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Diablo Canyon Nuclear Power Plant

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ASLBP Number: 15-941-05-LA-BD01

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1 UNITED STATES OF AMERICA

2 NUCLEAR REGULATORY COMMISSION

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4 BEFORE THE ATOMIC SAFETY AND LICENSING BOARD PANEL

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6 -----x

7 In the Matter of: : Docket No.

8 PACIFIC GAS & ELECTRIC : 50-275

9 COMPANY : 50-323

10 (Diablo Canyon Nuclear : ASLBP No.

11 Power Plant, Units 1 and 2): 15-941-05-LA-BD01

12 -----x

13 Thursday, July 9, 2015

14
15 Nuclear Regulatory Commission

16 Hearing Room T-3 B45

17 11545 Rockville Pike

18 Rockville, Maryland

19
20 BEFORE:

21 PAUL S. RYERSON, Chairman

22 DR. GARY S. ARNOLD, Administrative Judge

23 NICHOLAS G. TRIKOUROS, Administrative Judge

24

25

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P-R-O-C-E-E-D-I-N-G-S

1:02 p.m.

CHAIRMAN RYERSON: Please be seated.

Welcome and good afternoon. This afternoon, we're here for a second, very separate Diablo Canyon matter. It concerns, again, the PG&E Diablo Canyon Power Plant, but specifically a Petition and Hearing Request by Friends of the Earth that the Commission has referred to the ASLBP.

And I'm going to repeat a number of remarks that I made this morning, which will seem repetitive to most of you, because most of you were here. But this is a separate proceeding and it will have its own transcript. So we will start over again with introductions.

I'm Judge Ryerson, a legally trained judge, and I chair this particular Licensing Board. Judge Arnold, again, a nuclear engineer, is on my right. And Judge Trikouros, likewise a nuclear engineer, is on my left.

Once again, in addition to having a reporter creating a transcript of today's argument, we're going to have -- the argument is being webcast and is also available to members of the press and the public through a listen-only phone line that's being

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1 kept throughout the day.

2 Before we take the appearances of counsel,
3 once again I'd like to just go over our ground rules,
4 somewhat informal ground rules. Our purpose today is
5 to hear argument on the question that's been referred
6 to us by the Commission. And that is whether the NRC
7 has granted PG&E greater authority under its existing
8 licenses for the Diablo Canyon Plant or otherwise
9 altered the terms of those licenses so as to entitle
10 Friends of the Earth to a Request for a Hearing under
11 Section 189a of the Atomic Energy Act.

12 As we indicated in our Scheduling Order,
13 we will allow each party to make a brief opening
14 statement, not to exceed ten minutes. And then, most
15 of the session will once again be questions that the
16 Board has for the various parties. We have read your
17 Memoranda and we hope that the most useful part of
18 today's session, frankly, will be trying to get
19 answers to questions that we have.

20 Generally, a Board member will ask a
21 question of a particular party and if for some reason
22 someone else feels a compelling need to respond to
23 that question, even though it hasn't been put to them,
24 we're, as I said, going to be relatively informal.
25 Raise your hand and we will, I'm sure, recognize you

1 at the next appropriate moment.

2 Logistically, we'll try to take a short
3 break every hour, hour and a half max and go as long
4 as necessary to finish. Which I hope will be before
5 5:00, but it might conceivably could go after that if
6 it has to. Comments from other judges before we take
7 the appearances? Judge Trikouros? All right. Well,
8 let me first then ask counsel to introduce themselves.

9 MR. AYRES: Judge Ryerson, my name is
10 Richard Ayres. I represent Friends of the Earth in
11 this matter.

12 MS. OLSON: My name is Jessica Olson. I
13 also represent Friends of the Earth in this matter.

14 MR. BERNETICH: My name is John Bernetich.
15 I also represent Friends of the Earth.

16 CHAIRMAN RYERSON: Thank you and welcome.
17 Once again, for the licensee.

18 MR. REPKA: I am David Repka with the law
19 firm of Winston and Strawn on behalf of Pacific Gas
20 and Electric Company. On my left is my colleague,
21 Tyson Smith, also with the law firm. And on my right
22 is Mr. Jearl Strickland of PG&E. He's Director of
23 Technical Services at Diablo Canyon Power Plant.

24 CHAIRMAN RYERSON: Thank you and welcome to
25 you. And we have a slightly different group for the

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1 NRC staff. Who do we have today?

2 MR. ROTH: Good afternoon, your honors.
3 David Roth for the NRC staff. I have Joseph Lindell
4 and Cathy Kanatas, also representing the NRC staff.
5 And two staff members themselves to assist counsel
6 with any technical matters. Eric Oesterle and Neil
7 O'Keefe are sitting behind us.

8 CHAIRMAN RYERSON: Thank you. There is one
9 matter I'd like to take up before we get through the
10 opening statements. And that is, I think it was --
11 must have been Thursday night quite late, we received
12 by email, not through the electronic filing system,
13 but email, I believe appropriately served on all other
14 parties by email, a proposed Limited Appearance
15 Statement from a former commissioner.

16 And frankly, usually I am not enthusiastic
17 about unsolicited Limited Appearance Statements and
18 this was not solicited, but it was volunteered and it
19 obviously reflected some effort and thought. We are
20 trying to decide what to do with that. Again, it was
21 not solicited and, frankly, although clearly some
22 thought went into it, our rules do not allow Limited
23 Appearance Statements to constitute evidence of any
24 form.

25 So to the extent that the Limited

1 Appearance Statement includes factual representations
2 going back to the original licensing of Diablo Canyon,
3 I do not believe even if we accept the Statement that
4 we can properly consider those fact statements as
5 evidence and consider them for their own weight.
6 Likewise, the Limited Appearance Statement expresses
7 great confidence in the Licensing Boards and in the
8 adjudicatory process, but as to that aspect of the
9 Limited Appearance Statement, I think the Commission
10 has made quite clear that in referring this matter to
11 us, it has asked us to do a fairly narrow assignment.

12 And that is specifically determine whether
13 under our rules, Friends of the Earth has established
14 a right to a hearing. Friends of the Earth has also
15 asked for a discretionary hearing, thinking it would
16 be a good thing to air these issues in public and the
17 Commission, as I understand it, has kept that issue
18 for itself. It has not ruled on that or denied
19 without prejudice for the present time. So the
20 Commission really has that aspect of it in front of
21 it, not us.

22 So all of that said, out of respect for a
23 former commissioner, I think the Board is tentatively
24 inclined to accept the Limited Appearance Statement,
25 but to recognize what I've just said, that we're not

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1 taking facts from it and, frankly, to the extent it
2 expresses policy views, those really don't seem to be
3 in front of us in light of the nature of the
4 Commission's referral. I think we would be issuing an
5 Order to that effect fairly shortly unless anyone has
6 an objection or a comment. Anybody have a comment on
7 that? Mr. Ayres?

8 MR. AYRES: Your honor, I understand what
9 you're saying and why you're saying it. It is
10 unusual. We were unaware of this happening until very
11 shortly before it did. So we were not involved in any
12 way in stimulating it or anything else.

13 I do think, though, that there is value in
14 the testimony if you will of someone who was there at
15 the beginning of Diablo strictly given the complexity
16 of this license beginning on almost day one. So I
17 would hope that the Board would consider some sort of
18 rationale for taking the facts alleged here as
19 evidence before it.

20 CHAIRMAN RYERSON: Well, I will say, again,
21 I think we are strictly prohibited by our rules from
22 taking the former commissioner's statements as
23 evidence. I suppose if we are persuaded by something
24 -- I agree, I mean, the background of the Diablo
25 Canyon licensing process, I think everyone agrees, is

1 a very complex and unusual background.

2 Now, I think we might conceivably, if we
3 see something of great interest in that Statement, see
4 if we can verify those facts through official records
5 of which we can take judicial notice, but I do not
6 expect that we will take any of those factual
7 statements as facts based upon the Limited Appearance
8 Statement. I think our rules forbid that expressly.
9 Mr. Repka, any comments?

10 MR. REPKA: With the limitations and
11 qualifications that you have expressed, Judge Ryerson,
12 we don't have any objection to the treatment that you
13 propose. Just with respect to Mr. Ayres' comments, I
14 would say that to the extent that anything in there
15 were to be considered, we would absolutely have an
16 interest in responding to that and do believe that
17 former Commissioner Gilinsky is simply raising issues
18 that were litigated at the time of initial licensing.
19 But I understand from you say that we're not at that
20 point, but should that ever be an issue, we would
21 certainly want to respond.

22 CHAIRMAN RYERSON: Okay. And NRC staff?

23 MR. ROTH: David Roth for the staff. We
24 understand the Board's reasoning. Based on a cursory
25 review of the item emailed, we don't think it's overly

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1 relevant to the matters referred to the Committee.

2 CHAIRMAN RYERSON: Okay. All right. Thank
3 you. So we will issue an Order on our own without a
4 need for any briefing on that particular issue. So I
5 think we're ready for opening statements. Mr. Ayres?

6 MR. AYRES: Chairman Ryerson, Judge
7 Trikouros, Judge Arnold. Thank you for the
8 opportunity to present to the Board today. We
9 appreciate it. And my name is Richard Ayres. As I
10 said earlier, I am counselor for Petitioner, Friends
11 of the Earth.

12 I should say at the outset, as probably
13 everyone will say, this is a matter which is heavy in
14 fact. And as a consequence, we're going to have to
15 struggle through some facts. And for that reason, we
16 have brought along a couple of visual aids which we
17 will share with you in a smaller size form.

18 And I'm -- also for that reason, I will
19 read a statement as an opening statement here. I
20 apologize to the Board to begin with for that because
21 I know it's not as spontaneous or interesting, but
22 I'll try to make it as interesting as I can.

23 May it please the Board. The Commission
24 has directed the Board to determine whether Petitioner
25 has identified any staff actions that amount to a de

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1 facto license amendment. Under applicable case law
2 and NRC rulings, a de facto license amendment has
3 occurred when the Commission staff acts to authorize
4 additional operating activities by the licensee or
5 otherwise alters the original terms of the license.

6 In our filings, we have shown that when
7 confronted with a series of findings showing Diablo
8 Canyon exposed to new and increasingly more capable
9 seismic hazards, the staff approved changes in the
10 terms of the Diablo Canyon license that have reduced
11 the margin of safety. These changes provide PG&E with
12 greater operating authority than in the pre-existing
13 license. Petitioners are, therefore, entitled under
14 the Atomic Energy Act to an opportunity for public
15 hearing to test the prudence of these de facto license
16 amendments.

17 PG&E was licensed to operate Diablo Canyon
18 on the basis that the maximum seismic risk to the
19 plant had been accounted for. The 2008 discovery of
20 the Shoreline Fault, just offshore, called into
21 question the adequacy of the plant's design basis.
22 PG&E has conducted four studies since then to assess
23 whether the plant's design basis nonetheless remains
24 adequate.

25 All four showed that the maximum

1 earthquake from the newly discovered faults would
2 exceed the Double Design Earthquake seismic design
3 basis of the plant. The fourth showed that it would
4 also exceed the Hosgri evaluation. Thus, the hazard
5 from the Shoreline Fault Zone is bounded by neither
6 the DDE, nor the Hosgri spectra.

7 After the first two analyses, PG&E
8 proposed a license amendment, license request 11-05,
9 to change the design basis of its license by
10 substituting the Hosgri evaluation for the Double
11 Design Earthquake for the safe shutdown earthquake.
12 Initially, the staff agreed that the proposed changes
13 in the seismic design basis required a license
14 amendment. Subsequently, the staff reversed position
15 and, instead, ordered PG&E to change the design basis
16 of the plant by amending the Safety Analysis Report.

17 PG&E then withdrew the proposed amendment.
18 The NRC staff then approved the changes to the seismic
19 design basis that were made in Revision 21 for the
20 Diablo Safety Analysis Report. Revision 21
21 substituted the less protective Hosgri spectrum for
22 the Double Design Earthquake as the plant's seismic
23 design basis. The staff action amounts to a de facto
24 amendment for several reasons.

25 First, by altering the Safety Analysis

1 Report to use Hosgri as the seismic yardstick, the
2 staff has granted the plant greater operating
3 authority. Second, with this yardstick, the plant can
4 continue to operate even though all four studies of
5 the seismic situation demonstrate that the reevaluated
6 ground motion response spectra far exceed that of the
7 DDE design basis. And third, under Revision 21,
8 inputs and methods used to reanalyze that seismic
9 hazard are different from those called for in the
10 preexisting design basis.

11 This is not an enforcement situation where
12 a licensee is failing to operate by the terms of its
13 licensing basis. Here, the NRC staff has granted the
14 licensee authority to operate on terms different from
15 those established by the licensing basis.

16 As we have shown in our briefs, staff
17 actions changed the terms of the license in a number
18 of ways. Correspondence with PG&E through its
19 instruction to change the Safety Analysis Report and
20 subsequent approval of those changes and through its
21 repeated declarations that the Hosgri evaluation, not
22 the DDE, marked the outer limits of the seismic design
23 basis.

24 Requirements of the Atomic Energy Act are
25 straightforward. When a license is amended, there

1 must be an opportunity for a hearing. Commission's
2 case law in the federal courts tell us that NRC action
3 granting the licensee greater operating authority or
4 otherwise altering the terms of the license
5 constitutes a de facto license amendment, not matter
6 what the staff chooses to call it, oversight,
7 enforcement, or whatever.

8 Now, PG&E and staff's responses to our
9 contentions or arguments are largely circular. They
10 claim that the staff cannot have approved Revision 21,
11 because the staff doesn't approve revisions to a Final
12 Safety Analysis Report. They claim that NRC actions
13 taken as part of the post-Fukushima Section 50.54(f)
14 process cannot be a de facto license amendment because
15 they are, by definition, oversight actions, not
16 licensing actions.

17 These arguments ignore well settled
18 standard laid down by the Commission for whether an
19 action constitutes a de facto license amendment. They
20 also ignore the Commission's admonition in the parent
21 case that it is the substance of the action that
22 counts, not the label applied by the Commission staff.

23 What we're putting up for you first is a
24 comparison of Revisions 20 and 21 to show you the
25 differences between them. PG&E and NRC rely so

1 heavily on these circular arguments because they
2 cannot dispute that the changes made from Revision 20
3 to 21 go directly to the plant's seismic design basis.
4 According to PG&E's internal FSARU Change Request
5 Form, these changes had been "submitted to and
6 approved by" the NRC prior to making the changes.

7 First, Revision 21 changed the plant's
8 maximum earthquake from the DDE to the HE as you can
9 see. Because it is part of the plant's seismic design
10 basis, safe shutdown earthquake cannot be altered
11 without a license amendment. Third, Revision 21 added
12 a new method of evaluation to the seismic design basis
13 by designating the methods and assumptions required in
14 the Fukushima process as the method by which any new
15 seismic information will be evaluated in the future.
16 Under NRC regulations and relevant case law, this
17 change alters the terms of the license and it may only
18 be done by license amendment.

19 And finally, although Revision 20 noted
20 that the LTSP "does not alter" the plant's design
21 basis, Revision 21 did just that. Under the new
22 heading Design Basis, Revision 21 inserted the LTSP as
23 a "licensing basis earthquake." This changes is a
24 direct alteration to the seismic design basis that
25 requires a license amendment.

1 Since 2008, when the Shoreline Fault was
2 discovered, the staff and PG&E have treated the Hosgri
3 evaluation and the LTSP response spectra as the
4 bounding scenario, bounding spectra for Diablo Canyon.
5 Following each of a number of seismic evaluations,
6 PG&E asserted that the plant remains safe because the
7 new spectra resulting from the reanalysis were bounded
8 by these two evaluations. Staff repeated found this
9 assertion to be acceptable from both the safety and
10 licensing perspectives.

11 Finally, turning to the staff action, all
12 of these changes to the seismic design basis were
13 approved and, in some cases, ordered by the NRC staff.
14 Staff approved expansion of PG&E's authority through
15 the following actions. First, it designated many of
16 the changes PG&E had requested in the License
17 Amendment Request 11-05 as considerations in the post-
18 Fukushima process.

19 Second, it directed PG&E to amended the
20 FSARU to add the Shoreline as a lesser included
21 scenario under Hosgri and effectively adopted the
22 Hosgri evaluation as a safe shutdown earthquake.
23 Third, staff reviewed and approved proposed changes to
24 the FSARU before PG&E submitted them. And finally,
25 staff authorized the plant to continue to operate even

1 though it has been shown repeatedly to exceed its
2 seismic design basis.

3 These facts make clear that the staff has
4 taken significant affirmative actions that have
5 resulted in expansion of PG&E's operating authority.
6 To close, the Commission has directed the Board to
7 determine whether the staff has granted the licensee
8 greater operating authority or otherwise altered the
9 terms of the license.

10 We have shown in our Briefs and we will
11 show today that the staff has approved major
12 expansions of the operating authority of Diablo Canyon
13 first by requesting and approving changes to the
14 seismic design basis and second, by approving a new
15 method of evaluation to be used in any future seismic
16 hazard analysis. Under the Atomic Energy Act,
17 therefore, this Board should grant the Petitioners an
18 opportunity for a hearing to determine whether the
19 amendments are consistent with the Atomic Energy Act
20 and the safety of the public. Your honors, thank you
21 and we will await your questions.

