



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-4005**

September 16, 2004

MEMORANDUM TO: NRC PUBLIC DOCUMENT ROOM

FROM: William B. Jones, Chief, Project Branch E
Division of Reactor Projects

SUBJECT: CORRECTED MEETING TRANSCRIPT FOR JUNE 9, 2004,
TOWN HALL (CATEGORY 3) PUBLIC MEETING

Enclosed is the corrected transcript of the June 9, 2004, town hall (Category 3) public meeting conducted at the Embassy Suites Hotel in San Luis Obispo, California. The transcript has been reissued to show the date of the town hall meeting as June 9, 2004. Statements provided by members of the audience have also been included. The NRC will review the transcript to ensure that questions raised during the meeting are adequately addressed.

In accordance with Section 2.390 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams/index.html> (the Public Electronic Reading Room).

Should you have any questions concerning this matter, we will be pleased to discuss them with you.

Sincerely,

/RA/

William B. Jones, Chief
Project Branch E
Division of Reactor Projects

Dockets: 50-275
50-323
License : DPR-80
DPR-82

Enclosure:
Meeting transcript and statements

Enclosure

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV

PUBLIC MEETING WITH NUCLEAR REGULATORY COMMISSION
SAN LUIS OBISPO, CALIFORNIA
WEDNESDAY, JUNE 9, 2004
6:30 P.M.

REPORTED BY CAROLYNN E. SPERE, CSR #10091

1 APPEARANCES:

2 FOR THE NRC:

3

4 T. GWYNN, DEPUTY REGIONAL ADMINISTRATOR

5 M. SATORIUS, DEPUTY DIRECTOR, DIVISION OF
REACTOR PROJECTS (DRP)

6

W. JONES, CHIEF, PROJECTS BRANCH E, DRP

7

D. PROULX, SENIOR RESIDENT INSPECTOR, DRP

8

T. JACKSON, RESIDENT INSPECTOR, DRP

9

G. SHUKLA, PROJECT MANAGER, NRR

10

G. BAGCHI, SENIOR-LEVEL ADVISOR

11

V. DRICKS, PUBLIC AFFAIRS OFFICE, RIV

12

J. TAPIA, SENIOR STRUCTURAL ENGINEER

13

L. CAMPER, NUCLEAR MATERIAL SAFETY &
SAFEGUARDS DEPUTY DIRECTOR

14

15 G. IMBRO, CHIEF OF MECHANICAL & CIVIL
ENGINEERING

16

Y. LI, STAFF SEISMOLOGIST

17

S. YOUNG, SENIOR PROJECT MANAGER,
OFFICE OF NUCLEAR SAFETY

18

19 C. CAMERON, FACILITATOR

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21

22

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1 WEDNESDAY, JUNE 9, 2004

2 6:30 P.M.

3 * * *

4 MR. CAMERON: Good evening everyone. My name
5 is Chip Cameron, and I'm the special counsel for public
6 liaison at the Nuclear Regulatory Commission. And I
7 would like to welcome all of you to the NRC's public
8 meeting tonight. And we are going to discuss seismic
9 issues with you, and other issues of concern that you may
10 have in regard to Diablo Canyon.

11 And it's my pleasure to serve as your
12 facilitator tonight. And my general responsibility is to
13 try to assist all of you in having a productive meeting
14 tonight. And some of my specific responsibilities will
15 be to assist all of you in making sure that the
16 information that's presented from the NRC is clear and
17 responsive, and to also assure that everyone who wants an
18 opportunity to speak tonight has that opportunity.
19 I'm also going to keep track of any action items that
20 come out of this meeting tonight. It's not meant to be a
21 summary of the meeting, but anything that the NRC commits
22 to looking at or doing during tonight's meeting.
23 And I wanted to take just a couple minutes to
24 talk about the meeting process before we get into the
25 substance of the discussion tonight. And I wanted to

1 talk about format for the meeting, very simple set of
2 ground rules for the meeting, and just give you an idea
3 of what to expect in terms of the agenda for tonight's
4 meeting.

5 In terms of format, we want to try to keep it
6 very simple, to try to maximize the interaction with all
7 of you. We have one NRC presentation on the results of a
8 seismic inspection that the NRC did. And we are going to
9 use that as a backdrop to get into a discussion of
10 seismic issues, which we know are of concern to everyone.
11 And then after that discussion, we'll go on to other
12 issues that you might have.

13 Grounds rules: If you have a question or you
14 want to make a contact, just signal me. And if it's a
15 question, I would like to operate by bringing you this
16 cordless microphone. If you have a more formal comment
17 or statement, we can either go to you with this cordless
18 mike, or you can come up and use the podium that's right
19 here. We tried to place it so that you not only would be
20 looking at the NRC, but so hopefully others in the
21 audience can see you talking also.

22 We are taking a transcript of the meeting, so
23 if I could ask you when you do talk, to give us your name
24 and affiliation, if appropriate. And in order to help
25 our stenographer,Carolynn, the first time that you talk,

1 if you could just spell your last name so that she has
2 that on the transcript. And then when we come around
3 again, you can just give your name, and that way we will
4 know who is talking tonight.

5 I would also ask that only one person speak at
6 a time. That's going to allow us to get what I call a
7 clean transcript. In other words, you will know who is
8 talking. But the most important thing about that is so
9 that we can give our full attention to whomever has the
10 floor at the time.

11 And I would just ask you to try to be brief, or
12 perhaps direct is a better word, and to the point in your
13 comments. And I know that that can be difficult because
14 these are complicated subjects and controversial
15 subjects, but that will at least -- the more that we can
16 do that, that will at least make sure that we hear from
17 everybody who has something to say tonight.

18 And I would just thank you all for being here.
19 This meeting is just one point on a spectrum. And we are
20 going to leave you with some telephone numbers and e-mail
21 addresses tonight. If you have any questions, any
22 concerns, any trouble finding NRC documents, I am going
23 to give you an initial contact. Please call them, and
24 they will try to help you. In fact, it's going to be
25 Mr. Victor Dricks. Victor is right there. He is with

1 our Region IV office in Arlington, Texas. His direct
2 number is right here, but if you want to use an 800
3 number, which I believe you will, it's up here. It's
4 1-800-952-9677. If you need to reach anybody at NRC
5 headquarters in Rockville, Maryland, the 800 number is
6 1-800-368-5642. We will put Victor's e-mail up there.
7 And if you would like to get in touch with any of us, any
8 of the people who are here to talk tonight, just ask us
9 for our e-mail address, and we will be glad to give that
10 to you and to talk to you in the future.

11 And we are going for try to keep this informal,
12 as informal as we can, in the spirit of having a good
13 discussion with all of you tonight. And Pat Gwynn, who
14 is our Deputy Regional Administrator -- the NRC has four
15 regions. The region that handles the Diablo Canyon Plant
16 is Region IV. It's in Arlington, Texas. Pat, in one
17 minute, is going to come up and say a few minutes of
18 formal welcome to you, and introduce the rest of the
19 staff.

20 Right after that, we are going to go to
21 Mr. Bill Jones, right here, and Pat will introduce Bill
22 and what he does. He is going to give you the summary of
23 the seismic inspection. And then we are to go right into
24 addressing seismic issues.

25 And with that, Pat, I turn it over to you.

1 MR. GWYNN: Thank you. Can the people in the
2 back of the room hear me?

3 Thank you. My name is Pat Gwynn. I'm the
4 deputy regional administrator for Region IV offices in
5 Arlington, Texas. And I wanted to first thank you all
6 for coming out tonight. I recognize several of the faces
7 in the audience that are here again from our February the
8 4th meeting. We got a lot of feedback from you, from
9 that February 4th meeting, and so you'll find that the
10 meeting tonight is quite a bit different from the one
11 that we held in February. I hope that we are somewhat
12 successful in improving the conditions of that meeting.

13 There were four particular pieces of feedback
14 during and after the meeting that I wanted to just review
15 with you to let you know that we recognize that we need
16 to improve our process. The first was that we did not
17 give adequate advance notice for that meeting. We agree
18 with that. So this time we started a month in advance by
19 sending out our meeting notice to the people that were on
20 our mailing list.

21 Three weeks in advance, we sent out a press
22 release to the local newspaper. About a week in advance,
23 we sent out a paid advisement in the local newspaper.
24 And in addition to that, we contacted some people and
25 asked them to use their chains to make sure that the word

1 got out. And I hope that our advance notice for this
2 meeting is better than the one that we had before.

3 The second piece of feedback that we got, that
4 I thought was quite valuable, was that we, in our desire
5 to maximize the information we gave to the community, had
6 limited your opportunity to participate in the meeting.

7 And I apologize for that. That was not our intention.

8 And so tonight, we've scheduled our meeting with Pacific
9 Gas & Electric Company for tomorrow.

10 Tomorrow morning at 9:00 at the Community
11 Center, there is going to be a meeting between the
12 Nuclear Regulatory Commission and Pacific Gas & Electric
13 Company in which we will perform our annual End of Cycle
14 Performance Review for the Diablo Canyon Plant. And you
15 are welcome to come to that meeting. It's at a less
16 convenient time. Unfortunately, we have to be efficient
17 in the use of our time as well, but that meeting is open
18 for public observation. There will be an opportunity at
19 the close of that meeting for questions and answers as
20 well. So we've tried to maximize your opportunity to
21 participate and to dialogue with the NRC staff in this
22 meeting tonight.

23 The third piece of feedback that we got was
24 that our facilitator should not be answering the
25 questions. He was our public affairs officer. Tonight,

1 you saw that we brought a designated facilitator. That's
2 his sole job. He will not be answering questions. If
3 you answer a question, you are fired.

4 MR. CAMERON: That may be an advantage.

5 MR. GWYNN: And finally, and perhaps the most
6 important piece of feedback that we got, was that we
7 didn't have the people present to answer the questions
8 that you had. And in particular, we did not have an NRC
9 seismologist present, and we knew that you had issues and
10 questions about seismology for the Diablo Canyon Plant.

11 And so tonight we have an NRC staff seismologist with us,
12 as well as 13 other members of the Nuclear Regulatory
13 Commission staff, representing not only Region IV's
14 offices in Arlington, Texas, but also the Office of
15 Nuclear Reactor Regulation, the Office of Nuclear
16 Security & Incident Response, and the Office of Nuclear
17 Material Safety & Safeguards. All three of those offices
18 are located in our headquarters that's in Rockville,
19 Maryland.

20 And so I would like to, at this point,
21 introduce those members of the NRC staff that are here
22 with us tonight. And starting first with the Arlington,
23 Texas, staff, Arlington -- our regional offices, we have
24 four. The one that's located in Arlington, Texas, is
25 responsible for inspection and enforcement of the law

1 that relates to the operation of nuclear power plants and
2 the safe use of nuclear materials in the Western United
3 States. And so the people that are here with me from
4 Region IV include: Mr. Mark Satorius, Mark is the Deputy
5 Director of the Division of Reactor Projects in Region
6 IV; Mr. Bill Jones, Bill Jones is the chief of projects
7 Branch E in the Divisional Reactor Projects, and he has
8 responsibility for the day-to-day supervision of our
9 inspection program for three reactor plants, including
10 Diablo Canyon; Mr. David Proulx, who is our senior
11 on-site safety inspector at Diablo Canyon. He lives in
12 Atascadero. And Dave is here with us tonight. He
13 performed part of the seismic inspections in response to
14 the San Simeon earthquake on December 22nd. Also Terry
15 Jackson, our on-site resident inspector, who works for
16 David on site, and also participated in the inspections.
17 And Agnes Chen is here. Agnes is our site secretary at
18 Diablo Canyon. She also lives in the local community.
19 She is here helping us with the administration. And
20 thank you, very much, for that, Agnes.

21 In addition, from Region IV, we have Victor
22 Dricks. You've already met our Public Affairs Officer.
23 Nick Taylor, Nick, would you stand up and hold your hand
24 up in the back. Nick is a reactor engineer working out
25 of our Region IV offices. And that is the group that we

1 have from Arlington.

2 In addition to the Arlington staff, we have
3 three individuals from our Office of Nuclear Reactor
4 Regulation in Washington, or in Rockville, Maryland. The
5 Office of Nuclear Reactor Regulation has the
6 responsibility for licensing the operation of nuclear
7 power plants and for maintaining those licenses. People
8 need to have changes to their licenses from time to time.
9 They also deal with generic safety issues. They also
10 provide us the inspection program that we implement out
11 of the regional offices, and they oversee our
12 implementation of that inspection program.

13 Tonight, from the Office of Nuclear Reactor
14 Regulation, we have Mr. Gene Imbro, who is the Chief of
15 the Mechanical and Civil Engineering Branch in
16 Washington; Mr. Yong Li, Yong is our staff seismologist
17 from the Office of Nuclear Reactor Regulation; and
18 Mr. Goutam Bagchi, Goutam is a senior structural engineer
19 working in the headquarters offices; and Girija Shukla,
20 Girija is the licensing project manager who is
21 responsible for Diablo Canyon licensing.

22 In addition to the Office of Nuclear Reactor
23 Regulation, the Office of Nuclear Security & Incident
24 Response, this is an office that was created as a direct
25 result of the terrorist attacks that occurred on

1 September the 11th of 2001. The NRC recognized that we
2 had distributed the responsibility for nuclear power
3 plant and nuclear material security throughout our
4 organization. We needed to provide a greater focus to
5 that. We developed a brand-new office. Mr. Skip Young
6 is here from the Office of Nuclear Security. And that's
7 in response -- he the senior project manager in the
8 Division of Nuclear Security.

9 And finally, the Office of Nuclear Material
10 Safety & Safeguards, we have Mr. Larry Camper. Larry is
11 the deputy director for licensing and inspection in the
12 spent fuel project office, which is a part of the Office
13 of Nuclear Material Safety & Safeguards. They have the
14 responsibility for decommissioning of reactors for
15 disposal of nuclear waste, high-level and low-level
16 waste. And the Spent Fuel Project Office, in particular,
17 has responsibility for the licensing of independent spent
18 fuel storage installations, and so we've asked Mr. Camper
19 to join us tonight to address matters in that area.

20 And so we have quite a group here. I hope that
21 by bringing all of these people -- it's very expensive
22 for us to do this, so we have made a significant
23 investment in your community because we understand that
24 you have questions, and we want to provide an opportunity
25 for you to ask those questions of our people. These

1 people, I hope, will maximize our ability to answer your
2 questions tonight. I can't guarantee that we'll be able
3 to answer a hundred percent, but I think we will do a
4 better job than we did the last time that we were here.

5 And with that, then, I would like to turn the
6 meeting over to Mr. Bill Jones. Bill is going to
7 summarize the inspection that we performed in response to
8 the December 22nd San Simeon earthquake. We came here
9 February 4th. We gave you an interim report. We weren't
10 finished yet. Our inspection is essentially complete
11 now. And Mr. Jones, we committed at that time to come
12 back and give you a final report. And that's what we are
13 here for, first.

14 And Bill, I will turn it over to you.

15 MR. CAMERON: If we can just let Bill --

16 MR. GWYNN: Chip, I missed one person. I
17 apologize.

18 Mr. Joe Tapia, Joe is a senior structural
19 engineer in our Region IV offices. And he was also
20 involved in the on-site inspection in response to the
21 San Simeon earthquake. My apologies, Joe.

22 MR. CAMERON: And Bill is going to try to be
23 brief so that you won't have to just sit here and listen
24 to us. But I would just ask if you can, hold your
25 questions and let him get through his presentation, and

1 then we will be out to you.

2 Bill.

3 MR. JONES: Thank you, Chip.

4 My name is Bill Jones. I'm the branch chief
5 out of Region IV with responsibility for Diablo Canyon
6 and two other facilities in Region IV area. It is a
7 pleasure for me to be here tonight, and I am very pleased
8 to see this type of turnout from the community.

9 The NRC is here to address questions and
10 comments from this community and to provide an update to
11 the NRC's inspection activities at Diablo Canyon
12 following the San Simeon earthquake. As Pat Gwynn
13 indicated, this is the follow-up meeting to discussions
14 we had with Pacific Gas & Electric and this community
15 last February.

16 First, I want to recognize that the December
17 22nd earthquake had a real and lasting impact on this
18 community. The NRC has three employees located on site
19 at Diablo Canyon, who were also affected. These
20 employees, who were introduced earlier, are David Proulx,
21 Terry Jackson and Agnes Chin. David and Terry are the
22 two individuals who are responsible for carrying out the
23 day-to-day independent inspection activities at Diablo
24 Canyon. They were on site December 22nd to provide
25 immediate inspection and assessment of the impact of the

1 earthquake on Diablo Canyon and the adequacy of Pacific
2 Gas & Electric's response to that earthquake.

3 This is in addition to the direct
4 communications Pacific Gas & Electric implemented with
5 the NRC through our headquarters' emergency center, as
6 well as the State and local officials. The NRC's
7 response to the earthquake and our follow-up inspection
8 oversight activities were extremely thorough, involving
9 an immediate inspection of the plant and integration of
10 the NRC staff's experts to identify what conditions
11 should be considered in our inspections. And we brought
12 Mr. Yong Li with us. He was instrumental in helping us
13 identify those initial systems and what we needed to be
14 looking for within those first few days to verify the
15 plant was safe.

16 A Region IV inspection was subsequent --
17 inspector was subsequently dispatched to assist with
18 inspection of the facility. You met Mr. Tapia early on.
19 The inspections were performed immediately after the
20 earthquake and continued through March with the
21 inspection of the Unit 1 containment. The NRC continues
22 to implement a baseline inspection of Diablo Canyon on a
23 daily basis by the resident inspectors and the regional
24 inspectors.

25 The earthquake struck 35 miles north/northwest

1 of Diablo Canyon. Although some residents sustained
2 damage to their homes and property, no damage to Diablo
3 Canyon from the earthquake has been identified. Diablo
4 Canyon is built on San Luis Obispo structural block, and
5 it is securely anchored to that rock structure. This is
6 significant to understanding in the observed plant
7 response to the San Simeon earthquake. Although the
8 magnitude of the earthquake as sensed at the Plant, the
9 site, was only a small fraction of the design, the NRC
10 did go out and inspect it.

11 The NRC inspectors performed an immediate
12 visual examination of Diablo Canyon. The individual
13 examinations were very extensive and involve observation
14 of the main control room indications, outside areas,
15 system piping and supports. The building structures were
16 examined for any evidence of cracks or soil movement.
17 Since the February public meeting where the NRC presented
18 the results of our inspections, the NRC has performed a
19 visual examination of the Unit 1 containment and its
20 internal structures, systems and components. I also
21 performed a visual examination of the Unit 1 containment
22 during the spring outage. It is a lessons learned from
23 the David-Bessie incident that we have NRC management go
24 out and observe the plants when they are shut down that
25 includes a detailed, thorough review of the containments

1 and pulling up or going up -- to the reactor crew going
2 up to areas we had problems with the David-Bessie head
3 and verifying that there is no boric acid and that
4 conditions are being identified.

5 We looked for any indications that pipes had
6 moved, hangers and supports were intact, or that seismic
7 restrains had been deflected. Our inspectors also looked
8 at systems and component testing performed since the
9 earthquake and the in-service inspections that were
10 performed during the Unit 1 Outage.

11 No damage from the earthquake has been
12 identified for any system, structures or components,
13 including storage tanks, the spent fuel pool, or any of
14 the spent fuel pool assemblies.

15 The NRC's independent inspections verified that
16 Pacific Gas & Electric had followed the earthquake
17 response procedure and appropriately implemented the
18 emergency plant, including the lowest level of event
19 classification and notification of unusual event. The
20 NRC did identify an issue about the subsequent reporting
21 to the NRC of the emergency sirens that were unavailable
22 because of the loss of power. The NRC found that for the
23 San Simeon earthquake, the emergency sirens were not
24 needed; however, alternate means -- I'm cutting in and
25 out on you. I apologize for that.

1 The NRC found that for the San Simeon
2 earthquake, the emergency sirens were not needed;
3 however, alternate means for notifying persons within the
4 emergency planning zone existed. It is important to note
5 that the purpose of the emergency sirens, or alternate
6 notification method, is to notify individuals of the need
7 to modify the emergency broadcast stations.

8 In January, the NRC inspectors found that the
9 seismic instrumentation, located in the Unit 1
10 containment dome had not yet been evaluated. This matter
11 was to Pacific Gas & Electric. Their subsequent
12 analysis, which was reviewed by the NRC staff, showed
13 that the plant response was consistent with the Hosgri
14 evaluation.

15 The NRC is continuing the evaluation of the
16 San Simeon earthquake, including a June 7th update to the
17 seismic evaluation performed by Pacific Gas & Electric.
18 In summary, the NRC found, through our independent
19 inspection and reviews, that the plant's response was
20 well within the design basis of the plant. The decision
21 to continue to operate was well supported, the
22 declaration of Notification of unusual Event was
23 appropriate, and the conditions for exiting the NUE were
24 met. Alternate means for notifying the community in case
25 of the need to monitor the emergency broadcast system

1 were available for those areas affected by the siren
2 power outage. The emergency evacuation routes were open,
3 and no damage to the plant occurred from the San Simeon
4 earthquake.

5 NRC has completed the follow-up inspection, as
6 we discussed during the February 4th public meeting. The
7 NRC will continue to inspect Diablo Canyon through the
8 NRC's baseline inspection program. All reviews of the
9 San Simeon special reports and the insights from the
10 Long-Term Seismic Program established for the Diablo
11 Canyon license continue.

12 MR. CAMERON: Okay. Thank you very much, Bill.

13 We are going to use that report and backdrop to
14 first go to Rochelle Becker, who has three sets of
15 questions on seismic issues for the NRC. After the NRC
16 tries to address Rochelle's questions on the first set,
17 we are going to go out to any of you who have any
18 questions about that or any questions about the
19 inspection report. We are going to go back to Rochelle
20 for a second set of questions and do the same thing.

21 So Rochelle, are you ready for us? And if you
22 can just spell your name.

23 MS. BECKER: Yes, I'm ready.

24 MR. CAMERON: All right.

25 MS. BECKER: Rochelle Becker; R-o-c-h-e-l-l-e,

1 B-e-c-k-e-r.

2 On February 4th, several county residents asked
3 questions on seismic concerns and waited three and a half
4 months for a response, which contained either partial
5 answers or non-answers. We would like to try and clarify
6 any questions and receive full responses tonight.

7 Mr. Jones is quoted in our local paper as
8 stating, "We are going to stay as late as they need us to
9 and make sure we have all the individuals there to answer
10 all the questions." I personally find this puzzling.
11 For over 30 years, this community has been waiting for
12 answers to our safety concerns. If you are really here
13 to listen to our voices as homeowners, business owners,
14 parents and grandparents, and not just as the NRC, you
15 might actually hear us. You might actually admit that a
16 nuclear power plant and high-level radioactive waste dump
17 does not belong on our earthquake-prone coastal zone.

18 The Mothers For Peace remind you that virtually
19 everyone in this room lives in a county which experienced
20 a 6.5 magnitude earthquake last December. The loss is
21 still being felt. And I can assure you that the first
22 thing in the minds of this community when the quake hit
23 was, "Has there been a radioactive release at Diablo? Is
24 Diablo safe?"

25 The quake made international news. Why?

1 Because there is a nuclear plant on our coast. No one
2 believes the Diablo Canyon Nuclear Power Plant is truly
3 safe. No one believes that the potential for an
4 accident, earthquake, terrorist attack, or act of malice
5 and insanity does not exist. The NRC and PG&E speak in
6 terms of probabilistic risk. We ask that instead, you
7 consider the risk to our children and grandchildren whose
8 future is in your hands.

9 With risk in mind, these are follow-up
10 questions which resulted from the NRC's partial, evasive
11 or non-answers and its additional responses dated May
12 28th.

13 And I would like to begin with questions to
14 Dr. Li. And I do appreciate you bringing a seismologist
15 tonight, which would have been nice at the last seismic
16 meeting.

17 So was it you, Dr. Li, who answered the
18 questions, the scientific seismic questions in the NRC
19 responses?

20 MR. CAMERON: The answers that were posted on
21 the website, did you prepare those answers? And please,
22 Yong, hold the microphone up closer to you so people can
23 hear.

24 MR. LI: I was not personally involved in
25 preparing those questions.

1 MS. BECKER: Well, I guess you are going to
2 take the heat for the person who did, because you are the
3 only seismologist here.

4 MR. LI: I'm ready for that.

5 MS. BECKER: You're ready for that. Okay.

6 A question was asked if a survey for the,
7 quote, transition, quote, has been done in the vicinity
8 of the Diablo Canyon Nuclear Plant to see if there are
9 any faults that are right next to shore.

10 The NRC's response was as follows: "The area
11 referenced as the, quote, transition zone, unquote, has
12 been, quote/unquote surveyed as part of the Long-Term
13 Seismic Program." Skipping on, "The Long-Term Seismic
14 Program has resulted in the identification of five active
15 faults with significant earthquake potential. All are
16 newly recognized or newly determined to be active." The
17 NRC answer later states that the identification was prior
18 to 1991.

19 Is the information on which the NRC is basing
20 its decision to license an expanded high-level
21 radioactive waste dump on our coast really 13 years old?

22 MR. LI: To answer your question, we -- NRC
23 requires licensee to implement Long-Term Seismic Program.
24 Licensee spent a lot of efforts to acquire seismic line
25 offshore and onshore, and they did their additional work

1 to acquire the new seismic line too. And also they
2 checked the deeper crust seismic line. Through those
3 works, they did not identify any new active faults in
4 this so-called transitional zone.

5 MS. BECKER: So my question is, Is this
6 information really 13 years old?

7 MR. LI: It's -- at that time, we conclude
8 that. But the licensing conditions required the
9 licensee, if they have any new discovery, to keep us
10 informed. And they are doing this continuously.

11 MS. BECKER: But the information is based on
12 the Long-Term Seismic Program that was last updated in
13 1991?

14 MR. LI: Yes.

15 MS. BECKER: Everybody else is shaking their
16 head yes. Okay.

17 MR. CAMERON: Let me just make sure that that's
18 clarified. And the question is the recency of the
19 information on which this transition zone conclusion was
20 reached. Can you add anything to that? And you are
21 going to have to do it on the record.

22 MR. GWYNN: Pat Gwynn, again. And to be fair
23 to Mr. Li, the seismic review for the independent spent
24 fuel storage installation was not done by the Office of
25 Nuclear Reactor Regulation. It was done by the Office of

1 Nuclear Material Safety -- I'm sorry, the Office of
2 Nuclear Material Safety & Safeguards, and by their
3 contractors. And I believe the seismologist that
4 actually did that review works for the Southwest Research
5 Institute in San Antonio, Texas. And he was not able to
6 be here with us tonight, so maybe Larry Camper can add a
7 little bit to what's been said about that seismic review.

