not quite finished. Ιf 25 I could -- I'm just quoting. 26 ALJ BROWN: Wait a minute. When I ask you to 27 stop, it means the two of you are talking over one 28 another. Okay? Okay. Now, you asked Mr. Gilmore for

1 some documents. 2 MS. MC PHERSON: As per --3 ALJ BROWN: Correct. 4 MS. MC PHERSON: -- your statements here that in a 5 general sense that we would like to see them provide б documents to back up --7 ALJ BROWN: Yes. 8 MS. MC PHERSON: -- their claims that the 9 reservoir is not leaking, just as they asked us to 10 provide documents to prove that it is leaking, rather 11 than us having the full burden of proof to just say: 12 This is what we have. Now show us something that you 13 have that shows that it isn't. 14 ALJ BROWN: Mr. Gilmore. 15 MR. GILMORE: Well, your Honor, we'd be happy to 16 present our case when it comes time to present our case, 17 and if we're going to rely upon any documents or 18 studies, we will make an effort to provide them to you 19 in advance. 20 MS. MC PHERSON: Thank you. And the other point 21 would be, again, which, yes, it does go to a motion, 22 that again in these documents, Judge Brown, you had 23 stated that, for instance, the CPUC always has the 24 ability, and I'm quoting here, to order an investigation 25 into anything it finds, even if you hadn't filed your 26 complaints, if accidentally, as part of checking on the 27 applications, the CPUC had run across a health and 28 safety concern, they could initiate their own

1 investigation. And then I move to the Safety Branch 2 where Mr. Epuna stated: 3 I want to note that our 4 investigations, our investigation is independent of what SoCal is 5 б doing. However, we requested data 7 from SoCal to compare to what we 8 are doing, but our investigation 9 is independent of their study. 10 And again, that harks to the motion that we 11 put forward that we would like to see that investigative 12 material. 13 ALJ BROWN: You didn't even need to file a motion. 14 You could have asked for that any time. You can call up 15 or chat with Matt on the way out here today. I don't 16 know how complicated it would be to get. 17 MS. MC PHERSON: All right. 18 ALJ BROWN: Okay. 19 MS. MC PHERSON: All right. 20 ALJ BROWN: You don't need to motion unless 21 someone has refused to give you something. You just ask 2.2 for it. 23 All right. Well, as you had said MS. MC PHERSON: 24 to put in a public record request, I think that we are 25 also covering our bases here to make sure that we are 26 provided with everything, that, your know, in hindsight, 27 one would say: "Well, you could have asked and you 28 didn't get it." So we're asking.

1 ALJ BROWN: 0 Okay. All right. Now I have a 2 question that I wanted to ask Dr. Endres. On page 10 of 3 the Plaintiffs' Prepared Written Testimony, number one, 4 you asked for the, under your conclusions, the 5 installation of a gas monitoring well system and a б shallow gas collection system. That kind of parallels 7 your, we'll call it your wish list as part of the 8 executive summary on page 2. Are you with me? 9 Yes, I am, your Honor. I understand where А 10 you're going. 11 Now, on your conclusion No. 2 on page 10 of 0 12 the testimony, which is GR -- Exhibit GR-1, Grassroots 13 1, you then asked for: 14 An independent team must be 15 assembled to evaluate the well 16 leakage problems, identify what 17 wells are leaking now, and install 18 appropriate monitoring equipment 19 to protect against leaks in the 20 future. 21 All right. Does that step need to be taken 22 first before we could know where to do gas -- to 23 implement a gas monitoring well system? 24 Your Honor, if I could cut to the chase. А Ι 25 think that what I did is I took your guidance on this 26 very issue, and what I attempted, what has been 27 attempted here in the executive summary is to 28 characterize our recommendations in a much more cogent

1 or more of a per --2 0 Sure, sure. But just tell me. Do we need --3 do we need to evaluate -- how do you want us to evaluate 4 the well leakage problem? I believe, your Honor, that what we've 5 Α characterized as our four Roman numerals -б 7 0 Yes. 8 А -- that perhaps all of the conclusions set forth on page 10 can be recharacterized as some form of 9 10 subset of those four Roman numerals and they no longer 11 have to be addressed from the standpoint of our true 12 recommendations. That's why the executive summary has 13 been put in a more cogent way. 14 MS. MC PHERSON: Your Honor. Dr. Endres, I may be 15 disagreeing with you a little bit on this from a 16 standpoint of, again, I go back to the transcripts where 17 actually it was found that we would not be provided with 18 all of the well records because the rest of the two 19 teams, both Energy and Safety Branch, would be provided 20 with the entirety of SoCalGas's well records. And what 21 we are asking again, as is set forth in the motion, is 22 that we would like to see the entirety of the well 23 records of SoCalGas having been reviewed. 24 At this point there is no information showing 25 that that has ever occurred, and we very much need that 26 information. The entirety of the well record has never 27 been reviewed, unless there's something that -- I'm 28 sorry. Mr. Gilmore is raising his eyes at me. Did you

1 have a response for that?

ALJ BROWN: We can pursue that. I'm just trying to clarify for my own purposes exactly what Grassroots was still asking the Commission for as part of its wish list and exactly how to imple --

6 MS. MC PHERSON: No. 2, I think, stands. And are 7 you saying, Bernie, then that this is a subset of the 8 other ones in broader headings, but that we and I 9 believe as part of having been a part of creating this 10 document that we still wish to have all of these?

11 THE WITNESS: Well, I would suggest the following. 12 I believe that what we can do over the next day or two 13 is take the four Roman numerals set forth here in 14 executive summary, use that as our primary framework, 15 and then we will go back and revisit the conclusions to 16 see if we need to draft any of the language here on to 17 any of the four Roman numerals, but I'm confident that 18 we can take the conclusions set forth here and 19 incorporate them, or not even have to incorporate them 20 into the four Roman numerals set forth, but it would 21 probably at worst be maybe a subpoint to be made or a 22 clarification point.

ALJ BROWN: Okay. And the reason I'm kind of focusing in on this is to, one, to give the Commission some direction and also to help give our testimony and then hopefully the cross-examination some focus and to also help both sides to focus in on the documents that would be needed to either support or refute the request

1 being made. Okay? 2 MS. MC PHERSON: Yes. 3 ALJ BROWN: Rather than having it be an incredibly 4 large world, to focus it on the specifics. 5 MS. MC PHERSON: I'm for that. Okay. Now, is there anything else б ALJ BROWN: 7 that you wanted to do to wrap up today? 8 MS. MC PHERSON: Well, if we're going to quit at 9 4:30, I was going to suggest that we have Kathy Knight 10 come up and then come back, but we no longer have that. 11 So that if we could pick up tomorrow perhaps with even 12 Kathy for a short while but then have Dr. Endres lay the 13 foundation for the documents that we will be able to 14 provide tomorrow. 15 ALJ BROWN: Perfect. Why don't we go off the 16 record for just a second. 17 (Off the record) 18 ALJ BROWN: We'll go back on the record. 19 We will start at 10:00 a.m. tomorrow morning, 20 and I'm relieving you, Tom, of your court reporting 21 duties for the day. 22 (Whereupon, at the hour of 4:26 p.m., this matter having been continued to 10:00 a.m., April 19, 2005, at Los 23 Angeles, California, the Commission then 24 adjourned.) 25 26 27 28