22 CHAIRMAN RYERSON: Thank you, Mr. Ayres.
23 If you are providing copies of these to the Board,
24 have you already provided copies to --

25 MR. AYRES: No, we have them --

1 CHAIRMAN RYERSON: -- other parties?

2 MR. AYRES: -- right here.

3 CHAIRMAN RYERSON: You have copies for the
4 other parties?

5 MR. AYRES: Yes. Mr. Bernetich will -- you
6 want to walk them around? You have those, your
7 honors?

8 CHAIRMAN RYERSON: I don't -- we don't have
9 our set yet.

10 MR. AYRES: Okay. Sorry. I thought you
11 had them already.

12 CHAIRMAN RYERSON: All right. Mr. Repka?

13 MR. REPKA: Yes. Thank you, Judge Ryerson.
14 As noted, we were not provided a copy of this
15 information prior to this. I will try to respond to
16 a couple of things along the way as best I can.

17 The issue before the Board is a specific
18 and limited one as defined by the Commission. Whether
19 the NRC has issued an approval that granted PG&E
20 greater authority than the authority provided in the
21 existing Diablo Canyon licenses or otherwise altered
22 the terms of the licenses. FoE maintains that this is
23 a fact heavy issue. I believe it is an issue of law
24 that can be decided as a matter of law.

25 The NRC has not issued any approval to

1 PG&E on seismic issues that amends the licenses,
2 backdoor or otherwise. The NRC has not taken any
3 action that grants PG&E any greater authority than
4 provided in the current licenses, nor has it altered
5 the terms or conditions of the licenses.

6 Diablo Canyon units operates safely today
7 in accordance with the same licenses and technical
8 specifications as they did previously. Safety related
9 structures, systems, and components remain qualified
10 for the seismic loads defined by the current licensing
11 basis that includes the Hosgri Earthquake evaluation.
12 There has been no NRC action entitling FoE to a
13 hearing under Atomic Energy Act Section 189a.

14 FoE's de facto amendment argument has
15 continuously evolved since the Hearing Request was
16 filed in August 2014. Through all of the pleadings,
17 FoE's arguments have been premised on
18 mischaracterizations of the Diablo Canyon seismic
19 licensing history, facts taken out of context,
20 misunderstandings of the PG&E seismic studies, and
21 misrepresentations of the NRC's regulatory processes.

22 FoE has asserted that the NRC has approved
23 relaxed assumptions and acceptance criteria for
24 evaluating new seismic information, that the plant is
25 operating outside of the licensing basis as defined by

1 FoE, that new seismic studies and methodologies have
2 been "folded into" the licensing basis of the plant.

3 But none of that is true. The licenses
4 have not changed. The licensing basis has not
5 changed. And, in fact, the NRC has not issued any
6 approval to PG&E on seismic issues that changes the
7 operating authority or alters the license.

8 In the original Hearing Request and again
9 today, FoE relies upon PG&E's withdrawn License
10 Amendment Request, LAR 11-05. That request would have
11 modified the licensing basis by redefining the safe
12 shutdown earthquake and adopting a specific approach
13 to evaluating new seismic information, something
14 lacking in the current regulations and licenses. The
15 LAR, the License Amendment Request, was withdrawn
16 after the Fukushima accident. The license and
17 licensing bases remain unmodified.

18 Diablo Canyon is instead included in the
19 generic Section 50.54(f) process to assess the
20 adequacy of the current licensing basis. Meanwhile,
21 safety related equipment is qualified and functional
22 for the current licensing basis seismic criteria and
23 there is a clear safety basis for continued operation
24 in accordance with the current licensing basis.

25 The NRC Section 50.54(f) requests to all

1 operating licensees requires seismic reevaluations
2 based on new information and new methodologies
3 developed since initial licensing. It is not a change
4 to the licenses of operating plants. It's an exercise
5 of the staff oversight process to determine whether
6 additional actions, including license or licensing
7 basis changes, are warranted.

8 PG&E's response in March 2015 summarizing
9 the results of its seismic hazards screening
10 evaluation does not change the Diablo Canyon license
11 or licensing basis. The fact that it is based on a
12 non-licensing basis probabilistic methodology is the
13 very point of the evaluation and any plant or license
14 changes that may be subject to Section 189a hearing
15 rights are still to be determined.

16 The Commission in its St. Lucie and Fort
17 Calhoun decisions has emphasized the distinction
18 between licensing actions that involve hearings and
19 oversight activities that do not. FoE simply ignores
20 the distinction.

21 The NRC staff's Research Information
22 Letter 1201 in its October 2012 letter evaluating
23 PG&E's interim report on the Shoreline Fault is not an
24 NRC licensing approval. It's an NRC staff oversight
25 document addressing and confirming PG&E's assessments

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1 of the safety of current operations in accordance with
2 the current design and licensing basis.

3 The NRC concluded that the Shoreline Fault
4 could be addressed in the UFSAR as a lesser included
5 case under the licensing basis Hosgri Earthquake
6 evaluation. The conclusion did not change the license
7 or even the licensing basis. FoE has claimed, and
8 again today, that the NRC has approved UFSAR Revision
9 21 and, therefore, amended the license. But under the
10 regulations, the NRC does not approve UFSAR revisions.

11 Revision 21 added information on the
12 Hosgri evaluation. It did not add the Hosgri
13 evaluation for the first time. That already existed
14 in the UFSAR. It simply added additional
15 clarification. The UFSAR revision referenced the
16 Long-Term Seismic Program. It included that as
17 licensing history information, it did not include that
18 as part of the licensing basis of the plant.

19 In any event, a UFSAR revision is a
20 notification document. It is not an amendment to the
21 license. As recognized by the Commission in its
22 recent decisions, a licensee cannot unilaterally amend
23 a license. UFSAR revisions are subject to NRC
24 oversight and enforcement, but there is no NRC
25 approval that confers hearing rights.

1 PG&E's Internal Change Request document
2 related to UFSAR Revision 21 is also not an NRC
3 approval. Nor is the NRC's internal and preliminary
4 review document, the so called Bamford Memo. If FoE
5 believes that the UFSAR revision did not comply with
6 10 CFR 50.71(e) or with 10 CFR 50.59, that concern
7 must be pursued through a request for enforcement
8 action under 10 CFR 2.206.

9 The NRC's December 2014 Inspection Report
10 at Diablo Canyon is also not an approval. Nor does it
11 amend the license or the licensing basis. Inspection
12 Reports are not license amendments and do not involve
13 hearing rights, plain and simple.

14 FoE has also relied upon a nonconcurrence
15 and a differing professional opinion, but staff's
16 management's disposition of those internal concerns,
17 related to the adequacy of NRC oversight by their very
18 nature, did not change the Diablo Canyon licenses.
19 FoE consistently misrepresents the relevant facts and
20 the NRC's regulatory processes.

21 FoE equates oversight with licensing
22 approvals. FoE equates the license with licensing
23 basis. FoE would expand the Atomic Energy Act hearing
24 requirement to practically every NRC activity and
25 every NRC decision to either pursue or not pursue

1 enforcement action. FoE's approach is simply not
2 consistent with the law, with Commission precedent, or
3 the existing regulatory framework.

4 Three cases have been relied upon to
5 support the argument that there has been a de facto
6 license amendment. The Commission's decision in
7 Perry, First Circuit decision in Citizens Awareness
8 Network, and a D.C. Circuit decision in Shieldalloy
9 versus NRC. In all three of these cases, there were
10 clear NRC actions granting approval for specific new
11 activities. An approval of a Revised Reactor Vessel
12 Specimen Withdraw Schedule in Perry. A Commission
13 decision to order and allow a licensee to proceed with
14 major decommissioning work not otherwise authorized in
15 Citizens Awareness Network. And an order approving
16 new venting of radioactive gasses in Shieldalloy.

17 The issue in each case was whether those
18 approvals should have been treated as license
19 amendments subject to hearing rights. In the present
20 case, there is no licensing event. No NRC approval
21 that could be a de facto amendment. Yes, the NRC has
22 exercised its oversight authority. And, yes, the NRC
23 is evaluating new seismic information as an ongoing
24 matter using new methodologies on a schedule
25 consistent with PG&E's and the NRC's staff's

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1 conclusion that operations under the current license
2 and the current seismic design and licensing basis is
3 safe.

4 But the Diablo Canyon units are still
5 operating in accordance with the current licenses and
6 seismic licensing bases. The NRC has not increased
7 operating authority or granted any new authority.
8 There is no approval of new activities even remotely
9 analogous to the specific approvals granted by the NRC
10 in the three cases relied upon.

11 Citing testimony from a Senate committee
12 hearing and other external communications, FoE may
13 think that PG&E has not complied with the licensing
14 basis. But even if true, and it's not, a
15 noncompliance with the licensing basis is not a
16 noncompliance with the license. Nor is it a change to
17 the license or an increase in operating authority.

18 FoE may think that there is an increased
19 seismic risk based on the new seismic information
20 developed by PG&E. But even if true, increased risk
21 is not a change to the license or the licensing basis.
22 It is not an increase in operating authority. If the
23 seismic hazards are determined to be greater, that may
24 be a reason to impose new requirements that change the
25 licensing basis, but the NRC has not reached that

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1 decision to date.

2 FoE's concerns regarding compliance or
3 regarding safe operation are matters for a Section
4 2.206 Petition. In fact, the Commission already
5 referred FoE's concerns related to safe operations and
6 immediate suspension of operations to the EDO for
7 consideration under Section 2.206. The remaining
8 concerns must be treated the same way. FoE's Request
9 for a Hearing on an operational safety matter should
10 be denied.

11 CHAIRMAN RYERSON: Thank you, Mr. Repka.
12 Mr. Roth?

13 MR. ROTH: Your honor, Ms. Kanatas is going
14 to do the opening.

15 CHAIRMAN RYERSON: Okay. Thank you.

16 MS. KANATAS: Good afternoon, your honors.
17 My name is Cathy Kanatas and I represent the staff.
18 As your honors know, this afternoon's proceeding is
19 not a forum to relitigate the Diablo Canyon operating
20 license or a proceeding to discuss the safe operation
21 of the plant. Instead, it is a threshold proceeding
22 to determine whether FoE has identified a de facto
23 licensing action that triggers an opportunity to
24 request a Section 189 hearing.

25 Therefore, unlike this morning's

1 proceeding, there is no pending application seeking
2 NRC approval or a Notice of Opportunity for Hearing
3 establishing the scope of a proceeding. Instead, we
4 have the Commission's referral in CLI-15-14, which
5 established this proceeding and its limited scope.

6 Since CLI-15-14 is why we're here today
7 and because FoE and the staff have different views of
8 this referral, I will discuss it first. Then I will
9 briefly discuss why none of the staff actions in FoE's
10 Petition or Reply constitute a de facto license
11 amendment and why the Board should deny the Petition
12 on that ground. Finally, I will address why FoE's
13 contentions do not meet the Section 2.309 requirements
14 and why the Board should not consider FoE's
15 Supplemental Brief.

16 In CL-15-14, the Commission referred a
17 limited question to the Board. Did FoE's August 2014
18 Petition or October 2014 Reply identify an NRC staff
19 action related to the analysis of the Shoreline Fault
20 that effectively amended PG&E's license and,
21 therefore, provided FoE with an opportunity to request
22 a hearing? The Commission's referral specified both
23 the law and the facts to apply in this proceeding.

24 In terms of the law, the Commission
25 directed that the Board apply the de facto license

1 amendment framework in the Commission's Perry decision
2 and to use the Commission's recent decisions in St.
3 Lucie and Fort Calhoun as guidance. In the staff's
4 view, this means that the Board should do a discrete
5 and backward looking analysis of each completed agency
6 action discussed in FoE's Petition and Reply to
7 determine if any of those staff actions granted PG&E
8 any greater operating authority or altered the
9 license.

10 This analysis should carefully distinguish
11 any staff oversight activity which ensured compliance
12 with existing requirements, as the Commission held in
13 St. Lucie and Fort Calhoun that these actions do not
14 alter an NRC license or grant additional authority.
15 The Board should not apply Perry to licensee actions
16 or submittals as a licensee cannot amend its license
17 unilaterally.

18 Further, the Board should follow St.
19 Lucie, which rejected the theory of an ongoing and
20 continuing de facto license amendment process.
21 Instead, the Board, like the Commission in St. Lucie,
22 should consider only staff actions taken 60 days
23 before the Petition was submitted and should also
24 account for the Fort Calhoun holding that future
25 license amendments do not constitute de facto license

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1 amendments or trigger hearing rights now.

2 Finally, the Board should follow
3 Commission precedent that limits the de facto analysis
4 to the terms of the challenged agency document. For
5 example, in SONGS, the Commission directed that only
6 the staff's Confirmatory Action Letter be analyzed to
7 determine whether there was a de facto license
8 amendment.

9 FoE's de facto claims are contrary to this
10 established legal framework. For example, FoE points
11 to PG&E's actions under 50.59 as support for a de
12 facto amendment. Further, FoE argues that the staff
13 is undergoing some ongoing and continuing amendment of
14 the license and that the Board must consider multiple
15 staff actions and licensee submittals to make its
16 threshold determination. This is not the legal
17 analysis directed in CLI-15-14.

18 Likewise, FoE and the staff have differing
19 views on the relevant facts referred to the Board. In
20 the staff's view, the Commission's referral only asks
21 the Board to apply Perry to the following discrete
22 actions. The staff's March 2012 50.54(f) letter, the
23 staff's Research Information Letter or RIL 12-01, the
24 October 12, 2012 letter associated with that RIL, and
25 an alleged staff approval of PG&E's UFSAR Rev 21.

1 FoE argues that the facts to be considered
2 are much broader and include additional and subsequent
3 staff actions and licensee submittals and claims
4 raised in its Petition for review in the D.C. Circuit.
5 But this open-ended and wide ranging factual inquiry
6 is not contemplated by CLI-15-14.

7 The Commission did not ask the Board to
8 consider any subsequent staff activity or direct
9 additional briefing from FoE on its claims. Instead,
10 the Commission specified that the Board should rule on
11 FoE's Petition based on the filings submitted and a
12 single additional filing from PG&E and the staff
13 responding to FoE's UFSAR claims. This Board's June
14 2 Scheduling Order echoed this direction.

15 As explained in detail in the staff's
16 filings, the Board should deny FoE's Petition because
17 it has not identified a de facto license amendment
18 under Perry. FoE has not pointed to any staff action
19 that altered the terms of PG&E's license or granted
20 PG&E additional operating authority.

21 First, FoE has not shown that the staff's
22 50.54(f) letter constituted a de facto amendment.
23 That letter requested information and suggested that
24 in the future, a license amendment may be needed. It
25 did not make any determinations, approvals, or alter

1 the license. Staff request for information is an
2 oversight activity and future possible license
3 amendments do not constitute de facto license
4 amendments.

5 Second, FoE has not shown how the RIL
6 constitutes a de facto license amendment. As noted,
7 the RIL contains the staff's independent assessment of
8 PG&E's 2011 Shoreline Report and concludes that the
9 plant can safely operate despite the Shoreline Fault.
10 FoE claims the RIL made the Hosgri Earthquake the
11 bounding seismic event and that in doing so the staff
12 amended PG&E's license.

13 In support of this claim, FoE relies on a
14 differing professional opinion of an NRC employee.
15 But the RIL did not make the change FoE claims. And
16 the evaluations in the RIL did not alter PG&E's
17 operating license or authority. Instead, the staff's
18 assessment concluded that the Shoreline Fault was
19 bounded by the Hosgri evaluation, which is part of the
20 plant's existing design and licensing basis.

21 Third, FoE has not shown that the staff's
22 October 12 letter constitutes a de facto amendment.
23 FoE claims that this is a de facto amendment because
24 it specified a method of analysis where none was
25 previously stated. But the October 12 letter only

1 summarized the results of the RIL, stated that the
2 50.54(f) process would apply to evaluate new seismic
3 information, and stated that PG&E may update its UFSAR
4 pursuant to 50.71(e). None of these statements alter
5 the license or augment PG&E's operating authority.

6 Finally, FoE has not shown that the staff
7 approved PG&E's UFSAR or that any other staff action
8 related to the UFSAR constituted a de facto license
9 amendment. The staff agrees with FoE that the de
10 facto case law says it is the effect and not the
11 label. However, FoE has not shown how any action at
12 all, no matter what the label, constituted an approval
13 or an alteration of the license.

14 As noted in the staff's brief, the UFSAR
15 is a licensee document and the changes made to it were
16 done under 50.59 or pursuant to 50.71(e)'s reporting
17 requirements. Therefore, there is no de facto
18 amendment. Further, UFSAR Rev 21 did not as FoE
19 claims achieve the same results as PG&E's withdrawn
20 License Amendment 11-05. Instead, UFSAR Rev 21
21 included only clarifications of Diablo's existing
22 seismic design basis and licensing basis.

23 Therefore, FoE's Petition should be denied
24 because it has not identified a licensing activity
25 that triggers a Section 189 hearing. Because there is

1 no de facto license amendment proceeding, there is no
2 need to determine whether the other threshold
3 question, whether the Petition meets 2.309.

4 However, the Board could also deny the
5 Petition on the ground that it does not meet 2.309.
6 FoE's Petition, instead of raising a genuine material
7 dispute on a license amendment, raises claims not
8 appropriate for litigation in a 189 hearing, including
9 challenges to the adequacy of the staff safety review,
10 challenges to PG&E's 50.59 evaluations, and claims
11 that the plant is not safe to operate. But those
12 claims, as noted, are not before this Board. Instead,
13 the Commission referred those claims to the EDO to be
14 considered under 2.206.