8 Larry.

9 MR. CAMPER: Thank you, Pat.

10 As part of the application for the independent
11 spent fuel storage installation, the utility did go
12 through and do additional analysis and updated the
13 seismic information. In doing that, one of the things
14 that it did was is it chose the dry cask storage system
15 that it wanted to use, the high storm system, ISFSI. It
16 made a decision that based upon that analysis, that was
17 done as part of the application which goes back a couple
18 years now; that they were using modifications to high
19 storm systems.

20 That modification is the anchoring system that
21 they chose to use. That anchoring system that they opted
22 to use is 5-feet long, 2 1/2 inches in diameter. There
23 are 16 of them that will bolt each of the storage casks
24 to the concrete bank. So I think the simple answer to
25 your question is there was an update of their seismic

1 analysis as part of the application for the independent
2 spent fuel storage system.

3 MR. CAMERON: Thank you.

4 Rochelle, why don't you go on.

5 MS. BECKER: This question was not answered by
6 Mr. Cluff about the -- back to the transition zone survey
7 of PG&E, nor was it answered by PG&E's expert or the NRC
8 staff. And in fact, Mr. Gwynn stated, "Well, we do not
9 have a staff geologist with us tonight." However, the
10 NRC's response of May 28th still did not answer this very
11 direct and clear question.

12 It is our understanding that the methods PG&E
13 mentions in their long-term seismic final report are not
14 adequate to determine if there is a similar fault to that
15 which broke on December 22nd, just offshore of this
16 nuclear plant, and certainly could not have been included
17 in their cask design program because the earthquake was
18 after that.

19 The only way to do this is what oil companies
20 refer to as a, quote, Transition Zone Seismic Survey. We
21 understand that this is the only way to see the
22 subsurface structure below the coast. Looking at purely
23 offshore and onshore seismic and geology cannot give
24 information on the near offshore region. For the NRC to
25 refuse to order this survey and ignore the possibility of

1 faults right next to the shore adjacent to the Diablo
2 Canyon Nuclear Plant and recently-licensed nuclear waste
3 dump is really irresponsible. Refusal defies the NRC's
4 mandate to protect public health and safety.

5 During the licensing phase for the Diablo
6 Canyon Nuclear Power Plant, cost estimates for retrofits
7 from lack of independent NRC oversight, cost rate payers
8 2.2 billion dollars, according to a CPUC report. Rate
9 payers across the nation are growing tired of being
10 forced to pay for NRC's incompetence in adequately
11 monitoring nuclear facilities. These surveys may be
12 expensive, but our lives and the lives of our children
13 and grandchildren are priceless, and a near-shore survey
14 must be required.

15 We would like to know if the NRC will require
16 PG&E to commission an independent Transition Zone Seismic
17 Study, and we would like to know the answer to this
18 tonight.

19 MR. CAMERON: Thank you, Rochelle.

20 Yong Li, you heard the question, and there is
21 really two basic parts here. One, if you could perhaps,
22 if you have an opinion on whether the type of information
23 that Rochelle is interested in, if a Transition Zone
24 Seismic Survey is the only way to get that; and also, her
25 second very direct question is whether the NRC would

1 commission this Transition Zone Seismic Survey.

2 Do you have anything to say on that? And

3 please use your microphone.

4 MR. LI: So it's a Long-Term Seismic Program.

5 After the Long-Term Seismic Program, it's concluded,

6 there is no new active faults discovered along this

7 transitional zone there. Although it was done some years

8 ago, but there are several ways to uncover new fault

9 lines in this offshore situation. I think a lot of

10 California aware of this factor here.

11 MR. CAMERON: Yong, just keep that mike.

12 MS. BECKER: I talk with my hands too.

13 MR. LI: So if there is new earthquake occur

14 along some -- in the new fault line, it will be uncovered

15 by those concentrated at the epicenter. But since we

16 implement the NRC -- I mean, since the NRC contract with

17 PG&E finished the Long-Term Seismic Program, still, there

18 is no such new seismic activity along the new fault line.

19 And so those seismic line either reflection line or

20 refraction line. They study those seismic line. They

21 tell us there is no active fault line there, so it is

22 concluded there is no active fault line which can

23 generate earthquake, other than the Hosgri Fault.

24 MR. CAMERON: So is our answer to the question

25 about whether we need a transition zone survey -- could

1 you just wait one minute. I want to make sure we answer

2 Rochelle's question about do we need to do a transition

3 zone survey and would we do one? And if you could --

4 MS. BECKER: Has it ever been done?

5 MR. CAMERON: Could you address those

6 questions?

7 MR. BAGCHI: It has been done. We have

8 acquired information from the oil company surveys for the

9 Long-Term Seismic Program. Just because the Long-Term

10 Seismic Program happens to be however many years old does

11 not nullify the fact that information has not been

12 challenged. It has produced useful information based on

13 which the NRC has drawn some useful conclusions. And NRC

14 did not entirely depend on one utility. NRC used

15 independent sources of evaluation. USGS performed

16 evaluation of that information. And University of Reno,

17 Nevada, conducted geological work, along with the -- as a

18 contractor to NRC. And absolutely, Transition Zone

19 Survey has been done. I have heard assertions here that

20 no survey has been done. That is not true.

21 MS. BECKER: Mr. Bagchi, are you a

22 seismologist?

23 MR. BAGCHI: I am not a seismologist.

24 MS. BECKER: Are you a mechanical engineer?

25 MR. BAGCHI: I am a structural engineer.

1 MS. BECKER: A structural engineer. Okay.

2 MR. BAGCHI: There are two aspects to it; one
3 is the ground motion, and then how the ground motion is
4 used to perform the capacity -- the analysis and
5 determination of the capacity of the plant. And I am
6 informed about both aspects of it because I have stayed
7 with the NRC long enough to know the operating license
8 process. I have stayed with the entire Long-Term Seismic
9 Program, and I was in a supervisory capacity to review
10 the Long-Term Seismic Program progress and reaching a
11 conclusion through the supplementary report.

12 MR. CAMERON: And Rochelle, what I hear the
13 answer being to this question is some of this type of
14 work has been done.

15 MR. BAGCHI: Yes. That is my presentation to
16 you.

17 MR. GWYNN: I think that it would be fair --
18 Pat Gwynn, again. I think it would be fair, Rochelle, if
19 your seismologist would like to sit down and talk with
20 our seismologist, perhaps, you know, we can get a better
21 understanding and they can get a better understanding of
22 what actually has been done. But based on what you've
23 heard from the staff here, I don't see any reason why
24 NRC, at this point in time, would require additional
25 investigations.

1 MS. BECKER: Okay. Actually, our seismologists
2 are all out of the country at this moment in different
3 places. And so I will certainly make sure I get a
4 transcript of this to them and that they get back to you.
5 They certainly were not unwilling to meet. They were
6 just unavailable today.

7 MR. CAMERON: And we'll put that down as an
8 action.

9 MS. BECKER: Yes. And I would like a copy of
10 this survey that you did, that you said you -- and I
11 don't want an answer. I just want a copy.

12 MR. BAGCHI: That copy is voluminous. It's on
13 the docket. It is available to the public.

14 MS. BECKER: Oh, I'm sure it's on Adams. I'd
15 like a copy sent to me, please.

16 MR. CAMERON: And we'll identify that
17 specifically, and we will take care of that. So two
18 action items: Possible NRC meeting with Mothers for
19 Peace seismic expert, and a copy of the document that --

20 MS. BECKER: That they are referring to as a
21 survey.

22 MR. CAMERON: -- that Goutam referred to.

23 And okay. Rochelle, on this particular
24 segment, do you have any more?

25 MS. BECKER: Yeah. I'm sorry my questions

1 aren't short, but they are all directed to the
2 seismologist, so they all have to go together. Sorry.

3 The next question: What actions is the NRC
4 taking to insure that they are not previously undetected
5 thrust faults near and underneath the plant? That was
6 the question I asked.

7 The NRC's response was: "The Long-Term Seismic
8 Program updates on the geology/seismology and tectonics
9 associated with Diablo Canyon continue to support the
10 conclusion that there are no undetected thrust faults
11 near or underneath the plant." I am still going to
12 assume we are talking about a 13-year-old study.

13 The NRC response continues: "A recent
14 preliminary report on the December 22, 2003, 6.5
15 magnitude San Simeon earthquake discusses the probable
16 origin of the San Simeon earthquake as a blind thrust
17 fault. The NRC plans to review the integration of this
18 report into the Long-Term Seismic Program at a later
19 date."

20 Has the NRC looked into the possibility that
21 the Diablo Canyon Nuclear Plant is built on top of a
22 geologic fold that is caused by a fault that has never
23 been addressed by the NRC? We know from the recent
24 San Simeon earthquake that the fold belt is seismically
25 active. The fold under Diablo Nuclear Power Plant

1 exists. It is on surface geologic maps. How did this
2 fold form? By faults like the one that jolted our county
3 on December 22nd? The 1994 Northridge earthquake? The
4 1987 Whittier Narrows earthquake? The 1984 Coalinga
5 earthquake? All of these moderate to large earthquakes
6 occurred on unknown faults because none of the faults
7 reached the surface. The folds are evidence that the
8 faults exist.

9 The NRC licensed an expanded high-level
10 radioactive waste dump on our coast in March of this
11 year, knowing full well that new seismic information
12 questions the validity of seismic design of the Diablo
13 Canyon Nuclear Plant. What was your hurry? The reactive
14 spent fuel pools will not be full until 2006. The USGS
15 is gathering data and analyzing it as we speak. The
16 Mothers for Peace raised the issue of new seismic data in
17 our Contentions before the ASLB in 2002. And our request
18 for a hearing was denied, not on the merits, but because
19 we were in the wrong forum. We were told to file a
20 petition to reopen the original licensing proceeding to
21 discuss new seismic information.

22 Is the NRC seriously continuing to tell this
23 community we must raise money to file yet another
24 petition? We are growing tired of forcing the NRC to
25 uphold this mandate to protect public health and safety.

1 It is your job to consider and independently review new
2 data on the earthquake design adequacy of a nuclear plant
3 and high-level radioactive waste dump in our seismically
4 active coastal zone before making a bigger radioactive
5 mess.

6 MR. CAMERON: Okay, Rochelle. Let's go to Yong
7 Li for --

8 MS. BECKER: This is about folds.

9 MR. CAMERON: The direct question is, Are the
10 folds evidence of undiscovered faults? I think that was
11 the direct question.

12 MS. BECKER: That's it.

13 MR. CAMERON: Go ahead, Yong Li.

14 MR. LI: There are no new -- the conclusion --
15 let me put the conclusion first. There are no new folds
16 or faults, active faults or active folds associated with
17 the earthquake under the Diablo Canyon Plant.

18 MR. CAMERON: Are you familiar with what
19 Rochelle means by "folds"?

20 MS. BECKER: I would just like to undo this
21 map. And I am not going to pretend, because everybody in
22 the room would know that I am lying, that I am a
23 seismologist. But this is a map by some of our experts
24 which shows the folds. And if you would like to pay for
25 a copy of this, we would happy to get one for you.

1 MR. LI: Okay.

2 MS. BECKER: It's probably something you want
3 to look at more than three seconds, so I'll fold this
4 fold map back up again, and I will ask you to pay for it
5 from our experts, and they will send it to you.

6 MR. CAMERON: Okay. And did you want to
7 comment at all on the relationship between the folds and
8 the issue of undisclosed, undetected faults?

9 MR. LI: If we are talking about the active
10 faults or active folds, which can generate the
11 earthquake, we are talking about those fault lines or
12 folds --

13 MS. BECKER: I'm sorry. I am having a hard
14 time between "fold" and "fault," even though you are like
15 two inches away from me, so could you enunciate? It's
16 not your fault. I am just having a hard time which one
17 you're talking about.

18 MR. LI: You are emphasizing active folds.

19 MS. BECKER: F-o-l-d-s.

20 MR. LI: Right.

21 MS. BECKER: We're talking about the same
22 thing.

23 MR. LI: But according to the CDMG definition,
24 California Geological Survey definition, if you want to
25 say some folds are active, they must be active within

1 quarternary, within 10,000 years. But the map you showed
2 us here, they are not active within those period. They
3 are folded, but they are folded much older than this time
4 here, so it is not an active fold definition. They
5 didn't match with that definition. And there is no --
6 most important thing, there are no more than seismicity
7 associated with the folds you mentioned here, so we don't
8 have any evidence to tell the public, tell anybody here,
9 those are active folds which can cause an earthquake.

10 MS. BECKER: Those are active faults or folds?

11 MR. LI: Folds, f-o-l-d-s.

12 MS. BECKER: I'm sorry. It's not your fault.
13 I'm just having a hard time with the two words.

14 MR. LI: Does that answer your question?

15 MS. BECKER: I have no idea. The transcript
16 will be sent to the seismic experts, and I will tell you
17 if it answers the question. I'm sorry they couldn't be
18 here.

19 MR. CAMERON: We will look at the fold map. I
20 think you heard, Yong. It's his opinion that the folds
21 on the fold map are not, in his opinion, evidence of
22 undetected fault.

23 And Rochelle, do you want to get out to other
24 people on this?

25 MS. BECKER: This is my last question to

1 Mr. Li.

2 MR. LI: I also want to mention a little bit of
3 your first comment. Before you asked a question about
4 the NRC's attitude toward the seismic research here. I'm
5 a geophysicist there working for the NRC. When this
6 earthquake occurred December 22nd, I was actually in the
7 emergency response room. Although I do not -- I did not
8 feel the vibration of the earthquake, but I am with you,
9 with the people here, because I was in the emergency
10 response room.

11 Whenever a big earthquake occurs in this
12 country or in the world, especially those earthquake that
13 occur near a nuclear power plant, we are a hundred
14 percent concerned about those. We are extremely
15 concerned, I should say, because we can learn lessons
16 from those earthquakes occurring near the nuclear power
17 plant. We can apply those lessons into our design of the
18 nuclear power plant.

19 And actually, when I was at the emergency
20 response room, I talked to the local people, asked them
21 about the cracks, if there were any abnormal phenomenon
22 observed during the earthquakes. And I asked them about
23 the ground motion they observed. And we have a lot of
24 exchange between the local people and the NRC staff
25 member.

1 MS. BECKER: Okay.

2 MR. CAMERON: Thank you.

3 MS. BECKER: This isn't personal. I am just
4 asking these questions, so don't take offense.

5 MR. CAMERON: We have one clarification down
6 here from Goutam on something you said.

7 Goutam.

8 MR. BAGCHI: I just want to be sure that I
9 understood you to say that the San Simeon earthquake was
10 caused by a blind thrust fault. The source mechanism
11 does not indicate that, and I really do not understand
12 where you got that information from.

13 MS. BECKER: Actually, it's a quote from the
14 NRC's response to me. Quote, "A recent preliminary
15 report on December 22, 2003, magnitude 6.5 San Simeon
16 earthquake discusses the probable origin of the
17 San Simeon earthquake as a blind thrust fault."

18 That's what I said. That's what you said.
19 It's whoever answered your question said.

20 MR. BAGCHI: You are quoting somebody's
21 report --

22 MS. BECKER: I am quoting the NRC's response to
23 me.

24 MR. BAGCHI: We need to verify that. I would
25 verify that.

1 MR. CAMERON: Okay. We are going to obviously
2 have to address that.

3 MS. BECKER: Let's get my third question out of
4 the way.

5 MR. CAMERON: Let him make a clarification.

6 MR. GWYNN: Just for clarification for the
7 people in the room, because I want to make sure that it's
8 clear to the local community, that it's the policy of the
9 United States government that these independent spent
10 fuel storage installations are only temporary measures.

11 MS. BECKER: I'm sorry, Pat. That really
12 didn't help.

13 MR. CAMERON: The point that follows from that
14 would be what?

15 MR. GWYNN: For the long-term, there will be a
16 geologic repository for the permanent disposal of
17 high-level nuclear waste.

18 MS. BECKER: And Mr. McGaffigan has just moved
19 that another three years down the road, three to five
20 years down the road. Promises have been made to be
21 broken by the NRC. So sorry, that one doesn't wash here.

22 (Applause.)

23 MR. CAMERON: That was the last one.

24 MS. BECKER: This is my last one right here.

25 And if you weren't so defensive, I could get through this

1 faster, guys.

2 Has the NRC instituted or commissioned an
3 independent study to determine the ground motion on the
4 Hosgri Fault, whether it's a thrust or reverse motion,
5 which according to some geologists could result in
6 greater ground motion?

7 The NRC's response was: "The NRC concluded
8 that ground motion at the site should be evaluated for an
9 earthquake on the Hosgri Fault that is two-thirds
10 strike/slip and one-third reverse/slip. Thus, the NRC
11 conclusion gave greater weight to the ground motion
12 associated with strike/slip component of motion for the
13 design of Diablo Canyon."

14 I'm assuming this is still the 13-year-old
15 study, so I'll go on. "It appears on the question of
16 vertical versus horizontal movement on faults in the
17 vicinity of the Hosgri, the NRC and PG&E's position
18 remains two-thirds of the motion is horizontal. We have
19 heard that the USGS is reevaluating their position and
20 the Hosgri is likely to have as much vertical as
21 horizontal movement. We have also heard that this will
22 increase the accelerations from the design earthquake."

23 What independent review of the USGS information
24 has the NRC done to uphold its position of the two-thirds
25 horizontal and one-third vertical, versus one-half

1 vertical and one-half horizontal, since 1991? Where is
2 the paperwork to assure an independent review has taken
3 or is taking place on this issue?

4 On the question of near-field accelerations,
5 which does not appear to be covered in any NRC or PG&E
6 reports, evidence from directly over the fault that broke
7 December 22nd, is that the vertical acceleration exceeded
8 1G. Our understanding is that what happens in this case
9 is that rocks and most everything else tend to fly off
10 the ground. And that the resulting recontact with the
11 ground is often severe. To our knowledge, neither Diablo
12 Canyon Nuclear Plant, nor the recently licensed expanded
13 on-site, high-level radioactive waste storage is designed
14 for high vertical accelerations, especially none that
15 exceed gravity.

16 MR. BAGCHI: The damaging effect of an
17 earthquake is caused by horizontal shaking. All man-made
18 structures are affected -- most man-made structures are
19 affected that way. The vertical acceleration causes no
20 damage to a plant built like the Diablo Canyon Nuclear
21 Power Plant. Its foundation is anchored well into the
22 rock, and the vertical acceleration is not likely to
23 cause any damage of concern.

24 MS. BECKER: So it doesn't make any difference
25 to you whether it's one-half and one-half, or two-thirds

1 and one-third?

2 MR. BAGCHI: I believe that the vertical
3 acceleration considered is appropriate for the magnitude
4 of the earthquake that has been postulated.

5 MS. BECKER: That didn't answer my question.

6 MR. BAGCHI: What is the question, please?

7 MS. BECKER: My question is, Is there any
8 difference if it's one-half vertical and one-half
9 horizontal or two-thirds horizontal and one-third
10 vertical.

11 MR. BAGCHI: The component of the thrust, you
12 mean?

13 MS. BECKER: Yeah.

14 MR. BAGCHI: Maybe the ground motion will
15 increase a little bit and the vertical components will
16 not increase to such an extent that it's going to nullify
17 anything. I do not believe that increase of that kind of
18 proportion will affect the vertical component, the safety
19 of the plant due to the vertical component.

20 MR. CAMERON: And Yong Li, do you want to add
21 something to that for Rochelle?

22 MR. LI: To answer your question about the
23 one-third and two-thirds, one-third vertical and
24 two-thirds horizontal motion along the Hosgri Fault, the
25 Hosgri Fault was identified as a predominantly

1 strike/slip fault with some component of vertical motion.

2 There are many evidence to prove that. Let me just

3 describe a little bit here.

4 First, from the surface, you look at the Hosgri

5 Fault, it's very good lenient. And that's the first

6 geological evidence to indicate that the Hosgri Fault is

7 a strike/slip fault. That's the first line of evidence.

8 There are more.

9 And another important evidence is from the

10 earthquake, distribution of the hypercenter distribution

11 of the earthquakes. If you look at the profile of the

12 earthquake, the earthquake lining up vertically with

13 certain angle dipped to the northeast, that also tells

14 you -- it's another evidence to indicate that this is a

15 strike/slip fault because if it's a reverse fault, the

16 angle could be gentle. And also, according to some of

17 the research, they believe those faults are called

18 Listric faults.

19 MS. BECKER: Listric?

20 MR. LI: Yeah. So if that's the situation, you

21 won't see the earthquake that had that kind of lenient on

22 the profile. You will see it's going to be bending a

23 little bit more. So basically there are many evidence

24 tell us you that Hosgri Fault is predominantly a

25 strike/slip fault.

1 And also another factor -- and all those
2 evidence will be -- as I understood, will be published by
3 USGS professional paper will be published soon, and those
4 results are summarized there. When it is published, I
5 can obtain a copy and send it to you for your reference.

6 MS. BECKER: I would appreciate that.

7 MR. LI: Another evidence -- I just mentioned
8 two of them. Another evidence is the horizontal slip
9 rate is must steeper than the vertical slip rate. The
10 horizontal slip rate is 1 to 3 millimeters per year. But
11 the vertical slip rate is much lower than that.

12 MR. CAMERON: Okay, Rochelle. I would like
13 to --

14 MS. BECKER: I'm done with that line.

15 MR. GWYNN: Excuse me, Chip. We have a little
16 clarification here for Rochelle.

17 MR. JONES: Bill Jones. With regard to, I
18 believe, I feel the section to the one answer you are
19 referring to when we talked about a recent preliminary
20 report on December 22, 2003, magnitude 6.5 earthquake,
21 we provided that in our answer because that report came
22 out at about the same time we are issuing the answers to
23 these questions.

24 We had not drawn any conclusions from that
25 report. We had not reviewed that report. That was

1 provided as information because that report was issued,
2 so it is there just as another document to be considered
3 that we will consider later on. But that is not an NRC
4 conclusion at all. And you saw the reaction to that, and
5 that is because he had not seen that and he had not
6 reviewed that. It is a preliminary report and still
7 ongoing additional review with US Geological Survey.

8 MR. CAMERON: So I think we cleared that up,
9 hopefully. It's not an NRC statement. And before you
10 go, Ma'am, just let me ask, Larry Camper, did you have
11 something?

12 MR. CAMPER: I just wanted, Rochelle, to
13 further clarify one of your points. The basis for
14 licensing the ISFSI was based upon three things. One was
15 analysis that showed that spent nuclear fuel can continue
16 to be stored there safely, the design basis for the
17 earthquakes -- I recognize you might have some argument
18 with that, but that was one criteria.

19 The second criteria is the fact that the
20 utility provided additional earthquake analysis and chose
21 to modify the high storm by using anchoring bolts that I
22 mentioned a few moments ago. That was another criteria.

23 And the third criteria is for that cask or any
24 cask, one of the design criteria that we evaluate when we
25 approve a certificate of compliance for a cask is severe

1 earthquake analysis, so those three things were the basis
2 for the licensing the ISFSI in terms of the earthquake
3 considerations.

4 MR. CAMERON: Thank you, Larry.

5 Let's go to you. And if you could, just first
6 time, just spell your name, and then we'll go over to
7 you.

8 MS. GROOT: My name is Henriette Groot. The
9 first name is spelled H-e-n-r-i-e-t-t-e; last name is
10 G-r-o-o-t.

11 And I kind of muscled my way into this
12 discussion because I was present at the Diablo
13 Independent Safety Committee meeting last week, June 2nd,
14 and there was all this discussion about seismic matters.
15 Dr. Cluff, from PG&E, gave a report, and I felt that it
16 was relevant that you should know what was said there. I
17 can't pretend to give a full report.

18 He did state quite clearly that since the
19 Long-Term Seismic Study was finished in '91, there have
20 been a great deal of additional data collected, some of
21 it on new faults. And I am a little hazy on that. But
22 his clear statement was that there was a lot of
23 additional information which had not been put out in a
24 report yet and that USGS and PG&E would come out with a
25 report -- would try to integrate this data and come out

1 with a report later this year.

2 But the critical point I wanted you to be aware
3 of is that he did say there was a lot of additional
4 information that had come out. I have other questions
5 and comments, but they can wait until later, I'm sure.

6 MR. CAMERON: Thank you very much for pointing
7 that out to us, and we will look forward to you speaking
8 again, and we are going to go over right here.

9 And if you could just give us your name and
10 spell it for us.

11 MS. BIANCHI: My name is Shirley, that's
12 S-h-i-r-l-e-y, and last name is Bianchi, B-i-a-n-c-h-i.
13 And I am a member of the Board of Supervisors, but I am
14 not authorized to speak for them tonight.

15 I was really interested in the comment that the
16 on-site storage would be temporary. You know we are
17 dealing with something that has a half-life, as you well
18 know, of 250 years. So for us, "temporary" is relative.
19 I doubt very much, if the state of Nevada has anything to
20 do with it, that Yucca Mountain will be the repository.
21 There may be one sometime, someplace, somewhere, but I
22 don't think we should depend on Yucca Mountain, just as
23 we were told that there would be a Ward Valley for
24 low-level. Well, we managed to get that one stopped as
25 well.

1 But my other comment, dealing with seismic
2 stuff, obviously, we are really concerned because of the
3 earthquake. And I am really concerned with some of the
4 comments that were made because I live virtually on top
5 of the epicenter of that earthquake. And I have a very
6 large boulder in my front yard. It was -- well, it used
7 to be about 6-foot square, you know, about that. It was
8 a boulder; now it's two boulders. So when you tell me
9 that the plant is anchored in rock, this doesn't really
10 encourage me a whole lot because the rock can break as
11 well.

12 We are really pleased that you are having a
13 public meeting tonight. We really are. We are really
14 happy that you are listening to our concerns. My
15 question is, Will you be back at another public meeting
16 to tell us what the results of the action items are going
17 to be; that you have actually listened to what our
18 concerns are going to be; that you will actively respond
19 to those concerns; and that you will actively let us know
20 what you are going to do about those concerns? Because
21 frankly, we are all a little bit tired of going to public
22 meetings and being listened to.

23 Thank you.

24 (Applause.)

25 MR. CAMERON: Okay. Thank you, Shirley. And

1 that's Board of Supervisors, San Luis Obispo.

2 MS. BIANCHI: Well, I'm not speaking for them.

3 MR. CAMERON: I know you're not, and we want to
4 be clear. Thank you for those comments.

5 How are we going to address the action items in
6 terms of getting the information out to people? And
7 regardless of whether it's connected to the action items
8 at all, do you have anything to say about other meetings
9 with the public to go through this type of information?

10 Pat, I think that's one for you.

11 MR. GWYNN: Can you hear me in the back of the
12 room?

13 We haven't really planned further down the road
14 in terms of whether or not another meeting is needed.
15 Obviously, we desire to satisfy your questions, answer
16 all those questions to your satisfaction. And so if, in
17 fact, as a result of this meeting, it looks like we need
18 to come back to have a follow-up meeting, I think that at
19 least some of us would be pleased to do that. I can't
20 guarantee you that we can bring this large a group again
21 in the near future, but I think we would like to have the
22 opportunity to communicate with you.