15 Finally, and as noted, FoE attempts to
16 broaden the scope of this proceeding by making
17 additional de facto claims in its Supplemental Brief.
18 But as indicated in St. Lucie, the late filing
19 criteria in 2.309 applies to de facto hearing
20 requests. Therefore, if FoE wishes to supplement its
21 August 2014 Petition with additional claims, it must
22 file a new or amended contention or a new Petition.

23 In conclusion, the staff respectfully
24 submits that the answer to both threshold questions
25 before the Board is no. First, FoE's Petition does

1 not identify a completed NRC staff action that
2 effectively amended PG&E's license or augmented
3 operating authority.

4 Second, FoE's Petition does not meet the
5 threshold requirements under 2.309 to be granted a
6 hearing. While FoE has concerns with the safe
7 operation of the plant and believes the license should
8 be modified, suspended, or revoked, those issues are
9 not before the Board. Thank you, your honors.

10 CHAIRMAN RYERSON: Right on ten minutes.
11 I mean to within two second.

12 MS. KANATAS: I practiced. I did cut it
13 back.

14 CHAIRMAN RYERSON: One quick follow-up
15 question, if I may. The NRC staff's position is that
16 the Board should not consider events that are not
17 referenced in either the August Petition or the, I
18 guess it was, October Reply. I take it your position
19 is also it would not make a difference if we did or
20 have you not reached a view on that?

21 MS. KANATAS: Correct, your honor. We do
22 not believe that those actions were referred to the
23 Board by CLI-15-14. But, as I think we noted in our
24 June 26 Brief, we provided a brief analysis of why
25 even if they were referred, they do not change the

1 staff's position that FoE has not identified a de
2 facto license amendment.

3 CHAIRMAN RYERSON: Thank you. Mr. Ayres,
4 let me start, if I may, with you and we're talking
5 about the Supplemental Brief. You asked for the
6 opportunity to brief intervening developments if you
7 will. Your original Petition was back in August of
8 2014 and it wasn't referred to us until May.

9 So without deciding on the relevance of
10 any events, we decided to allow some brief briefing on
11 those subjects. But as a threshold matter, let me ask
12 you, did it occur to you as these developments took
13 place, while your Petition was pending in front of the
14 Commission, did it occur to you to try to bring them
15 to the Commission's attention in some form? Did you
16 do that? And if not, why not?

17 MR. AYRES: You're talking about the things
18 that happened after --

19 CHAIRMAN RYERSON: After your --

20 MR. AYRES: -- we filed our Petition?

21 CHAIRMAN RYERSON: -- original Petition.
22 Correct.

23 MR. AYRES: Well, we did not attempt to
24 bring them to Commission's attention separately. I
25 think the reason was that we -- two things really.

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1 One is that we did take the Revision 21 issue to the
2 D.C. Circuit, as you know. And that court is holding
3 the issue while you consider this.

4 The other is I think that we were in a
5 proceeding before the NRC with papers being filed and
6 then ultimately an oral argument. And that seemed to
7 be the appropriate place to bring up issues that in
8 our mind fill out the picture of the de facto license
9 amendment that we have argued has been undertaken.

10 CHAIRMAN RYERSON: I'm not -- I'm a little
11 confused.

12 MR. AYRES: I'm sorry.

13 CHAIRMAN RYERSON: There was no argument in
14 front of the Commission, was there?

15 MR. AYRES: Only the one that referred this
16 to you.

17 CHAIRMAN RYERSON: The Order, the
18 Commission's Order. But --

19 MR. AYRES: I'm sorry. I --

20 CHAIRMAN RYERSON: Yes.

21 MR. AYRES: I think I misspoke and said NRC
22 when I meant D.C. Circuit.

23 CHAIRMAN RYERSON: Okay. Okay. Okay. So
24 essentially, I mean, while the matter was pending in
25 front of the Commission, you did not attempt to update

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1 the Commission. You had another -- I know you had a
2 proceeding in front of this Board as well and the
3 license approval and you have your D.C. Circuit
4 Opinion. I mean, can we be candid? It just didn't
5 occur to you to do that as well. To follow up with
6 the Commission?

7 MR. AYRES: Well, we had the matter in
8 front of the Commission.

9 CHAIRMAN RYERSON: Yes.

10 MR. AYRES: I think we felt it would fall
11 within the ambit of that.

12 CHAIRMAN RYERSON: Okay. But the specific
13 matters addressed in your Supplemental Brief to this
14 Board were not brought to the Commission's attention.
15 They were not raised in your August 2014 Petition --

16 MR. AYRES: No.

17 CHAIRMAN RYERSON: -- they were not raised
18 in your October Reply Brief.

19 MR. AYRES: Many of them hadn't happened by
20 then.

21 CHAIRMAN RYERSON: Right. Right. By the
22 Reply Brief. But while it was -- while the matter was
23 pending before the Commission, you could have brought
24 some of them to the Commission's attention. I forget
25 what the rule is in the Federal Courts of Appeals, but

1 there's some sort of rule for intervening authorities
2 or developments. I mean, you didn't attempt to do
3 that?

4 MR. AYRES: We didn't, no.

5 CHAIRMAN RYERSON: Okay. Let me ask you
6 this question, what -- and I, well I think I know the
7 answer to the question. I mean, it's a two -- the
8 first part of the question is, has the Commission ever
9 actually found a de facto license amendment itself?
10 I mean, I think the Perry case you referred to, I'm
11 not sure it actually came out ultimately finding a de
12 facto license amendment. It articulated the standard,
13 but has -- is there any Commission case that finds a
14 de facto license amendment?

15 MR. AYRES: I think the answer is no.

16 CHAIRMAN RYERSON: Oh, okay. So what would
17 you say your best authorities are? Either judicial or
18 Commission authorities? Which ones would you -- if we
19 only were going to read a few, which ones would you
20 say we should read?

21 MR. AYRES: I think you should read them
22 all.

23 CHAIRMAN RYERSON: I know you should. I
24 know we should, but what do you think are your best
25 cases?

1 MR. AYRES: Which ones would be on the top
2 of the stack?

3 CHAIRMAN RYERSON: Right.

4 MR. AYRES: The First Circuit case, that
5 would be one of them. There's another Circuit Court
6 case -- I guess that one. And then you have now four
7 cases decided by the ASLB or the Commission on the
8 subject, including the San Onofre case you can still
9 read. And so there's that set of precedence to be
10 looked at.

11 I want to say one other thing about this
12 question of a de facto license amendment. If you have
13 an actual license amendment, there's an announcement
14 in the Federal Register, a proceeding begins, it is
15 all done according to a set of rules. The difference
16 between that and a de facto license amendment, at
17 least one major difference, is that the actions are
18 taken outside of that formal context and, therefore,
19 it's not surprising to find that it's difficult to
20 piece together the documents that show this pattern.

21 We believe that if you look at the group
22 of documents we've identified, what you see is a very
23 clear pattern. And so we would respond to Ms.
24 Kanatas' comment by saying we never alleged that one
25 particular document constituted a de facto license

1 amendment. The de facto license amendment is
2 evidenced by a variety of documents, which we've
3 referred to in our briefs and will refer to here as
4 well.

5 CHAIRMAN RYERSON: So, I mean, essentially
6 your view is that there can be a pattern or practice
7 of staff behavior that amounts ultimately to a de
8 facto license?

9 MR. AYRES: As the effect of --

10 CHAIRMAN RYERSON: Yes.

11 MR. AYRES: -- the series of acts which add
12 up.

13 CHAIRMAN RYERSON: How do we distinguish
14 between a de facto license amendment and oversight
15 activities then? I mean, is there a bright-line test
16 -- let me suggest this. Suppose Diablo Canyon, all in
17 favor of efficiency and being productive decides
18 unilaterally to increase the productivity of its plant
19 10 percent. They're capable of doing that. They go
20 right ahead and do that. They don't tell the NRC.
21 The first day after they do that, has there been a de
22 facto license amendment? I would say, not. Wouldn't
23 you agree?

24 MR. AYRES: Yes, I would, yes.

25 CHAIRMAN RYERSON: Okay. Suppose there's

1 a letter a couple weeks later from someone at the NRC
2 kind of alluding to some awareness of this 10 percent
3 increase in power, is that a de facto license
4 amendment or is that a compliance issue?

5 MR. AYRES: Oh, I think it's not a de facto
6 license amendment.

7 CHAIRMAN RYERSON: Okay.

8 MR. AYRES: Because it -- now you're
9 positing what if there is NRC action.

10 CHAIRMAN RYERSON: Yes.

11 MR. AYRES: But the other prong of the test
12 is that it expands the operating authority of the
13 plant. And in that case that you posited, I don't
14 think it does expand that. That is implicit in the
15 license as granted.

16 CHAIRMAN RYERSON: Okay.

17 MR. AYRES: Because there's no limit in the
18 license --

19 CHAIRMAN RYERSON: Okay.

20 MR. AYRES: -- how much it may be run, that
21 I know of.

22 CHAIRMAN RYERSON: Say you get another
23 letter from the NRC congratulating Diablo Canyon on
24 its increased efficiency. Is that a de facto license
25 amendment?

1 MR. AYRES: No. I think for the same
2 reason, it's not.

3 CHAIRMAN RYERSON: Okay. Okay. So I mean,
4 I --

5 MR. AYRES: The license doesn't address how
6 much you may run the plant. It allows you to run it
7 as much as you can.

8 CHAIRMAN RYERSON: Oh, I think there are
9 limits on the power. It might -- yes. There are
10 limits on the license on the power output you can
11 have.

12 MR. AYRES: Are we exceeding those limits
13 in your --

14 CHAIRMAN RYERSON: So if you exceed those
15 --

16 MR. AYRES: -- hypothetical?

17 CHAIRMAN RYERSON: -- limits -- you see,
18 this is where -- I'm not sure if there is de facto
19 amendment, what I'm looking for is a bright-line test
20 that we apply. When does the staff's failure to come
21 down with a hammer or rather maybe failure to come
22 down with a hammer strikes me as a compliance issue.
23 When is the staff's enthusiastic endorsement in some
24 fashion a de facto license amendment? Where is that
25 line? And is it possible to explain where it is?

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1 MR. AYRES: Let's start from your
2 hypothetical. Again, now we're assuming the plant
3 actually does operate at a greater, higher rate of
4 operation than permitted in the license.

5 CHAIRMAN RYERSON: Right.

6 MR. AYRES: And someone at the NRC staff
7 writes a letter to them saying good job.

8 CHAIRMAN RYERSON: Well, that's the highest
9 level. I'm --

10 MR. AYRES: That's your highest?

11 CHAIRMAN RYERSON: Yes. For the first
12 level -- first level was day two, the NRC doesn't even
13 know about this somehow. Forget the onsite person who
14 might know about it. But if that's purely a
15 unilateral action by PG&E, that is not a license
16 amendment. We're in agreement on that I take it.

17 MR. AYRES: Right.

18 CHAIRMAN RYERSON: And then you get into a,
19 to my mind, a fuzzier area where you might have some
20 correspondence that suggests that somebody was aware
21 of this, somebody at the NRC was aware of this, but
22 didn't do anything about it. And then, you get to a
23 further step where it's absolutely clear that they're
24 aware of it and excited about it, congratulating them
25 on it.

1 I mean, at somewhere, I don't know where
2 the compliance issue turns into a de facto license
3 amendment. Is there a way to articulate a test for
4 that?

5 MR. AYRES: I think there is -- it's
6 inevitably a judgment call. I don't think there is a
7 bright-line test. But looking at the case we have
8 before us, I think it clearly passes the test on the
9 judgment basis.

10 In this case, the company was allowed to
11 operate a plant which had been shown repeatedly not to
12 meet the licensing basis. And it was allowed to do
13 that after first having asked for an amendment to the
14 license and then having been told by the NRC, no you
15 don't need to do that, instead do this.

16 I may have put the word instead in there,
17 but that's how it reads to me. So I think that both
18 the NRC involvement and the action, the increase in
19 the operating authority in this case clearly exceed
20 the threshold of any well adjudged principle there.

21 CHAIRMAN RYERSON: And one other, at least
22 one other question for you to clarify my understanding
23 of your position. Your initial Petition before the
24 Commission back in August of 2014 seemed to flatly say
25 that the Hosgri was not part of the licensing basis.

1 Has your thinking on that evolved at all given the
2 history of the Board approval, the Appeal Board
3 approval, the Commission denial of the appeal from the
4 Appeal Board?

5 I mean, it was clear that way back, years
6 and years ago, whenever, you might dispute exactly
7 when. But years and years ago, the Hosgri Fault, not
8 the Shoreline Fault, but the Hosgri Fault was
9 extensively investigated and that was -- everyone
10 considered that as part of the licensing basis for the
11 plant, did they not?

12 MR. AYRES: Yes, your honor. It is clear
13 that Hosgri evaluation was part of the early, I'll
14 call it the early licensing. Initially, the plant --
15 the design basis for the plant was the DDE in terms of
16 vibratory ground motion. Partway through the building
17 of the plant, I'm sure I'm not telling you anything
18 you don't know already, the Hosgri was discovered and
19 a new analysis was done of that.

20 Our reading of the result of that process
21 was, and this is repeated in the safety analysis for
22 decades of the plant, is that the safe shutdown
23 earthquake for this plant is the DDE. Plus, for this
24 particular fault, the Hosgri evaluation -- well, the
25 Hosgri evaluation is full of assumptions and theory

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1 that apply there, but may or may not apply in the
2 future in another place.

3 And we think that what's happened here
4 that's made this --that's really changed this license
5 is that what was a one-time exception, the Hosgri
6 evaluation, is now by the staff's action through
7 slight-of-hand become the safe shutdown earthquake or
8 this design basis earthquake for this plant by itself.

9 So instead of having to meet both the DDE
10 and the HE, which is the way the safety analysis has
11 read for many years, the way we read the changes that
12 have been made is that from now on a demonstration and
13 evaluation of a new seismic problem need only be
14 through the HE evaluation in order to be approved as
15 part of the plant's design basis.

16 CHAIRMAN RYERSON: Does the NRC staff want
17 to comment on that aspect of the history here? Mr.
18 Roth or whoever else would like to handle that?

19 MR. ROTH: Certainly, sir. Dave Roth for
20 the staff. As they've noted, the Hosgri evaluation
21 and the Hosgri Earthquake was something discovered
22 early in the plant's licensing. The staff's and the
23 applicant's and the Board's Orders at the time all
24 reflect that.

25 In some instances, as noted in the staff's

1 Supplemental SER 7, the Double Designed Earthquake,
2 which was the original design submitted for the
3 construction permit, wound up being more conservative,
4 more restrictive than the later Hosgri evaluation.
5 But what's significant is that the Hosgri evaluation
6 has long been part of their licensing basis.

7 CHAIRMAN RYERSON: But is it accurate to
8 say it's a one-time exception? In other words, if
9 there were -- well, there is another fault. There's
10 the Shoreline Fault. Is that not evaluated under the
11 same standards as Hosgri if that's the licensing
12 basis?

13 MR. ROTH: Well, the licensing basis
14 evaluation was to get the operating license. That was
15 the reviewed plant's safety to determine as the
16 Appeals Board found that the plant was safe to
17 operate. The staff also found that the structure,
18 systems, and components would survive the evaluated
19 earthquake.

20 When the plant discovers anything new,
21 whether it be a flood or whether it be an earthquake,
22 then they evaluate to determine whether that affects
23 the operability of any structures, systems, or
24 components. But whether they come back with an
25 operability evaluation that through inspection the

1 staff determined is correct or incorrect, doesn't
2 change their license.

3 CHAIRMAN RYERSON: All right. Let me ask
4 you the same question that I put to Mr. Ayres. Does
5 the staff have a bright-line test for the difference
6 between oversight and a de facto license amendment?

7 MR. ROTH: Well, the staff's bright-line --
8 Dave Roth for the staff. The staff's bright-line test
9 would be the test recently restated by the Commission
10 in St. Lucie. That, in the end, whether it's the
11 approval granted, one, greater authority than they
12 already had or two, otherwise altered the terms of the
13 original license.

14 CHAIRMAN RYERSON: Now, you don't dispute
15 that the staff effectively changed its mind about the
16 need for a license amendment? Is that a fair
17 characterization?

18 MR. ROTH: A better characterization would
19 be back to where the source of a license amendment
20 comes from. Pursuant to the Commission's regulations,
21 a license amendment request is when the licensee
22 desires to amend its license.

23 Whether the licensee decides later to
24 withdraw that as they may find it unnecessary, they
25 may find whatever information they wanted to be

1 subsumed by different generic processes, it's not for
2 the staff's judgment to decide when they should amend.
3 Staff thinks the license needs to be amended, the
4 staff have orders to amend the license.

5 CHAIRMAN RYERSON: I mean, one argument
6 that Friends of the Earth makes that has I think a
7 certain intuitive appeal, I don't know if it has legal
8 merit, but it has an intuitive appeal, is that what
9 happened here was that in the case of Diablo Canyon,
10 a new fault was found in 2008, the Shoreline Fault.
11 And there was perhaps a consensus that the way to deal
12 with that appropriately was through a license
13 amendment, which of course would have triggered
14 hearing rights for interveners.

15 And then someone fortuitously, the
16 Fukushima incident came along and the Commission on an
17 across-the-board basis decided to solicit additional
18 information about all domestic reactors of their
19 seismic risks. And that the impact of that on Diablo
20 Canyon, which was a very positive impact everywhere
21 else, but the impact on Diablo Canyon, if I understand
22 their argument, is that it had a reduced impact or
23 reduced the concerns about safety.

24 Because instead of going through with a
25 full amendment process at that point, the PG&E kind of

1 took comfort in the fact, well everybody's being
2 required to kind of look at things again in a less
3 formal process. And that, as a result, the safety is
4 not as well served at Diablo Canyon. May be well
5 served doing this process at all the other reactors in
6 the United States, but in terms of Diablo Canyon was
7 actually a reduction of safety concerns. What's your
8 response to that?

9 MR. ROTH: The staff would disagree that
10 it's having any lower safety standards in Diablo
11 Canyon.

12 MS. KANATAS: If I may, I would say that as
13 Mr. Roth specified, PG&E submitted LAR 11-05 under
14 50.90, which as Mr. Roth said is they desired to amend
15 their license in a particular way. That License
16 Amendment Request specified that it wanted to define
17 an evaluation process for newly identified seismic
18 information. It wanted to make the Hosgri Earthquake
19 the equivalent to the SSE, among other things.

20 So that was withdrawn and what ended up
21 happening was the generic process, as you said. But
22 that generic process was not to change the design
23 basis of Diablo. It was not to alter the license. It
24 was to request information and it specifically said
25 the evaluations submitted in response to the letter do

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1 not revise the design basis of the plant.

2 It's only then after -- once the
3 Commission is able to review all the information that
4 is submitted, that we will then decide in what's
5 called Phase Two of this 50.54(f) letter whether a
6 modification, revision, or other action is warranted.
7 So I would say that for what they wanted to do, they
8 submitted a License Amendment Request. Then they
9 withdrew it because something else was happening
10 different. Not the same thing as FoE is attempting to
11 claim. That what's in UFSAR Rev 21 is the same thing
12 as what was in LAR Request 11-05.

13 CHAIRMAN RYERSON: So what you're saying is
14 the ongoing examination of the seismic issue at Diablo
15 Canyon could or could not, but could result in a
16 license amendment in the future at which point Mr.
17 Ayres would have a, presumably a hearing opportunity?

18 MS. KANATAS: Absolutely, your honor. And
19 that's the case for any of the power reactor licensees
20 that received the March 2012 50.54(f) letter. That's
21 exactly the purpose of 50.54(f) as stated in the
22 regulation.

23 CHAIRMAN RYERSON: Mr. Ayres?

24 MR. AYRES: Thank you, your honor. I think
25 there's -- this trying to put together the 50.54(f)

1 process and the issues here throws a red herring into
2 the pot. The issue that we've raised is the amendment
3 to the license that's been made in order to allow the
4 plant to continue operating, even though based on its
5 past design basis it would not have been able to
6 operate. That occurred in Revision 21 UFSAR.

7 I agree with you about your general point
8 that somehow in this case, the 50.54 process manages
9 to extend even further the time of dealing with
10 whatever the Shoreline Faults can put out. But that's
11 not our case here. We recognize that some future
12 situation will occur there. We may like it, we may
13 not like it. Whatever comes of that process, we'll
14 deal with then.

15 What we're here to talk about today is the
16 process that already happened where the license has
17 been effectively amended in order to allow this plant
18 to continue operating given that the seismic hazard to
19 the plant has increased over what it was before.

20 CHAIRMAN RYERSON: Thank you. Mr. Repka,
21 we'll probably take a break after a few comments by
22 you.

23 MR. REPKA: Yes, I've been saving them up.
24 I would like to respond to three things. So don't let
25 me forget. One is your question about whether the HE

1 was a one-time event. Second was your hypothetical.
2 And the third is the LAR 11-05.

3 Let me take those in reverse order. LAR
4 11-05. I'd like to give a little more color to that
5 situation. The NRC regulations don't have a process
6 for updating new seismic information. The seismic
7 licensing basis is set at the time of licensing the
8 plant. So the criteria, the HE was clearly part of
9 that process. It wasn't a one-time exception.

10 It was -- the HE and the DDE both create
11 a set of seismic loads because of the assumption some
12 of the DDE seismic loads are more limiting than the HE
13 loads. All the equipment is required to be qualified
14 for both sets of loads. So the HE clearly creates a
15 -- involves a design response spectra.

16 If you're qualified for the ground motions
17 related to the HE or within the HE, you're going to be
18 qualified for the seismic loads. And the point is
19 it's not a one-time exception. It's clearly part of
20 the licensing basis in the sense that it helps define
21 the seismic qualification.

22 But there is no process when new
23 information comes up as to how to analyze that new
24 information. What process would be required to
25 determine whether or not we should make changes. So

1 when the Shoreline Fault was identified, PG&E already
2 had a process that no other licensee had.

3 It was called the Long-Term Seismic
4 Program. Which was a process for evaluating new
5 information. It was done at a period shortly after
6 licensing the plant. The company always maintained
7 the Long-Term Seismic Program. That's how the
8 Shoreline Fault was developed. And so there was a
9 process that was used at the time of the LTSP to
10 evaluate whether or not that confirmed the adequacy of
11 the licensing basis or whether some additional changes
12 needed to be made.

13 So PG&E's deal was, in the absence of a
14 clear process, we would like to adopt something
15 similar to the LTSP for evaluating the effect of that.
16 There was lots of controversy with the resident
17 inspector at the time about how to do that.

18 But it was a voluntary submittal on PG&E's
19 part to put that process into the license. Not an
20 admission that it needed to be there, but that in the
21 absence of a process, we will put a process into our
22 license to evaluate new seismic information forever
23 forward, whatever that information may be, we'll
24 analyze it through this chain of logic. And it was a
25 fairly sophisticated flow chart provided with the

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1 License Amendment Request.

2 Again, that wasn't an attempt to accept
3 Shoreline Fault as part of the design basis. It was
4 a -- it would have adopted a process where none
5 existed. When -- and it would have applied going
6 forward to all new information.

7 When Fukushima happened and the NRC
8 already had an open item in GSI-199 for Central and
9 Eastern United States plants to reevaluate their
10 seismic licensing basis, no different than the
11 situation PG&E was in with the Shoreline Fault. There
12 was no process there. There were some reevaluations.

13 The NRC looked at this and said, we'll
14 deal with all plants the same. Here's the process
15 we're going to use at this time to evaluate new
16 information. And we called it the Section 50.54(f)
17 process. We check, we're going to use certain
18 probabilistic methodologies, and in addition, there's
19 a Fukushima Task Force Recommendation to actually
20 include a new regulation in the future that would
21 require periodic updates to the seismic licensing
22 basis. But we'll deal with that in the future.

23 So given that we now had a process that
24 PG&E was folded into, the need to adopt in our license
25 going forward was obviated, at least for the time

1 being. So, again, it wasn't an implicit recognition
2 that we needed a license, it was something that would
3 have been desirable to the company at that time. And
4 we opted to withdraw it.

5 And so, therefore, it has not -- again, in
6 terms of the intuitive argument, it really is not that
7 situation. We're not -- it wasn't an attempt to
8 somehow change the licensing basis relative to the
9 Shoreline Fault. Yes, it did include a component to
10 clarify that the SSE would be the Hosgri going
11 forward. That wasn't something that was necessary.
12 But the key to the License Amendment Request was a new
13 process for evaluating information and we did not put
14 that in the licensing amendment.

15 Now, you raised the issue of the
16 hypothetical of at what point does staff inaction
17 become a de facto amendment. My view would be that
18 staff inaction can never become a de facto amendment.
19 The cases -- FoE says the best case is the First
20 Circuit case. The First Circuit case is the Citizens
21 Awareness Network case that I referred to earlier.

22 That was a very specific affirmative
23 action by the Commission in that case to authorize a
24 licensee to go ahead with new activities that were
25 specifically precluded under the existing license,

1 major decommissioning activities. At that time, NRC
2 regulations required you to get a specific approval
3 before going forward with major dismantlement and
4 decommissioning. And so the Commission changed that
5 policy and issued an Order and said, in response to a
6 request from the licensee and said, go forward, you
7 can do that. So a very affirmative action.

8 So when you're talking about the case of
9 the NRC inaction to say the power upgrade, where the
10 license clearly says this is your maximum power, staff
11 doesn't do anything. Well, the remedy for a
12 stakeholder is to file 2.206 Petition to ask the staff
13 to do something. The staff sends a letter and says,
14 oh we think this is okay. That's not an approval.
15 The licensee is still operating outside the authority.
16 The remedy is still file a 2.206 Petition.

17 I think that they -- what would be
18 required for a de facto amendment, again, would be an
19 affirmative action by the NRC. And I think -- I would
20 submit that it really has to be a reviewable, APA
21 reviewable decision of the agency. That the argument
22 is that, that should have been a license amendment.

23 So in our -- in your situation in which
24 the NRC staff issues a letter that says, oh yes, good
25 job guys, way to go, I don't think that's a de facto

1 license amendment. I think that's, again, another
2 event that should trigger a 2.206 Petition saying you
3 can't do that under your license. If the NRC then
4 denies the 2.206 Petition, that's a reviewable denial
5 of a 2.206 where there should have been -- the
6 argument is there should have been a license
7 amendment.

8 That's where you could get a de facto
9 license amendment. I think that, again, it has to be
10 an affirmative act and similar to all three of the
11 cases in which de facto license amendment has even
12 been considered.

13 CHAIRMAN RYERSON: Thank you. Mr. Ayres --

14 MR. AYRES: Judge Ryerson, I know --

15 CHAIRMAN RYERSON: -- you look like you
16 want to say something before we go off bench for a
17 moment.

18 MR. AYRES: I only want to make an offer,
19 your honor. Which is, since the issue has been raised
20 of what the action was of the staff and what it needs
21 to be in order to accomplish a de facto amendment, I'd
22 like to offer when we come back to go through the
23 factual basis of our claim of action by the staff. We
24 have laid this out and we can walk you through it so
25 you get a full sense of what the facts are that you're

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1 dealing with. If the Board would like us to do that.

2 CHAIRMAN RYERSON: Why don't we talk about
3 whether that would be useful over our break. And
4 either start with questions or start with that when we
5 get back. Let's reconvene promptly at 2:30.

6 (Whereupon, the above-entitled matter went
7 off the record at 2:20 p.m. and resumed at 2:34 p.m.)

8 CHAIRMAN RYERSON: Please be seated. I
9 tried to turn this water into wine, it didn't work.
10 All right. Welcome back. Mr. Ayres, we thank you for
11 your offer, but we will decline. I think the facts
12 are set forth in your briefs and we will use that as
13 our principal source. I have only one more question
14 and then I believe that Judge Arnold has a number.

15 If I understand Mr. Repka's statement
16 about 2.206, Mr. Repka, I think you were suggesting
17 that if the staff, say, wrote a letter congratulating
18 PG&E on exceeding its authorized power, that the
19 appropriate response would be to file a 2.206 Petition
20 and if that were ultimately denied, that would be a
21 judicially reviewable event and presumably would be
22 reviewable not under a discretionary standard, but
23 perhaps as a de facto license amendment. That the
24 court could take it up on that ground. And I'm
25 wondering, does the NRC staff agree with that analysis

1 of the procedural rights of a person whose 2.206
2 Petition is denied?

3 MR. ROTH: One moment, your honor.

4 MS. KANATAS: Your honor, I think before we
5 even get to that, I think that the hypothetical as you
6 postured it, I would potentially say that could
7 constitute a de facto amendment to the extent that it
8 would, if we basically said, yes we approve your
9 operation beyond what you're currently licensed to in
10 a letter that, that could be at least arguably under
11 Perry analyzed as an action that would authorize
12 additional authority to the licensee.

13 And that it would not be trying to enforce
14 existing requirements or not acting upon knowledge
15 that a violation had occurred. As I agree with Mr.
16 Repka that inaction, not a de facto but a letter
17 saying we're okay -- we're glad you're operating
18 beyond your maximum power seems to be at least
19 something that would be a question of -- a mixed
20 question of fact and law.

21 CHAIRMAN RYERSON: I think under my
22 hypothetical actually everyone might go to jail if
23 circumstances --

24 MS. KANATAS: That too. And that's --

25 CHAIRMAN RYERSON: -- but I was trying --

1 MS. KANATAS: -- a problem.

2 CHAIRMAN RYERSON: -- to come up with
3 something.

4 MS. KANATAS: Sorry.

5 CHAIRMAN RYERSON: Mr. Repka, you want to
6 finally address the point?

7 MR. REPKA: Yes. I guess it depends on
8 what the letter says, but an exercise of enforcement
9 discretion if the letter is, yes you're violating your
10 license, but we choose not to take enforcement action
11 at this time, that's the enforcement discretion and
12 clearly an enforcement space. It's not an approval.

13 I can't imagine that there would be
14 enforcement discretion though that wouldn't have a
15 backend date and say, but we expect you to achieve
16 compliance by such and such a date. That's not a de
17 facto license amendment because it's still a
18 noncompliance and there's a recognition you're in
19 noncompliance.

20 CHAIRMAN RYERSON: All right. Judge
21 Arnold, some questions?

22 JUDGE ARNOLD: Sure thing. Talking about
23 the Hosgri Fault and whether it is or is not part of
24 the design basis, I went back and looked over some of
25 the adjudication history. Now, adjudicatory hearings

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1 were held by an Atomic Safety and Licensing Board in
2 December 1978 through February '79 and one of the
3 primary subjects of the hearing was the evaluation of
4 the Hosgri Fault. This is documented in LBP-79-26 at
5 10 NRC 453.

6 Now, in a section of that Order that is
7 specifically titled The Hosgri Fault Earthquake
8 Potential, the Board stated, "The assignment of a 7.5
9 magnitude is acceptably conservative for the safe
10 shutdown earthquake." And that's on Page 479. So
11 clearly that Board was considering a magnitude 7.5
12 earthquake on the Hosgri Fault to be the design basis
13 safe shutdown earthquake.

14 Later in that same section on the Hosgri
15 Fault earthquake potential, the Board states, "The
16 Board concludes that a 7.5 magnitude earthquake is a
17 very conservative value for the safe shutdown
18 earthquake. We also find that the requirement imposed
19 by staff that a 7.5 magnitude earthquake be used by
20 the applicant in its seismic analysis is reasonable
21 and meets the regulatory requirements." That's on
22 Page 485.

23 Now concerning ground motion resulting
24 from a 7.5 magnitude earthquake on the Hosgri, "The
25 Board concludes that the 0.75G acceleration assigned

1 to the safe shutdown earthquake is an appropriate
2 value for the maximum ground acceleration that could
3 occur at the Diablo Canyon site and, thus, an
4 appropriate anchor point for the design basis
5 spectra," Page 494.

6 I also note that a significant portion of
7 the Order is devoted to a discussion made to plant
8 components specifically to accommodate that 7.5
9 magnitude earthquake on the Hosgri. And finally, the
10 Board makes the following findings on Page 507, three
11 of them.

12 One, "The Board finds that the Applicant
13 has demonstrated through appropriate analysis and
14 tests that Category One structures, systems, and
15 components will perform as required during the seismic
16 load of the safe shutdown earthquake." Two, "The
17 Board finds that the Category One structures, systems,
18 and components will be adequate to assure, A, the
19 integrity of the reactor coolant pressure boundary
20 and, B, the capabilities to shut down the reactor and
21 maintain it in a safe condition." And then finally,
22 "The Board finds that the necessary safety functions
23 will be maintained during the safe shutdown
24 earthquake."

25 Now this is a Licensing Board Order and

1 Licensing Boards are certainly not infallible, but
2 following an October 1979 earthquake in the Imperial
3 Valley of California, joint interveners moved to
4 reopen the record. The Atomic Safety and Licensing
5 Appeal Board chose not only to grant that motion, but
6 also chose to receive new evidence themselves.

7 The reopened ALAB hearing took place in
8 San Luis Obispo in October 1980. The resulting Order,
9 ALAB-644, is 13 NRC 903. After considering previous
10 evidence from the Licensing Board and new evidence
11 concerning the 7.5 magnitude earthquake on the Hosgri
12 Fault as setting the safe shutdown earthquake, the
13 Appeals Board stated that they had "found no error
14 warranting corrective action" in the Licensing Board's
15 partial initial decision and they stated accordingly
16 the Licensing Board's partial initial decision
17 rendered in this case on June 12, 1978 and September
18 27, 1978 are affirmed.

19 Now Appeal Board decisions are binding on
20 Licensing Boards and that Appeal Board decision
21 confirmed the Licensing Board's considering a 7.5
22 magnitude earthquake on the Hosgri Fault to be the
23 safe shutdown earthquake. My question first for
24 Petitioners is, does the Licensing Board have the
25 authority to consider that the 1977 Hosgri Fault is

1 not the safe shutdown earthquake?

2 MR. AYRES: Your honors, we are aware of
3 the decisions you're talking about obviously.
4 However, we don't read the record to say that the
5 Hosgri is the SSE. And that's for several reasons

6 First, because the Hosgri evaluation did
7 not evaluate all the SSEs required under the SSE
8 regulations. And, therefore, it doesn't meet the
9 standard review plan criteria for the SSE. We -- if
10 you look at our Petition at Page 54, Footnote 139,
11 you'll see a table from PG&E comparing the HE with the
12 SRP in support of LAR 11-05.