23 But more recently, or to be more prompt in
24 answering the questions, I am sure we will take an
25 approach, like we did the last time, which is to get the

1 transcript from the meeting back, review that transcript
2 against the information that we brought from our own
3 notes from the meeting, to prepare answers to questions
4 that were not adequately answered here in the meeting,
5 and to post those answers on our website, and to make
6 them available to our electronic public document room,
7 that Adams system.

8 I know that I heard a couple people have
9 skepticism about Adams. And I would like to say that if
10 you tried Adams in the past and you didn't like it, you
11 really ought to try it again, because we eliminated --
12 and for people who are not technically informed, it's
13 confusing to me, believe me. There is a system called
14 Citrix, and Citrix was not friendly to people's home
15 computers, and it made some people have trouble using our
16 Adams system. We've eliminated Citrix. It's now
17 directly web-enabled. If you have a web browser on your
18 computer, you can get into our public document room. If
19 you have Adobe Acrobat Reader, or similar, you can
20 download the documents, and you will be able to read them
21 on your computer.

22 So for those people who have computers in their
23 homes, you will be able to download that information and
24 we have a website that's specifically designated to
25 Diablo Canyon. And the handout that we provided you at

1 the beginning of the meeting, it identifies that web
2 location. And so hopefully, that will help you to get
3 prompt answers. And then, we'll be able to follow-up.

4 And Shirley, thank you very much for your
5 comment.

6 MS. BIANCHI: I would like an answer to the
7 question. Will you be coming back?

8 MR. GWYNN: I believe we will be coming back.
9 Maybe not this same group.

10 MR. CAMERON: Okay. And we have a quick
11 question here, and then we are going to go to David
12 Weisman, and then we are going to go to you, and we'll
13 keep going through.

14 You have a quick question for us, and please
15 tell us your name and spell it.

16 MS. ANDERSON: Good evening. My name is Carol
17 Anderson. It's C-a-r-o-l, A-n-d-e-r-s-o-n. And I was
18 one person that attended the meeting last week. It was
19 the concluding meeting, and I wanted to thank PG&E
20 personnel, very generous with their time at the meeting;
21 however, I was the only one in that meeting. And I was
22 going to approach this question tomorrow, but I realized
23 that I probably wouldn't have the rest of the public
24 here.

25 I was a little disturbed earlier when people

1 started breaking into laughter. I just wanted to ask a
2 concerned and serious question. And I would address this
3 to Mr. James Dyer. I know he is in charge of the nuclear
4 reactor regulation with the NRC. I know he is not here,
5 but maybe it can get back to him.

6 But at the meeting last week, it was discovered
7 that there are 85 tubes of degradation. And the quote
8 was made that these same tubes were cracking over a year
9 ago. It's a critical area. And the U-bends on these
10 tubes -- and I'm not engineer. So forgive me, I don't
11 know where they lie within the reactor, but on the
12 Huntington steam generator, these Huntington are
13 American-made. They are no longer made in America. The
14 bending processes are now bent in Sweden because there is
15 a problem with these cracking tubes, and there is leakage
16 still occurring.

17 So it would be interesting to find out if the
18 NRC is going to go along with PG&E and have these
19 replaced or repaired, because right now, they are not
20 being so, and PG&E did mention that.

21 Thank you.

22 MR. CAMERON: And Carol, I am going to put that
23 in "parking lot" right now.

24 Where is Carol? I am going to put that in a
25 parking lot, and we will come back and address this. I

1 take it this is steam generator tubes, and other people
2 may have issues, so please be patient. We will get
3 through the seismic. I will put it up here, and we won't
4 forget to go back to it.

5 And thank you.

6 David Weisman.

7 MR. WEISMAN: David Weisman, W-e-i-s-m-a-n.

8 And I would like to address sort of the part two of the
9 seismic issue. What happens when the ground stops
10 shaking? Sorry, I am just middle age now, and this
11 glasses thing about not being able to see all of you and
12 read at the same time. Anyone experience that before?
13 It's like new to me.

14 My concerns involve the aftermath of the
15 San Simeon earthquake and involve the question as to
16 whether the NRC is truly regulating emergency
17 preparedness for seismic or other event -- it could be a
18 terrorist event -- that would require the enactment of
19 the Alert Notification System and Evaluation Plan, or
20 merely, as we will later see in an answer, passing the
21 buck on to other agencies.

22 As a primer, just a quick show of hands of the
23 assembled people from the NRC here this evening, How many
24 do happen to have a personal residence within the 17 mile
25 primary evacuation zone of a nuclear reactor?

1 MR. GWYNN: Today?

2 MR. WEISMAN: As of today. Okay. That's just
3 because sometimes when you say "we are with you on this
4 in the control room in Arlington," which is not a seismic
5 area, keep that in mind. It's really scary when it's
6 your own dishes and things that are falling all over the
7 place.

8 I would like to ask the question why the NRC is
9 not considering, and has not considered in the past, the
10 symbiotic effect of both an earthquake and an accident at
11 the Diablo Canyon Nuclear Power Plant. At the time of
12 the licensing, the interveners were told the two
13 incidents would be look at separately, but not together;
14 however, as the events of the morning of December 22nd
15 demonstrated, there could be an earthquake and there
16 could have been an accident at the plant. What is the
17 potential problem for the 240,000 resident of this
18 county, and how would that be addressed?

19 Another show of hands here, How many people
20 here at the NRC attended or received a transcript from
21 the California State Seismic Commission hearing held in
22 Paso Robles on March 11th and 12th of this year? Okay.
23 How many have sought to obtain a transcript of that
24 meeting? Because, you see, there is some very
25 interesting facts that come to light among the

1 seismologists from the State who were there.

2 The verbatim transcript has not been prepared,
3 but I have the minutes. But before I get to the minutes
4 of that meeting, let me quickly summarize your own NRC
5 report, dated January 30th, 2004, on the earthquake, from
6 page 14. "The Emergency Operating Facility advised the
7 control room of damage to Highway 46 and falling rocks on
8 Highway 41," though earlier we heard it said that there
9 was not a problem with traffic or that kind of thing.

10 "41 and 46 had debris on the road and 46
11 experienced buckling, but the highways were passable for
12 emergency response," not evacuation emergency response.
13 "In addition, the personnel in the EOF communicated the
14 status of the emergency sirens that were inoperable
15 because of power outages in San Luis Obispo County."

16 As we all know by now, or maybe some who don't,
17 56 of the 131 emergency sirens were inoperable because of
18 power outages. "Alternate means of notifying people
19 within affected areas were unavailable," and this we've
20 heard, and I'll get to that on page 2.

21 Now, when we asked at the original meeting,
22 "Why is there not backup power supply for the emergency
23 notification sirens within the emergency planning zones,"
24 answer, "Current Federal regulations do not require
25 emergency notification sirens within emergency planning

1 zones to have backup power. The NRC regulations are
2 published in Appendix E, Title 10, Codes of Federal
3 Regulations, Part 50, New Reg, 0654, FEMA REP-1, a joint
4 publication of the NRC and FEMA, Federal Emergency
5 Management Act, published in 2002, criteria for
6 preparation and evaluation of radiological emergency
7 response plans and preparedness in support of nuclear
8 power plants. That's what I read over breakfast this
9 morning.

10 "In the event the emergency sirens are not
11 available and are needed, alternate means of notifying
12 the public have been established, including the use of
13 local law enforcement." And here is the question, which
14 is why I wondered who was or wasn't at the seismic
15 commission meeting here in our town. And the thing is
16 this: The fact is those systems don't work and didn't
17 work. And these were reported at that meeting, and
18 that's what I will get to now.

19 Just to quickly update for those who may be new
20 to that part of the issue, from the Tribune here on March
21 26th, so we don't get off on the wrong foot, "PG&E will
22 equip the County's emergency warning systems with battery
23 backups by the end of 2006."

24 From the same article, "Ron Alsap, a County
25 Emergency Service Coordinator, said the battery backups

1 will add another layer of public safety and free up
2 police and firefighters. Currently if the sirens fail,
3 fire agencies must alert the public using public address
4 systems on their vehicles. David Oatley, the general
5 manager of Diablo Canyon Power Plant, stressed that even
6 without battery backups, the siren system is 99.7 percent
7 reliable," I guess except on the morning of December
8 22nd. "The County has a fallback procedure for notifying
9 the public. The use of public address systems and the
10 police." His quote is, "The equation that no sirens
11 equals you are not safe is not accurate," Oatley said.

12 Well, I have some questions about this. I
13 would like to know, since the NRC response to our
14 concerns cites joint authority with FEMA, would the FEMA
15 representative here this evening kindly identify him or
16 herself?

17 Okay. That's an answer. It's going to be a
18 question. If it's a joint thing, we want to know who is
19 looking out for us. If the buck is going to be passed from
20 one agency to another, then at least bring the other ones
21 in so they can take half the lashing.

22 Is there anyone here besides the supervisor
23 from the County tonight who represents emergency
24 services?

25 Okay.

1 MR. CAMERON: You are not batting a hundred,
2 are you?

3 MR. WEISMAN: Nor are we.

4 Well, this brings up the next point. There is
5 a serious communication problem here, isn't there? This
6 is not the first and only place where this is happening,
7 folks. This is a national epidemic. Many of you may
8 have seen, from U.S. News and World Report, just two
9 weeks ago, "Excuse me. Can we talk? Why Emergency
10 Responders Still Can't Communicate With Each Other." It
11 is happening in New York. It is part of the 911
12 investigation. We know that these emergencies can happen
13 as a result of earthquakes or terror threats, and we are
14 seeing here in this county, spearheaded by the agencies
15 at the top, FEMA and the NRC, a lack and a neglect of
16 concern for those problems here.

17 More than two years after September 11th, we
18 see this happening in New York. So moving to the
19 conclusion here, "It took the earthquake itself to reveal
20 that a loss of power to the emergency siren system is
21 indeed a reality, even though a static system of the test
22 is conducted every year. What procedures and policies is
23 the NRC going to require at facilities to create a
24 testing model that truly takes into account all
25 scenarios?"

1 In addition, "Approximately 60,000 San Luis
2 Obispo County residents lost three to five hours of
3 electricity at the time of the quake." That's one out of
4 four residents. Without the power, how were these people
5 going to turn on the TV and the radio, assuming everyone
6 has read the instructions in the phone book and has a
7 battery-powered backup kit in their emergency
8 preparedness thing? So how would they able to turn on
9 the TV or radio to hear the alerts that would be
10 required? Perhaps they would call from their cell
11 phones.

12 How many people here used their cell phone at
13 the time of the earthquake?

14 A couple of them. Okay.

15 You can't. And here is why. And this is from
16 Christine Ferrara, Utilities Division Manager, County of
17 San Luis Obispo County, from her Power Point presentation
18 at the seismic commission hearing. Quote, from
19 Ms. Ferrara, "Cell towers connected to failed water tanks
20 will also fail also and at critical times. TCSD tanks at
21 cell towers and the epoxy connections all failed." Okay.
22 The second loss of communication.

23 With the loss of communication, how will
24 residents know about an evacuation? Well, the next
25 assumption is law enforcement will go out with their

1 megaphones. Right. Except that in Morro Bay, the garage
2 doors jammed shut on the fire truck station as a result
3 of it. Luckily, they had moved the big truck outside the
4 night before. Coincidence only.

5 We also know from Ms. Ferrara's report that
6 there was a police station in San Luis Obispo where the
7 doors jammed shut on the thing. Now, it's just a couple
8 of examples, but it's the kind of thing that we can't
9 count on. So when we're assured that there are backups
10 to the backups, of which there are still no backups at
11 this point, it's a little bit concerning.

12 The next thing about that would be, and I don't
13 want to use the euphemism here, the logic tree, because
14 what we've heard from tree so far is that the G forces
15 uproot them and throw them. But we hear from Lou
16 Rosenberg, the County's geologist, and we have seen
17 photographs of rocks and boulders on Route 46, the two
18 principal east-west evacuation routes. Unless this NRC
19 begins to look at the coincident events of earthquake and
20 accident at the plant, they will see an orderly
21 evacuation is not possible. If the roads themselves are
22 damaged and were damaged by the quake, that could cause
23 the damage at the plant. And you can see Mr. Rosenberg's
24 slides, which are available for that.

25 To further conclude with Mrs. Ferrara's

1 remarks, "Power outages pose the greatest challenge in
2 sustaining customer service and most significantly," she
3 writes, "and formal emergency response plans don't work
4 well even on small systems. That is my conclusion." She
5 is the County's Utilities Manager and Division
6 Supervisor.

7 So, so much for my confidence in the statements
8 of Mr. Alsap and Mr. Oatley. Where is the interagency
9 communication that seems to be lacking that we hear is
10 endemic across the nation? And that includes the NRC
11 here tonight. No one should be under any
12 misunderstanding in this room. As we have been told that
13 the emergency alert system in this county is not really
14 for Diablo Canyon, it's for Tsunami warnings and other
15 things of civil disobedience as well. If that's the
16 case, then why isn't there one in Santa Barbara County?
17 So that must be passed along.

18 You can pass the buck to FEMA or the County, or
19 you can step up and take the plate in the lead role in
20 coordinating this effort. I'm assuming at tomorrow's
21 meeting you present the matrix charts that show how the
22 reactors do in a variety of areas. That's a typical
23 end-of-cycle thing. Let me be correct, this is first
24 quarter, 2004, performance summary. Letting you know
25 that that's what we are dealing with.

1 Under "Reactor Safety" -- I'm sorry I don't
2 have a color print and a Power Point for you folks. I
3 don't know much about that on computers, but here is
4 Emergency Preparedness, and here is the one marked "Alert
5 and Notification Systems." And it's gets a G for green.
6 You get reds, yellows and greens. Green is go; yellow is
7 like "hey, hey"; and red is "huh-uh."

8 Well, here we are, quite a ways after the
9 earthquake. To my knowledge I have not seen
10 solared-powered backup batteries or things installed on
11 these yet. So as far as we know, we're still operating
12 under the same system that existed. How could these
13 people have a green when, in fact, were the same thing to
14 happen again tomorrow, there is absolutely no assurance
15 that the emergency alert system would work any better,
16 except for your statement that, "Well, it's up to FEMA
17 and the County"?

18 MR. CAMERON: Okay. David, thank you. And I
19 know the NRC would be interested in that transcript from
20 the March --

21 MR. WEISMAN: 11th and 12th.

22 MR. CAMERON: -- March 11th and 12th. So if we
23 could get that from you.

24 And I think that there is two issues for NRC to
25 address right now. And one is a general issue about

1 communication, notification of the public. David went
2 through a number of problems with that. Can someone from
3 the NRC talk about that aspect of it? And then there is
4 the specific question that was raised about the green/red
5 finding. So can we do those, and then we will go to this
6 young woman right here for her question.

7 Who is going to handle that for us?

8 MR. SATORIUS: Yes. Mark Satorius. And let me
9 talk to you about the communications aspects of it,
10 because I think a that's very important aspect.

11 MR. WEISMAN: Do you mean communications
12 between agencies or communications between the reactor
13 community and the plant itself?

14 MR. SATORIUS: I think between agencies. And I
15 want to start with answering by the focus that our
16 chairman has pointed towards the importance of emergency
17 preparedness. It's always been one of the three major
18 areas that we focus our agency's response to.

19 But very recently he came out with a statement
20 -- previously our agency has focused on being a safety
21 agency. Our chairman recently came out with a refocus to
22 the staff that we need to focus not only on safety, but
23 we need to focus on nuclear security, and we need to
24 focus on emergency preparedness. And that statement
25 focused the staff with we need to take an additional

1 effort to look at that triad, because they all relate

2 very closely to each other.

3 And to give an example on how that has played

4 through, there is -- at the highest levels of the agency,

5 there is a Deputy Executive Director whose sole purpose

6 is nuclear security and emergency preparedness. And

7 that's a new change within the staff.

8 Emergency preparedness has taken a very, very

9 high level of interest, and very, very high level of

10 focus and resources applied to within our agency. We

11 have increased the staff there. We understand the

12 necessity for there to be good communications between

13 ourselves and FEMA. The purpose of this reorganization

14 is to put an exclamation point at the end of that

15 sentence to make sure that that happens, because we

16 realize the necessity for that to happen so that -- I

17 guess we are not up here as the sole bag holder, as you

18 pointed out; we can have our Federal partners in line

19 with us and working together.

20 MR. CAMERON: Okay. Can we go to the green/red

21 issue?

22 UNIDENTIFIED: Can I ask a quick question about

23 when did the reorganization start?

24 MR. CAMERON: Okay. The question is, When did

25 the reorganization start?

1 MR. SATORIUS: You know, I want to be as
2 accurate as I can, but I know that -- somebody help me
3 here. The Director of Emergency Preparedness, and they
4 just went over to NSIR recently, but they had a
5 directorate that was put in place about two months ago,
6 which elevated it beyond a group with a first line
7 supervisor to a manager with several supervisors. And
8 that took place -- I want to say, since the first of the
9 year.

10 A month ago, so it's been this year.

11 MR. CAMERON: Mark, could you give David -- and
12 we are going to go to this red/green.

13 MR. PROULX: To address the green/red issue, in
14 the performance indicators, what they report, with
15 respect to the sirens, is the percentage of time that
16 they are available. During the San Simeon earthquake,
17 there were a number of them that were not operable
18 because of the loss of power. But that was for about a
19 period of about five hours, three to five hours depending
20 on the location of the siren. Now, five hours in an
21 entire quarter doesn't make up a very high percentage --

22 MR. WEISMAN: Unless it happens at the time of
23 the accident.

24 MR. PROULX: There wasn't an accident.

25 MR. WEISMAN: There wasn't this time.

1 Here we go. Sir, just so I can -- save your
2 paper change. Red, green and yellow, here we go, folks,
3 yellow, green and red. We will now begin passing out the
4 colored plates because since they can grade the reactors,
5 we can grade the graders. So for those who would like to
6 take a plate this evening, and we'll pass them out, when
7 you begin to hear answers and things you think we are
8 being given the line straight and all, you give them a
9 green, folks. You think there are some questions, you
10 can give them a yellow. And you think somehow it's not
11 being met by those needs, you can give them a red.

12 Five hours out of a quarter.

13 MR. CAMERON: David, thank you for those
14 instructions. I think people will know that.

15 But I do want to give David, our resident
16 inspector, to complete the answer to that question, and
17 then we are going to go right here, and then we will go
18 right there.

19 Let's give him a chance to complete what he
20 said.

21 David, go ahead.

22 MR. PROULX: The performance indicators are
23 based on the percentage of time that the sirens are
24 available for the entire quarter. Now, for it to go from
25 green to white or to another -- the sirens have to be

1 inoperable about five percent of the time. And for the
2 entire quarter, they were available only less than one
3 percent of the time.

4 MR. CAMERON: And these criteria, for people
5 who are interested on how this is set, if people want to
6 see what the criteria is, what documents, what do they
7 look at to see what the criteria are, if that would be
8 useful for people?

9 MR. GWYNN: Can you hear me again? Pat Gwynn.
10 I wanted to add to what's been said so far.

11 You may have heard about the power loss that
12 was experienced in the Northeast last summer. And as a
13 result of that power loss, the agency recognized that
14 there may be a need for relooking at some of our
15 requirements for alert notification systems, so there is
16 an internal review that's going on in that area. I can't
17 tell you what the results of that will be, but that
18 internal review is undergoing right now.

19 I wanted to also state that at the time that
20 the NRC's requirements for alert notification systems
21 were established, that there was no such thing as a solar
22 backup system. So that's why you had such things as
23 route alerting as possible options. There are other
24 options that different utilities use. Some people have
25 tone alert radios that are activated in people's homes in

1 order to provide that type of alert notification.

2 Finally, I would like to ask Mr. Weisman if
3 there was any question in his mind on December 22nd, if
4 there was any question in your mind on December 22nd that
5 there had been an earthquake in this county. So were you
6 alerted to that problem or not?

7 MR. WEISMAN: You bet I knew there was an
8 earthquake.

9 MR. GWYNN: The design of the Diablo Canyon
10 Nuclear Power Plant is such that no earthquake that can
11 happen on the faults in this area can cause an accident
12 to occur at that facility.

13 MR. WEISMAN: Who is going to sign a piece of
14 paper that I can put in my chest of drawers and keep
15 there safe and snug to hold against him at a later date?
16 We've been assured -- and the people of Toledo, Ohio,
17 believed there was a more than 3/8 inch of steel keeping
18 the boiler reactor head on a David-Bessie reactor tube.

19 MR. CAMERON: All right. We have one more NRC
20 comment on this. And if you want to, it's fine to hold
21 up the plates, but you don't need to yell "red." We will
22 probably be hearing a lot of that, so hold your plates
23 up.

24 Gene Imbro, and then we are going to get to
25 you.

1 And then we have some people over here, and I
2 know that we have some people here. We will get back to
3 you. Go ahead, Gene, very, very quickly, please, if you
4 can.

5 MR. IMBRO: Part of what I am going to say is
6 what Pat has said, maybe in a little more detail, so you
7 can get your red plates out and we can see them.

8 First of all, the reason that seismic and an
9 accident are not combined is that in containment
10 building, are the buildings that house safe-related
11 equipment, and the reactor coolant system, which contains
12 all the radioactivity, is all designed to withstand at
13 least the Hosgri earthquake, which is postulated as the
14 worst earthquake, and possibly more.

15 So the seismic event is not going to cause an
16 accident because the plant is designed for that
17 eventuality, possibly. And secondly, I understand, but
18 also, even though the plant is designed for the seismic
19 event, it won't cause an accident. As part of a defense,
20 all the safety systems that are required to mitigate an
21 accident or also designed to be functional during and
22 after the seismic event. So the premise is basically
23 flawed that we will have an accident and an earthquake.
24 You may choose not to believe that, but that's what we
25 believe, and that's what's documented in our SER.

1 MR. CAMERON: Okay. Thank you very much.

2 And we're finally going to get to you.

3 Do you need to do something,Carolynn?

4 MR. GWYNN: Let's take a break.

5 MR. CAMERON: We've got to keep going. Let's
6 not take a break because we're never going to get back on
7 track here, so we're just going to keep going. And I
8 have three people over there that we're going to go to,
9 and we're going to come back here and the gentleman
10 there.

11 MR. GWYNN: Chip, I hate to defer with you but
12 we have a court stenographer here who is working harder
13 than anybody else in this room, and she deserves a break.
14 And I just think we need to give her a break. Now, if
15 this isn't the right time, maybe another five or ten
16 minutes.

17 MR. CAMERON: Maybe this isn't the right time.
18 Okay.

19 Go ahead. Please tell us your name and spell
20 it for the court reporter.

21 MS. COLLINS: Good evening. My name is Tarren
22 Collins. That's T, as in time, a-r-r-e-n; C-o-l-l-i-n-s.
23 I'm the chair of the Santa Lucia Chapter of the Sierra
24 Club. I'm also the co-chair of the Southcoast Alliance.
25 That's 33 environmental groups on the Central Coast, with

1 over 22,000 members. I am also the chair of the Great
2 Coastal Placements Campaign for Sierra Club and the
3 attorney for the San Luis Obispo County Chumash Counsel.

4 I am also a proud to be a fifth generation
5 member -- resident of San Luis Obispo County. And I
6 brought pictures of my grandchildren to show you. This
7 is my daughter, Kia, she is the sixth generation of my
8 family to live in this county. That's little Evan and
9 his sister Chloe, and they represent the seventh
10 generation of my family to live in this county.

11 This picture was taken at Avila Beach, just
12 downwind from the Nuclear Power Plant. We are brave, I
13 know.

14 This picture was taken near my house in Shell
15 Beach, downwind from the nuclear power plant. It's a
16 little bit bigger picture of little Chloe. She was just
17 a year and a half last week, and her brother in this
18 stunning red hat, Evan, three years old.

19 I am concerned about the high-level nuclear
20 waste that will likely be stored in Diablo Canyon beyond
21 the next seven generations. The NRC issued a statement
22 last week, I guess that's you, announced the deadline to
23 open for the -- where we are all going to take this stuff
24 later on. That deadline slipped again, so we need to
25 plan on this radioactive waste being stored here forever.

1 And to me, it's insulting for you to act like
2 it's temporary until you can say that tomorrow that waste
3 will be moved, and you know where and you know when.

4 (Applause.)

5 MS. COLLINS: Of course, you know, it might be
6 more temporary than any of us think because the storage
7 facility, as currently proposed, 138 casks above ground
8 in a bowling pin formation, perfect for a big jet liner
9 hijacked by terrorists, nice target. So they might be
10 right, it might be temporary.

11 Despite all the evidence to the contrary, the
12 NRC has concluded that the possibility of a terrorist
13 attack on a proposed nuclear facility is, quote,
14 speculative and simply far too removed from the natural
15 or expected consequences of agency action to require a
16 study under NEPA.

17 I agree with our state attorney general who
18 responded to this statement by saying, quote, this
19 confusion defies logic and is inconsistent with
20 statements made and activities undertaken subsequent to
21 September 11th by the president, the members of his
22 cabinet, and the NRC itself."

23 In my opinion, NRC decisions concerning
24 terrorism and seismic safety are based on politics and
25 corporate power, not on sound scientific evidence.

1 (Applause.)

2 MS. COLLINS: A case in point, virtually all
3 components at nuclear power plants have failed before
4 their expected time. Most were supposed to be available
5 for the lifetime of the facility. So if casks, licensed
6 for 20 years -- of course we know they will be there
7 longer -- but if they are licensed for 20 years, begin to
8 leak or crack, then what's the plan?

9 The NRC ruled that we are not allowed to bring
10 this up in hearings. Why? That's my first question, I
11 guess. Actually, you can wait. I'll keep going.

12 Better cask designs are available and being
13 used in Germany. We deserve the most studied and
14 hardened casks on the market. Why isn't the NRC
15 demanding this for the public? Why have you, the NRC,
16 licensed a cask system for Diablo that is easily
17 accessible? It's an easily-accessible target for
18 terrorism, acts of malice and insanity.

19 There is new seismic information that the NRC
20 refused to consider before granting a license to expand
21 on-site, high-level radioactive waste storage on this
22 earthquake active coast. The NRC stated that its denial
23 of the seismic hazard information, presented by Mothers
24 for Peace and the Sierra Club, was not based on merit.
25 That's not why you are rejecting it, not because it lacks

1 any merit, but on the NRC's contention that the new
2 seismic information should be filed in a petition to
3 reopen the original license case for Diablo Canyon.

4 As I lawyer, I know this is form over
5 substance. It is reckless and irresponsible for the NRC
6 not to have gathered this new seismic evidence itself.
7 To now sweep the seismic information under the rug
8 endangers all living things in the vicinity of this power
9 plant.

10 The time has come for the public to demand that
11 PG&E and the NRC stop placing politics over science.
12 Your cavalier attitude about safety is playing Russian
13 roulette with the future, and the future of your children
14 and grandchildren. What are we leaving for the seventh
15 generation of to children to come?

16 Now, I don't recognize any of you from my
17 neighborhood in Shell Beach. I am assuming that none of
18 you live downwind of the power plant.

19 You live downwind of the power plant in
20 Atascadero? I guess the wind blows that way sometimes.

21 MR. PROULX: I spend a lot of time there,
22 though.

23 MS. COLLINS: Do your children spend a lot of
24 time there?

25 MR. PROULX: They play there, too.

1 MS. COLLINS: From now on when you are making
2 decisions about this power plant and the safety issues, I
3 want you to remember my grandchildren and my children,
4 and think of your own children being placed in jeopardy.

5 Now, I have a few questions. Although I am an
6 amateur geologist, I did take geology in college. It's a
7 fascinating subject, one in which there really aren't a
8 lot of absolutes or knowns, in my understanding.

9 And correct me if I am wrong, but geologists
10 and seismologists aren't able to predict earthquakes
11 before they happen, are they?

12 MR. CAMERON: Okay. Let's answer that
13 question.

14 Yong Li.

15 MS. COLLINS: That's just a yes-or-no question.

16 MR. LI: It's very hard to predict earthquake,
17 especially in the short-term. But in the long-term, we
18 can predict within a certain time frame that the
19 earthquake will occur.

20 MS. COLLINS: So did you predict the earthquake
21 at San Simeon?

22 MR. LI: San Simeon was not predicted, as I
23 understood. But the fault that can generate an
24 earthquake, that's a known fact. We know that the fault
25 can generate earthquake. But actually, based on the

1 starting, that earthquake was overestimate. We predict
2 could have happened like a 6.7 to 7.0, but it turned out
3 it only generate a 6.5 earthquake.

4 MS. COLLINS: But there is nothing that you can
5 say with all absolute assurance that there won't be a
6 larger earthquake on that fault, right?

7 MR. LI: The size of the earthquake depend on
8 many factors. The size of the fault line, the rupture,
9 is a key fracture. If you have a longer fault, it could
10 generate bigger earthquake. But if the physical size of
11 the fault is limited, you can only generate that size
12 earthquake.

13 MS. COLLINS: When was the last time a new
14 fault was discovered?

15 MR. LI: I'm sorry. Could you repeat --

16 MS. COLLINS: When was the last new fault
17 discovered anywhere on earth?

18 MR. LI: There are many faults in this world,
19 but only those faults which are active can generate the
20 earthquakes.

21 MS. COLLINS: Now, is the Hosgri Fault an
22 active fault?

23 MR. LI: The Hosgri Fault was recognized as
24 active fault, you are right.

25 MS. COLLINS: And when was that recognized?

1 MR. LI: The fault was recognized -- I think it
2 was around 1970s.

3 MS. COLLINS: That's after the plant was built.

4 MR. LI: The plant was -- those two gentleman,
5 they went through the Long-Term Seismic Program. They
6 have better data on those things.

7 MS. COLLINS: But my question is probably
8 pretty simple, and I don't think it takes a rocket
9 scientist or a geologist to answer the question. You
10 don't know with absolute certainty that there won't be
11 another earthquake fault discovered by virtue of another
12 earthquake happening, or any other -- new technology. Do
13 you know that for certain?

14 MR. CAMERON: And Tarren, that's a
15 million-dollar question you are asking.

16 And Yong, can you tell us how seismologists do
17 their work in terms of prediction? Tell everybody that.

18 MS. COLLINS: I'm really not looking for
19 predictions. I'm looking for certainty. And I guess
20 what I'am wanting you to admit is that your science is
21 not able to predict earthquakes and that we cannot rely
22 completely on anything known today.

23 MR. CAMERON: And that's a statement of your
24 belief.

25 MS. COLLINS: I am asking him to answer yes or

1 no.

2 MR. CAMERON: I'm asking him to tell how
3 seismologists try to do what you are asking about, which
4 is prediction, and then go on to other people.

5 MS. COLLINS: I have one more question. Rather
6 than that question, I would rather have you answer this.

7 Are you familiar with the precautionary
8 principle?

9 MR. LI: Precautionary principles? In terms
10 of --

11 MS. COLLINS: When you are planning -- I think
12 it's a scientific principle. One of you should know
13 about it, but I can try to explain it to the best of my
14 ability, although I am not a scientist. It means you try
15 to use caution. If you don't know the answer because you
16 can't determine it absolutely by science, then you take
17 the worst-case scenario and plan for that. Are you
18 familiar with that principle? Because it leads to the
19 last question, and then I will release the podium.

20 MR. LI: I can't answer that question very
21 generically, but I can answer you specifically regarding
22 the Hosgri Fault. There are many conservative factors in
23 determining the seismic design of the power plant. Just
24 to give you a quick, simple example.

25 The earthquake could occur, as a matter of

1 fact, on any point along the Hosgri Fault, which has a
2 land of 110 kilometers from north to south. The
3 earthquake could occur on any point of this fault line
4 here. But as NRC required, the license, when they
5 designed this power plant, they purposely asked them to
6 put this earthquake on the coastal location of the power
7 plant, which is 4.5 kilometer away from the power plant.

8 MS. COLLINS: You asked them to do that?

9 MR. LI: Yes. So that has a lot of safety
10 factor embedded in this design.

11 MS. COLLINS: But that is my last question to
12 you. And that is, is the California coast -- I learned
13 this in geology. It's a constantly moving, active place.

14 And in your estimation as a geologist, is the
15 California coastline the safest place to put a nuclear
16 power plant or long-term storage? It's just a yes or no.
17 I mean, is that the safest place you can think of?

18 MR. LI: I know there are many places in
19 California with a faster speeding, moving rate. Like the
20 San Andreas Fault, it moves very fast.

21 MR. CAMERON: He doesn't have to be forced into
22 a yes-or-no answer.

23 MS. COLLINS: I don't mean to, but you are
24 asking me to hurry.

25 MR. LI: But this part of the world, this

1 Central California area, this San Luis Obispo, it's
2 relatively the rate of the displacement is relatively
3 slow, very slow. For example, along the Hosgri Fault,
4 the relative motions are 1 to 3 millimeters per year.

5 MS. COLLINS: That you are aware of now. I
6 mean, that's how long it's been in the recent history.
7 But again, we just had the San Simeon Fault, which didn't
8 really go along with your predictions, did it?

9 MR. LI: As I told you, that the size of the
10 earthquake was actually overly predicted, yeah. It's
11 within the limit. It's not go beyond the prediction.

12 MS. COLLINS: So is the California coast the
13 safest place to build long-term storage?

14 MR. CAMERON: Okay. Thank you, Tarren. And
15 thank you, Yong Li.

16 We have a mother who needs to return to her
17 son. And we have a student, and we are going to get you
18 two up. And we had three people waiting over there. And
19 if it's okay with you, I would like to see if you can do
20 these two and those three, and then we are going to take
21 a break. So can you get up and tell us your name and
22 your concerns, questions.

23 MS. CRAM: Hi. My name is Cynthia Cram;
24 C-y-n-t-h-i-a, C-r-a-m. I'm just a mom. I don't
25 represent any committee or anybody.

1 I live right next to the nuclear power plant.
2 I'm in the Sunset Palisades. My husband and my sweet
3 little boy, he is three, he is sleeping over there, we
4 play all the time in our vicinity. What I have are a few
5 comments, and I also have questions for you, but I want
6 to thank every single one of you for being here. I did
7 listen to the senate committee hearings, and I was very
8 disappointed in the responses. But here, I feel, at
9 least, we are more one on one, and I really do appreciate
10 to be able to talk to you.

11 A couple comments that I have are I've been in
12 major earthquakes, even bigger than this recent one we
13 had. I was in the Loma Prieta, and I was in the San
14 Fernando Valley in the Sylmar in 1971. And as I recall,
15 and I have a lot of videotape afterwards, because once
16 the power came back on, it was constant on the news,
17 those were not considered active plates at the time
18 either.

19 The other comment I have is not only do you
20 have emergency problems with notifying people of, say, a
21 nuclear release, but also the telephone companies are
22 jammed, and you cannot call anyone. The emergency
23 systems tell us that we need to have someone out of state
24 because that's the only way we can get ahold of anyone to
25 let people know where we are. In the Loma Prieta, I

1 happened to be in downtown San Francisco, so it was
2 really tough getting home.

3 We here live in quite a small population area,
4 and I understand that there is risk benefits that are
5 looked into; however, my comment in relation to that is
6 Los Angeles is downwind of this plant. If there were to
7 be a major disaster, and San Francisco isn't really that
8 far away in relative terms, so the damage could be a lot
9 more serious than just little San Luis Obispo area.

10 The other comments I have to make are in those
11 large earthquakes that I was in, the damage that was done
12 was a lot more serious than they expected, and those were
13 even in earthquake-proof buildings. The movements of the
14 earthquake faults were much more damaging and much more
15 -- what I want to say is that they found from diagonal
16 thrusts, in addition to vertical and horizontal thrusts,
17 which they didn't expect. So structurally, some of the
18 buildings that they thought were earthquake-proof.
19 Turned out not to be, quote/unquote, earthquake-proof,
20 they didn't have as much damage as they could have if
21 they hadn't been earthquake-proof, but they did have
22 damage. And that concerns me with the plant, Diablo to
23 be exact.

24 Another couple comments, a question actually,
25 and I don't know if you could answer this. PG&E, do they

1 have seismic equipment on site?

2 MR. BAGCHI: Yes.

3 MS. CRAM: Because, I was home one day -- I am
4 very close to the plant. I was home one day when we had
5 an aftershock, and it was very jolting. And I turned on
6 your public radio station to here to see what magnitude
7 it was, or whatever, and within two minutes, PG&E calls
8 in and says, "Just letting you know, there was no damage
9 at the plant. And our equipment showed no movement at
10 all." And it was something to that effect, but very,
11 very close to that. Those weren't the exact words by the
12 spokesperson. But that really bothered me as someone who
13 has been in major earthquakes, because I know it takes
14 time to look over a plant and see if damage has been
15 done. It doesn't take two minutes. An hour, I may have
16 felt a little more comfortable if he called back and
17 said, "I'll get back to you guys and let you know," but
18 to immediately call in and say within a two-minute period
19 and say that there is no damage, no cracks, no movement,
20 no water leakage, again, I've been in these quakes so I
21 know what things can happen.

22 And two more quick things. You may not be
23 aware, but we can fly over this plant. And you can just
24 open a small plane cockpit window and drop something out
25 if you wanted to, so it's a little bit concerning to me.

1 And there are planes going over every day. I mean, I
2 live right next to the plant. There are planes
3 constantly going over. Now, we do have a military base,
4 which is a little bit comforting, but still.

5 And my big question is a hypothetical. What
6 projections do you have if there were to be a major
7 disaster at the plant caused by, say, an earthquake of a
8 9, 10, magnitude? Have you looked at that possibility?

9 Thank you.

10 MR. CAMERON: Okay. And thank you. When we
11 come back from the break we are going to get to some of
12 the security issues.

13 Anybody want to address the last question
14 before about what type of hazard we are talking about?

15 MR. PROULX: I can address your question about
16 instrumentation they have at the plant. They have
17 seismic instrumentation located in several locations
18 inside the containments in each of the buildings in the
19 ground and in and near the plant. This instrumentation,
20 you can visually see it within the control room within
21 minutes, and if it exceeds -- if it even comes on-line,
22 it will give them an alarm in the control room that there
23 has been any seismic movement.

24 Now, the way they often get informed about the
25 earthquakes is not because they feel them because they

1 often get informed by the U.S. Geological Service
2 website. Living here in San Luis Obispo County, I've
3 also experienced a number of the aftershocks that there
4 have been. And the first thing we do when we feel them,
5 we call the control room to find out if they have
6 registered any instrumentation.

7 Now, if there is an earthquake that nobody
8 feels, and it doesn't even register on the seismic
9 instrumentation, generally the utility won't perform any
10 inspections. There was a significant aftershock on March
11 17th, which I believe was around 4.4, that we were at the
12 plant when that earthquake occurred. We didn't feel it,
13 but a number of people on site did, but it didn't provide
14 enough motion to even register on the seismic monitors,
15 but we did perform inspections on that day as well.

16 MR. CAMERON: Okay. Thank you. And I am going
17 to put your potential consequences over here in "Parking
18 Lot" for now to give this young man --

19 MR. GWYNN: And I would like to just say a few
20 words myself about communications in particular. I know
21 that it's troublesome for homes and families when there
22 is a problem that occurred in the community that impacts
23 a large number of people, and you can't get out on your
24 telephone to let people know that you are okay. And
25 that's a limitation of technology, but we don't have that

1 limitation when it comes to our emergency response
2 functions.

3 Our communication systems are set up so that we
4 have special circuits that we use in communicating not
5 only with the power plant, but with State and local
6 officials, with our headquarters offices in Washington,
7 D.C., and with other Federal agencies. It's a thing
8 called a Government Emergency Telephone System. If for
9 some reason the telephone lines are down, we can't rely
10 on those, why then we go to other forms of communication.

11 And we even have satellite telephones that we
12 can use to communicate with our people at the site, if
13 it's necessary. Those satellite telephones have come in
14 handy on a couple of occasions. For example, when
15 Hurricane Andrew hit Southern Florida, it also hit one of
16 the nuclear plants in Florida head-on, wiped out all of
17 the communications. We still had some communication
18 capabilities there. So from an emergency response
19 standpoint, we can communicate under virtually every
20 circumstances. I think that we heard -- but that depends
21 upon your access to a telephone, your access to a radio,
22 perhaps a radio that has a battery associated with it.

23 We, in Texas, don't have earthquakes, but we do
24 have tornadoes. And everybody in our community, my
25 community, has a place in our home where we can go to be

1 safe. And we have the equipment that we need in that
2 location so that we can keep in contact with the world
3 and know whether or not we are in danger from that
4 tornado.

5 MR. CAMERON: Okay. And we did hear you about
6 the major point about communication. We did hear that.

7 Let's go to this young man. And just tell us
8 your name and give a spelling.

9 MR. ACOSTA: My name is Jesse Acosta;
10 J-e-s-s-e, A-c-o-s-t-a.

11 I grew up in Goleta, just south of here. I've
12 lived there all my life, some hiatus to different parts
13 of the country. As I see it, oftentimes we are victims
14 of technology, in the sense that we have this nuclear
15 technology. And instead of thinking that if there could
16 be something that's wrong with it, we proceed with the
17 momentum to continue to use it, whether it's good or not.

18 And the problem I see today is that -- I mean,
19 I'm a student here at Cal Poly. I have finals; I have to
20 go study for them. That's why I am making it so brief.
21 What I am learning is that I don't know everything. And
22 as you ask any professor who has maybe got a doctorate in
23 cellular biology, if you ask him about ecology, he has no
24 idea.

25 And what I see today, it concerns me because I

1 feel as if oftentimes as humans, our biggest weakness is
2 that we don't admit that we don't know everything. And
3 you guys are constantly telling us that everything is
4 okay, but what don't you know? I mean, show some
5 humanity here. I mean, we know that you may be experts,
6 and I respect that. And I know that I'm not. But there
7 could be serious problems. And I mean, are the
8 consequences really worth it? I mean, is it really worth
9 it? Is the power, the energy that we have in this room,
10 the lights, is it really worth it? I mean, is it really
11 worth it? Can we ask that question and have an answer?

12 I mean, there is millions of lives at stake.
13 There is millions of lives and generations at stake. And
14 it's okay to be wrong. It's okay to say that this is the
15 best idea, that nuclear energy is not the best idea.
16 That's okay, because we can figure it out. We are
17 inventive. We are humans. We are inventive.

18 (Applause.)

19 MR. CAMERON: Thank you. We are going to have
20 three final, before-the-break comments, and going to go
21 to is this lady right here. And if you can just --

22 MS. NORWOOD: My name is Nancy Norwood. It's
23 N-o-r-w-o-o-d. I live in San Luis Obispo, and I want to
24 harken back a minute to the emergency response planning,
25 because for years we've been assured that there is an

1 adequate emergency response in place in this County. And
2 I am particularly curious if David and Terry are familiar
3 with this green sheet that came out in the water bills
4 recently? I'd like to call it to your attention.

5 I found it rather alarming, considering the
6 fact that we had drills and assurances for years that
7 there is an emergency response plan in place. Anyway,
8 but I'm making some assumptions that you all are
9 responsible, at least to some degree, for coordinating
10 this.

11 This came from the City of San Luis Obispo. As
12 I say, it came in the water bill. It's the second or
13 third time I've gotten one like this. I'm sure many in
14 this room have. At the top it says, "What if you dialed
15 911 and there was a busy tone or there wasn't any dial
16 tone at all?" So what this is announcing are training
17 classes for a community emergency response team, put on
18 by the Fire Department of San Luis Obispo.

19 And to me the particularly alarming part of
20 this is the answer to why they are doing this. "In the
21 event of a large-scale disaster, the normal emergency
22 response agencies that serve you," and this is
23 underlined, "will be overwhelmed, and they might not be
24 able to assist you for up to 72 hours. It's simply a
25 supply-and-demand issue."

1 Dave and Terry, are you aware of this? That
2 our County Office of Community Services is not up to
3 handling it faster? You can certainly have it. I'll get
4 another one. I'm sure I'll get another one in another
5 water bill.

6 MR. CAMERON: We will attach it to the
7 transcript.

8 MS. NORWOOD: In fact, I have some more
9 extensive remarks that I was going to make. But in the
10 interest of time, I have decided not to. You can attach
11 these, please. Thank you.

12 MR. CAMERON: Thank you very much, Nancy.

13 And we are going to go here and to this
14 gentleman.

15 (Discussion held off the record.)

16 MS. GRABIEL: My name is Nina Grabiell. It's
17 N-i-n-a, G-r-a-b-i-e-l.

18 And I just have two questions, comments, I
19 guess. The first one is, What's the size of the
20 earthquake that Diablo is built to withstand? I mean, I
21 hear that it's earthquake-proof, but how big of an
22 earthquake are you talking about?

23 MR. LI: Could you repeat the question,
24 quickly.

25 MS. GRABIEL: I just want to know, when you

1 planned the construction of Diablo Nuclear Power Plant,
2 what was the size of the earthquake that you built it to
3 withstand?

4 MR. LI: 7.2.

5 MS. GRABIEL: So it's supposed to withstand a
6 7.2?

7 MR. LI: Yes.

8 MS. GRABIEL: So beyond a 7.2, what's the
9 projected thing to happen?

10 MR. LI: Well, as I mentioned before to another
11 lady there, in our plan language, if you want to have a
12 bigger earthquake, to have an capital fault there. But
13 from all the research results we have, the Hosgri Fault
14 is the most capital fault there, but this fault can only
15 generate this kind of size of the earthquake. The 7.2 is
16 a cap, maximum earthquake, we call it.

17 MS. GRABIEL: Okay. So you've just come to
18 this conclusion just basically by scratching numbers on a
19 piece of paper. And so when you go through all your
20 equations, that's the final number at the end of your
21 equation is the 7.2. So this is assuming that you guys,
22 whoever is coming up with these numbers, has, I guess --
23 what's the word? -- that you know what Mother Nature is
24 going to do. I am just putting that out there, because
25 really the reality is you don't know. You really don't

1 know. You can't predict it. There is nothing that you
2 can really do about it. I just wanted to make that
3 assertion right there. So that even your own premise is
4 a little bit faulty, just on that.

5 And then my second, I guess, concern would be
6 earlier in the discussion here, other people have brought
7 up the idea of an earthquake happening at the same time
8 as a disaster. And one of the responses was, you know,
9 that wasn't figured into any of your equations because
10 that's really not very likely to happen. So my feeling
11 is, you know, if we are going to be -- I imagine you are
12 charged with protecting the people who are in the
13 vicinity of these power plants, and also the way the wind
14 blows down the line. So we are talking about millions
15 and millions of people, lots and lots of hundreds of
16 acres of miles of land and so forth. Because it isn't
17 just people who suffer. It's everything. Life itself
18 suffers.

19 So if that's the consequence of something
20 happening over here, why don't we use some forethought
21 and prepare for a worst-case scenario? Even though it
22 may never really happen, what is wrong with planning out
23 the worst-case scenario and, you know, let's find
24 solutions for that as a protective measure? Isn't that
25 what you are paid to do? Isn't that what my taxes are

1 supposed to pay you to do, is to protect me in the case
2 of a worst thing happening?

3 I feel very betrayed by the government, by the
4 NRC, by the County, by PG&E, everybody who is making a
5 buck off of this, and they are basically forfeiting my
6 future and the future of Mother Earth.

7 MR. CAMERON: I think Girija wants to add
8 something there. Yong Li, do you have anything else, or
9 can we give it to Girija?

10 MR. LI: I just want to quickly answer her
11 question regarding the worst scenario. The 7.2
12 earthquake I mentioned to you is the worst scenario. As
13 I mentioned -- there are many big earthquakes around the
14 world, but as I mentioned, you have to have a capital
15 fault which can generate earthquake. But from all the
16 research and our seismic study in this area, the Hosgri
17 Fault is the biggest fault.

18 As I mentioned before, we purposely required
19 the licensee to put the earthquake at the coastal point
20 near the power plant, which is 4.5 kilometers away. This
21 Hosgri Fault has a 110 kilometers, and some point are
22 very far from the power plant, but we put the worst
23 scenario 4.5 kilometers away. And also there are many,
24 many safety factors, the conservative factors imbedded in
25 the whole design process.

1 Another example, attenuation relationship which
2 tell us you the seismic wave could be decreased away from
3 the earthquake epicenter, that relationship also
4 overestimates the ground motion at the power plant. So
5 basically, the real ground motion would be smaller than
6 the predicted ground motion. So there are many layers of
7 the conservative factors here, so we are giving you the
8 worst scenario. How about that?

9 MR. CAMERON: Thank you, Yong. Girija, do you
10 want to add something before we go to this gentleman.

11 MR. SHUKLA: Yeah. My name is Girija Shukla.
12 I am the project manager for Diablo Canyon from the NRC.
13 I am the man between you and the NRC as far as the
14 licensing is concerned. I am not an expert of
15 earthquakes, but I'm an expert of licensing, so I'll tell
16 you what all these numbers mean to you.

17 When Diablo Canyon was built and licensed,
18 there were three faults, and all they can produce is less
19 than .2G accelerations. So the plant was designed for
20 .2G accelerations. But PG&E doubled that number to .4G.
21 accelerations for the safety of the plant.

22 Then we found out Hosgri, which is .75G, and
23 NRC required PG&E to look at this plant, augment the
24 plant, reinforce the plant to meet .75G.

25 Now, what does this number mean to you? The

1 plant is required by NRC to have equipment to operate, to
2 make sure your health and safety is protected at .2G.
3 Okay. At .2G level, the plant will keep on operating
4 safely. No problem. At .4G, the plant will shut down.
5 In fact, the shutdown set point for Diablo Canyon is
6 .35G.

7 What that means? That means that they have
8 equipment they are required to operate to safely shut
9 down the plant and keep it safely shut down. These
10 equipment are supposed to operate. So the plant will be
11 shut down at .35G. .75G is a design number. Diablo
12 Canyon will never reach more than .35G. It will be
13 safely shut down and you will be safe in your homes.
14 That's the story.

15 MR. CAMERON: Thank you.

16 And we are going to go to this gentleman right
17 here, and if you could just introduce yourself to us,
18 please.

19 MR. BIESEK: My name is Jack Biesek,
20 B-i-e-s-e-k. And I want to thank you for the opportunity
21 to speak to you tonight and thank you for coming here to
22 listen to our concerns.

23 I live near Avila Beach going on 28 years now.
24 I am a member of the Avila Valley Advisory Council, the
25 local planning review group for the Avila Beach area, and

1 our volunteer work as concerned citizens lets us look
2 into the future and help people with their planning and
3 their properties in such a way they respect the natural
4 resources and respect their fellow citizen's right to
5 share these resources.

6 I am not here as a representative of AVAC. I
7 am here as an individual and as a concerned citizen and
8 as a steward of the land where I live. In 1977, we were
9 promised that radioactive nuclear waste would be stored
10 in a repository, a safe storage site, outside of
11 California, to be provided by the U.S. Government, and
12 that the Diablo Canyon was only going to be a temporary
13 holding for these wastes. What is the status of that
14 promise? Zero commitment to date. Although we heard
15 tonight that this is temporary storage, I would like that
16 to be defined with a specific date when you get a chance
17 to answer that.

18 What are the current plans for removing the
19 waste? Zilch, I think is the technical term for that
20 answer. And what is the status of PG&E being responsible
21 when they can file bankruptcy at the drop of a hat?

22 And what are we left with:

23 When the plant was licensed, it was licensed
24 for storing a limited amount of nuclear waste. Now that
25 plant was doubled the storage racks. And what is up with

1 that? To use an analogy, PG&E applied for a
2 three-bedroom house, then built six bedrooms, and now
3 wants to put beds in the yards so people can sleep
4 wherever they want. Help us out here and explain your
5 reasoning. We don't quite get it.

6 Why would you be granting a new license to
7 store waste in our backyard? This is ludicrous, unfair
8 and unjust. The student who rose to speak about the
9 humanistic issue is right on the mark. This is a human
10 issue -- 57 channels and nothing on. This is what we've
11 got -- television experts but no answers for our
12 concerns. You do not live in our area.

13 I submit the only reasonable plan would be to
14 close Diablo until the storage site is approved. Very
15 simple thing to do. Why not err on the side of safety.
16 Let's do a brief look at recent history. How many
17 nuclear plants have been ordered since Three Mile Island?
18 Zero. Let's look at our state. Humboldt Nuclear Plant,
19 closed. Rancho Saco near Sacramento and the legislators,
20 closed.

21 Let's look at the world. Chernobyl, what a
22 waste of human resource and a shame upon the human race
23 that is. Are we going to experience a great disaster
24 here in California? We hope not. And that's why we are
25 here tonight, to ask you to hold off on licensing until

1 some studies and evaluations about these thrust faults
2 and folds can be done scientifically and fairly.

3 Why is the onus on us to acquiesce to PG&E and
4 the NRC? Why isn't the onus on PG&E to perform their
5 duty and earn the right and pay for their efforts and
6 live up -- if they made poor planning and they didn't
7 plan to storage racks, fine. Close them down.

8 I think it's -- (applause.)

9 I've taken some time this week to look into the
10 future and think about Diablo, and I don't like what I
11 see. I see a mothballed site that is a nuclear waste
12 dump, and we the local citizens are stuck with the deadly
13 remains of an outdated technology stored above ground, a
14 sitting duck for terrorists or for Mother Nature to show
15 her strength and sweep it out to sea, or for the earth to
16 quake and tear open the strongest of the strong
17 containers like they were eggshells.