13 Second, although it's certainly true that
14 the 1978 Opinion equates the HE with the SSE, it is
15 not part of the current licensing basis and, more
16 important, it was issued six years before the plant
17 received its operating license. That was in 1984 and
18 was, therefore, superseded by the original FSAR in
19 1984, which says that the DDE is the SSE.

20 And then third, the 1981 Board appeal
21 decision, it too was superseded by the original FSAR
22 since it occurred earlier, which says that the DDE is
23 the SSE. So, I certainly would not deny that there is
24 a little confusion there. But what has been in the
25 license, in the FSAR, which is part of the licensing

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1 basis since 1984, since the plant was licensed through
2 until Revision 21 is that the DDE is the safe shutdown
3 earthquake.

4 MS. OLSON: If I might, I might just add to
5 that, that the ASLB Appeals Board decision in 1984,
6 while the Board may have found that it would have been
7 acceptable to designate the Hosgri as the safe
8 shutdown earthquake, that is not, as my partner said,
9 what the FSAR said when the operating license was
10 approved. It said very clearly and says to this date
11 that the DDE is the equivalent to the safe shutdown
12 earthquake.

13 CHAIRMAN RYERSON: Okay. PG&E?

14 MR. REPKA: The licensing basis is more
15 than the FSAR. The licensing basis, even as defined
16 in Part 54, but more broadly other context includes
17 the entire docketed correspondence. The entire NRC
18 docket to the extent that, that goes to how did the
19 licensee, the applicant at the time, demonstrate that
20 its plant, its design meets the NRC's regulations and
21 acceptance criteria.

22 The licensing basis most certainly
23 includes the licensing hearing record, the ASLB
24 decisions, and the Appeal Board decisions. If the
25 Hosgri Earthquake is not part of the licensing basis,

1 then the term licensing basis has no meaning.

2 The FSAR is a licensee document. It is
3 submitted after licensing. In addition to the
4 Licensing Board decisions that you referenced, Judge
5 Arnold, the NRC's Supplemental Safety Evaluation
6 Reports that we've cited in our initial Brief in this
7 case, SSER 7 talks to the Hosgri being the equivalent
8 to the safe shutdown earthquake.

9 Now at the time, Diablo Canyon was not a
10 Part 100 Appendix A plant. The very terms safe
11 shutdown earthquake, operating basis earthquake, those
12 were Part 100 Appendix A terms, so there was always a
13 little bit of confusion about how they would apply to
14 Diablo Canyon. But the point was always that Diablo
15 Canyon had its own licensing history, its own
16 licensing basis that included the three earthquakes,
17 the DE, the DDE, and the Hosgri.

18 Now the FSAR as recognized in SSER 7, it
19 carried forward a disagreement at the time that PG&E
20 maintained as to whether or not the Hosgri should be
21 considered the safe shutdown earthquake. But the
22 UFSAR did clearly include the Hosgri Earthquake as
23 part of the seismic analysis. The structural
24 qualification analysis was all based -- the reanalysis
25 was all based on the Hosgri Earthquake. All of that

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1 is referenced in the FSAR.

2 Yes, there was some confusion created by
3 the way the regulatory terminology should be employed
4 with the way PG&E maintained a position back then that
5 the safe shutdown earthquake ought to be the DDE. But
6 the fact of the matter is, it was licensed through the
7 Hosgri, all of the decisions point to that. The staff
8 safety evaluation points to that. It was included in
9 the FSAR.

10 And the only thing that was being done
11 relative to that in UFSAR Rev 21 was to clarify the
12 confusion and make it very clear and make the UFSAR
13 consistent with the licensing records. So it wasn't
14 a change to the licensing basis, it was a
15 clarification of the licensing basis and it's -- the
16 licensing basis is what it is. And the licensing
17 record and the Licensing Board decisions and the
18 Appeal Board decisions are clearly part of that.

19 JUDGE ARNOLD: Any comment from staff?

20 MR. ROTH: One additional comment for
21 endorsement of the Appeal Board's decision. In CLI-
22 84-12, the Commission, while considering a rule making
23 action associated with earthquakes, provided the
24 following observation on Diablo Canyon. And I'm just
25 going to read real fast here.

1 "The Commission notes that the important
2 safety issue for any plant located in a region
3 potentially affected by seismic activity is not the
4 location of the facility per se, but the probable
5 consequences of such location for the plant in
6 question. The Commission will not license a plant
7 unless it can make the statutorily required finding
8 that operation of the plant will not result in undue
9 risk to public health and safety.

10 Necessarily, this includes a determination
11 that the seismic design is adequate. Such a finding
12 is not undetermined by the circumstances that more
13 conservative criteria might have been applied to a new
14 plant. The issue is whether operation of the plant as
15 designed will result in undue risk to public health
16 and safety. The Commission's seismic criteria have
17 been fully addressed for Diablo Canyon and the
18 Commission has determined that the seismic design of
19 the plant presents no undue risk." ALAB-644, 13 NRC
20 903.

21 JUDGE ARNOLD: Thank you. I'm also
22 confused as the type of information that the seismic
23 design basis consists of. Does it include specific
24 faults or specific earthquakes on faults? Or is it
25 the ground motion at the plant caused by the

1 earthquake?

2 MR. REPKA: The licensing basis is in the
3 end, it's the ground motions caused by earthquakes.
4 The ground motions are derived from various analyses.
5 Yet they're not specific in the end to a specific
6 earthquake because if -- at the point, if you look at
7 the Hosgri as the earthquake in the region that was
8 going to cause the maximum vibratory ground motions.

9 You use that as an analytical tool. You
10 come up with a set of ground motions or response
11 spectra and ultimately that's used to define the
12 seismic qualification loads for your safety related
13 equipment. The DDE was completely hypothetical
14 earthquake. The DE was a hypothetical earthquake.

15 So there's different ways to derive the
16 ground motions, but ultimately the licensing basis is
17 the ground motions and the seismic loads that are
18 based on those ground motions. After that's set, the
19 plant does not care where the earthquake comes from as
20 long as the loads it creates are less than the
21 licensing basis loads. Ground motions and loads.

22 JUDGE ARNOLD: So, when we talk about the
23 Hosgri being part of the design basis, we're
24 specifically saying the ground motions at the plant in
25 the 1977 evaluation?

1 MR. REPKA: That's correct. Which has been
2 shown to be conservative. But the 0.75 GEP ground
3 acceleration at the plant and the related loads and
4 Diablo Canyon has always maintained that as the
5 licensing basis as a matter of fact. All equipment is
6 qualified for -- all safety related equipment is
7 qualified for the seismic loads, whether or not
8 they're related to the Hosgri or the DDE, depending
9 upon the assumptions.

10 JUDGE ARNOLD: And -- go ahead.

11 MR. AYRES: Your honor, just to comment on
12 the drift of this discussion. The DDE is -- as I
13 understand it, the DDE is indeed a hypothetical
14 earthquake. But it's basically one that's designed to
15 look at the ground motion at the plant and to be
16 applicable to ground motion no matter where it comes
17 from.

18 The Hosgri analysis, as the record shows
19 you, was done for a very particular reason. And on a
20 particular site. And it, indeed, incorporated some
21 very particular aspects that I don't think the
22 Commission would approve in a current day license.
23 For example, when the plant after analysis still
24 didn't quite achieve what was needed, there was
25 something called the tau factor added on. Which was

1 essentially just giving another 20 percent margin of
2 safety.

3 I mean, that was a very arbitrary action
4 taken to make this particular earthquake acceptable
5 for this particular plant. So for that reason, trying
6 to use the Hosgri evaluation as a yardstick for any
7 new earthquake is really inappropriate.

8 MR. REPKA: May I respond?

9 JUDGE ARNOLD: Yes, you can.

10 MR. REPKA: None of the evaluations related
11 to seismic qualification are specific to the
12 earthquake source. They consider the 0.75G and then
13 from there, what was done in the structural
14 evaluations was to incorporate what, at the time, was
15 up-to-date assumptions about damping factors, material
16 strengths, and for example, material strengths, the
17 plant had been built so we now knew what the materials
18 were. We didn't need to use engineering book values
19 anymore.

20 And, therefore, yes, that may have
21 eliminated conservatism, but it also more accurately
22 reflected the plant as built. But the point is, the
23 analysis is not specific to the source of the
24 earthquake. The point is once you have the design
25 response spectra, you can calculate the loads. And

1 then that can be applied to any subsequent earthquake.

2 The NRC's regulations don't require an
3 evaluation of every regional fault. They look to
4 consider what the maximum ground motions at the site
5 will be. And, for example, there would have been
6 other regional faults considered at that time and that
7 have been considered ever since, such as the Los Osos
8 Fault or the San Luis Bay Fault.

9 And to say that somehow the Hosgri
10 evaluation can't be applied to that is ridiculous.
11 The fact is, the ground motions from those faults will
12 be less and, therefore, they are included within the
13 seismic design basis. They are bounded by the seismic
14 design basis. And that is the same conclusion that's
15 been used to apply to the more recent developments and
16 the new information.

17 JUDGE ARNOLD: Thank you. This question is
18 also for you. On Page 10 of the Petition, Petitioners
19 cite to a January 2011 PG&E report. And this is a
20 quote, "The magnitude of deterministic earthquakes for
21 the Shoreline Fault, magnitude 6.5, is less than the
22 magnitudes for the Hosgri, magnitude 7.1, but due to
23 the shorter distance, the ground motions from the 84th
24 percentile ground motions for Shoreline Fault are
25 greater than the updated ground motions from the

1 Hosgri Fault source."

2 But the very next sentence said,
3 deterministic -- which Petitioners didn't cite, says,
4 "Deterministic analysis for the Hosgri, Shoreline, San
5 Luis Bay, and Los Osos Fault Zones, using conservative
6 estimates of the fault depths for each fault indicate
7 that the 84th percentile ground motions fall below the
8 1977 Hosgri Earthquake design spectrum." Now, that --
9 it sounds to me as though there's two Hosgri
10 evaluations. Do you know what the difference is?

11 MR. REPKA: Yes, sir. And this is in fact
12 addressed in the Declaration of Mr. Horstman that was
13 attached to our original Response. That includes
14 Figure ES-1 from the February 2011 Shoreline Fault
15 Report. What that report did and what it showed was
16 that if you take the new information about the Hosgri
17 and the new methodologies, what MS referred to the
18 Hosgri dip equals 80 curve in Figure ES-1, and you'll
19 see that attached to the Declaration, that's a new
20 Hosgri evaluation.

21 And it's a much lower response spectra
22 because we now know a lot more about the Hosgri than
23 we did back then. And so, yes, relative to the San
24 Luis Bay Fault and the Los Osos Faults, there are
25 differences. But none of those faults exceed the 1977

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1 design basis Hosgri evaluation. So, yes, the short
2 answer is there's two different Hosgris, the 1977
3 Hosgri being the licensing basis and being much, much
4 more conservative.

5 JUDGE ARNOLD: So if you had a new
6 earthquake, it could result in ground motions greater
7 than the updated Hosgri while still being within the
8 design basis?

9 MR. REPKA: Correct.

10 JUDGE ARNOLD: Petitioners, on Page 11 of
11 the Petition, you cite Dr. Hardebeck, the geophysicist
12 who discovered the Shoreline Fault. And you state Dr.
13 Hardebeck concluded that PG&E and NRC are wrong to
14 rule out the possibility of a joint rupture that could
15 cause a much larger earthquake than either fault.

16 I looked through the reference and I
17 couldn't -- in fact, the only place I found any
18 reference to NRC in the document was in the list of
19 references. So, did Dr. Hardebeck conclude that or is
20 that your interpretation of what Dr. Hardebeck came up
21 with?

22 MS. OLSON: Your honor, I believe that's
23 our conclusion based on Dr. Hardebeck's research.

24 JUDGE ARNOLD: Okay.

25 MR. AYRES: And she testified before the

1 Board.

2 JUDGE ARNOLD: Oh.

3 MR. REPKA: May I respond to that just
4 quickly?

5 JUDGE ARNOLD: Sure.

6 MR. REPKA: Just for your -- just for the
7 record, the September 2014 Central Costal California
8 Seismic Imaging Project Report addresses that as
9 well. Dr. Hardebeck's research for the USGS was
10 actually funding in part by PG&E. Dr. Hardebeck
11 suggested that the Hosgri and Shoreline Faults may be
12 linked.

13 And so in that report, PG&E assumed that
14 the two are linked and, again, that fault is bounded
15 by the 1977 Hosgri. So Dr. Hardebeck's research is
16 incorporated and considered in the analysis and is
17 also considered in the March 2015 process.

18 JUDGE ARNOLD: Thank you.

19 MS. OLSON: If I may just respond once
20 more. I think the discussion that we're having here
21 about whether or not the new -- the reanalyzed
22 earthquake hazard is bounded by the Hosgri is missing
23 a critical element. Which is whether or not the
24 reanalyzed earthquake hazard is also bounded by the
25 Double Design Earthquake spectrum, which is another

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1 part of the seismic design basis for this plant that
2 we allege is being ignored by the NRC staff who is
3 sanctioning PG&E to continue to operate the plant
4 despite a continued demonstration that the reevaluated
5 spectra exceed that part of the seismic design basis.

6 MR. REPKA: Which I would respond to by
7 saying that's a -- I disagree, but that's a fine issue
8 to raise through the 2.206 process because it's
9 disagreeing with what the staff has decided.

10 JUDGE ARNOLD: Moving on. For Petitioners,
11 on Page 13 of your Petition, you have a two paragraph
12 quote from an NRC document explaining why the staff
13 denied the PG&E license amendment. And in Footnote
14 30, you cite to the NRC document from which that was
15 taken and you say that, that document was "basis for
16 DE denial of Diablo Canyon 1 and 2 LAR 11-05." Now,
17 I went looking for that, you gave an ML number, and it
18 looked like it was in fact extracted from a string of
19 emails. Is that correct?

20 MS. OLSON: That is my best recollection,
21 your honor.

22 JUDGE ARNOLD: Okay. And the emails were
23 discussing a draft, not a final document, correct?

24 MS. OLSON: I believe that is correct.

25 JUDGE ARNOLD: Now, do you know if the

1 draft was ever issued as an NRC document with that
2 quote still in it?

3 MS. OLSON: I believe you'll have to ask
4 the staff that, your honor.

5 JUDGE ARNOLD: Would staff happen to know?

6 MR. ROTH: Your honor, the staff of course
7 never made a finding or a denial or an approval of the
8 LAR. The LAR was withdrawn.

9 JUDGE ARNOLD: Okay. Does staff often
10 provide its official position only in draft form and
11 emails? Or is it correct to assume that this quote is
12 a final position of staff?

13 MR. ROTH: It would be incorrect to assume
14 that quote represented a final position of staff.

15 JUDGE ARNOLD: Thank you. Petitioners, on
16 Page 25 of your Petition, you state, "After discovery
17 of the Hosgri Fault, PG&E was permitted to analyze the
18 fault using a controversial one-time exception from
19 its licensing basis." Do you have -- know of any
20 document that actually says that this is a one-time
21 exception?

22 MR. AYRES: Well, first of all we're
23 speaking about is the Hosgri exception evaluation. Do
24 you have them?

25 MS. OLSON: Yes. Your honor, I would say

1 that what we mean by that is that the Hosgri
2 evaluation was specific to the Hosgri Fault. And to
3 apply those methods of analysis and the assumptions
4 used would require -- to apply those assumptions to
5 another fault zone, would require a license amendment.
6 And that is the change that has been directed and
7 subsequently approved by the NRC staff in the changes
8 that were made in FSAR Revision 21.

9 JUDGE ARNOLD: Do you know of any NRC
10 document that has any word saying this is a one-time
11 exception or this is limited only to the Hosgri or
12 basically says there are finite limits to what Hosgri
13 can be used for?

14 MR. AYRES: Do you have it?

15 MS. OLSON: Well, I can point you to the
16 FSAR language in Revision 21 which -- in Revision 20
17 rather, which described the site geology of the plant
18 very specifically describing all of the faults
19 analyzed to form the seismic design basis. And in
20 that section, the FSAR said only this about Hosgri,
21 PG&E was requested by the NRC to evaluate the plant's
22 capability to withstand a postulated Richter magnitude
23 7.5 earthquake centered along an offshore zone of
24 geologic faulting generally referred to as the Hosgri
25 Fault.

1 The detailed methods, results, and plant
2 modifications performed based on this evaluation are
3 dealt with in Section 3.7, which deals with seismic
4 qualification of plant equipment. So it is our
5 reading of that language that what's colloquially
6 referred to as the Hosgri evaluation is specifically
7 applicable to seismic activity along the Hosgri Fault
8 Zone.

9 MR. REPKA: We are not aware of any
10 language that characterizes the Hosgri evaluation as
11 a one-time exception. In fact, we were surprised when
12 we saw that reference first made in the filing. It
13 clearly is part of the licensing basis. It was part
14 of the evaluation. Plant mods were based upon the
15 Hosgri evaluation. And it has always, again, been
16 used as the benchmark for seismic qualification of
17 safety related equipment along with the DDE.

18 FoE asserts that the methodology of the
19 Hosgri should be limited to the Hosgri, yet FoE wants
20 to take the methodology and assumptions of the DDE and
21 apply that to all new seismic information. And that
22 -- it makes no more sense to do that than it does to
23 limit the Hosgri to just the Hosgri. So, the fact of
24 the matter is, it's not a one-time exception. It
25 applies throughout to all equipment and it's part of

1 the licensing basis.