18 If we don't stop the external storage idea,
19 then this site needs to be marked adequately for the
20 future generations, and the hundreds and thousands of
21 years from now where people cannot approach the plant and
22 deal with the deadly radioactive waste. I know about
23 this a little bit because I was asked to study for the
24 Waste Isolation Pilot Project in New Mexico, where they
25 asked me as a consultant, "What kind of signs do we need

1 to mark a site for 10,000 years to let people know there
2 is deadly radioactive waste that they didn't go near,
3 that they can't come into the area?"

4 I would like to submit an idea, for the record.
5 This sketch of a sign shows a boundary marker that has a
6 warning that hazardous materials are in use. In
7 California we have a law known as Proposition 65. This
8 law safeguards our citizens by providing a warning notice
9 when carcinogenic materials are in use. And this idea
10 follows the spirit of that law. It indicates that there
11 is a hazardous warning. And it says, "This area is known
12 to contain hazardous nuclear products known to the State
13 of California to cause cancer, birth defects and other
14 reproductive harm. This site has been authorized by the
15 PG&E and the Nuclear Regulatory Commission to be suitable
16 for long-term storage of hazardous waste."

17 Of course, if we move the storage on your
18 temporary storage, we can take the markers down. We also
19 site the names of the NRC members: Nils Diaz, Jeffrey
20 McGaffigan, and Edward -- I'm sorry, getting old with the
21 glasses -- and Robert D. Glynn, CEO of PG&E, so I believe
22 giving credit where credit is due. And for 10,000 years
23 we'll have your name emblazoned on these signs that you
24 know you deserve and have earned the responsibility.

25 In summary, let me just reiterate, that until

1 there is a permanent storage site for nuclear waste, we
2 should not generate any more nuclear waste at Diablo
3 Canyon. That's my personal opinion as a concerned
4 citizen.

5 Thank you for listening.

6 (Applause.)

7 MR. CAMERON: We are going to this gentleman.
8 We don't want any trouble. And then we're going to take
9 a break. All right, sir. Please introduce yourself.

10 MR. KREJSA: Honorable members of the staff and
11 members of NRC, would you stand up and just -- my name is
12 Dr. Richard Krejsa. That's K-r-e-j-s-a.

13 Do you gentleman want to stand up and stretch?
14 You really look uncomfortable, all this body language.
15 You've been there a long time. You can do it.

16 MR. GWYNN: We are going to take a break when
17 you are finished. Thank you.

18 MR. KREJSA: I am a emeritus professor of
19 biological sciences at Cal Poly State University, and I
20 am impressed by the number of people you've provided here
21 at great expense, as one gentleman said earlier on. Of
22 course, we are the taxpayers who pay for that expense.
23 And I am glad that you think it is great, because we
24 think our children and our grandchildren here are worth
25 it.

1 How many of you have been here since the plant
2 was built? How many have been on your various boards
3 since, say, 1975? Anybody since 1980? On a board that
4 has to do with the NRC or Atomic Energy Commission, on --
5 in the agency, employed for 20 years?

6 Thirty years? Okay.

7 I just notice that at 7:00 p.m., the simple
8 lapel microphone used by Mr. Jones failed, so if the NRC
9 can't operate a lapel mike in a hotel ballroom, what can
10 we expect from a complex nuclear plant with a storage
11 site on an earthquake fault?

12 MR. SHUKLA: We don't regulate the microphones.

13 MR. KREJSA: I see. They are not under your
14 regulation.

15 I just have to tell you that I haven't been to
16 an NRC meeting, or any kind of a meeting, since
17 approximately 1983, so it was bad for my health then, and
18 I am standing here with a TENS unit now. I've been
19 waiting for two and a half hours, and I didn't want to
20 get cut off, because I'm in a little bit of pain to be
21 here.

22 I was a member of the Board of Supervisors of
23 the San Luis Obispo County from 1973 to 1980. That was
24 during the period which most of the construction at
25 Diablo occurred, except for the reconstruction, you know,

1 when the towers were switched and all of the extra \$5
2 billion that went into that.

3 In 1975, 29 years ago, I was chairman of the
4 Board of Supervisors in this county. And as chairman, I
5 asked the staff whether we had a nuclear emergency
6 response plan. And the answer was no. I asked the staff
7 to begin to assemble such a plan, but our Board of
8 Supervisors at that time, who were all enamored of
9 nuclear power as the biggest tax source, tax revenue
10 source that this county had, they voted three to two
11 against having an emergency response plan. It took me
12 four years, from 1975 to 1979, and the only reason we got
13 an emergency response plan in this county was because of
14 the Three Mile Island, quote, incident, as it's reported.

15 Now, within six months of the Three Mile Island
16 incident, we had a nuclear emergency response plan in
17 this county. And that plan was borrowed verbatim from
18 San Diego County, from the plant down there. And we just
19 changed the words to make it "San Luis Obispo County,"
20 and we fit it that way. And so that was the plan. And
21 that plan at that time was certified and accepted by the
22 NRC. Excuse me. I'm a little nervous. I haven't done
23 this for a long time.

24 MR. CAMERON: Just take your time.

25 MR. KREJSA: San Luis Obispo County Nuclear

1 Emergency Response Plan, thrown together 25 years ago,
2 was deemed acceptable, and it was certified for this
3 county. And one would have thought that 25 years after
4 our first emergency response plan, we and our families
5 could feel safe here; that we would have had enough
6 experience to have a plan that's worked. But as you see,
7 the emergency alert system in this county failed during
8 the most recent earthquake.

9 And I just referred to David Weisman's
10 questions, and I would just endorse all of the other
11 questions that were asked. And I am not going to ask
12 only but one or two questions, but I want to tell a few
13 stories from a historical point of view so that you
14 understand why some of the people are here and continue
15 to come to these meetings for all these years.

16 I've listened to your responses to questions
17 from the people of this county, and I personally think
18 that for the most part, they are typical bureaucracies.
19 I've been out of this business since 1980, but tonight,
20 24 years later, I feel like I'm listening to the same
21 kind of nonsense, the same kind of questions -- not same
22 kind of questions, the same questions are being answered
23 and the same answers are being given that we got from the
24 old Atomic Energy Commission before 1976, and from the
25 NRC since.

1 Let me tell you a true story. In 1975, as
2 chairman of the Board, I created a nuclear emergency.
3 And I said that a truck coming from Diablo with waste in
4 it had slipped off the bank and fallen into San Luis
5 Obispo Creek, which is just seven miles downstream of the
6 city of San Luis Obispo. And so I called the
7 administrative officer, County Administrative Officer,
8 and it was just a few minutes after 5:00. I called the
9 County Administrative Officer. He was gone, but his
10 assistant answered. And I said, "I've got an emergency
11 here, and I want some answers. What do we do if somebody
12 calls -- what do I do," because I was the person
13 responsible for pushing the button if we had an
14 emergency. I was supposed to call somebody.

15 So I called the CAO, and the CAO's assistant
16 told me, "You better the call the sheriff," so I called
17 the sheriff. The sheriff's department is supposed to be
18 connected to PG&E. I called the sheriff's department,
19 and I told them the problem. And they said, "You better
20 call PG&E," so I called PG&E. And at that time, and I
21 guess they still do, they had a person who was delegated
22 to the Board of Supervisors to answer any questions, and
23 so forth, and they are very friendly, very nice guy. And
24 I talked to this gentleman. And I won't say his name.
25 He is retired and also deceased now.

1 Anyhow, he was not there. And I talked to his
2 assistant. And the assistant said, "He is on vacation."
3 And I said, "Well, I have an emergency." And they said,
4 "Well, you'll have to wait until he comes home." So I
5 waited two weeks, and he came back from his vacation.
6 And I asked him -- I told him the emergency. And he
7 said, "Dick, why don't you come here. Why don't you come
8 down to the plant, and we've got all these books from the
9 Atomic Energy Commission on our shelves here, and the
10 answer has got to be there someplace."

11 So I was to come down to his place to read all
12 these books on these shelves full of NRC, only at the
13 time still Atomic Energy Commission, regulations. And I
14 said, "No. I just want an answer to this question: What
15 do I do when a truck with a nuclear waste product has
16 gone into the creek in San Luis Obispo County, and what
17 am I supposed to do as chairman of the Board? What's the
18 process?"

19 And he said, "Well, I'll call NRC tomorrow" --
20 or AEC tomorrow. So he called. And the next day, he
21 called me back and said, "I have told them the problem,
22 and I explained to them that you want an answer." Four
23 weeks later, I got a letter from the Atomic Energy
24 Commission, and in it was a booklet. And the booklet had
25 -- the title of the booklet was, "79 Questions You Always

1 Wanted to Ask About Nuclear Power." And Question No. 78,
2 the answer to Question No. 78, "What do you do in the
3 event of an emergency, call your local county sheriff."

4 It took me seven weeks as chairman of the Board
5 of Supervisors to get an answer for an emergency. And I
6 don't think anything has changed in 25 years. We are at
7 the same position we were. We've got all you gentleman,
8 and we thank you very much for coming here. I feel sorry
9 for you. I really do, for you to have to sit and listen
10 to all this stuff. Because I did this for eight years.

11 I was listening to this stuff for all my career as a
12 public official, and now I come to you as a private
13 individual to say that this is more of the same.

14 Finally, I'm glad that Mr. Li and his
15 colleagues and his, quote, can learn from earthquakes.
16 One of the answers to one of the questions asked earlier
17 was "we can learn from earthquakes." But this learning,
18 it seems to me, comes after the earthquake. So does this
19 mean that we'll have to wait until after the next
20 earthquake in the county to discover if we have been
21 guinea pigs or not.

22 I have some more stuff here, but I think I'll
23 just close it off with that and say thank you for coming.
24 And I hope I listen to the people here today, because
25 we've been doing this for a long time, longer than most

1 of you people have been serving in whatever office or
2 capacity you are in. And I didn't think I would ever
3 have to come back to a microphone again. I just came
4 tonight to hear what was going on, because I've been out
5 of the loop. But it sounds like the loop is the same.
6 The loop is the same as I heard 25 years ago, and we are
7 not getting anywhere.

8 And we've got more people here. We used to
9 have three people and fourteen attorneys would come. And
10 at least you are sitting down at our level. Those people
11 would all be over here, and we would have one little
12 stand over here to chat, to talk and tell us what our
13 concerns are. So we thank you. You've done a really
14 good job of moderating this. I don't know your name,
15 sir, but thank you very much. And thank you all for
16 coming tonight.

17 MR. GWYNN: Chip, a couple of things that I
18 would like to say about our ability to respond to
19 emergencies at nuclear power plants. You probably are
20 aware at the time that this occurred, the plant wasn't
21 licensed. In fact, the agency requires the demonstration
22 of the effectiveness of the emergency plan as a
23 prerequisite to the issuance of an operating license.
24 And so that had to be done sometime in the middle '80s.
25 I'm not sure about the exact date. But you probably also

1 know that as a result of the accident at Three Mile
2 Island, that the president's commission that looked at
3 the action criticized our agency and criticized others
4 because we were not prepared to respond to that
5 emergency.

6 There has been so much work that has been done
7 since that time to improve not only the plans, but also
8 to improve the implementation of those plans, the
9 effectiveness of that. It's tested on a regular basis.
10 And I can assure you that what you experienced in 1975
11 and what you would experience today, if you were the
12 leader of the organization, I believe would be quite a
13 bit different.

14 MR. KREJSA: Okay. That's nice to say that,
15 thank you, but I don't feel comfortable with your answer
16 to that. Thanks.

17 MR. CAMERON: All right. We are going to take
18 a break now, and it is 9:12. Be back at 9:30, and we'll
19 go for another hour, and we are going to start with
20 security.

21 (Break taken.)

22 MR. CAMERON: There is going to be a point
23 tonight where we just want to try to answer, again, some
24 of the more important questions that we heard. We are
25 going to continue on. We're going to go to some new

1 issues, okay. And we have security. IRA has a question.
2 And you know, please don't line up. Okay. I'll get to
3 you, because we want to listen. We want everybody to
4 listen to what's being said. And we are going to get to
5 you. And we have one gentleman in the back who talked to
6 me who is back there.

7 But, I guess, the one thing I would ask you is
8 everybody here who wants to say something, what you have
9 to say to us is important. And it may be that we are
10 hearing the same type of thing from you. That doesn't
11 mean that it's not important for you as an individual to
12 be able to say that, and we want to respect that. We
13 will respect that.

14 But if you can -- if it is a point that's been
15 said before, if you can make the point briefly, then that
16 might help all of us to make sure that we hear from
17 everybody. And we have ordered some cots, sleeping bags.
18 But let me tell you one thing, seriously: We do have an
19 NRC Public Meeting Feedback Form. And thank you for
20 reminding us to tell people about it. But this helps us
21 to improve our meetings, and certainly put any type of
22 comment you want down here. But either leave it with us
23 tonight or mail it back in. It already has postage on
24 it. And there is a handout that's out there that has
25 phone numbers and things like that on it. If you haven't

1 seen that, please pick that up.

2 Okay, sir. We are going to security, right?

3 MR. RIECHERT: My name is Andrew Riechert.

4 I've already spelled it, so I won't waste any time on

5 that.

6 My former position -- I'm semi-retired in this

7 area. I run a small business. Formerly, I've been vice

8 president of engineering for U.S. West and also for

9 Ericsson, U.S.A., and the cell phones. And I'm sorry

10 they don't work during earthquakes.

11 And I thought I would give you guys a break.

12 Thank you very much for coming. I am going to speak

13 rather quickly, if I can. I would like you to listen

14 quickly. I am not going to ask you any embarrassing

15 questions. I am going to change the thing around, and

16 you can listen to me, if that's all right, and we'll see

17 how well that works.

18 The reason I am here is that I am extremely

19 concerned. I am also extremely upset and depressed, but

20 I thought what I would do here is not ask the questions.

21 I thought I'd try and see if we can come up with some

22 answers. One of the things that concerned me is that

23 we've had a tragedy called 911. I remember it well.

24 It's my birthday. The problem we have with 911,

25 apparently, is that some people didn't connect the dots.

1 Those people were in high government positions. I assume
2 that you are similar, so my job here is to give you some
3 dots, connect them for you, and let you go on and worry
4 about them, if that's all right. Everybody okay with
5 that?

6 Okay. Let me give you the first dot. The
7 Russian submarine, the Kursk, sank tragically in August
8 of 2000. Everyone remember that one? President Putin, I
9 think, was playing golf at the time. Lost a lot of
10 Russian sailors.

11 Okay. President Jack Kennedy was a famous
12 torpedo boatman, PT109. The San Diego fires occurred
13 roughly, I think, October 24th of 2003. Traffic school,
14 the Queen Mary in Long Beach and lots of cold water.

15 What are these? These are a bunch of dots.
16 The only thing that connects them is a nuclear power
17 plant. Without a nuclear power plant, there is no
18 connection. Let me explain.

19 The Kursk went down on, I think, August 2000.
20 There was an article in Scientific American, which I'll
21 just quote quickly from. This is an article in May 2001.
22 You can look it up. With my background, I'm quite
23 comfortable with the quality of the reporting in
24 Scientific American. I hope you are to. "Warp Drive
25 Underwater," it's entitled. "When the Russian submarine,

1 K151 Kursk, sank last August, rumors rapidly arose that
2 the mysterious blast that sent the big boat to the bottom
3 of the Barents Sea, was connected to the testing of an
4 ultrahigh-speed torpedo. Several months earlier,
5 American businessman, Edmond Pope, was arrested in Moscow
6 on charges of espionage. He apparently was working for
7 the American Government and trying to steal plans of this
8 torpedo just before the tragedy."

9 What is a cavitating torpedo? That was the
10 weapon that was under discussion. Cavitating torpedo is
11 actually a rocket that runs under water. According to
12 the spec of the Russian torpedo that was being tested,
13 the explosion was sufficient to blast apart a nuclear
14 submarine with all the pressure-resistant hull that it
15 had on board to stop that, so it has a hell of a punch.
16 It's believed that the torpedo, which is sometimes
17 referred to as "The Squaw" can actually carry a nuclear
18 warhead.

19 The way it works is to do with the Queen Mary
20 on Long Beach. If you go down and see the Queen Mary,
21 you go down to the bottom of the ship, you will see a
22 section where the propellers are under water and well lit
23 up. And there is a note saying that the Queen Mary used
24 to have to, I think, change its propellers every two or
25 three trips because they wore out so fast. The reason

1 they wore out is something called cavitation. And I
2 don't know if any of you go water-skiing, but propellers
3 in water wear out.

4 Why does a smooth propeller in smooth water
5 wear out? It's called cavitation. When the propeller
6 moves very quickly through the water, it creates a little
7 vacuum behind each blade, and those vacuums look like
8 bubbles, but they are not. They are actually no water,
9 no air. And when they collapse, they cause an extreme
10 wearing action on the propeller. It turns out that if
11 you put a rocket, and you put a little prod on the front
12 of the rocket, and you fire it under water, the little
13 prod in front of the rocket causes cavitation, which is
14 so big that the rocket is actually running in a vacuum
15 under water. And the Russians are a little bit smarter
16 than us, they figure this out, and they produced this
17 weapon in '97. They've been testing it ever since.

18 The first version they have, which is now
19 superceded, ran at 230 miles an hour under water, can
20 carry a nuclear warhead or massive equipment of an
21 artillery shell, and can travel 10 miles. Think about
22 that.

23 Traffic school: Everybody has been to traffic
24 school. You travel 30 miles an hour, 44 feet a second.
25 Right? You all know that one? Okay. 230 miles an hour

1 is roughly 300 feet a second. If a cavitating torpedo is
2 fired from a vessel that's less than 10 miles offshore,
3 it will come inland at 230 miles an hour. It only needs
4 fins on the front of it to tip up at that point, and it
5 will leave the water at 230 miles an hour, 300 feet a
6 second. If you take force of gravity at 32 feet a second
7 square, which I'm sure everybody on the other side there
8 knows very well, it takes approximately ten seconds, if
9 that was fired directly outright before it comes to a
10 halt. Ten seconds, 300 feet a second, average speed 100
11 feet a second, it will rise 1500 feet. I would like you
12 guys to think about that. It will get there in ten
13 seconds, of course.

14 It will then take another ten seconds. It will
15 then take another ten seconds, it will come down 1500
16 feet. It will come down and hit the ground at 230 miles
17 an hour, with all the weight of a huge cavitating
18 torpedo, which is roughly the same size as a school bus.

19 So now we know that there are weapons out there
20 that already exist that have caused the United States
21 government already great concern. There is not a lot of
22 publicity about this because obviously governments don't
23 want people to worry, but the United States government --
24 and I know nothing about this -- under obviously all
25 sorts of confidentiality is working into this and trying

1 to produce countermeasures.

2 If we have a weapon which is aimed at a coastal
3 installation, then that weapon can hit the coastal
4 installation. I think it's about something over maybe
5 one to two minutes. A rocket traveling under water where
6 no aircraft, no missile, no torpedo, no countermeasures
7 can hit it, will suddenly emerge from the water, and
8 within ten seconds will hit a target that could be
9 possibly 5,000 feet away.

10 I note that you are building a -- effectively a
11 dirty bomb, and sticking it in a container near the
12 shore, and all you are left without is the explosives.
13 If a cavitating torpedo came inbound, even if the
14 cavitating torpedo was equipped with a massive artillery
15 shell warhead, it would still hit the ground as the
16 explosive didn't come off, it would go over intervening
17 walls, highlands, et cetera, to the height of 1500 feet,
18 come down and hit something with a force of 230 miles an
19 hour from 1500 feet. So please think about that one.

20 I lived in this area. I've been in this area
21 probably on and off ten years. I'm a U.S. citizen,
22 although I don't sound like it, so I'm not a spy or
23 anything. I'm just here doing my job.

24 I noticed that the San Diego fires occurred, I
25 think it was around about the 24th of October last year.

1 When I came out from work and I looked up at the sky 48
2 hours later, I was amazed to see that the sky was dark
3 over nearly 60 percent of the sky. I, and think some of
4 you realized, from L.A. up to here, overhead and down
5 another 10, 20 degrees was a thick, black layer. That
6 was produced by matter which was ejected from a hot fire
7 and went upwards and across in the air and came here. In
8 48 hours, it had probably traveled 250 miles.

9 I would like you gentlemen please to consider
10 that when the cavitating torpedo hits your dirty bomb
11 collection, which the containers of which were presumably
12 not designed to be impacted by something that's a nearly
13 nuclear force, that no matter what comes down from 1500
14 feet at 230 miles an hour, usually -- because if anybody
15 plays billiards around here, or pool, or whatever you
16 guys call this silly game you have with too many red
17 balls -- what goes down, comes up, because of the laws of
18 momentum. So if anything comes down that fast, and as
19 you've seen with sort of asteroids-crashing-into-the-earth
20 movies, and all that stuff, it comes down, boom, and
21 everything gets thrown up. The ejectile, I think it's
22 called. So that's that dot connected.

23 What happens there is if you have a hit of a
24 nuclear power station and it merely hit the stored
25 material, that material could be ejected, would be up in

1 the atmosphere at 1500 feet, the winds take over, and you
2 are looking at damage, collateral damage, people damage,
3 and possibly massive civilian casualties, easily within
4 48 hours in San Francisco and/or L.A.

5 This is not a local phenomenon. The NRC office
6 in Monterey, forget it. You guys might die just a little
7 bit longer than we do. The effect here is that what
8 we've got is we have effectively dirty bombs being built
9 on the coast, where a weapon which is very difficult to
10 -- let me just quote back to the end of that article.

11 "Other informed sources claim the missiles, in fact, is
12 an offensive weapon designed to explode a high-yield
13 nuclear charge amid a carrier battle group, thereby
14 taking out the entire armada. During a nuclear war, it
15 could be even be directed at a port or coastal land
16 target."

17 Then the quote is, "As there are no known
18 countermeasures to such a weapon," states David Miller's
19 article, "its deployment could have a significant effect
20 on future maritime operations by surface and subsurface
21 and could western naval first forces at a considerable
22 disadvantage."

23 What I did, and I don't suppose anybody can see
24 it from here, is I went to the web this afternoon, and I
25 pulled off a map of the nuclear power stations in the

1 U.S. And, of course, all these guys are going to have
2 the same problem, waste storage on site. And on the West
3 Coast, there are five -- I think four or five running
4 down the West Coast. There are three or four,
5 San Antonio, Baton Rouge, Tampa running through the Gulf.
6 And there are something like nine or ten going up through
7 the Northeast, including, of course, Washington, New
8 York, Providence, South Carolina, Miami.

9 It seems to me that all the information is out
10 there in public. And what we have is we have one of the
11 most significantly valuable and easy-to-strike targets
12 which would virtually cripple, if not destroy, America's
13 ability to defend itself in an act of war. And you guys
14 are sitting there telling us that it's a great idea if
15 you put a dirty bomb with a weak cavitating that isn't
16 designed for how many high-explosive artillery shells
17 before it breaks type of specification, and you are
18 putting them all over the coast of the United States.

19 Now, as a relatively new citizen of the States,
20 I'm not a nine-generation Californian. I'm a
21 first-generation immigrant. I'm a U.S. citizen. I've
22 been here 25 years, But I signed up to defend this
23 country. I love this country. I love the Constitution
24 and what it stands for, and I aim to protect it. So my
25 input to you tonight is to say, "Here is the information.

1 Here are the dots. Here is the obvious connection. If I
2 can make it, everybody out there in the world can make
3 it." We are not at peace. We are at war. We are at war
4 with Iraq now. We've made nasty, nasty noises to Syria,
5 North Korea. We are not that happy with China. We like
6 Pakistan, which means India doesn't love us that much.
7 We've got problems in the Far East.

8 You tell me why anybody in those circumstances
9 would want to put the United States at such a risk that
10 we could possibly have dirty bombs going off merely by
11 enemy action in the easiest place to hit them, and we
12 would lose probably like 200 miles inland of the entire
13 United States around the coastline. I would then be a
14 citizen of the United Midwestern States of America, and I
15 don't like that idea.

16 What we need at your level, you can go back and
17 you can say, "There is a guy here that said this, and he
18 said it in public, and it might look bad if we don't do
19 something about it." So you can go to the people who
20 didn't come this evening, who are really, really
21 important and make some of these decisions. And just to
22 give you an idea of where you could be, let me read you a
23 statement from the Israel Air Force official website.
24 You all remember 911. You remember the fog of war,
25 couldn't do a thing about it. Right.

1 This is on the Israeli Air Force website. It
2 states it proudly. It's been there for many, many years.
3 It says, "February the 21st, 1973: Due to a navigation
4 error, a civilian Libyan Boeing 707 finds itself deep in
5 Israeli airspace over the Sinai Desert. Israeli phantoms
6 are scrambled, but the Libyan pilot does not comply with
7 their instructions and ignores their warning shots." And
8 then comes the killer, and no politician that I've ever
9 met will ever repeat this to you in this country.
10 "Taking into account the possibility that the plane is
11 headed towards Tel Aviv on a suicide mission, the
12 phantoms shoot it down; 105 people on board are killed."
13 And that is still today on the Israeli Air Force Official
14 website. There is the logo.

15 Gentleman, the opportunity is yours. You can
16 take this information. You can say, "We are doing a
17 very, very silly thing for this country, and we are in a
18 position to start the ball rolling to do something about
19 it."

20 And the answers to what you can do, you can do
21 one of two things. You can move this temporary material,
22 temporarily 200 miles inland where it cannot possibly be
23 hit, and it can be defended by the conventional weapons
24 of this country, or you can call out a bunch of the
25 redundant nuclear submarines that we have and you can

1 stuff them full of it and you can tow them to a safe
2 place where nothing could possibly get at them. But if
3 you leave it where it is, then this country is at an
4 unbelievable risk, and you are in the forefront of making
5 it happen.

6 And that's all I have to say tonight.

7 (Applause.)

8 MR. CAMERON: I'm glad that the people from our
9 Nuclear Security & Incident Response were here to listen
10 to that particular scenario, that I know I have never
11 heard before. But I want to give Skip Young an
12 opportunity to tell all of you about what the NRC is
13 doing in relationship to security. It's a different
14 approach than the one you suggested.

15 But Skip, can you talk to us a little bit. And
16 if anybody else wants to say anything on this subject,
17 let's go to you, because I think it's important to hear
18 from the NRC on this issue.

19 Skip, this is Skip Young.

20 MR. YOUNG: You can get the red plates out
21 right now. It's very difficult to respond to your
22 comments or the scenario you presented, but let me give
23 you some of the functions that are done in my office to
24 explain what we are doing to address some of those.

25 It's not a simple solution, and there is many

1 groups in the Division of Nuclear Security that deal with
2 it. We, first of all, have a group of intelligence
3 agents or analysts that look at the material that's
4 generated by other organizations, such as the CIA, FBI,
5 and that type of thing. That information is given to us
6 so that we can determine what I want to call the threat
7 that's out there.

8 I don't disagree with what you are saying about
9 the weapon that the Soviets are trying to design over
10 there. My comment coming back is, What is the
11 availability of that weapon to a terrorist? So the first
12 thing you have to do is you have to assess what is the
13 likelihood that an individual or a terrorist group could
14 actually use that type of weapon. There is a lot of
15 subjectivity into that, and everyone will disagree where
16 do you draw the line. Some people will say you should
17 protect against everything. The agency has decided we
18 have to decide where the right line is. I am not an
19 intel agent, so I am not going to talk about that area.
20 We have a group that does that.

21 We do have a group of engineers that are doing
22 what are called "Vulnerability Analysis." After 911, the
23 chairman at the time challenged the staff and directed
24 staff to go and do a thorough review of the security
25 programs that we have in place. Most people would call

1 it a top-to-bottom review. And what we are doing is --
2 the term that I'll throw out is VA's, Vulnerability
3 Analysis. For each type of licensee that we have
4 licensed, the Division of Nuclear Security is going back
5 and doing a Vulnerability Analysis against those type of
6 facilities. Facilities I think you would be interested
7 here would be the power plants and your dry cask storage
8 type facilities.

9 And what are we looking at? What are included
10 in the VA's? We are looking at -- we are doing an
11 engineering model, if you took a large aircraft you
12 crashed it into a power facility or you crashed it into a
13 dry cask storage facility. We've also looked at small
14 aircrafts laden with explosives. My comment there is it
15 is a small aircraft, so there is a limit to the amount of
16 explosives that you can stuff in an aircraft and allow
17 the thing to fly, and we're looking at that.

18 We're also looking at waterborne activities
19 along the coast. We are looking at what has happened to
20 the insider, the people that are inside the plants that
21 actually would have information, so you have to consider
22 someone who is inside the plant, which is known as an
23 insider, that could assist the terrorists or be one of
24 the terrorists. We are also looking at that activities.
25 We're also looking at what's know as an external assault

1 to the facility. And we're also looking at waterborne
2 and truck bombs. That's what the VA's are including.
3 That takes time. What the staff did
4 immediately is we issued advisories and orders to put in
5 place enhanced security measures, which were trying to
6 address some of the things like you pointed out on the
7 Israeli home page there. There is a lot of work that we
8 are doing. I'll be the first to stand up here and say we
9 don't have all the answers, and we haven't completed all
10 of the reviews, and that type of thing. There is a lot
11 of work still going on. And this is still an ongoing
12 process, because when you do your threat analysis, what
13 the threat was yesterday, may not be the threat tomorrow.

14 And we are looking at all kinds of weapon
15 threats. I don't want to comment on that particular
16 threat scenario, but we're looking at all types of threat
17 scenarios. We have a group of people that do that and
18 look at the realism, the ability. We deal with other
19 Federal agencies to develop time lines to determine how
20 long it would take someone to actually do this type of
21 thing. That's what we are doing in response to 911.
22 It's just an overview.

23 MR. CAMERON: Thank you, Skip. Let's hear from
24 Larry. This is Larry Camper. Larry, if you can add
25 something.

1 MR. CAMPER: I would just add to what Skip was
2 saying. Two things: One, in terms of security, I
3 mentioned earlier that the application that Diablo
4 submitted to us, they upgraded a number of things in
5 seismic. They are also were required, as part of that
6 process, to upgrade their security plan, which they did
7 do. That's any time we move to a dry cask storage, we
8 look at security plans in current terms.

9 The second point, Skip did touch on, that is
10 this issue of we have issued a number of additional
11 requirements since 911. And we issued those to dry cask
12 storage as well. For example, when Diablo Canyon moves
13 toward actually moving the fuel, 15 months prior to that,
14 they will receive an order from us that will contain
15 additional compensatory measures of a security nature.

16 And the only thing I would mention that Skip
17 didn't mention, in addition to the ongoing vulnerability
18 assessments that we are doing, that are looking at
19 full-size commercial aircraft crashing into the storage
20 casks, as well as other terrorist scenarios, which we
21 can't say in detail because of the safeguard and security
22 nature of that stuff, but as we speak right now, the
23 National Academy of science is conducting an independent
24 assessment, as requested by Congress, of the security and
25 safety of spent nuclear fuel, both in wet storage in

1 pools as well as in dry storage.

2 And this study was requested by certain members
3 of Congress because Congressman Hobson and Congressman
4 Rogers, in particular, had heard all these various
5 opinions. They had heard opinions from us; they had
6 heard opinions from concerned citizens; they had heard a
7 diversity of opinions. And what they wanted to do was
8 have an independent group with an appropriate scientific
9 pedigree. And the National Academy of Science often is
10 used to do independent studies, look at this issue, and
11 yes, we will provide a secure report to Congress sometime
12 during June, and then there will be a
13 publically-available version of that report available in
14 approximately six months.

15 Our agency, along with Department of Homeland
16 Security, was requested by Congress to fund that study,
17 which we did do and are doing. So another independent
18 group is looking at this issue, as well by an outside
19 group, the National Academy of Science.

20 MR. CAMERON: Thank you very much, Larry.

21 Anything that needs to be added?

22 MR. GWYNN: I would only add that the specific
23 information that we were given about this new weapon
24 system, the first I've heard of it -- that I don't know
25 much about weapons -- we certainly will take that back to

1 our Office of Nuclear Security & Incident Response to
2 make sure that they are fully aware of that information
3 and that it has been considered as a part of the
4 Vulnerability Analysis.

5 MR. CAMERON: And we are talking specifically
6 about information that this gentleman told us.

7 Okay. Ira, you wanted to ask a question,
8 right?

9 MR. WINN: Well, that was part of the deal was
10 that we were going to limit each person's remark to ten
11 minutes. And since you didn't go for that, I feel
12 released from that obligation.

13 My name is Ira Winn; I-r-a, W-i-n-n. And I've
14 been a citizen of San Luis Obispo County for 93 years.
15 It sure feels like 93 years.

16 At any rate, my first question to the panel is
17 this: You've talked about visual inspections following
18 the earthquake and going over everything very carefully.
19 But that wouldn't reveal internal piping cracks,
20 weakening of wells and joints or seams inside the steam
21 generators. So when I am done, I would like you to
22 respond to that. How do you go about proving that if
23 another earthquake hits, the material that hits is not so
24 weakened that it might collapse or some dire happening
25 would develop?

1 Now, while I was sitting here, I was reflecting
2 on your alarm procedures. You know, whether it's green
3 or yellow or red, and why it failed, and whether it is
4 five percent or not. And the only analogy I can really
5 think of is like the 15-year-old girl who tells her mom,
6 who is very worried about her afterschool behavior, that
7 for 99 percent of her time over the last year, she has
8 not been pregnant.

9 And I think that what happens is that we tend
10 to assume that because we file reports and we have all of
11 this administrative stuff in place, that the test is very
12 small sometimes. Sometimes it's human error. Sometimes
13 mechanical error. Sometimes it's just fate.

14 Now, it seems to me, I was reading in the
15 Bulletin of the Atomic Scientist recently, not exactly a
16 novel kind of a read, but sometimes they have some
17 interesting articles. And the physicist, Dr. Frank
18 Hempel, at Princeton University, who also is a professor
19 of public affairs, and a man named, Gordon Thompson, whom
20 I hadn't heard of before, he is with the Institute for
21 Resources and Security Studies in Cambridge,
22 Massachusetts, came up with the following conclusion
23 after they studied this plan of putting depleted fuel
24 into storage, external to the reactor.

25 And they said that "fuel pools make nuclear

1 plants vulnerable to a disaster that could effect an area
2 the size of New Jersey." Okay. So back comes the
3 response from the nuclear industry, I assume, or various
4 proponents of nuclear power, "You can't make such a broad
5 generalization. You have to look at each location
6 separately, because they are all a little bit different."
7 Now that's one side of the nuclear establishment.

8 On the other side, I understand, in Washington
9 under the present administration, there are engineers and
10 physicists who are working on developing a prototype
11 nuclear power plant for the future that would then be
12 assessed, licensed, and put out for bid, so that once
13 it's assessed and licensed, any other company can come
14 along and put the same darn model plant on their site
15 without having to go through public review, and all this
16 other thing.

17 And I am thinking, "Isn't this a little bit
18 like running upstairs and downstairs at the same time?"
19 And my question is, Does the right hand of the nuclear
20 establishment, or the NRC, speak to the left hand?
21 Those are my two questions.

22 Now, I had a couple of comments, and I'll try
23 to keep them brief in view of the time factor. I feel
24 that in matters of public health and safety, the
25 citizenry has to maintain a skeptical stance. There is

1 too much risk involved for us here. There is too much
2 risk for anyone who lives near a nuclear power plant or
3 in a tornado zone, as some of you said. But the
4 difference is that in nuclear power, you are dealing with
5 genetic damage that can carry to further generations.
6 That's not true with other forms of accident, be they
7 automobiles or tornadoes or earthquakes. No one is
8 genetically damaged by those events, and they cannot pass
9 the possibility of that damage on to future generations.

10 As a long-time reader of the Bulletin, The
11 Atomic Scientist, it becomes -- I already said that. I'm
12 sorry.

13 It becomes almost impossible for scientists
14 outside the nuclear industry establishment, and its
15 privileged contractors, to gain access to data that would
16 provide a clear and definitive view of the relationships
17 between nuclear power and cancer.

18 Every industry has its share of dangers and
19 accidents. And one of the problems that we have to face
20 is that the history of nuclear power, going back to the
21 old AC -- I know you changed your name because AC got a
22 very bad reputation. I know about the Rasmussen report
23 and how that was phoned up. I know about the BEIR
24 report, which is now, by some reports, is trying to be
25 subverted by the nuclear establishment, which will try to

1 claim that ionizing low-level -- ionizing radiation does
2 not have a cumulative effect. Hans Morgan, if he were
3 around now, would fight you bitterly on that; also a
4 nuclear physicist.

5 I know that distinguished scientists, John
6 Gotham, for example, biophysicist at UC San Francisco,
7 and Arthur Tamplin, and a host of others, who disagreed
8 with the nuclear establishment, were barred from data,
9 barred from contracts. There is a whole history of this.
10 In other words, the minute you come out -- I wrote an
11 article in the local paper, and bam, out comes this blast
12 from Diablo Canyon, using all kinds of ridiculous and
13 far-flung, phony-science arguments.

14 I mean, this is not the way you are going to
15 convince this public here. You are certainly not going
16 to convince me at all with this kind of bluster and bluff
17 and camouflage and smoke screen. It doesn't work. It
18 rebounds against you. The best thing you could do is
19 open yourself up to public scrutiny.

20 And I would like to end by saying that if the
21 industry really wishes to gain public trust, it would be
22 better served by opening up medical data -- no names need
23 to be given -- on workers at Diablo and other nuclear
24 power plants since their opening, and these are the
25 people who have experienced cancer, which is not just

1 restricted to them as part of the general population.

2 These results from the nuclear power plants
3 could then be plotted on a countrywide grid or countywide
4 grid and tied to an overlying baseline health study.
5 Then we could end the game once and for all of "My quoted
6 study is better than your quoted study."

7 The NRC stance, under the present
8 administration in Washington, is to make it harder and
9 harder for scientists and citizens to question the
10 nuclear line. That worries me a lot. Where secrecy
11 rules, anything deceptive is possible. And the history
12 of science is filled with so-called fail-safe conclusions
13 that failed, as well as gross and harmful deceptions.

14 In conclusion, I quote an old Greek motto,
15 "Whom the gods destroyed, they first make mad."

16 Thank you.

17 (Applause.)

18 MR. CAMERON: Thank you, Ira. And I want to go
19 to the first question. Thank you for the advice that you
20 gave to us.

21 MR. TAPIA: I'll speak to the concern about
22 potential damage to piping systems from the earthquake.
23 The design of piping systems is such that the weakest
24 link is the support system. So if there were to be
25 stresses imposed on the piping system, the place you

1 would see it manifested initially would be in the support
2 structures. So we did an inspection, walked down those
3 important piping systems looking for indications, the
4 first indications that we would see. We didn't see any.

5 Notwithstanding that, there is also the
6 required in-service inspection program that's conducted.
7 The pipes are inspected routinely as part of the ASME,
8 American Society of Mechanical Engineers, requirements
9 for in-service inspection. Those inspections are done to
10 monitor wear and potential cracking mechanisms that are
11 known, such as stress-corrosion cracking. It's a
12 phenomenon that is known. And so that was done during
13 this last outage, and there were no indications of damage
14 or cracks or anything resulting from the earthquake.

15 MR. WINN: And my question related to invisible
16 cracking. In other words, that cannot be looked at from
17 the outside.

18 MR. CAMERON: Let's just get you quickly on
19 record. Invisible cracking, can you go to that, Joe?

20 MR. TAPIA: If you don't see any -- we are
21 talking from the earthquake, okay. If you don't see any
22 indication of damage to the support structure, you
23 wouldn't expect that there would be damage in the piping
24 system itself. Okay.

25 MR. WINN: No, I don't agree. The seems that

1 can crack, and you wouldn't know it. You can do that
2 with any kind of a structure.

3 MR. TAPIA: The design of the system is very
4 robust, and I mean the pipe. The weak link in the
5 system, which includes the supports is the support
6 attachment to the wall. So if there is going to be any
7 damage manifest itself in the piping system, you are
8 going to see it at the weakest link, which is the support
9 attachment to the wall, so we look there first. Not
10 seeing any, it is logical to conclude that there isn't
11 any damage in the pipe.

12 AUDIENCE: You don't do any type of X-rays?

13 MR. TAPIA: We do the in-service inspection
14 routine. Ultrasonic testing is what's done to detect
15 cracking. X-rays will not show cracks, and that is done
16 during each outage. There are -- there is an inspection
17 plan that's submitted to us. There are certain samples
18 that are made, and there are inspections that are done
19 for the purpose of identifying cracking or wear or that
20 sort of thing. And that was during this last outage.
21 But we don't expect to see any damage resulting from the
22 earthquake, because of the inspection, and also because
23 of the level of motion that was felt in the building, it
24 was very, very small. The input ground motion was quite
25 small, compared to what those systems are designed for.

1 MR. CAMERON: And Joe, is this the type of
2 information -- Joe and David were -- and Terry did the
3 inspection report that Bill Jones talked about? Is this
4 the type of thing that is in the report?

5 MR. PROULX: Yes.

6 MR. CAMERON: I hope that this has clarified
7 some things for you. And thank you, Joe, for doing that.
8 I think that was helpful.

9 We are going to go to this gentleman, and then
10 this gentleman, and then I believe you wanted to say
11 something.

12 MR. SATORIUS: Before you do, there was one
13 other question that the gentleman had that I can address
14 up here.

15 MR. CAMERON: I'm sorry, Mark. And that's the
16 left hand/right hand.

17 MR. SATORIUS: I was going to ask him what he
18 meant by that, but I was going to answer one of his other
19 questions. Your other question had to do with the levels
20 of radiation, especially low levels of radiation and what
21 the effect of that is upon the body. And you are exactly
22 right, there has been a significant amount of debate
23 among scientists and health physicists on what those
24 effects are and at what level they become damaging.

25 And the agency has taken a positive action as a

1 result of that. We've enacted a rule called the ALARA
2 rule. ALARA is one of these silly acronyms that we have
3 that stands for "As Low As Reasonably Achievable." Did I
4 get that right?

5 And what that means is that licensees are
6 required to enact a program that we inspect as part of
7 our baseline inspection program, that they reduce the
8 dose to all of their workers, to all of the people that
9 work in the facility to as low as can reasonably be
10 achieved. And we are the determiners of what's low
11 enough; not them, we are. And we inspect that, and we
12 have inspection findings.

13 So we realize that there is a real question.
14 And as you have low levels of dosage, and the further
15 lower you drive that, the further you drive it away from
16 health affects. So I would say that the NRC has enacted
17 regulations that deal with that.

18 And the left hand/right hand, I'm not sure I
19 understood what you meant.

20 MR. CAMPER: I did want to point out real quick
21 that you are right, there is a great deal of science and
22 studies going on today about the effects of low-level
23 radiation. There is a great difference of opinion
24 amongst scientists and health physicists.

25 What we do, though, and you may know this, but

1 I think for everyone's benefit. The process that we use
2 follows something called the "LNT," the "Linear
3 Nonthreshold" model. What that says is that there is no
4 level at which there is not some effect from radiation.
5 That's the conservative model. And what we have done is
6 we have taken effects that we see at higher dosages of
7 radiation, effects we've observed, for example, in the
8 Marshallese Islanders, the victims of Nagasaki and
9 Hiroshima, and we extrapolate back and we say that there
10 is no level which there is not some consequence from
11 radiation. And that's what our regulations are based
12 upon.

13 Now, we know from a scientific information
14 that, in fact, the consequences of the effects and the
15 behavior is different at low-levels of radiation. But be
16 that as it may, we assume a very conservative model, the
17 Linear Nonthreshold model. And arguably, it is
18 conservative. But we think that is what you should do
19 when establishing regulations.

20 MR. CAMERON: Thank you very much, Mark.

21 And go ahead, Pat.

22 MR. GWYNN: I would like to add, because you
23 asked a question, a couple of questions, and I'll try to
24 sort them out.

25 You talked about two scholars on the East coast

1 Who had raised questions about fuel storage. And that's
2 exactly this Alvarez study that Mr. Camper was talking
3 about earlier. That is being reviewed by an independent
4 third party, the National Academy of Sciences, because
5 our professionals and those professionals have differing
6 opinions. We believe that either form is safe, but the
7 National Academy of Science is looking at that differing
8 view. And if, in fact, that independent body comes back
9 and says, "Mr. NRC, we think you are wrong," then
10 obviously, the NRC is going to be whatever is appropriate
11 to address that safety concern. So I wanted to just make
12 sure that it was clear.

13 Also, you raised a comment about the licensing
14 process for new reactors. And that's something that the
15 agency changed quite some time ago. It's never been
16 exercised. That new licensing process provides a
17 process.

18 You may recall that they started construction
19 at Diablo Canyon before the agency ever finished the
20 licensing review of the safety of the facility. The new
21 process provides that not only will the design be fully
22 reviewed and licensed with opportunity for public comment
23 and hearing, that a site where a reactor might be built
24 has to be reviewed and approved for a reactor site, but
25 the marriage of the reactor design and the reactor site

1 has to be reviewed and approved with an opportunity for
2 public comment before any ground can be broken to being
3 the construction of a nuclear power plant.

4 So that really, I think, provides three
5 opportunities for public involvement. The local
6 community would certainly be involved in the decision on
7 whether or not there was going to be a site in their
8 community and on whether or not the design could be
9 married to that site. And all of those opportunities
10 would be exhausted before a plant would ever being
11 construction in the United States. So that's that new
12 process that you were talking about.

13 MR. CAMERON: One final comment from Girija
14 Shukla. Go ahead.

15 MR. SHUKLA: Early on, every nuclear power
16 plant was custom designed, but later on the vendors found
17 out that if you have the standardized design, it would be
18 more economical, so they have made some standard design.
19 Everybody, Westinghouse, General Electric, and all these
20 vendors. And NRC does approve a generic design. But
21 there is no such thing that you can just take that design
22 from the shelf and build a nuclear power plant anywhere
23 you want. It has to go through a full review, full
24 hearing process. It only changes, as Mr. Gwynn said,
25 that we have combined the construction license and

1 operating license together, is called, "Combined
2 Operating License"; that we have to license the utility
3 at the same time when we license that design for them, at
4 the same time when we license the site. So it's a better
5 process for the public than for them. So rest assured
6 there is no such thing that you can just buy a plan from
7 somewhere and build it anywhere else.

8 MR. CAMERON: Thanks.

9 We are going to go to this gentleman, this
10 gentleman, and then go to you, and then to Mrs. Groot.

11 MR. HAGGARD: I'm Ken Haggard, local architect.
12 That's Haggard, H-a-g-g-a-r-d, like Merle.

13 Thank you for coming and listening to us. And
14 I would like to first start with a little disagreement
15 with my friend, Dr. Krejsa, whom I've known for years. I
16 think a lot of things we've hashed over a long time. But
17 I think the thing that has changed the most is
18 defensible, the question of defense. And so I would like
19 to pick up the person before last in terms of the defense
20 thing.

21 And I would like for run a little scenario from
22 my experience just to illustrate that it's not a
23 high-tech. It's not just a defense against a high-tech
24 thing, like that 250 miles per hour torpedo, and so
25 forth. I've been here a long time and following this a

1 long time, so I go back 45 years on this.

2 I was in the army 45 years ago as a captain in
3 the chemical corps. The chemical corps, our favorite
4 weapon in the chemical corp was this 4.2 mortar, which I
5 can show you here. I've got specs on this, if anybody
6 wants it. It's a weapon developed in the '20s to deliver
7 gas, but they found out how effective it was for infantry
8 use, so it became an infantry weapon in World War II and
9 throughout the Korean War.

10 And the reason it's so effective is it has a
11 2 1/2 mile radius. It only weighs 300 pounds, so six
12 people can carry it anyway. It was so effective that
13 they used it on boats. It was very light. You could use
14 it on ships. They used it in the island hopping campaign
15 against the Japanese in World War II. They mounted them
16 on the landing craft so that they could take over when
17 the artillery on the ships couldn't provide support,
18 because the troops were too close, you could fire these
19 things off.

20 So they are a very effective weapon and so
21 diverse and so forth, all kinds of ammunition is
22 developed for these things, like thermite shells. They
23 can burn under water. Phosphorus shells and so forth.
24 Now, I could get any of these weapons. I can go to a gun
25 fair, those gun fairs they have all over the state and

1 country, and locate somebody who can get me antique
2 weapons of this sort.

3 So I'd like to go through a little scenario, if
4 I was a terrorist and I wanted to be low-tech about it,
5 not the high-tech torpedoes, of what might happen here.
6 But the "here" is the water, all the waste in the water,
7 unprotected in water tanks.

8 I could drive to Montana de Oro, at the end of
9 Montero de Oro State Park. There is never anybody there.
10 There's a little rest room. I could unload my six guys
11 without equipment. If anybody is there, I would tell
12 them we're photographing wildlife or something. We could
13 walk a mile, stay in the park and still hit the thing.

14 At the same time, we could have somebody go up
15 this public road, Perfumo Canyon, cut a barbed wire
16 fence, go on this road and be off the property and still
17 hit it, or put it on the boats like they did in Okinawa.
18 And probably, if I was a really clever terrorist or guy
19 who wanted to do this, we could do all four of these at
20 once and synchronize this thing.

21 This thing can produce -- deliver 40 rounds in
22 two minutes. So with four of them, we could do 160
23 rounds in two minutes before the troops got taken out.
24 It's a pretty low-tech operation. It's using an antique
25 World War II weapon, but let's look at it from a military

1 viewpoint. If I was an "access of evil" type character,
2 which I'm not, but if I was, what would be the advantage
3 of this? Well, we mentioned the dirty bomb thing, so
4 we've got a dirty bomb. We don't have to develop the
5 dirty bomb. The U.S. provides it for us. Big effect if
6 we are successful. Huge economic disruption.

7 But the main one from a military viewpoint is
8 you've got Vandenberg Air Force base sitting down here,
9 which is half of the military missile testing in the
10 United States. The Predator weapon that was used in Iraq
11 and Afganistan, a lot of them are controlled from there.
12 We could knock that out, maybe with twelve people, maybe
13 not. But it sure beats crashing yourself into a big
14 building. Your possibility is way beyond that. Big
15 morale boost.

16 So symbolically, it's the ultimate irony. It's
17 like Jujitsu, turning your opponent's strength on
18 himself. With all these disadvantages, it seems
19 absolutely wrong to soften the target, if I can use a
20 military term. PG&E and NRC is going along on this waste
21 storage thing. We're softening the target. We should be
22 hardening the target. I don't know about shipping it out
23 of there, but at least defending that waste, because this
24 essentially is a dirty bomb, as the guy mentioned.

25 So now you are doing those studies, and the

1 National Academy of Science is, but if -- my question, I
2 guess, is, if it is determined that these things are
3 indefensible, all the earthquake and all the other things
4 we can argue about, and we have for 25 years now. If it
5 is determined to be indefensible, is the political will,
6 then, to close the plant, remove the waste and so forth,
7 because there is a lot of options besides these two? We
8 are bracketing the possibilities here from a very
9 low-tech thing to a very high-tech thing, but they all
10 deal with defensibility of this thing.

11 MR. CAMERON: I just would echo what Pat Gwynn
12 said before is that that type of information will be
13 something that be will be taken back.

14 And Larry Camper, and we'll go to Skip Young
15 first on that. Go ahead, Skip.

16 MR. YOUNG: I can't get into specifics, but I
17 will say that we are looking at all kinds of weapons
18 sweets. That's all I will say. If we, in our
19 vulnerability studies, come out and find, basically,
20 there is inadequacies there, we will look at that and
21 either require the licensees to put what I want to call
22 enhanced security measures in place to address that
23 shortfall.

24 MR. HAGGARD: But even this if it's found
25 indefensible -- I mean, isn't there the possibility that

1 it would be found that you couldn't defend these things,
2 then would be the recommendation be given to close the
3 thing and move the waste?

4 MR. YOUNG: I can't answer that question, but
5 it would go to the commissioners. And the commissioners
6 would have to decide -- you know, the charter of this
7 agency is basically to protect public health and safety.
8 From my perspective, if we found that -- even if it was
9 the safety or security question where there wasn't proper
10 protection of the public health and safety, I think from
11 the staff's recommendation would be to go up there, you
12 either have to correct the situation or you have to go
13 through the process of stopping that activity or
14 correcting that activity. That's my opinion. We have
15 some managers here that can give you a better answer to
16 that.

17 MR. CAMERON: Or as you implied, the hardening
18 of the target too.

19 MR. HAGGARD: Yeah. That's Dr. Thompson's
20 proposal. No waste. Nothing in ponds. Everything in
21 hardened storage. And then those are bunkered and really
22 hardened up.

23 MR. YOUNG: I think what the answer is if you
24 look what the Germans are doing, actually the way they
25 are doing the waste, my office is looking at what the

1 Germans are doing, because the Germans actually put their
2 dry cask storage in what I want to call "hardened
3 facilities," in other words where it's actually in a
4 building, inside. The casks are actually inside a
5 building.

6 MR. CAMERON: And we have to get you on the
7 record too. But you think the question why don't we look
8 at that before we --

9 MR. GWYNN: Two points, I want to make sure we
10 tried to answer about when -- do we have any sense for
11 schedule? When will these studies be finished? When
12 will the commission make their decisions? Do we have any
13 sense of that?