2 MS. OLSON: If I may just have a quick
3 response. I would say that FoE doesn't want to do
4 anything. FoE is looking at the licensing basis for
5 this plant and sees two parts to the seismic design
6 basis, the DDE and the HE. And only one of them, with
7 the permission of the NRC staff, is being shown to be
8 met. And we dispute that fact as well, but that
9 appears to be the conclusion of the staff.

10 JUDGE ARNOLD: Let me ask PG&E. Would you
11 say that everything in the updated FSAR is design
12 basis information? Or only part?

13 MR. REPKA: No, I wouldn't say everything.
14 I think that the FSAR is part of the licensing basis.
15 It reflects, hopefully accurately, the licensing
16 basis. I think ultimately, the licensing basis is far
17 more than that. It is the licensing correspondence,
18 the docketed correspondence, it's reflected in the
19 staff safety evaluations, it's reflected in the
20 licensing decisions.

21 And so, certainly to the extent that
22 something in the FSAR is inadequately descriptive, you
23 have to look at the underlying documents to find the
24 licensing basis. And in this case, much is being read
25 into the fact that there was this lack of clarity

1 surrounding what is the SSE, what is the role of the
2 Hosgri. Well, that can be determined based upon the
3 underlying licensing history.

4 Nothing that PG&E puts into a UFSAR
5 subsequent to licensing can trump what the staff has
6 decided or what the Licensing Board has decided. It
7 would be a perfect example of what the Commission
8 said. We can't unilaterally amend our license. And
9 so the UFSAR needed some clarification, but that
10 didn't change the underlying facts of the licensing
11 history.

12 JUDGE ARNOLD: Just because something
13 appears in the FSAR doesn't mean it's design basis?
14 It might be?

15 MR. REPKA: Or licensing basis either,
16 that's correct. I mean, if it said that this safety
17 related equipment will be installed and it will all be
18 painted pink. I mean, we might consider that the fact
19 that the safety related equipment is required is part
20 of the design and licensing basis. We might not
21 consider the color pink to be part of that.

22 JUDGE ARNOLD: All right.

23 MR. AYRES: Your honor, this flexible
24 licensing basis is something that leaves anyone
25 outside of the fraternity to my right here rather

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1 puzzled. Our understanding though is that the FSAR is
2 a part of the licensing basis. Therefore, if you make
3 a change in the FSAR, as was done in Revision 21, you
4 have changed the licensing basis for the plant. The
5 Atomic Energy Act says you have to have a hearing in
6 that instance.

7 Now, it's convenient for PG&E to find this
8 sort of accordion-like quality in the FSAR, but I
9 don't think the law is that flexible. It seems to me
10 that is in the licensing basis. It is part of the way
11 the plant was licensed that the company came forward
12 with this FSAR as they revised over time. And if it's
13 not part of the licensing basis, one wonders what
14 conceivable solid place is there to put your feet
15 about what the requirements are for these plants.

16 MR. REPKA: The license and the licensing
17 basis are not the same thing. The license is the --

18 MR. AYRES: We're aware of that.

19 MR. REPKA: -- license and includes
20 technical specifications. It cannot be amended
21 without a license amendment. The licensing basis is
22 something else. The UFSAR is something else, it
23 reflects the licensing basis. The UFSAR is a
24 controlled document. It's controlled by 10 CFR
25 50.71(e), by 10 CFR 50.59, and by other regulations

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1 that control other aspects of it like 10 CFR 50.54(a)
2 on the quality assurance plan.

3 MR. AYRES: I don't think we need that
4 explained to us.

5 MR. REPKA: I want to explain the
6 regulatory process.

7 MR. AYRES: But I don't think we need --

8 MR. REPKA: You have equated the UFSAR --

9 MR. AYRES: -- it explained to us.

10 MR. REPKA: -- with the license, which it
11 is not. So a change to the UFSAR is within the
12 control of the licensee subject to the control
13 mechanisms, including 50.59. If FoE believes we have
14 not adequately followed 50.59 and made a change that
15 should have required an approval, that's an
16 enforcement issue that should be raised through 10 CFR
17 2.206. And the Commission's cases are very clear that
18 challenges to 50.59 changes need to be brought through
19 10 CFR 2.206. But the conflation of the license, the
20 licensing basis, and the UFSAR is simply not accurate.

21 MS. OLSON: If I may just follow on to
22 that. I'm looking at the operating license for the
23 facility. Which says in Section 1, Paragraph C, the
24 facility will operate in conformity with the
25 application as amended. And as I understand it, the

1 Final Safety Analysis Report as updated provides a
2 substantial basis of the licensee's application for an
3 operating license.

4 JUDGE ARNOLD: I think we've gone into this
5 enough. Now I've got to do something from memory
6 here. One of the parties submitted the Revision 21 as
7 markup of Revision 20.

8 MR. REPKA: It wasn't us.

9 JUDGE ARNOLD: I have seen it.

10 MS. OLSON: Oh, I'm sorry. That was an
11 attachment to the pleadings.

12 JUDGE ARNOLD: Right. It's an attachment
13 to the pleading. And it was lined out and all that.
14 But one of the sections that was in Rev 20
15 specifically said seismic design basis and under that,
16 it listed the safe shutdown, the Double Design, and
17 the Hosgri. Now, that was Rev 20 and it's talking
18 about the Hosgri, so how is it this revision inserted
19 the Hosgri?

20 MS. OLSON: I would submit, your honor,
21 that what Revision 21 did was not change the fact that
22 the Hosgri evaluation was in or out of the design
23 basis. What it did was, it inserted Shoreline, the
24 Shoreline Fault Zone as a lesser included scenario
25 under the Hosgri evaluation, which changed the role of

1 the Hosgri evaluation from one part of the seismic
2 design basis to determine whether the plant could be
3 safely shut down to the seismic design basis for the
4 purposes of determining whether the plant could be
5 safely shut down.

6 MR. REPKA: But it does not do that. It
7 clarified that Hosgri was part of the licensing basis.
8 It was already -- the Hosgri was already in the UFSAR
9 before Revision 21. It included the Shoreline Fault
10 as a lesser included case, but that didn't change the
11 role of either the DDE or the Hosgri evaluation.

12 Both are still part of the licensing
13 basis. All equipment must be qualified for the loads
14 of the DDE and the Hosgri ground motions. That
15 continues to be the case. All equipment to this day
16 meets that seismic qualification. And the plant is
17 capable of safe shutdown.

18 MR. AYRES: Your honor, just a last word on
19 this, I hope. We certainly would not disagree with
20 you that in Revision 20, both the DDE and the Hosgri
21 were included. But if the DDE continued to be
22 effective in Revision 21, the plant could not be
23 operated because all of the studies that have been
24 done by PG&E show that the Shoreline Fault would
25 exceed the DDE.

1 So our point is that what's happened by
2 Revision 21 is that the Hosgri becomes the only
3 benchmark for what's acceptable. And, of course, in
4 the fourth of these seismic studies, we even find that
5 the Shoreline exceeds the Hosgri spectra. But for
6 purposes of this discussion, my point is simply that
7 if the DDE were still operative under Revision 21, the
8 plant would not be. And what happened here was to
9 alter the license in effect through the process of
10 changing the FSAR to allow the plant to continue to
11 operate legally when it could not meet the DDE.

12 JUDGE ARNOLD: Nick, you want to take over?

13 JUDGE TRIKOUROS: What a place to take
14 over. The -- let me start with the HE and the DDE a
15 little back further. When we talk about analytical
16 message and assumptions and inputs, are they part of
17 the design basis of the plant?

18 MS. OLSON: Yes.

19 MR. AYRES: Yes.

20 MS. OLSON: I believe the FSAR clearly says
21 when referencing SSER 34, that -- which evaluated the,
22 I believe it was the 1991 report on the Long-Term
23 Seismic Plan, that the seismic qualification basis of
24 the plant will continue to be the original design
25 basis plus the Hosgri evaluation including original

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1 assumptions, inputs, methods, et cetera. I'm
2 struggling to find the exact language, but that's a
3 pretty close --

4 JUDGE TRIKOUROS: The -- so let me start
5 with methods. Is the -- are the methods, what I would
6 refer to as computer codes? I'll ask anybody who can
7 answer that question.

8 MR. REPKA: Let me start. I mean, I think
9 that last comment was a bit open-ended and lacked a
10 little clarity. The methods -- you need to
11 distinguish between two things. There's -- you need
12 to -- in doing the evaluation, you need to do a
13 seismic source characterization and do a calculation
14 of what the maximum vibratory ground motions will be
15 at the site. So the ground motion response spectra.

16 Then from there, you do the structural
17 evaluation and that includes certain assumptions about
18 structural damping. It includes assumptions about
19 material strengths. It included the tau effect that's
20 been referenced. But that's all on the structural
21 side of the evaluation once you know what the maximum
22 ground motions are.

23 And we're not disputing whether those are
24 part of the licensing basis. Certainly all of that
25 was thoroughly litigated back in connection with the

1 Hosgri evaluation. But with respect to the issue of
2 the calculations of the ground motions. That we would
3 not consider to be part -- there is not licensing
4 basis ground motion prediction equation. There's no
5 specific methodology that we would consider to be part
6 of the licensing basis there.

7 The DDE was developed without any computer
8 codes. It was developed based upon expert
9 assumptions. The Hosgri curves were developed based
10 upon expert assumptions at the time and there were no
11 computer codes that could be reproduced today that
12 would be part of the licensing basis.

13 So all new seismic information needs to be
14 looked at by up-to-date methodologies and from there
15 you determine the set of ground motions. The ground
16 motions create the licensing basis acceptance criteria
17 as it were, the benchmark.

18 JUDGE TRIKOUROS: And so the front-end of
19 that, the determination of those ground motions can be
20 done with whatever the most current method available
21 for the day is?

22 MR. REPKA: I think there's no other way to
23 do it. That's clearly the best way to do it and
24 there's no other way. We could -- the Hosgri was
25 created by the NRC's consultant, Dr. Newmark, along

1 with PG&E's consultant, Dr. Blum. I -- and it was
2 created as an envelope of the two.

3 The two came up with their best guesses as
4 to what the their best estimates of what the maximum
5 ground motions would be. It would not be possible to
6 go to them today and say, recreate your methodology
7 and apply it to new information. Nor would it be a
8 good way to do it. There's a lot of new information
9 and new methods that have been developed since.

10 JUDGE TRIKOUROS: When we look at the
11 Shoreline Fault and we look at the, what you call the
12 CCCSIP --

13 MR. REPKA: CCCSIP, yes.

14 JUDGE TRIKOUROS: -- Report, when they
15 developed ground motion response spectra to compare
16 against the design basis events or the design basis
17 response spectrum, they were using different methods?

18 MR. REPKA: They were using --

19 JUDGE TRIKOUROS: To develop those ground
20 motions?

21 MR. REPKA: They were using, I believe,
22 what is referred to as the Next Generation Attenuation
23 Models. Yes. So they weren't using Dr. Newmark and
24 Dr. Blum, that is correct.

25 JUDGE TRIKOUROS: And were they both using

1 the NGA Models or were -- do you remember?

2 MR. REPKA: Both.

3 JUDGE TRIKOUROS: Well, let me ask it this
4 way. Did the Shoreline Fault Attenuation Model and
5 the more current CCCSIP use the same attenuation
6 models?

7 MR. REPKA: Yes. I believe they did. Or
8 maybe slightly updated versions. But basically within
9 the same family of ground motion prediction equations.

10 JUDGE TRIKOUROS: With respect to the DDE,
11 does it require any additional structural load
12 additions? For example, local loads or I should say
13 accident loads or any other loads that they might
14 define for design?

15 MR. REPKA: There's many different loads
16 that are evaluated -- were evaluated as part of the
17 DDE and subsequently. As we've talked about, the DDE
18 used some assumptions that are very -- structural that
19 are very conservative relative to what was used in the
20 Hosgri.

21 And there were reasons for that. That the
22 structural damping factors from the DDE predated the
23 NRC's Reg Guide. So the more recent Reg Guide numbers
24 were used in the Hosgri. So some numbers are more
25 conservative in connection with the DDE.

1 So in those cases, we used the more
2 conservative structural loads generated by the
3 combination of the DDE ground motions plus the
4 structural assumptions to qualify the equipment. But
5 having said that, if equipment is qualified for the
6 Hosgri and the Hosgri ground motions, if the ground
7 motions are less than the Hosgri, we can consider the
8 loads to be bounded by the Hosgri evaluation.

9 JUDGE TRIKOUROS: That would bound the DDE?

10 MR. REPKA: That would -- as a ground
11 motions, they would bound the DDE. But they would --
12 from a structural load standpoint, they don't
13 necessarily bound the DDE loads. And so that's why
14 the equipment is qualified for both Hosgri loads and
15 DDE loads. What we don't do is take DDE assumptions
16 and apply them to new data because those DDE
17 assumptions about loads were outdated even by the time
18 of the Hosgri.

19 JUDGE TRIKOUROS: So if I installed a
20 safety grade pump, it would be required to operate
21 under the DDE, under the HE, and under accident -- I'm
22 assuming the typical design accident loads and
23 possibly other loads?

24 MR. REPKA: DE, DDE, and Hosgri.

25 JUDGE TRIKOUROS: Yes.

1 MR. REPKA: Yes.

2 JUDGE TRIKOUROS: Now, let me take that one
3 step further and ask about the containment building.
4 Is the containment building designed against the DDE
5 and the HE?

6 MR. REPKA: Yes.

7 JUDGE TRIKOUROS: And are there any other
8 loads there that you're aware of?

9 MR. REPKA: So, I'm turning to Mr.
10 Strickland here and he's telling me other additional
11 loads would be wind loads, tornado loads, high energy
12 line break loads, yes.

13 JUDGE TRIKOUROS: Simultaneous, not
14 concurrent loads? Those are not concurrent with the
15 earthquake or are they? They are?

16 MR. REPKA: Yes.

17 JUDGE TRIKOUROS: All right. So, there are
18 a whole series of loads and the DDE and the HE are
19 part of that? Okay.

20 MR. REPKA: Yes.

21 JUDGE TRIKOUROS: Now, so I find a new
22 fault, call it the Shoreline Fault and I go and I
23 evaluate it and I compare it to the HE, but not the
24 DDE. It is now uniquely different than the
25 containment building. It is different than safety

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1 grade components. It is unique in that respect. Why
2 is that? And is that correct?

3 MR. REPKA: Why is it unique? You would
4 look at it and compare it to the HE ground motions and
5 if its ground motions are less, then necessarily the
6 loads will be less than what's been evaluated through
7 the HE. And then if the DDE loads separately are
8 greater, well the equipment -- the safe shutdown
9 equipment, I think I may have said earlier all
10 equipment, I meant the safe shutdown equipment, is
11 qualified for both the DDE loads.

12 JUDGE TRIKOUROS: So only for the
13 operability under a new fault, you would only use the
14 HE because you're telling me that the response
15 spectra, design response spectra for that event are
16 greater than the DDE?

17 MR. REPKA: The design response spectra for
18 the new event if they're less than the HE have been
19 previously considered and that would be for
20 operability, yes. Now, for new --

21 JUDGE TRIKOUROS: But as a general rule,
22 the HE bounds the DDE?

23 MR. REPKA: The HE from a set of -- as a
24 set of ground motions, bounds the DDE, correct.

25 JUDGE TRIKOUROS: Right. Okay. And that's

1 what you would evaluate a fault against?

2 MR. REPKA: Correct.

3 JUDGE TRIKOUROS: A new fault against?

4 MR. REPKA: For functionality as new
5 information. Now remember, we're dealing with new
6 information and the licensing and design basis are
7 what they are based upon the DDE and the HE. And so
8 the equipment is qualified for the design and
9 licensing basis.

10 So that -- the equipment hasn't changed,
11 the plant hasn't changed. You may have new
12 information. And so now from a functionality or
13 safety standpoint, you can look at that and say, it's
14 less than the HE, therefore, those ground motions have
15 been previously evaluated. The loads that correspond
16 to that have been previously evaluated. Therefore, we
17 are safe.

18 JUDGE TRIKOUROS: So in big picture then,
19 all of the analyses I did for all of those components
20 in the plant are still valid then because they're HE,
21 DDE, plus other loads, that the containment building
22 and other critical structures are HE plus DDE plus
23 whatever loads are associated with those?

24 MR. REPKA: Not plus, but separately.
25 They're qualified for the DDE and the HE, correct.

1 JUDGE TRIKOUROS: HE and DDE --

2 MR. REPKA: Correct.

3 JUDGE TRIKOUROS: -- or HE and DDE
4 separately, plus the other loads. All right. And
5 then it's sufficient, you're saying, to look at the
6 new fault and say as long as the ground motion
7 response spectra from that fault are less than the HE,
8 then everything falls into line, all the ducks are
9 lined up in a row?

10 MR. REPKA: Right.

11 JUDGE TRIKOUROS: Is that what you're
12 saying?

13 MR. REPKA: And that's, again, from a
14 standpoint of showing functionality of the equipment.
15 That's correct. And all of that's being done is an
16 evaluation of outside the licensing basis because
17 you're looking at new information that wasn't being
18 considered in the licensing basis. You haven't
19 changed the licensing basis. You're just looking at
20 the safety basis for continued operation.

21 JUDGE TRIKOUROS: So when people talk about
22 the Double Design Earthquake and additional loads that
23 are associated with that, and I don't have the
24 reference in front of me, but I have seen discussions
25 along those lines, that is only valid for structure,

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1 systems, components, not for the evaluation of a new
2 fault?

3 MR. REPKA: That's correct. It goes to the
4 structural evaluation of the structure, system,
5 components that are needed for safe shutdown as
6 opposed to evaluating the ground motions created by
7 the seismic source.

8 JUDGE TRIKOUROS: So, therefore, if all of
9 this is correct, and I were to evaluate the ground
10 motion response spectra from a new fault against the
11 DDE, it would be fine because I've already evaluated
12 against the HE?

13 MR. REPKA: That's correct. Yes, that's
14 correct. I mean, the DDE loads would not go away and
15 so if those are more conservative, that would continue
16 to apply to the equipment. But, yes, if we show the
17 ground motions are less than the HE, the equipment
18 will be functional.

19 JUDGE TRIKOUROS: And that's consistent
20 with the statement that all design aspects of the
21 plant have to be evaluated against the DDE and the HE?

22 MR. REPKA: I would say that.

23 JUDGE TRIKOUROS: So, has anyone evaluated
24 the Shoreline Fault against the DDE and proved that?

25 MR. REPKA: Well, again, what does that

1 mean to evaluate it against the DDE? If you look at
2 the ground motion response spectrum, it may be greater
3 than the DDE. But if it's bounded by the HE, the HE
4 was evaluated subsequent to the DDE. The loads were
5 calculated and, therefore, the loads are not going to
6 exceed the HE loads.

7 Does anybody take the DDE structural
8 evaluation numbers or methods or assumptions that were
9 made pre-construction and try to apply or plug those
10 into a new ground motions, no. We do not believe
11 that's required.

12 JUDGE TRIKOUROS: Okay. And then that
13 explains then the other outlier, at least for me. The
14 plant had a DDE and DE at some point?

15 MR. REPKA: Only prior to licensing.

16 JUDGE TRIKOUROS: And was deemed, let's say
17 acceptable from a structural point of view. Along
18 comes the HE -- regardless of what you call it in
19 terms of SSE or whatever --

20 MR. REPKA: Right.

21 JUDGE TRIKOUROS: -- which didn't exist at
22 the time --

23 MR. REPKA: An irrelevant designation.

24 JUDGE TRIKOUROS: Right. Then, the plant
25 was structurally modified, physically modified to

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1 accommodate the HE?

2 MR. REPKA: Correct.

3 JUDGE TRIKOUROS: It didn't need to be
4 structurally modified to meet the DDE, which it had
5 been built to.

6 MR. REPKA: Right.

7 JUDGE TRIKOUROS: But it needed to be
8 modified when the HE came along?

9 MR. REPKA: There were modifications at
10 that time, that's correct.

11 JUDGE TRIKOUROS: And that's because the
12 ground motion response spectra for the HE were greater
13 than the DDE?

14 MR. REPKA: Right. And then you'd look at
15 the spectrum and you see what equipment is susceptible
16 to ground motions in whatever frequency range and it
17 may have been that's there was particular structures
18 or components that needed modifications.

19 JUDGE TRIKOUROS: All right. So if the
20 Shoreline Fault is evaluated against the HE and now we
21 understand that, it was also evaluated against the
22 LTSP. What is the rationale there since that is not
23 a design basis?

24 MR. REPKA: The original evaluation when
25 the Shoreline Fault was first identified was against

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1 the LTSP because at the time the company believed that
2 the LTSP was the best available benchmark for
3 assessing the functionality of equipment. It had been
4 developed subsequent to licensing pursuant to the
5 license condition.

6 And so, again, in an operability or
7 functionality evaluation, you're not restricted to
8 licensing basis methodologies. You're just required
9 to use a best available method to show that the plant
10 is functional. And that was done.

11 There was some difference of opinion about
12 that and ultimately the operability was redone based
13 upon the Hosgri evaluation. But subsequent
14 evaluations and safety basis including what was the
15 interim evaluation that was included in the March 2015
16 report do use the LTSP.

17 But, again, that's not for a licensing
18 basis purpose. It's for assessing a safety basis
19 given that we're continuing to do reevaluations to
20 decide whether we need to make changes to the
21 licensing basis or the license or the plant.

22 JUDGE TRIKOUROS: All right. So let's talk
23 about the CCCSIP Report.

24 MR. REPKA: Okay.

25 JUDGE TRIKOUROS: It comes along, it

1 develops a ground motion response spectra for its
2 seismic sources, and those are compared against the
3 HE?

4 MR. REPKA: Those were compared to the HE,
5 that's correct. They were -- I alluded to this
6 earlier, it's the Figure ES-1, but -- oh, I'm sorry,
7 that's the Shoreline Report. Yes. But in the CCCSIP
8 Report, there was a -- I don't have that. But that
9 would have been compared against the HE.

10 JUDGE TRIKOUROS: Okay. And they were
11 found to --

12 MR. REPKA: The 1977 HE.

13 JUDGE TRIKOUROS: And they were found to be
14 acceptable?

15 MR. REPKA: Yes.

16 JUDGE TRIKOUROS: And the -- that was
17 documented and then the staff comes along in the
18 normal inspection process, the oversight process, goes
19 to the site and looks at that report? Or perhaps it
20 was given the report ahead of time?

21 MR. REPKA: The report was submitted to the
22 NRC for information. It was not developed at the
23 NRC's request, but it was submitted and the NRC in
24 December of 2014 documented it in an Inspection Report
25 on operability related to the findings of the CCCSIP

1 Report.

2 JUDGE TRIKOUROS: Okay. So the NRC is fine
3 with your -- with PG&E's evaluation of the CCCSIP
4 Report?

5 MR. REPKA: Yes. They did some things
6 differently, but ultimately came to the conclusion
7 that they concurred with the safe operation.

8 JUDGE TRIKOUROS: Now, in -- I don't see in
9 any of that additional authority.

10 MR. REPKA: No.

11 JUDGE TRIKOUROS: And I'm going to talk to
12 the other party in a moment. But what now happens?
13 The -- I have this operability determination that says
14 the plant can continue to operate safely. What does
15 the future then look like? Does the design basis get
16 -- does the FSAR get modified after a two year period
17 to reflect that?

18 MR. REPKA: Well, perhaps. We're in the
19 50.54(f) process. There's been the subsequent seismic
20 hazard's evaluation process. And, again --

21 JUDGE TRIKOUROS: Don't -- I'm sorry.
22 Don't take me there yet.

23 MR. REPKA: Okay.

24 JUDGE TRIKOUROS: Because I want to go
25 there, but I want to go there sort of in my logic

1 stream. Will the FSAR be updated in the future to
2 reflect the analysis done for the -- with respect to
3 the CCCSIP Report?

4 MR. REPKA: I don't know of any specific
5 plans to do that.

6 JUDGE TRIKOUROS: It won't be identified as
7 a lesser -- as something lesser than the Hosgri event?
8 I mean, it's the same situation, isn't it?

9 MR. REPKA: Yes. I mean, I suppose it
10 could be. I don't know of any plans to do that.

11 JUDGE TRIKOUROS: Is there any requirement
12 for it?

13 MR. REPKA: And I don't believe there's a
14 requirement to do that. Again, the report itself was
15 not prepared for the NRC. But the FSAR talks about
16 including -- reflecting new information and perhaps
17 that's something we would look at in the next UFSAR
18 update cycle. But, again, I'm not aware of plans to
19 do that.

20 JUDGE TRIKOUROS: So the -- really the only
21 reason for the NRC review was to make sure that your
22 assumptions and methods and inputs in evaluating the
23 CCCSIP were appropriate?

24 MR. REPKA: Yes. I mean, we were following
25 up on commitments to the NRC to update operability

1 evaluations based on new information. But they were
2 there to exercise their oversight with respect to the
3 continuing safe operation of the plant. And so that's
4 what the inspection report reflects.

5 JUDGE TRIKOUROS: I'm curious why the staff
6 asked PG&E to put the words into the FSAR that the
7 Shoreline Fault was a lesser event -- was a lesser
8 fault under the Hosgri.

9 MR. REPKA: You'd probably --

10 JUDGE TRIKOUROS: And I don't --

11 MR. REPKA: -- need to talk to the staff.

12 JUDGE TRIKOUROS: -- what it serves in all
13 this discussion we're having.

14 MR. ROTH: In the DPO, it was an issue of
15 concern and the information being provided there was
16 hoped to address the DPO.

17 JUDGE TRIKOUROS: So that was entirely
18 associated with the DPO? All right. Okay. Let me
19 give Mr. Ayres and company a chance here to respond.

20 MR. AYRES: Your honor, this is an
21 interesting exploration that you've done and it
22 explains how this process happened. Except for the
23 part that's relevant here today, it seems to me. The
24 -- what you've shown very well is that both the staff
25 and the licensee takes a view that the Hosgri is the

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1 bounding earthquake and so the only thing to compare
2 against is that. And if they can find that the
3 Shoreline Earthquake is within that envelope, then
4 everything's okay.

5 The point that we want to focus on here is
6 the point that I think the Commission asked you to
7 look at. And that is was the license changed de facto
8 to allow that analysis to be the only analysis? Or --
9 well, was it changed to do that? Because before that,
10 under Revision 20 and under the FSAR as it existed
11 before, PG&E had to show that the Shoreline Earthquake
12 would be consistent with, within the spectra of, the
13 DDE.

14 So, to write that essentially out of the
15 license, in our view, out of the FSAR is a license
16 amendment. And that license amendment was
17 accomplished, as you noted and staff has too, by this
18 dance between the staff and the company in which the
19 staff said, change the FSAR and the company did it and
20 then internally said, well we're okay on that, we
21 don't have to do a 50.59, because we know they're all
22 right with it. So, I would just focus on that issue
23 rather than taking issue with the things that you've
24 said about the analysis.

25 MS. OLSON: If I might just add one more

1 thing to your question about whether the GMPEs are in
2 the license, I gave the language that was quoted --
3 that is quoted in the FSAR from the staff and SSER 34
4 reviewing the LTSP Report from the licensee in the
5 early '90s. I would note one other change in the FSAR
6 that provides some new methods of analysis, provides
7 some authorization to use new methods of analysis to
8 demonstrate satisfaction of the seismic design basis.

9 And that appears in Revision 21 for the
10 first time in a new section, 2.5.7.2, which
11 essentially says that any new or updated seismological
12 or geological information will be evaluated using the
13 methods used in the post-Fukushima process. So
14 they're -- the licensee with the NRC's permission has
15 now created for itself in its licensing basis a new
16 method to use. And I believe that would include the
17 ground motion prediction equations that keep changing
18 when they do these evaluations. For better or worse.

19 JUDGE TRIKOUROS: Okay. I saw 2.5.7.2. I
20 saw what you're saying, but I didn't think that
21 excluded having to do the Hosgri evaluation.

22 MS. OLSON: It doesn't include having to do
23 the Hosgri evaluation, no.

24 JUDGE TRIKOUROS: So it didn't exclude the
25 Hosgri, is what I'm saying. It didn't create a method

1 that bypassed entirely the design basis of the plant.

2 MS. OLSON: It's a different method than
3 was used in the 1977 Hosgri evaluation that forms part
4 of the seismic design basis of the plant.

5 MR. AYRES: Among other things, it's
6 probabilistic as opposed to deterministic.

7 MS. OLSON: And by the way, Petitioner's
8 view is not that these methods cannot be changed. Our
9 view is only that -- and frankly our view is not that
10 they shouldn't be changed. Our view is that if you're
11 going to change them, they're in the license and
12 they're part of the seismic design basis. You need to
13 have a Section 189a hearing -- opportunity for a
14 hearing.

15 JUDGE TRIKOUROS: Okay. Does the staff
16 want to comment on this or not?

17 MR. ROTH: Certainly, your honor. It's
18 David Roth. Just as a reminder, under 50.59, first of
19 course, if they do a bad 50.59, if the staff disagree
20 with it, that's an enforcement matter. But one of the
21 key issues would be whether or not this is a change to
22 a method used to establish the design basis of the
23 plant.

24 And, again, that would be an inspection
25 and enforcement matter. But a forward looking

1 commitment to use the LTSP has existed since 1991 in
2 the UFSAR or a commitment to use the new Fukushima
3 information to evaluate new information does not
4 retroactively change the design basis of the plant.

5 JUDGE TRIKOUROS: I mean, the general
6 statement that I could make is that if that statement
7 were not in 2.5.7.2, it would be fine. Having it in
8 2.5.7.2 seems benign. Because you still have to meet
9 the design basis of the plant. You have -- as Mr.
10 Roth has said, you haven't changed the design basis of
11 the plant. Do you have any comment on that?

12 MS. OLSON: I do, your honor. If you agree
13 with us that the statement cited in the FSAR from SSER
14 34 from the staff that the seismic qualification basis
15 of the plant is the original design basis plus the
16 Hosgri evaluation along with associated methods,
17 inputs, et cetera, then a change in those methods,
18 inputs, et cetera, as is performed by, in our view,
19 Section 2.5.7.1, then that is a change to the methods
20 used in the design basis.

21 MR. REPKA: I would look at 2.5.7.2 of the
22 UFSAR as simply a statement of truism. I mean, the
23 fact of the matter is that new seismic information is
24 being looked at in the Section 50.54(f) process using
25 new methods. I think that's the very point of it.

1 And, again, the statement in the FSAR
2 doesn't change the license, it doesn't change the
3 methodology used to create the Hosgri or even the DDE.
4 It doesn't adopt a new method to be used going
5 forward, like the LAR 11-05 might have done. It
6 simply says that this particular evaluation is being
7 looked at in the Section 50.54(f) process and that, in
8 fact, is what's happening.

9 And if that process identifies a need to
10 create changes to the licensing basis, new maximum
11 vibratory ground motions, new plant mods, whatever,
12 that will come out of that new methods of calculation
13 that will come out of that process. In the meanwhile,
14 we're working under the current licensing basis.

15 And that doesn't change. I think, Judge
16 Trikouros, as you pointed out, the HE, the DDE don't
17 go away. And that's the basis to qualify equipment
18 and -- the safe shutdown equipment and ultimately
19 that's what matters.

20 JUDGE TRIKOUROS: Well, this is a good time
21 for a break, I think.

22 CHAIRMAN RYERSON: Yes. Let's take a break
23 and we'll take a 15 minute break this time and start
24 promptly at 4:00.

25 (Whereupon, the above-entitled matter went

1 off the record at 3:45 p.m. and resumed at 4:01 p.m.)

2 CHAIRMAN RYERSON: Please be seated. We
3 will continue with questions from Judge Trikouros.

4 JUDGE TRIKOUROS: Okay. I wanted to talk
5 now about the March 2012 letter and the, I guess it
6 was the March answer to the letter. Would I
7 characterize that correctly if I said it was operating
8 -- that, that whole process was basically operating in
9 parallel with, but had no impact on the design basis
10 at this time at least?

11 MR. REPKA: That's correct.

12 JUDGE TRIKOUROS: And what -- and the
13 outcome of it might be any number of things. You
14 mentioned it might be a design basis change, but it
15 might also be the basis for a process of evaluating
16 new earthquake faults. Is all of that possible to
17 come out of that?

18 MR. REPKA: Yes, all of that's possible.
19 I mean, it could be nothing. It could be fine. It
20 could be that a specific new criteria for ground
21 motions or -- so it could be licensing basis changes,
22 it could be plant modifications. But that's to be
23 determined based upon these new methodologies being
24 looked at in a probabilistic way that's not been
25 looked at before.

1 JUDGE TRIKOUROS: And any write-up in the
2 briefs regarding the methods that were used in that
3 evaluation really have no bearing at all?

4 MR. REPKA: Yes, that's correct. The
5 methods used to calculate the current design and
6 licensing bases, those were what they were and the
7 licensing basis are what they are and the safety
8 related equipment is qualified to those criteria. And
9 so that continues to be the case. So the new methods
10 have nothing to do with that.

11 JUDGE TRIKOUROS: So even if the ground
12 motion response spectra coming out of that are greater
13 than design, as of right now it doesn't mean anything
14 because it's a parallel process. Is this -- and this
15 is the way it seems.

16 MR. REPKA: That's correct. And it's a
17 parallel process and it doesn't change the existing
18 license. It doesn't grant new authority. Even if it
19 were to demonstrate some change in risk that hadn't
20 been evaluated before, that can't be equated to a
21 change in operating authority. It's just something to
22 be evaluated and meanwhile, we have a clear and well
23 documented safety basis for continued operation.

24 JUDGE TRIKOUROS: Mr. Ayres, in your briefs
25 you seem to identify the fact that if a plant screens

1 in or screens out, I can't remember now which it was
2 --

3 MR. REPKA: In.

4 JUDGE TRIKOUROS: -- was it screens in,
5 that, that becomes in essence a de facto amendment
6 that the plant is operating with a condition that's
7 greater than its design basis. But that -- any
8 comments on that?

9 MR. AYRES: Well, that is what it means to
10 screens in. The Commission was clear on the
11 Commission's view, the Commission's staff's view is
12 that, that's okay. We'll just let that ride for
13 another couple or three or four years while we decide
14 whether to change anything.