14 MR. YOUNG: The office is actually is doing the
15 ones for dry cask storage or the spent fuel project.

16 MR. CAMERON: Larry Camper.

17 MR. CAMPER: The ongoing vulnerability
18 assessments, I can't tell you an exact date, but I can
19 tell you this. The target has been for the studies to be
20 completed in the summer. And for the results, the
21 commission has been kept aware of the outcome of those
22 studies in real-time as we learn information. And as we
23 learn information from our contractors, we have been
24 having ongoing communications with the commissioners.

25 As soon as the Vulnerability Assessments are

1 completed, they will go to the commission, and the
2 commission will then determine if further mitigative
3 measures are in order. But I do want to comment about
4 this issue of putting the dry casks storage into
5 buildings, for example, as the Germans have done, or
6 putting berms around these things.

7 The National Academy of Science, which is
8 conducting this independent study, recently went to
9 Germany and was looking at those facilities. But I want
10 to point out that while at first glance, the idea of
11 putting a building around a dry cask storage facility may
12 seem like a good idea, understand when you do that, it
13 also causes problems. There are consequences,
14 undesirable consequences from enclosing those things.

15 UNIDENTIFIED: Like what?

16 MR. CAMPER: Like the pooling of aviation fuel,
17 for example. All I am saying to you is this: It is
18 readily understandable to reach the conclusion upon first
19 glance that if I put a berm around this, or if I put a
20 building around it, it's a good thing. But I am going to
21 tell you that for everything you do, there is a cause and
22 effect, everything.

23 MR. CAMERON: And I think, Larry, isn't it
24 true -- isn't it true, Larry, that the County
25 Environmental report, one of their recommendations on

1 security issues and design was that the design be such
2 that jet fuel would not accumulate?

3 MR. CAMPER: Yeah. I think there were three
4 mitigative measures that were suggested. There was this
5 idea of fire suppression system. There is a no-fly zone.
6 And I think the third was this idea of not having fuel
7 pooling, and this type of thing. And those are good
8 points. All good ideas.

9 And what I am really saying to you is that
10 while -- in the final analysis, we do not know what will
11 come out of the Vulnerability Assessments. They are
12 ongoing. But I can tell you this without getting into
13 details. The Vulnerability Assessments that we have been
14 conducting, and are conducting right now, are far more
15 severe than the idea of hurling a bazooka into this thing
16 from a long distance away. I mean, we're talking some
17 egregious attack scenarios and terrorist scenarios. We
18 are trying very hard to use worst-case scenarios as part
19 of this Vulnerability Assessment.

20 The VA, when it is completed -- we hope to get
21 that done this summer -- it will go to the commission.
22 The commission will then decide if further mitigated
23 measures are in order. In other words, do we need to do
24 other things, like berms, for example, or buildings
25 around them, or whatever those mitigative measures might

1 be. We just don't know yet because they're not complete.

2 MR. CAMERON: Thank you for that.

3 MR. GWYNN: And just to be clear for the
4 gentleman's last question, you heard Mr. Camper say that
5 the commission itself will make decisions, so there is
6 nobody here in this room that can answer your question
7 about what will the decision be. We don't know.

8 MR. CAMERON: Okay. Thank you.

9 Let's go this gentleman. And we'll go to you
10 and then over here.

11 MR. MARA: My name is Michael Mara, M-a-r-a.

12 I've been a county resident since 1977, and
13 there is a lot of us that have been fighting against
14 this, struggling with this for a long time. And there
15 are a lot of us who are very angry, and we are very weary
16 of this. We've been trying to get PG&E and the NRC and
17 the AEC, as it was, to keep its promises to give us the
18 assurances that we're looking for, to give us the
19 safeguards that we've been -- that we feel is due. And
20 it's just not happening. And it's got a lot of us really
21 sort of at our wits end with this entire process and with
22 this entire system.

23 However, to try to leave the emotion out of it,
24 I look at you guys, and I think you, I am sure you guys
25 have a solid faith in your point of view and your systems

1 and your technology. Understandably, you likely have the
2 best info available in many cases, but I know from
3 personal experience that nature has a way of sabotaging
4 the best-laid plans of mice and men.

5 The assumption that this system, that these
6 systems that function within this plant can be fully
7 controlled, that science, technology and computerized
8 equipment can deal with an eventuality, I've seen the
9 folly of this. I worked in it for 15 years, managed
10 networks for corporations, and we thought we had these
11 computers all worked out and everything was fine, and the
12 bugs will come in when you least expect them. And
13 obviously, when you are running a corporate network, it's
14 nowhere near as much at stake as a situation such as
15 nuclear power plant control and containment system.

16 But science itself is an interesting animal.
17 To use an analogy that everyone is probably familiar
18 with, for hundreds of years, thousands of years, people
19 ate butter. They thought it was a wonderful thing. Got
20 to a point where all of a sudden we decided butter is bad
21 for you and margarine is what we need to eat. And this
22 was cutting-edge science at the time. And that went for
23 a little while, and then science decided, "No. Margarine
24 is actually somewhat toxic for you, and we could go back
25 to butter. " So now, we all eat a little bit of butter,

1 and that's fine again.

2 Science keeps changing. It's not a fixed
3 certainty. It's not a situation that can be controlled.
4 You know, he mentioned about the 7.2 earthquake is
5 guaranteed the strongest earthquake we can have. There
6 is no way on this earth that a scientist can say that and
7 be absolutely certain beyond any shadow of a doubt that
8 that is absolutely what can happen. He can feel that
9 way. He can believe this, and that's fine. He is paid
10 to believe this, but it just doesn't work that way.

11 Man's irrational faith in science and
12 technology comes back to bite us on the ass. There is no
13 fail-safe technology. It does not exist. There is
14 always somewhere a bug that can get into the machine.
15 And so assuming that something might go at some point, go
16 right at the plant, whether through a seismic anomaly,
17 human error, terrorism, technological failure, you
18 gentlemen risk very little in a situation like this. A
19 reprimand perhaps; an unsatisfactory performance review.
20 Maybe, at worst, scorn from your colleagues.

21 In direct contrast, we risk all. Should
22 something go wrong, we risk our health, our children's
23 health. In the worst-case scenario, our lives, our
24 homes, our livelihood. Due to what is at risk for us, we
25 aren't going to go away. We will fight endlessly within

1 every means possible to get our concerns addressed, to
2 get our questions answered, to get PG&E and the NRC to
3 live up to its promises and commitments, or else until
4 this nuclear generation station and waste dump is closed
5 safely and permanently, one or the other, we are not
6 going to quit. We take this very, very seriously. At a
7 point that maybe you can or cannot understand, or you can
8 imagine you understand. But we are not going to just
9 walk away from this.

10 I find it interesting that none of you live
11 near nuclear power plants. Perhaps you know something
12 that we don't? Maybe that's not a good idea.

13 One thing that bothers me -- and those are
14 comments. A question in a situation -- accident,
15 earthquake, terrorist attack, something occurs to Diablo
16 canyon -- I would like to know what are the plans to
17 effectively evacuate this area. If you've spent any time
18 here, 101 now is getting to where consistently we have
19 stop-and-go traffic between San Luis Obispo and Pismo
20 Beach area. The first time I saw this a year or so ago,
21 I thought there was a wreck or I thought that CalTrans
22 had closed a lane, or something. I couldn't understand.
23 It's just traffic. This is just on a given day. This
24 isn't even necessarily even a Memorial Day weekend.

25 If the situation ever happens where (inaudible)

1 really does come in contact with the rotary device, we're
2 just out of luck. Unless you guys are planning on
3 sending in helicopters for us, are we supposed to swim
4 for it? The entire couple hundred thousand residents of
5 this county are supposed to try and get on 101 and drive
6 south. I mean, you know, just get on the freeway on a
7 weekend and see what it would be like if you had a panic
8 situation. Just see what it is now and imagine what it
9 would be like if you had a panic situation. We can't
10 evacuate. There is no way to evacuate.

11 Until you guys can come up with a valid,
12 functional evacuation system that will really get us out
13 of harms way, in the case of a serious accident, this
14 isn't workable for us. This is not a workable situation.
15 So I would like to know what is your plan for evacuation?
16 Are you going to build a 12-lane highway directly from
17 here to Bakersfield, so that we all can leave? What is
18 your plan for this? How does this work?

19 MR. CAMERON: Can we give a little bit of the
20 framework for what the emergency planning requirements
21 are? I don't mean necessarily specifically for Diablo.

22 MR. SATORIUS: I will -- we don't have anyone
23 for EP, but I will sure take your question. And my
24 answer to you is that we test, in conjunction with
25 County, and in some cases city, depending on the location

1 of the facility, but county, city, state, Federal, FEMA,
2 and NRC. And we run scenarios and drills within the
3 county emergency operations facility other a periodic
4 basis.

5 We did it in 2002 with Diablo Canyon. And
6 those scenarios are posed, just as you say, the difficult
7 evacuation scenarios. So we have requirements that these
8 be tested on a periodic basis. Our region right now is
9 performing one of these drills with the River Bend
10 station in Louisiana. So that would be the answer that I
11 can provide you.

12 MR. MARA: Well, so, you are running some
13 drills. What I am talking about just try driving around
14 this county when there were tourists around here and try
15 getting anywhere. In a panic situation, it's going to be
16 a mess. I mean, we are not going to be able to leave,
17 and that's not acceptable to us, to be stuck here, say,
18 in a worst-case scenario with that thing, there has been
19 a breach in the containment, there has been a breach in
20 the dry cask, and that thing is belching clouds of
21 radioactive plume, and we are stuck here in traffic.
22 That is not acceptable to us. And until that situation
23 is changed, we are not going to let this go. We are not
24 going to give up on fighting this.

25 You know, I had a real peculiar --

1 MR. GWYNN: Just briefly, to add to what Mark
2 said, we do have people who specialize in emergency
3 planning. We can't answer your question. We may be able
4 to bring them with us the next time that we come. I hope
5 so. And with respect to the specific emergency plan for
6 off-site, emergency planning for nuclear power plants is
7 a partnership between the Nuclear Regulatory Commission,
8 the Federal Emergency Management Agency and the State and
9 the local officials who have responsibility for emergency
10 management in the local community. The NRC actually is
11 directly responsible for the on-site, the --

12 MR. MARA: The safety of the plant, I
13 understand.

14 MR. GWYNN: -- the controlled area, and then we
15 coordinate with the Federal Emergency Management Agency
16 and others who are working with the county officials in
17 the State for the off-site. So the evaluation plans are
18 generated by the local community.

19 MR. MARA: It's a joint effort, I understand.

20 MR. GWYNN: That's correct. And so if you have
21 information about conditions in the county that you think
22 have changed that would cause questions to be raised by
23 the validity of those plans, then I think that it would
24 be valuable if you can provide that to us in some detail
25 and talk to one of our inspectors after the meeting.

1 MR. CAMERON: Is this available -- it's Mike?

2 MR. MARA: Michael.

3 MR. CAMERON: Are the plans available for the
4 public to look at if someone wants to?

5 Are you interested in -- have you seen the
6 plan? Do you know what's in the plan?

7 MR. MARA: I have looked at it a long time ago.
8 I haven't looked at it recently.

9 MR. CAMERON: Maybe we can take an action item
10 to get back to people if they want to see what the plan
11 is. And you have a couple more things to tell us.

12 MR. MARA: There was one. I had an interesting
13 experience about 20 years ago. I ran a service
14 department in Computerland of San Luis Obispo, and PG&E
15 purchased 300 computers from us. We were the delivering
16 store. So the truck delivery came to our store with a
17 truckload of computers, and I accompanied him out to the
18 plant sat there and supervised him unloading them on the
19 dock. And then he took off. The signature wasn't ready
20 to leave. I was standing there with a lab coat on. And
21 a guy pulled up in a little 30-foot bobtail truck, a
22 delivery truck that delivered bread in or roof tiles or
23 anything else.

24 And the PG&E guys were kind of lounging around,
25 you know, goofing off and stuff. And this guy walks up

1 to me and says, "I've got some fuel rods for you." And I
2 went, "Excuse me?" And he says, "I've got fuel rods
3 coming in," and he was dead serious. And I said, "Are
4 you serious?" And he says, "Oh, yeah."

5 I mentioned this to the PG&E guys, and
6 instantly they snapped to attention. I knew he was dead
7 serious. I wondered at the time, is this legal, to
8 transport these in an unmarked 30-foot truck? Is that
9 safe? Is that the standard policy that the NRC has for
10 transporting nuclear fuel rods? This is a real-life
11 experience. I saw it. This is not some conjecture or
12 third-party story or something.

13 MR. CAMERON: Do we have any -- I don't know --
14 Larry or someone else who can just briefly talk about the
15 transportation?

16 MR. MARA: There is no markings whatsoever on
17 the truck that I recall.

18 MR. CAMERON: Do you want to talk to that a
19 little bit?

20 MR. CAMPER: I can't comment on the scenario
21 that you are describing. I can only tell that you
22 transportation of fuel rods, transportation of materials
23 have to be transported in packages that meet certain
24 specifications. Those packages have to have been
25 reviewed and approved. There are entities which are

1 authorized and there are DOT regulations that oversee
2 this as well. So I can only tell you that your scenario
3 seems strange to me. I can't comment on your particular
4 scenario.

5 MR. MARA: I was there. It seemed strange to
6 me at the time.

7 MR. CAMPER: I'm saying I can't comment on your
8 particular scenario.

9 MR. MARA: I'm thinking, shouldn't there be
10 like a "hazardous materials" sign on the truck or
11 something? Or "Keep the hell away. Nuclear fuel rods."
12 Something.

13 MR. CAMPER: The transport of all radioactive
14 materials is subject to regulations by us or DOT. There
15 are placarding requirements. There are packages that
16 they can be shipped in requirements. It's not simply
17 putting in the back of a FedEx truck and showing up
18 somewhere.

19 MR. MARA: No. It wasn't a FedEx truck. It
20 was a delivery truck. I didn't look at the actual
21 containers. The truck might have been filled with led
22 with one fuel rod in. I don't know. But the truck was
23 completely unmarked.

24 In closing, I appreciate you guys coming out
25 here. And you guys say at some point you would like to

1 -- whatever, that you'll accommodate us. My comment is
2 if you guys want to cut down on your trips out here and
3 save the taxpayers some money, I offer you a simple
4 solution -- shut Diablo down.

5 Thank you.

6 MS. BROWN: I promise this won't take long, and
7 it may be anticlimactic because I'm going back to
8 grandchildren.

9 My name is Marilyn Brown. I've lived in
10 San Luis Obispo County for 32 years. During that time, I
11 raised my family, and I operated my business. I would
12 like to introduce my grandchildren to you. This is J.J.,
13 the athlete. He is ten. This is Zoe, the dancer. She
14 is six. This is Emily, the musician. She plays trumpet,
15 and she is going to be running for president when she is
16 35. She tells me that. And this is Avery. She is 9,
17 and she has always wanted to be a chef.

18 Two of them live here with me near the Diablo
19 Nuclear Plant, and two live in Washington state, near the
20 Hanford plant. We are a two-nuclear-reactor family. How
21 did we get so lucky.

22 My reason for being here this evening is to
23 implore you to use every scintilla of caution and
24 conscience when you regulate the nuclear industry. The
25 decisions you make are far-reaching and effect us all. I

1 realize that economics and politics have bearing on
2 decisions, but please let safety be number one in your
3 priorities. Even if you have taken all measures to deal
4 with terrorism, either foreign or domestic, or an act of
5 insanity, or simply a technological failure, we are on
6 shaky ground here.

7 The earthquake we had on December 22, 2003,
8 should have been a wake-up call. I lost my business
9 location in Paso Robles after 22 years. That was
10 replaceable. Our children and grandchildren are not. I
11 have a calendar here of the everyday nuclear accidents
12 that have occurred all over the world. These are
13 documented since the first atomic bomb was used. It is
14 14 pages in length, and there are many U.S.A. incidents
15 of technological failures, coupled with human error.
16 These incidents risk public health and the environment.

17 One that stands out to me is the April 20,
18 1973, incident, where thousands of cubic feet of
19 radioactive waste flowed out of the Hanford nuclear
20 weapons complex. It contaminated the Columbia River. My
21 daughter has a Cherry farm on the Columbia. And although
22 this incident occurred years ago, the half-life of
23 radioactive elements is a sneeze in a tornado.

24 There must be a limit put on how much waste is
25 allowed here. Also, I would like to ask, if and when

1 there is a depository to transport the radioactive waste
2 away from here, does it need to be removed from the dry
3 casks and put into another type of container for
4 shipment? Thank you for listening.

5 MR. CAMERON: Okay, Marilyn, thank you.

6 And can we answer the question about you have
7 dry cask storage, when it goes to be transported
8 somewhere, what's the story?

9 Larry, are you going to do this for us?

10 MR. CAMPER: The simple answer to your question
11 is yes. When the spent nuclear fuel is removed from this
12 site, or from any of the nuclear power facilities, it
13 will be transported -- it can only go to the national
14 repository, assuming for the sake of discussion it's
15 Yucca Mountain. But the Nuclear Waste Policy Act
16 requires that the spent nuclear fuel can be shipped only
17 in shipping containers that have been approved by the
18 Nuclear Regulatory Commission. So yes, it will be a
19 special package to transport.

20 MS. BROWN: It has to be taken out of the dry
21 casks and put into another type of container?

22 MR. CAMPER: It goes out of the spent fuel pool
23 into a cask or container that's approved, reviewed and
24 approved by us. And when it's removed from the dry cask
25 storage and taken to the repository, it will also be

1 transported in a package that has been reviewed and
2 approved.

3 MS. BROWN: But the very act of taking that out
4 of one container and putting it into another, that opens
5 a whole other bag of problems, doesn't it? I mean, how
6 is this performed? By people? By machine?

7 MR. CAMPER: It's performed by people working
8 for the power plant using equipment that's designed to
9 move the spent fuel rods out of the spent fuel pool into
10 the canister and into the cask. And similarly when it
11 comes out, it will be done by using special equipment to
12 do that.

13 MS. BROWN: What about glassification?

14 MR. CAMPER: I'm sorry. What about what?

15 MS. BROWN: Glassification of the nuclear
16 waste. They are trying that at the Hanford plant, I
17 believe.

18 MR. CAMPER: Oh, vitrification. Putting like
19 in glass cylinders?

20 MS. BROWN: Yes.

21 MR. CAMPER: Well, the spent nuclear fuel
22 storage system that we're talking about here does not
23 involve vitrification. It involves placing the spent
24 fuel rods into a canister that is welded, that is filled
25 with inert gas, and then is placed into an overpack and

1 put onto the pad. Similarly, when it comes out, it will
2 go into a canister that is designed for transportation.
3 Now, increasingly, the industry is moving toward what is
4 called DPC's, Dual Purpose Canisters, that can be used
5 for transport. But the entire thing does require a
6 particular type of package that's been reviewed and
7 approved.

8 MS. BROWN: The reason I ask that is because I
9 was thinking because of all the problems that there are
10 with the dry cask storage, if there has been any research
11 into another whole way of doing it, dealing with the
12 nuclear waste that might be less problematic.

13 MR. GWYNN: Larry, just for clarification, our
14 resident inspector indicates that the casks that are
15 proposed to be used at Diablo Canyon are Dual Purpose
16 Casks, which means that they don't have to be unloaded.
17 They can be shipped directly. There are other designs.

18 MR. CAMERON: Did you get that, Marilyn?

19 MR. CAMPER: Increasingly, the trend has been
20 for the industry to move toward Dual Purpose Casks.

21 MR. CAMERON: Okay. Thank.

22 Henriette.

23 MS. GROOT: Yes. My name still is Henriette
24 Groot. I have a couple of comments to make here,
25 basically on safety issues. Not different from anybody

1 else, actually.

2 First of all, let's call a spade a spade. When
3 I got my Ph.D. in psychology from UCLA, my dissertation
4 was on verbal behavior. And language is very important
5 in structuring our behavior. And when we come to safety
6 issues, language is doubly important. So let's call a
7 spade a spade? ISFSI, Independent Spent Fuel Storage
8 Installation, does that really tell people how dangerous
9 that stuff is? Hell no. Let's call it by its true
10 name -- highly radioactive hazardous nuclear waste.
11 Somebody earlier showed you the signs that really should
12 be attached to these casks, to this whole project.

13 If you tell a truck driver, "I am going to load
14 your truck with some spent waste, with some spent fuel,"
15 would he know how dangerous that stuff is? Of course
16 not. So let's call it by its proper name. Let's have
17 the courage to at least tell people what it is. That's
18 the first point I wanted to make.

19 The next one, those casks, now I understand
20 they are basically going to be licensed for a 20-year
21 period, and they might be good for another 20 years. And
22 my question is, what happens after that? Is PG&E going
23 to go in there and say, "Well, oh, this cask now needs
24 replacing"? Who is going to do that work? Has anyone
25 studied how you are going to then put the stuff in

1 something else in the next cask?

2 And I, as everybody else here is, am assuming
3 that basically it's not going to be in Yucca Mountain by
4 that time. No. It's going to be in Yucca by the Sea;
5 namely Diablo. That's what we're going to have, Yucca by
6 the Sea.

7 Okay, next point. So there is a new procedure
8 for the approval of new plants. What I would like to
9 know, is there also a new procedure for approval of dry
10 cask storage to insure that this site and this method of
11 storage are a proper marriage? I would like to hear an
12 answer to that. And perhaps your answer should be that
13 in light of that, the an approval already given for the
14 dry cask storage at Diablo needs to be reevaluated.

15 Thank you.

16 MR. CAMERON: Thank you, Henriette.

17 And Larry, I think you are on, on this one, in
18 terms of what is the listening process. Would you
19 characterize it as new or streamlined in any way? Can
20 you just give Henriette and the audience a little bit of
21 information on that?

22 MR. CAMPER: The process for the licensing of
23 the ISFSI, or if you want to call it the dangerous waste,
24 first of all, the waste has to go into a cask or into a
25 canister and into a cask that has been reviewed and

1 approved. That package, that package is evaluated
2 against a number of things. I mean, we look at thermal
3 analysis, structural analysis, criticality, severe
4 accidents. For example, one of the accidents that we
5 evaluate against is it has to be able to withstand a
6 \$4,000 pound automobile being hurled at it at 126 miles
7 an hour, as an example. So the pack evaluation itself
8 undergoes an evaluation.

9 We issue what's called a Certificate of
10 Compliance for it. Okay. And that Certificate of
11 Compliance goes through a public rulemaking process where
12 we now have published the fact that this particular cask
13 is now available.

14 In the case of Diablo, these nuclear power
15 plants can move to dry storage by one or two ways: They
16 can move through a general license, which is authorized
17 in the regulations if they use an approved cask. In the
18 case of Diablo, they opted to go for a site-specific
19 license. That was their decision. And as a result of
20 that, they subjected themselves to the hearing process,
21 and there were some comments earlier tonight about
22 certain contentions that were filed in the hearing
23 process.

24 The license was issued under Part 72. Okay.
25 Now, the license is issued for 20 years. You are

1 correct. But the commission is on record as saying that
2 dry cask storage is suitable for at least a hundred years
3 without causing any environmental consequences. It did
4 that in 1990 when it revisited the Waste Competence
5 Decision.

6 Now, what is the Waste Competence Decision?

7 That is a process that is used where the United States
8 and other countries align themselves with the
9 International Atomic Energy Agency and say, "This is the
10 process and the regulatory approach we will use to
11 regulate nuclear waste." So we issued a license for 20
12 years. It can be renewed. We have our first renewal
13 under review right now.

14 And the thing that we look at, even though the
15 commission has pointed out that it's safe without viable
16 consequences for 100 years, 30 years beyond the operation
17 of the power plant itself, including renewal, the reason
18 we do it for 20 years is it gives us a chance to look at
19 things like materials degradation. Is there additional
20 data that we didn't have before? Do we want to impose
21 any additional maintenance conditions on the licensee?
22 So the 20-year renewal is an opportunity to do another
23 evaluation, even though they are safer than that. Dry
24 cask storage has been in place and used now for many
25 years, especially in Europe. Longer in Europe than it is

1 in the United States.

2 MS. GROOT: Yeah. Nevertheless, what happens
3 after a hundred years? You and I won't be here.
4 Somebody will have to worry about that.

5 MR. CAMPER: Well, I know that earlier tonight
6 when it was pointed out that this approach -- put the red
7 plates up -- when this approach was pointed out as being
8 temporary, the policy that the Congress of the United
9 States passed in the Nuclear Waste Policy Act, not the
10 Nuclear Regulatory Commission, but the Congress of the
11 United States said, among other things, in the Nuclear
12 Waste Police Act, that dry storage, the capacity to store
13 nuclear fuel on site was an important part of that Act
14 and the process this country will follow until we develop
15 a permanent geological repository.

16 The Nuclear Regulatory Commission is on record
17 in saying that storage in pools and dry storage both are
18 safe and secure. The commission has also said that the
19 ultimate solution to high-level waste is the ultimate
20 disposition of a high-level waste repository. Right now
21 the Congress has determined that that is Yucca Mountain.
22 The Department of Energy is working toward that
23 objective. So yes, we and the Congress and the Nuclear
24 Waste Policy Act envisions this dry cask storage approach
25 as a temporary mechanism.

1 MR. CAMERON: And just one clarification,
2 though, Larry, is even though Congress determined that
3 Yucca Mountain was a potential site, the Department of
4 Energy still has to meet the regulatory requirements of
5 our agency and get a license.

6 MR. CAMPER: Well, there are two things. One
7 is, that's absolutely right, Chip. The Department of
8 Energy, as part of the requirements of the Act, is to
9 prepare and submit to our agency an application to build
10 and then to operate high-level waste repository. The
11 Department of Energy is now preparing that application
12 and is on schedule to submit it to us in December.

13 The second thing, and it's a point that I
14 mentioned earlier, and that is, let's assume for sake of
15 discussion that Yucca Mountain is built, Yucca Mountain
16 becomes operational, for the sake of discussion. The
17 movement of the spent nuclear fuel from these various
18 independent installations has to be carried out in a
19 package, a transportation package, that is been reviewed
20 and approved bring the NRC as well. Those are
21 requirements of the Nuclear Waste Policy Act.

22 MS. GROOT: The transportation would be a
23 nightmare in itself. Do any of you gentleman really
24 believe that Yucca Mountain will happen? Really?

25 MR. CAMERON: I don't think people are going to

1 be able answer that now.

2 MS. GROOT: It's not a fair question.

3 MR. CAMERON: We have a few more people,
4 including you, who are next. We are getting on to five
5 hours. And we are going to adjourn -- we're going to get
6 the people that we have. And I want Pat to say a few
7 words before we close. The NRC staff is going to be here
8 after the formal part of the meeting is adjourned to talk
9 with you about anything. So let's go to you, and then to
10 you, and then you have a couple questions back there, and
11 try to get you in.

12 Go ahead.

13 MS. SEELEY: Thank you for coming, and thanks
14 for staying so late. My name is Linda Seeley,
15 S-e-e-l-e-y. I live in San Luis Obispo, and I've lived
16 here for 22 years.

17 I have questions for you, and I would like you
18 to answer them as I ask them. There are just a few.
19 Number one, Why is there no no-fly zone over nuclear
20 plants in this country?

21 MR. CAMERON: Who wants to take that one?
22 Girija or Skip?

23 MR. SHUKLA: You are right that there are no
24 permanent no-fly zones over the power plant. But as our
25 other members have said, we have a intelligence community

1 to warn us on those things. And FAA would create a
2 no-fly zone in a hurry over Diablo Canyon. You should
3 rest assured.

4 MS. SEELEY: It's not just Diablo Canyon. It's
5 all nuclear power plants in this country, and none of
6 them have no-fly zones. Why?

7 MR. SHUKLA: There was an incident a couple
8 years ago after 911 where when we got the intelligence
9 that something was going to happen at Three Mile Island,
10 and we had a no-fly zone within seconds.

11 MS. SEELEY: However, if you recall 911, that
12 happened without -- well, there was warning, but they
13 were not able to prevent it. Remember?

14 MR. SHUKLA: We are smarter now.

15 MR. CAMERON: Can you give the mike to Skip.
16 We will get some more input on that particular question
17 for you.

18 MR. YOUNG: The issue of no-fly zones over
19 commercial plants is a complicated problem because it
20 involves other industries. Like if you put a no-fly zone
21 over Diablo Canyon, it would shut down your local
22 airport, so there are certain things that the staff are
23 looking at. We have the capability of putting in a
24 no-fly zone over a specific power plant if we need to, if
25 we have intelligence that says there is an imminent

1 threat to this facility.

2 We are working with TSA and FAA to try to
3 address what I want to call the Federal response to using
4 an aircraft as a weapon. The first defense that the
5 Federal government is looking at, and we haven't finished
6 looking at it, is to insure that the terrorist doesn't
7 get the use of the aircraft to use as a weapon. That's
8 the first line of defense.

9 The second line of defense is for these
10 facilities, as part of the orders we issue to them, we
11 require for them to come up with what I want to call
12 "mitigating strategies." If a plane would crash into
13 this facility, they have to have in place or have gone
14 through the thought process of saying, "If this happened,
15 what would they do and how would they safely render the
16 plant?"

17 We are doing the vulnerability studies. And
18 once we finish those, we will feed that information back
19 to the utilities to say that will either assess things we
20 need to do more or we need to do less. But it has got to
21 be a Federal-communities response when you start looking
22 at putting no-fly zones over certain portions of the
23 country.

24 MS. SEELEY: There is a no-fly zone over
25 Disneyland. There is a no-fly zone over Disneyland, and

1 that is by the Orange County Airport. And there is no
2 no-fly zone over nuclear power plants. And those spent
3 fuel assemblies can withstand the impact of a 4,000 pound
4 car going 300 miles an hour. Well, how big a Boeing 747
5 or a Hummer? 6,000 pounds, right?

6 We are worried. We live here. You don't. We
7 have children and grandchildren. This is a constant
8 everyday worry for us. You -- I don't think you even
9 understand. You talk in these grand terms about -- your
10 word that you use is "we are looking at things." We are
11 looking at things too, and we are looking at the fact
12 that we live in a world that is not safe, as safe as it
13 used to be. Why won't the Nuclear Regulatory Commission,
14 why have you refused to look at the issue of terrorism?
15 Why? That is a good question.

16 MR. CAMERON: We have to clarify -- we have to
17 respond to that.

18 MS. SEELEY: Right.

19 MR. YOUNG: We are looking at terrorism.

20 MS. SEELEY: You have refused to look at -- to
21 hold public hearings on the issue of terrorism. You
22 refused. Why? Why do you do these things to us? Why do
23 you make us distrust you and think that you lie to us all
24 the time? Why do you do this to us? We don't deserve
25 it. And you are abusing the sanctity of our lives, and I

1 am very angry.

2 MR. GWYNN: And I appreciate what you just
3 said. I understand, I think, the source of your concern.
4 And you need to understand that the Federal government
5 has responsibility here. We have, in addition to the
6 security measures that are at these sites, we have clear
7 agreements with the Federal Aviation Administration.
8 They have a notice that's been issued for every nuclear
9 power plant in the country that says, "Airmen, you will
10 not trespass across these spaces." So even though it's
11 not a no-fly zone, it's a notice to airmen.

12 So people who are licensed pilots who want to
13 keep their license will pay attention to that. If there
14 is a credible threat, a credible threat against a
15 specific nuclear power plant, or even a group of nuclear
16 power plants in the United States, we have an arrangement
17 with the FAA to immediately initiate a no-fly zone across
18 those plants that are potentially affected by that
19 threat. We also have agreements with the North American
20 Air Defense Command, with the Northern Command of the
21 United States Army to provide whatever resources are
22 necessary to assist local authorities, the FBI and
23 others, in defending the facility. So there are things
24 in place that are there to provide some level of
25 assurance to you that these plants are safer and that

1 they are being defended.

2 The additional studies are being done to see if
3 there are any changes that need to be made. I personally
4 have been involved in participating in exercises where
5 we've talked directly with the pilots in airplanes who
6 are following aberrant-behaving aircraft to make sure
7 that they stay away from nuclear facilities in the United
8 States. So we are practicing that, just in case we ever
9 need to use it.

10 But the principal source of security is with
11 the Transportation Security Administration for aircraft
12 safety, to make sure that the people who get on airplanes
13 are not bad people.

14 MR. CAMERON: Larry, do you want to add to
15 that?

16 MR. CAMPER: Two quick comments. You are
17 right, we don't live here like you do, and we understand
18 that. And we understand where you are coming from. But
19 we have all made careers out of trying to protect public
20 health and safety. We take your concerns very seriously.
21 Every day we go to work, and in many cases because of
22 things that go on, like after 911, it was 24/7. We take
23 your concerns very seriously. So please understand, that
24 while we may not live here and will never feel quite the
25 way you do, believe me, this is what we do, and we are

1 very serious about it.

2 I mentioned, in the course of explaining the
3 licensing process for ISFSI, that severe accidents, such
4 as car, a 4,000-pound car at 126 miles an hour, was an
5 example of severe accident. You are totally right that a
6 large, modern-day commercial aircraft is something
7 totally different. In our ongoing vulnerability
8 assessments, we are looking at that very issue. And when
9 I say "looking," what I mean is we, along with our
10 contractor, are conducting sophisticated scientific
11 studies as to what would be the consequences, if any, of
12 an impact into one of these dry cask storage systems, in
13 dry cask storage in transportation. And we are also
14 looking at other serious terrorist threats.

15 So it is on our scope. We are looking at it.
16 And at the same time we are doing it, the whole idea of
17 dry cask storage or spent nuclear fuel storage, wet and
18 dry, is being looked at by the National Academy of
19 Science. So there is a great deal of work, good
20 scientific work going on in this area. We are not
21 oblivious to your concerns.

22 MR. CAMERON: All right. Thank you, Larry.

23 Do you want to use this, or do you want to come
24 up there?

25 MS. DIPERI: My name is Kathy DiPeri,

1 D-i-P-e-r-i.

2 I've got lots of questions, but I don't think I
3 want your answers because I've been listening all night,
4 and I've probably spent the last 25 years dealing with
5 listening to the same kinds of answers over and over
6 again. I feel like I am sitting talking in front of the
7 good-old-boys club, and I don't think that you make your
8 living by trying to protect us. You make your living by
9 trying to defend nuclear power and nuclear waste that
10 you've created with the industry. And you can shake your
11 head and say no, but you guys are the pawns for the
12 higher-ups who are making the decisions. And you've
13 justified your jobs for all these years of creating
14 waste. And there is some very serious, serious
15 ramifications that could happen with the waste that's
16 been created from this industry.

17 And I hope that some of you guys will really
18 think about the jobs that you have and think about it,
19 because you probably have brilliant minds, and they
20 probably could have been used in other ways of doing
21 something good for the planet, instead of being locked
22 into an industry that's trying to destroy our planet and
23 the life on it. There is a lot of waste that you
24 created. It makes me think your mothers never taught you
25 to clean up after yourselves; that you guys still

1 continue to justify making it.

2 There is lots of questions I have about the
3 seismology studies. There is lots of questions I have
4 about the dry casks, but your patent answers of how to do
5 it all rely on false assumptions. And your assumptions
6 are things that you consider reasonable and logical. For
7 instance, when you said that after the earthquake you
8 guys went and looked at the wells and whatever, the
9 stress points, and so you figured that there was no
10 damage done. Well, there has already been damaged done
11 to the tubes. There is lots of degradation that's
12 already happening.

13 So you say the damage hasn't been done by the
14 earthquake, but if you are really logical, you would know
15 that since there is already done and there is already
16 tube degradation, anything that shakes it, whether it
17 shakes it horizontal or vertically, is going to create
18 more damage. So there is a lot of false pretenses there
19 that you are assuming, and you are taking a lot of
20 people's lives into your hands when you make these
21 assumptions.

22 And I am really sorry that David Oatley left.
23 I'm glad Missy is still here, and I think Jeff is still
24 here. And you guys defend PG&E. We have an industry
25 here that went bankrupt, that pulled an Enron on us in

1 this community, and still is cutting corners to try to
2 make up its financial losses, and we are supposed to
3 trust them, and we are supposed to trust you that allow
4 them to continue to do what they are doing. It's absurd,
5 and our community can see right through that. So it's
6 like we don't need your placating answers. Great, you
7 are doing studies on what's going to happen in terrorism.
8 What good is a study when something actually happens? We
9 don't need a study to tell us that something could
10 happen.

11 What we need is something to be done with the
12 waste and something -- and we need you to stop making
13 more waste. The minute they start putting the waste, the
14 spent fuel rods in the dry casks, that's just leaving the
15 spent fuel pools open for PG&E to make more crap for us
16 that's going to last longer and longer.

17 So really, what you guys need to do is look
18 into your souls and think about how you're going to stop
19 making the crap, because we don't really want it in our
20 community, and no one else wants it in their community.
21 And you are going to cause hazardous conditions trying to
22 move it anywhere. And the only reason nuclear power
23 needs to continue to be made is because they need the
24 nuclear waste for bombs. We don't need it for energy.
25 There is wind energy. There is solar, thermal. There is

1 a lot of things that have already been proven to be
2 efficient. And we don't really need our lights in
3 exchange for nuclear waste.

4 So I think you guys all need to -- the way I
5 see it is that you guys are the ones who will be
6 criminally responsible when something happens. If the
7 plant was really safe, then what was the necessity of the
8 Price Anderson Act? Why is there an Act that says no
9 power plant can be insured? Why can't we sue your asses
10 if something happens? You know, and the way I would see
11 it, David Oatley, the vice president of the company,
12 would be in jail for criminal activity, because he would
13 be the one held responsible. Missy Hospins or Jeff Lewis
14 would be the ones who would be responsible, criminally
15 responsible for telling the lies over and over again that
16 the power plant is safe when, in fact, it is just you
17 guys' assumption. So I think you guys need to look into
18 your conscience and really think about what your lives
19 are really all about.

20 (Applause.)

21 MR. CAMERON: Okay. I think we have one
22 comment up here about the statement about nuclear power
23 for bombs.

24 MR. GWYNN: Just to be accurate, the material
25 that's generated in a nuclear power reactor or

1 light-water reactor that is built in the United States
2 cannot be used to make any form of a weapon, not a
3 nuclear weapon. It's not possible.

4 MR. CAMERON: If you want to talk further about
5 this after the meeting is over, but that is being offered
6 as a true statement.

7 Yes, sir, you had a couple of questions.

8 Dr. SINGER: Very briefly.

9 Hi. My name is Dr. Nathan Singer; N-a-t-h-a-n,
10 S-i-n-g-e-r. The hour is getting late. I'm not going to
11 be long. Most of my questions have already been put
12 forth by other people.

13 You brought up the issue regarding the sirens
14 earlier this evening. And it just brought home a huge
15 problem that we are having. I thought the crisis we
16 experienced on 911 would have woken this country up. We
17 are no longer at peace. We are a country at war, and we
18 have many nations around the world eager to see us
19 sustain damage. The reactor at Diablo Canyon is in a
20 very vulnerable position being right on the coastline.
21 If the sirens get a green mark for working -- for
22 functioning 95 percent of the time, but yet during that
23 one critical moment that we needed it, which was during
24 an earthquake, they malfunctioned, that means that they
25 malfunctioned 100 percent of the time. That was the only

1 time we ever needed them, and yet they blew it. So why
2 are they getting three years to install solar batteries
3 or battery backup systems, when we could need it tomorrow
4 and it won't be there? We are now no better prepared
5 than we are on December 22nd when the system failed.

6 MR. CAMERON: And would you like a comment from
7 us on that?

8 Dr. SINGER: I would like an answer, sure.

9 MR. CAMERON: Go ahead, Bill.

10 MR. JONES: The sirens on December 22nd were
11 not needed, were not required. The plant was in a safe
12 condition. The plant was operating. There was no damage
13 to the facility. So to say that the sirens were actually
14 required on December 22nd is not a factual statement.

15 The plant was designed to be able to handle an
16 earthquake significantly greater than what it actually
17 saw. The plant, based on the inspections that we
18 performed, the in-service inspections that were
19 performed, the in-service testing that was performed, the
20 immediate reviews that we performed that Mr. Tapia talked
21 about, all give us assurance that the plant was not
22 damaged.

23 Now, I understand that the 56 of 131 sirens
24 were not available for about a five-hour period, but that
25 is a period where the plant was safe and the earthquake

1 obviously clued people in that there is a need to talk to
2 the emergency broadcast system, but not because the plant
3 was in an unsafe condition or that you needed to consider
4 any kind of evacuation or anything like that. So I would
5 point to the fact that the plant operated as expected, it
6 was within its design, and the sirens during that period
7 were not required to be actuated.

8 And you've got to remember that there are other
9 means available to notify those people in those areas
10 when those sirens are not available, and that's important
11 because that's part of the emergency plan that is
12 practiced every two years on an evaluation and yearly as
13 part of a drill.

14 MR. GWYNN: I would like to add to what Bill
15 said, just repeating what I said earlier that we've heard
16 what you said about sirens. We had experience with power
17 outage in the Northeast agencies looking with current
18 technology, should we be requiring any changes in this
19 area. And I hope that perhaps next time we come out, we
20 can bring one of our EP specialists with us and we can
21 talk about this in a little more detail.

22 MR. CAMERON: Doctor, do you have another
23 question?

24 Dr. SINGER: Yes. With regards to spent
25 nuclear fuel and storing it on site, aren't there any

1 other options? I mean, we are looking at Yucca Mountain
2 as being the ultimate repository. How far down the road
3 is that realistically?

4 MR. GWYNN: Larry may want to say something. I
5 want to just throw out that there have been proposals for
6 what are called away-from-reactor independent spent fuel
7 storage installations. There is one that's proposed to
8 be licensed in the state of Utah, in the state of Utah.
9 It's a relatively large facility. Essentially, you
10 would, instead of keeping the casks at the reactor site,
11 you would transport these Dual Purpose Casks to that
12 private fuel storage installation in Utah. They would be
13 held there until such time as a geologic repository was
14 available, and then they would be transported to the
15 repository.

16 Whether or not private fuel storage is going to
17 be licensed by the agency, I don't know. That review is
18 still in progress, but that is one possibility that there
19 could be an away-from-reactor independent spent fuel
20 storage that's put into operation sometime in the
21 foreseeable future.

22 Dr. SINGER: But we don't have a foreseeable
23 date?

24 MR. GWYNN: No. But I can tell you that the
25 current schedule for that licensing review would probably

1 give a decision on the licensing of a private fuel

2 storage sometime next year.

3 MR. CAMERON: Larry.

4 MR. CAMPER: I would only add to what Pat said

5 that you asked the question, "Is there no alternative to

6 dry storage?" If you look at it, what are the options?

7 One is reprocessing. Decisions were made in this country

8 several years ago that we would not do reprocessing of

9 nuclear fuel. That option was gone, for now; although,

10 it was reinstated during a subsequent administration. By

11 that point, the momentum had been lost for reprocessing

12 of nuclear fuel. It was not a viable option today, at

13 least under the present conditions.

14 Restacking the spent fuel pools, making a

15 tighter configuration. There has been some earlier

16 comments about that tonight. Many of the power plants

17 have, in fact, done that, but they do not have an

18 infinite capacity. At some point, you have to do

19 something with the build-up of the fuel. At this point

20 in time, that something is dry storage. The movement is

21 toward dry storage at the nuclear power plants

22 themselves.

23 As Pat points out, we are currently looking at

24 an application to operate a private fuel storage facility

25 in Utah. It's a consortium of utilities that want to do

1 that. We are currently undergoing and conducting an
2 analysis of an aircraft crash into that facility. We
3 hope to be positioned to complete the staff work by the
4 end of the year and make some recommendations to the
5 commission for consideration early next year.

6 MR. CAMERON: All right. Thank you, Larry.

7 Thank you, Doctor.

8 I am going to turn it over to Pat again as our
9 senior official to say a few words to adjourn the
10 meeting.

11 MS. BECKER: Sorry, Chip. I have three more
12 pages of questions left over from the responses that were
13 nonresponsive.

14 MR. CAMERON: Rochelle, I'm sorry.

15 MS. BECKER: I don't want to do this either.

16 MR. CAMERON: You can submit those questions to
17 us and we will answer them, but we really can't go on for
18 another hour, two hours with that. And so we are going
19 to have to try to figure out a different way to try to
20 get you answers to those questions. And --

21 MS. BECKER: Well, these are three and a half
22 months which I waited for these answers, which are
23 nonresponsive. And I don't want to stay here any later
24 than you guys do, but three and a half months is a long
25 time to wait. If I let these out of my hands and don't

1 ask them publicly so the public can hear what these
2 questions are that are nonresponsive on this camera and
3 the transcript can refer to it, then it's lost.

4 MR. GWYNN: We can attach those questions to
5 the transcript.

6 MS. BECKER: Can I show them to the camera too
7 so the people can read them?

8 MR. CAMERON: We are not going to be able to
9 have a real productive dialogue with you.

10 MS. BECKER: I agree.

11 MR. CAMERON: If you can -- they're going to be
12 attached to the transcript if you can get us a copy.

13 MS. BECKER: I'll get it to you tomorrow.

14 MR. CAMERON: If you want to get this on the
15 record, okay, and you can do this fairly quickly, then
16 why don't you do it. But we are not going to have an
17 opportunity to try and have a dialogue with you on these
18 questions. What we are going to be able to do is try to
19 respond to those questions the same way that we are
20 responding to these action items.

21 MS. BECKER: Okay. Can I read these questions
22 now?

23 MR. CAMERON: Why don't you do that, and it
24 will be on the record, and we'll know.

25 Is that okay with you guys?

1 Go ahead, Rochelle.

2 MS. BECKER: I could have done this quicker
3 earlier when I was less tired.

4 These are questions that would have gone to
5 Mr. Bagchi and/or Mr. Imbro, I'm assuming, from your
6 structural engineers and your mechanical engineers.

7 This is the question I ask: Is it possible to
8 assure that there was no damage or stress to the plant
9 that occurred during either quake? I actually asked if
10 it was possible to assure with absolute certainty that
11 there was no damage.

12 I believe my question referred to both the
13 October and December earthquakes, and PG&E's testimony
14 filed at the PUC case that there are, quote, "several
15 thousand cracks in the steam generators." And I wondered
16 how you would know if there were thousand and two cracks
17 in the steam generators from the earthquake.

18 The NRC's response was, quote, "Implementation
19 of this inspection program, a systematic inspection to
20 plant systems, components and supports in accordance with
21 Section 11 of the ASME Code will serve to further confirm
22 that earthquake -- that the earthquake caused no
23 incipient damage."

24 Does this mean you have determined the outcome
25 of your systematic inspection before it's been completed?

1 Does the systematic inspection include sonic testing,
2 ultrasonic testing, any other type of testing that is
3 different than just looking at things?

4 My next question, What actions would the NRC
5 initiate in the likelihood that Diablo Canyon is not
6 designed to withstand ground acceleration from a 7-point
7 magnitude thrust or vertical earthquake?

8 The NRC's response, "If new information is
9 discovered that calls into question the seismic adequacy
10 of Diablo Canyon, the NRC will make a prompt
11 determination as to whether or not to allow the facility
12 to continue to operate." Prompt was not the case when
13 the Hosgri Fault was discovered. Neither PG&E, nor the
14 NRC took immediate action. It was the community
15 activists who found this Shell Oil geologist's report and
16 brought it to the attention of the NRC and PG&E. Did the
17 NRC take this information seriously and bring in experts
18 who agreed with the discovery to independently verify the
19 seriousness of this new seismic information? No, they
20 did not. Community residents had to raise money and hire
21 consultants to dispute PG&E and the NRC consultants. The
22 final result was Diablo Canyon was retrofitted,
23 backwards.

24 If the NRC could list instances of prompt
25 action taken without public outcry, we are fairly certain

1 that this list would be small. Public trust is woefully
2 lacking in the NRC. And that doesn't mean necessarily
3 you guys, because you aren't the decisionmakers, but it
4 is lacking in the NRC. And the NRC does not appear to
5 really care that the public does not believe that they
6 are protecting their public health and safety of nuclear
7 facilities. One meeting with public input on format does
8 not create trust, especially in light of the NRC's
9 history and current rulemaking, which further limit
10 public input.

11 Third question: Would reracking the
12 radioactive pools again cause any additional sloshing?

13 The NRC's response was, "Any expansion of spent
14 fuel storage in the existing spent fuel pools would
15 require a complete seismic evaluation of the spent fuel
16 racks and the pool structure to ensure the current
17 seismic design is maintained."

18 Evidently, the NRC does not require complete
19 seismic evaluation of an expanded high-level radioactive
20 waste dump in an earthquake active coastal zone. Again,
21 we remind you that the Mothers for Peace and the Sierra
22 Club raised the issue of new seismic data and contentions
23 addressing the expanded radioactive waste dump almost two
24 years ago. We question the NRC's sincerity in its
25 statement that it's required to do complete seismic

1 evaluations on reracking of spent fuel pools. From our
2 past experience, the public often must raise money to
3 hire attorneys to force the NRC to follow its own
4 requirements.

5 Is it possible that the damage or stress can
6 only be identified if pipe wells underwent X-rays or
7 other screening that is not apparent to the naked eye?
8 NRC's response, "No." Does the NRC mean that sonic only
9 and/or X-rays never reveal damage or stress not found in
10 a systematic inspection? If yes, please explain. If no,
11 why are X-rays or sonic tests not being required?

12 Does the NRC need to revise its analysis to
13 take into account the recent earthquake on December 22,
14 2003? If yes, why, and how will this be accomplished?
15 If no, why not?

16 How did the NRC or PG&E previous study address
17 compressional thrust earthquakes? Please provide a list
18 of all studies that have addressed the possibility of
19 thrust earthquakes and cite where this information can be
20 easily found.

21 In your summary -- I'll skip that.

22 The NRC's answers to these questions will be
23 reviewed by a variety of seismic experts in the state of
24 California. In the meantime, a very important question
25 must be asked of the NRC experts brought to this town

1 hall meeting. Knowing that one of the major topics of
2 concern is seismic adequacy of Diablo, in light of the
3 recent earthquake information, do you really believe that
4 you have all the qualifications in-house to exhaustively
5 review this information? If Diablo Canyon Nuclear Plant
6 and high-level radioactive waste facility have not been
7 adequately designed to withstand a thrust vertical ground
8 acceleration, either on the Hosgri or nearby faults, will
9 this community be again forced to raise tens of thousands
10 of dollars to sue the NRC to do its job?

11 Everyone involved in finding answers to seismic
12 question is guessing. Some of it is educated guessing,
13 but it is speculative all the same. It is important for
14 all of us to remember when it comes to earthquakes, human
15 speculation, no matter how educated, is still
16 speculation, and it is Mother Nature who really calls the
17 shots.

18 I apologize to the court reporter for that
19 slurring, but it was the best I could do.

20 MR. CAMERON: And Rochelle, I sincerely, and I
21 think I speak for the rest of the NRC staff, thank you
22 for all the time you took to prepare those questions and
23 to try to get the answers to things that concern you. So
24 thank you for that, and I'm sorry we got so late on this.

25 MS. BECKER: We all knew it would be late.

1 Don't worry about it.

2 MR. CAMERON: But we will respond. Okay.

3 And before I turn it to Pat, I just want to

4 thank everyone for being here. But I want to thank

5 Carolynn for doing an incredible job.

6 I also have to thank our cable people. You

7 know, it's was just great.

8 And Pat?

9 MR. GWYNN: To those of you who remain, I want

10 to thank you for bearing with us. This has been a long

11 evening. I know that it's kind of tough to add this to

12 your regular day, but I found it to be an extremely

13 useful dialogue. You've brought a number of issues to

14 us. Unfortunately, some of them came across so quickly

15 that it wasn't possible for us, I think, to answer every

16 question that was asked. We will answer the questions

17 that were asked. That is our process.

18 Once the transcript is completed and provided

19 to us, our people will review the transcript. We will

20 come back, and just as we did for the last meeting, we

21 will make our responses available promptly through the

22 website. We will issue them to the service list, and we

23 will come back to talk with you again at an appropriate

24 time.

25 I also want to thank AGP and the SLO Span

1 people for making this available to the community for
2 those people who couldn't be here tonight to participate
3 in a meeting. There will be a number of opportunities
4 for them to see and hear for themselves the proceeding
5 that we had here this evening. And we will again to work
6 with SLO Span, the public bulletin board process, to give
7 notice to meetings and things of that nature.

8 So again, thank you for coming this evening.
9 And we will make ourselves available to people after the
10 meeting, if anybody wants to come up and talk to us
11 one-on-one.

12 Thank you.

13 (Hearing concluded at 11:40 p.m.)

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REPORTER'S CERTIFICATE

I, CAROLYNN ELAINE SPERE, A
CERTIFIED SHORTHAND REPORTER IN AND FOR THE STATE
OF CALIFORNIA, DO HEREBY CERTIFY:

THAT SAID PROCEEDING WAS TAKEN BEFORE
ME AT THE TIME AND PLACE THEREIN SET FORTH AND WAS
TAKEN DOWN BY ME IN SHORTHAND AND THEREFORE REDUCED
TO COMPUTERIZED TRANSCRIPTION.

THAT, TO THE BEST OF MY ABILITY, THE
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TRANSCRIPT OF MY SHORTHAND NOTES SO TAKEN.

DATED AT SAN LUIS OBISPO, CALIFORNIA,
THIS 24TH DAY OF JUNE, 2004.

CAROLYNN ELAINE SPERE
CERTIFIED SHORTHAND REPORTER

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