15 JUDGE TRIKOUROS: Right. Now --

16 MR. AYRES: That seems to us to be frankly
17 outside the law.

18 JUDGE TRIKOUROS: And so that becomes an
19 enforcement issue.

20 MR. AYRES: It could be an enforcement
21 issue. That's -- I've said from the beginning. The
22 issue here in front of this -- today is not what
23 happens in that process. It's about what has happened
24 in the change in the license to amend the license on
25 the part of the staff over the last several years in

1 order to allow the plant to continue to operate now.
2 So, I think there's -- I said it was a red herring.
3 It is a red herring to look at the Long-Term Seismic
4 Process.

5 JUDGE TRIKOUROS: Well, I'm still having a
6 little bit of a problem understanding where you are.
7 Every structure, system, and component in the plant is
8 evaluated against the HE, the DDE, and whatever
9 additional loads are required by the design basis of
10 the plant for those components.

11 The Shoreline Fault, for example, was
12 evaluated against the HE, but if you evaluate it
13 against the DDE, it would have higher -- the ground
14 motion response spectra would be higher than the DDE.
15 But it's still within the HE. Both the HE and the DDE
16 are design basis response spectra.

17 MR. AYRES: Your honor, the --

18 JUDGE TRIKOUROS: I'm trying to find where
19 the problem is here.

20 MR. AYRES: Right. I'm trying to explain
21 it as we see it. We know because there have been four
22 seismic reports since 2008 and each of them has said
23 that the plant or the newly discovered Shoreline Fault
24 would cause seismic activity, seismic hazard beyond
25 the DDE.

1 So, yes, there's been analysis of how that
2 Shoreline Fault interacts with the DDE. And what it
3 shows is that it violates the DDE. It's shown it now
4 four times. So --

5 JUDGE TRIKOUROS: Well, let me interrupt
6 you. So going back to the beginning, however, the
7 plant sitting with the DDE finding the HE became
8 structurally modified to meet the HE. So the baseline
9 structural capability of that plant is not the DDE.
10 It ceased being the DDE after those structural
11 modifications were made to meet the HE. So if you
12 evaluate it against --

13 MS. OLSON: Respectfully, your honor, I
14 would disagree with that. And I think that's
15 evidenced in the Final Safety Analysis Report and
16 subsequent statements by the staff that were
17 incorporated into the FSAR. The seismic qualification
18 of the plant is the DDE plus the Hosgri. And those
19 are different calculations and they represent
20 different loads on SSEs.

21 And not -- it is my understanding, and I'm
22 wading into an area of technical expertise here which
23 I'm probably ill-equipped to wade into, but it is my
24 understanding from the documents that not all SSEs are
25 qualified to both the DDE and the HE. Only certain

1 SSEs required for safe shutdown are. And they're
2 qualified in a way that is different from the General
3 Design Criteria that were used for the DDE
4 qualifications.

5 JUDGE TRIKOUROS: All right. Well, I
6 thought we were past that, but we need to go back a
7 little bit.

8 MS. OLSON: Well, my point is only that
9 there are two bases upon which equipment needs to be
10 qualified in the plant. It's the DDE and the HE. If
11 it was just the HE, then why does the FSAR continue to
12 say that the safe shutdown earthquake for purposes of
13 demonstrating compliance with the General Design
14 Criteria 2 is the DDE?

15 MR. AYRES: Yet the licensee reads the HE
16 as the only criteria. Yes, they analyze --

17 JUDGE TRIKOUROS: That's not what he said.

18 MR. AYRES: Yes. He said it's within the
19 HE envelope and, therefore, safe. That's the
20 company's position ratified by the staff.

21 JUDGE TRIKOUROS: Well, the plant was
22 deemed unsafe when the HE was identified. And,
23 therefore, had to be modified, I'm sure at a cost of
24 a lot of money, to make it meet the HE requirements.
25 So if I do that and then I tell you, you have to meet

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1 the DDE, it's not the same plant that I'm evaluating.

2 MR. AYRES: Well, but calculation could be
3 done of whether the plant as it is -- how it will be
4 able to handle an earthquake from the Shoreline Fault,
5 the Los Osos, the other faults. And what's at stake
6 here is, is the plant capable of handling these new
7 earthquakes that we didn't know about even 20 years
8 ago?

9 And the question is what's the right
10 benchmark for that? The licensee maintains that the
11 benchmark is the HE. As long as the shaking doesn't
12 exceed the HE, everything's okay. But the studies
13 done by the licensee show, all four of them, that in
14 fact the shaking does exceed the DDE. Now, our point
15 is the DDE has been -- the DDE and HE together, each
16 separately, two tests to me, have been in the license
17 since 1984 until Revision 21. And under Revision 21,
18 what has been done is to make the HE the only
19 benchmark.

20 MR. REPKA: May I address that? So, what
21 FoE is doing is here is conflating the structural
22 loads and the ground motion. And the plant is
23 qualified for both the DDE and the HE. And
24 modifications were made to address the loads created
25 by the HE.

1 So the plant -- so the equipment, the
2 safety related equipment, particularly the safety
3 related equipment for safe shutdown, is qualified for
4 the loads for both the DDE and the HE. In some cases,
5 the DDE loads are greater because of conservative
6 assumptions in that analysis. So those are
7 maintained.

8 Now, what FoE is saying is that, that's
9 the same as saying that you must meet the ground
10 motions of the DDE and the HE. And that's not what
11 we're saying. Ground motions may exceed the DDE
12 ground motions, but yet the seismic loads won't exceed
13 the DDE or the HE seismic loads. So those are two
14 different concepts. And what we're saying is if the
15 ground motions don't exceed the HE ground motions, we
16 can't possibly exceed the most conservative seismic
17 loads.

18 JUDGE TRIKOUROS: You have more to say
19 about this?

20 MR. AYRES: No, I think you look at the,
21 and I recommend that you do this, if you look at the
22 four reports in question, what you'll find is they say
23 that the plant can't meet DDE limits or spectra --

24 MR. REPKA: Ground motions.

25 MR. AYRES: -- based on an earthquake from

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1 the Shoreline Fault.

2 MR. REPKA: But the HE didn't meet the DDE
3 ground motions either. So that's the whole point, is
4 they had to be translated into structural loads.

5 MR. AYRES: The HE was an exception.

6 MR. REPKA: It was what it was.

7 MR. AYRES: That's what it was.

8 MR. REPKA: And it create -- and it was
9 used to create a set of structural loads which were
10 used to modify the plant and it's been carried forward
11 as the basis for the seismic qualification of
12 equipment.

13 JUDGE TRIKOUROS: I don't know what the
14 word exception means here and it doesn't seem to have
15 a lot of meaning at all because the HE is the design
16 basis of this plant, right?

17 MS. OLSON: Along with the DDE.

18 MR. AYRES: The HE and the DDE.

19 JUDGE TRIKOUROS: Exactly. I'm saying it
20 is -- the HE is part of the design basis of the plant.
21 So is the DDE and, I guess, the DE is in there too.

22 MR. REPKA: Yes.

23 JUDGE TRIKOUROS: The LTSP is outside of
24 that envelope, but is a licensing basis event or
25 method.

1 MR. REPKA: We don't credit it as a
2 licensing basis, but it is a margins assessment and it
3 verifies the adequacy of the licensing basis. And it
4 can be used as a -- it has been used as benchmark in
5 the functionality or operability determinations to say
6 that if you meet the LTSP, you're going to be
7 functional. That was approved by the NRC back in
8 post-licensing.

9 JUDGE TRIKOUROS: Okay. I didn't get one
10 closure before -- an operability determination, it
11 wasn't clear to me how that ended or did it sit on the
12 books as just an operability determination forever
13 basically? Was there some cataloging of that, that
14 had to take place in the future or something along
15 those lines? Is it --

16 MR. REPKA: I think there's an operability
17 determination on the books. And we take issue with
18 the fact that this new seismic information should be
19 addressed in operability space, because operability is
20 relative to the existing licensing basis and there's
21 no question there.

22 But setting that issue aside, yes, there
23 is no operability determination, but more importantly
24 now, we're in the 50.54(f) process. The March report
25 has gone in. That included an interim evaluation of

1 safe operation as requested in the 50.54(f), because
2 the word exceedance is relative to the DDE in the
3 probabilistic -- using the probabilistic screening
4 methodology.

5 But so there is a safety basis that, that
6 I think at this point in regulatory space is probably
7 the appropriate process to evaluate this, not really
8 the operability process. The interim operation that
9 -- the interim safety determination is a matter of
10 record in the March report, it's still under NRC staff
11 review as far as I understand. But I think maybe
12 that's the appropriate place really to look at the
13 issue of ongoing safe operation.

14 JUDGE TRIKOUROS: But right now, the CCCSIP
15 Report is sitting in operability space and has been
16 reviewed -- it's been submitted to the Commission and
17 they're reviewing it. Is that really where --

18 MR. REPKA: The Shoreline was submitted to
19 the NRC. It wasn't submitted for review. I believe
20 that they are -- have considered -- said they would
21 consider it for evaluation for any relevance to
22 license renewal. I don't know that they've said that
23 they're going to review it specifically for -- in
24 current operation space. But I would defer to the
25 staff on that.

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1 JUDGE TRIKOUROS: And the question also
2 applies to -- for Shoreline and CCCSIP.

3 MR. REPKA: While they're conferring, I
4 would just add -- emphasize what I said earlier is
5 that both of those reports were inputs to the SSHAC
6 process as well, the data and the reports.

7 MR. ROTH: Your honor, it's Dave Roth for
8 the staff. With respect to the report, the staff
9 reviewed that for operability determination and are
10 also considering that through the 50.54(f) information
11 process.

12 JUDGE TRIKOUROS: So it's sort of in limbo
13 right now, quite frankly. In the sense we don't know
14 the final disposition.

15 MR. ROTH: If the final disposition at some
16 point would be an Order in the future, certainly
17 there's no Order that's come out from review of that
18 report. Yes, it's indeterminate right now.

19 MR. REPKA: I would add that too in
20 reference to this question, there's a staff February
21 20, 2014 letter we've cited in our briefs addressing
22 the 50.54(f) process. And it says among other things
23 that the staff considers the seismic hazard
24 reevaluation being performed pursuant to the 50.54(f)
25 letter to be distinct from the current design or

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1 licensing basis of operating plants. Consequently,
2 the results of the analyses performed using present
3 day regulatory guidance, methodologies, and
4 information would not generally be expected to call
5 into question the operability or functionality of
6 SSEs.

7 So, it's drawing the distinction between
8 operability processes that normally apply to degraded
9 and nonconforming conditions at the plant relative to
10 the current licensing basis and the 50.54(f) process
11 that's looking at new seismic information where there
12 is no requirement otherwise to update the seismic
13 hazards.

14 JUDGE TRIKOUROS: Are the seismic fragility
15 curves pretty much it? Or are they -- is there any
16 chance the CCCSIP Report or something or any new data
17 might changes those? Or are they fixed?

18 MR. REPKA: I think that the seismic
19 hazards have been updated through the March letter and
20 while there may be changes, I wouldn't expect those to
21 be -- there's not new work to necessarily change
22 those. The fragilities, which relate to the
23 capability of the equipment to survive and operate
24 given the seismic hazards, that aspect of the risk
25 evaluation is specifically being updated as part of

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1 the next phase of the 50.54(f) process. So we've
2 currently used fragilities based on LTSP fragilities,
3 but there will be new fragilities in that report in
4 June of 2017.

5 JUDGE TRIKOUROS: Oh that's -- so, okay.
6 So fragilities are part of the entire process?

7 MR. REPKA: Correct.

8 JUDGE TRIKOUROS: Okay.

9 MR. REPKA: But they weren't part of the
10 screening evaluations, which is what was just
11 submitted in March.

12 JUDGE TRIKOUROS: I guess the question is,
13 what benefit would there be if the HE were identified
14 as the SSE?

15 MR. REPKA: I think that there would be no
16 difference. I think that the point of seeking that
17 clarity back in 2011 really said more about what was
18 going on in terms of there was a DPO involving the
19 resident inspector at the time, clarity to the FSAR.
20 So there -- and how to handle new seismic information.
21 PG&E had the LTSP, so had its views as to how new
22 seismic information should be handled.

23 But in the vacuum, there was a need -- a
24 search for clarity. At this point, I don't think it's
25 a meaningful distinction. I think, again, it's

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1 terminology that derives from Part 100 Appendix A that
2 really wasn't the licensing basis of the plant. The
3 plant wasn't licensed to -- Appendix A didn't exist
4 back at the time the plant was licensed. It was just
5 evolving and so the terms were being developed and
6 there was some desire back then to sort of put it in
7 those terms. But that really wasn't the basis for the
8 license.

9 JUDGE TRIKOUROS: The SER Supplement, might
10 have been 34 --

11 MR. REPKA: Thirty-four would have been the
12 LTSP SSER.

13 JUDGE TRIKOUROS: Okay. That -- yes. That
14 identified, to my surprise, it actually identified the
15 HE as the SSE. So I don't understand the evolution
16 here, but --

17 MR. REPKA: And, again, as Judge Arnold
18 pointed out, certainly the Licensing Board, the Appeal
19 Board, the staff in SSER 7, had all referred to the HE
20 as the SSE. For whatever reason, the only people that
21 didn't was PG&E. But putting that aside, the SSE is
22 the maximum vibratory ground motion expected at the
23 site from the regional faults. That would be, at the
24 time, the HE.

25 JUDGE TRIKOUROS: Again, just for clarity,

1 I've seen in various documents and I haven't made a
2 list and correlated them, but I've seen the design
3 basis of the plant as being described as the DE, DDE,
4 or HE. And other times I've seen it as and HE. But
5 it is or HE in some meaningful documents, I believe.
6 Just to make it clear. It is, what? It is and?

7 MS. KANATAS: It is and.

8 JUDGE TRIKOUROS: Okay.

9 MR. REPKA: It is and. I could speculate
10 that the or might be a reflection on the fact that in
11 some cases one is limiting with respect to the
12 structural loads and in the other case, the other may
13 be. So it's the more conservative. But from a --
14 strictly from a ground motion standpoint, the HE is
15 the most conservative. But to your question, I'd say
16 it's an and.

17 JUDGE TRIKOUROS: And again, with respect
18 to operability, the method that PG&E chooses to
19 determine operability is really up to PG&E with the
20 staff then providing an audit of that?

21 MR. REPKA: That's correct.

22 JUDGE TRIKOUROS: Is that the standard
23 process?

24 MR. REPKA: As it would be --

25 JUDGE TRIKOUROS: And there's no limit on

1 --

2 MR. REPKA: -- in any case of a
3 nonconforming or degraded condition. It would --
4 which is by definition something that doesn't meet the
5 full licensing basis. That's not where we are because
6 the plant does meet the licensing basis. But you can
7 use a methodology and as long as that's an acceptable
8 methodology, but that's a matter for staff review and
9 if it's -- the staff doesn't like it, we would expect
10 to hear about that in enforcement space.

11 JUDGE TRIKOUROS: There's been some
12 terminology about design basis limits. And I can find
13 it in a minute, but what does it mean when a document
14 says neither the HE nor the LTSP contained design
15 basis limits, conditions, or assumptions used in the
16 bounding SSE?

17 MR. REPKA: I'm not sure what you're
18 reading from. And I'm not sure I understand that
19 statement.

20 JUDGE TRIKOUROS: That statement doesn't
21 mean anything to anybody here? It didn't mean
22 anything to me, but I did read it.

23 MS. OLSON: I would suggest that perhaps
24 what it's referring to, if I may, is the 10 CFR Part
25 50 Appendix A, General Design Criteria 2, design bases

1 for protection against natural phenomena.

2 JUDGE TRIKOUROS: Okay. Yes, that might be
3 true.

4 MS. OLSON: But those are the design
5 criteria for which, as far as I understand, the Hosgri
6 evaluation is not -- does not meet.

7 JUDGE TRIKOUROS: Okay. That might have
8 come out of the DPO Panel Report.

9 MR. REPKA: Perhaps. But to the last
10 point, clearly the Hosgri meets the design criteria.
11 That was something the plant was licensed to.

12 JUDGE TRIKOUROS: Yes.

13 MS. OLSON: With all due respect, I believe
14 the plant was licensed to the DDE's meeting of the
15 General Design Criteria and the Hosgri as an add-on to
16 that with some modified assumptions, such as an
17 increased damping factor and some different views
18 about the -- some less conservative views about
19 material strengths and the tau factor, which is
20 described in former Commissioner Gilinsky's --

21 JUDGE TRIKOUROS: I think we've covered
22 everything else that I wanted to cover.

23 CHAIRMAN RYERSON: Judge Arnold, any more
24 questions?

25 JUDGE ARNOLD: No.

1 CHAIRMAN RYERSON: All right. Well, we
2 have finished everything we hoped to finish today.
3 Again, our job now is to take back everything that we
4 have. We'll have, of course, the transcript of all
5 this argument. And reach a decision.

6 In this case, in referring this matter to
7 us, the Commission has directed that we come up with
8 a decision within 140 days of the Referral Order,
9 which I think was May 21. In any event, the date that
10 we are supposed to have a decision by I think is
11 October 8. And we intend to comply with the
12 Commission's directions, so you will have a decision
13 either on the 8th or possibly well before that.

14 Again, on behalf of the Board, I want to
15 thank all the counsel today for your help. And we
16 will, again, go back and work on our decision. Any
17 comments, Judge Arnold, before we adjourn? Judge
18 Trikouros? Okay. Thank you very much. We're
19 adjourned.

20 (Whereupon, the above-entitled matter went
21 off the record at 4:30 p.m.)
22
23
24
25