Oct. 23, 2015

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	)	Docket Nos. 50-275
	)	50-323
PACIFIC GAS & ELECTRIC COMPANY	)	
	)	ASLBP No. 15-941-05-LA-BD01
(Diablo Canyon Nuclear Power Plant, Units 1 and 2)	)	

FRIENDS OF THE EARTH'S NOTICE OF APPEAL OF LBP-15-27

Pursuant to 10 C.F.R. § 2.311(c), Friends of the Earth ("Friends") hereby submits, together with the attached Brief, this Notice of Appeal of the Atomic Safety and Licensing Board's September 28, 2015 Memorandum and Order (Denying Petition to Intervene and Request for a Hearing), LBP-15-27. Friends respectfully submits that the Atomic Safety and Licensing Board erred in determining that Friends has failed to meet the requirements for an admissible contention, and therefore should have granted the petition to intervene and request for a hearing and admitted Contentions 1 and 2.

Respectfully Submitted,

/s/ Richard E. Ayres

Richard E. Ayres
Jessica L. Olson
John H. Bernetich
AYRES LAW GROUP LLP
1707 L Street, NW, Suite 850
Washington, DC 20036
Tel: (202) 452-9200

Counsel for Friends of the Earth

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	)	Docket Nos. 50-275
	)	50-323
PACIFIC GAS & ELECTRIC COMPANY	)	
	)	ASLBP No. 15-941-05-LA-BD01
(Diablo Canyon Nuclear Power Plant, Units 1 and 2)	)	

BRIEF OF FRIENDS OF THE EARTH

IN SUPPORT OF APPEAL OF LBP-15-27

Richard E. Ayres
Jessica L. Olson
John H. Bernetich
AYRES LAW GROUP LLP
1707 L Street, NW, Suite 850
Washington, DC 20036
Tel: (202) 452-9200
ayresr@ayreslawgroup.com
olsonj@ayreslawgroup.com
bernetichj@ayreslawgroup.com

Counsel for Friends of the Earth

Oct. 23, 2015

TABLE OF CONTENTS

I. INTRODUCTION 1

II. STATEMENT OF THE CASE 4

A. Procedural history 4

B. The Board's Memorandum and Order 6

III. STANDARD OF REVIEW 8

IV. ARGUMENT 8

A. The Board erred as a matter of law by failing to consider whether the events and actions identified and described by Friends constitute a *de facto* license amendment proceeding 8

1. The Board failed to consider whether the Staff has engaged in a "proceeding" to *de facto* amend Diablo Canyon's licenses 10

2. The Board erred by finding that the Staff had not approved the changes contained in Revision 21 11

3. Prior to Revision 21, the Hosgri Evaluation was not the plant's safe shutdown earthquake and, therefore, not part of its seismic design basis 15

a. Current licensing basis 16

b. General Design Criteria 17

c. Seismic design basis 17

4. Revision 21 contains changes to Diablo Canyon's seismic design basis to include Hosgri and the LTSP earthquakes as "maximum possible earthquakes" and thus *de facto* amends the licenses 21

5. Changing the maximum earthquakes identified for Diablo Canyon, as the Staff has directed, alters the terms of the licenses and grants greater operating authority by excusing PG&E from demonstrating that the licenses meet the terms of General Design Criterion 2 23

6. PG&E's filing and subsequent withdrawal of a license amendment request to designate the Hosgri Evaluation as the plant's safe shutdown earthquake is probative to this matter 24

7. Changing the plant's seismic design basis requires changing the plant's technical specifications, which cannot be done without a license amendment and attendant opportunity for a public hearing 26

8. The Staff's December 2014 Inspection Report is part of a proceeding to *de facto* amend Diablo Canyon's licenses 29

V. CONCLUSION 29

TABLE OF AUTHORITIES

JUDICIAL DECISIONS

Citizens Awareness Network v. NRC, 59 F.3d 284 (1st Cir. 1995)…….…….. *passim*

ADMINISTRATIVE DECISIONS

Cleveland Elec. Illuminating Co. (Perry Nuclear Power Plant), CLI-96-13, 44 NRC 315 (1996)……..…….…….…….…….9, 10

Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Stations, Units 2 and 3), CLI-01-24, 54 NRC 349 (2001)….…….…….…….....27

Exelon Generation Co. (Limerick Generating Station, Units 1 and 2), CLI-12-19, 76 NRC 377 (2012)… …….…….…….…….……...8

Pacific Gas & Elec. Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-15-14, 81 NRC __ (slip op.) (May 21, 2015) …….…….…….5

Pacific Gas & Elec. Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-15-27 (Sep. 28, 2015) …….…….…….……..……*passim*

Yankee Atomic Elec. Co. (Yankee Nuclear Power Station), CLI-94-3, 39 NRC 95 (1994)……..14

STATUTES AND REGULATIONS

42 U.S.C. § 2239……...……...……2, 10, 23

10 C.F.R. § 2.311…….……8

10 C.F.R. § 50.2……...……..17

10 C.F.R. § 50.36……...……27

10 C.F.R. § 50.54…….7

10 C.F.R. § 50.59……...…27

10 C.F.R. § 50.71……...11

10 C.F.R. § 50.91……...…….23

10 C.F.R. Part 50, App'x A…….17, 21

10 C.F.R. § 54.3……..….16, 20

10 C.F.R. Part 100, App'x A……...18, 22

MISCELLANEOUS

AEC, Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants, Rev. 1 (Oct. 1972) (ML13350A352)……..22

FSARU, Rev. 20…….....*passim*

FSARU, Rev. 21…….*passim*

Limited Appearance Statement of Dr. Victor Gilinsky (July 7, 2015)… ……...6

NEI 97-04, Revised Appendix B, "Guidance and Examples for Identifying 10 CFR 50.2 Design Bases" (ML003771698)… ……....19

NRC, Additional Branch Chief Comments Related to NCP 2012-011 With Annotations (ML12284A066) (Feb. 8, 2012)…..……26

NRC, Inspection Manual, Ch. 0326, "Operability Determinations & Functionality Assessments for Conditions Adverse to Quality or Safety" (ML13274A578)…..……..16

NRC, Regulatory Guide 1.29, "Seismic Design Classification," Rev. 4 (Mar. 2007)……..19

NRC, Memorandum from Peter J. Bamford to Michael T. Markley (June 23, 2014) (ML14022A120) ……11

NUREG-0675, "Safety Evaluation Report Related to the Operation of Diablo Canyon Power Plant, Units 1 and 2," Supplement No. 7 (May 26, 1978) …….20

NUREG-0675, "Safety Evaluation Report Related to the Operation of Diablo Canyon Power Plant, Units 1 and 2," Supplement No. 34 (ML9107100057) (June 30, 1991)...……...21

"Periodic Updating of Final Safety Analysis Reports," 45 Fed. Reg. 30,614 (May 9, 1980)…...13

PG&E, License Amendment Request 11-05, Evaluation Process for New Seismic Information and Clarifying the Diablo Canyon Power Plant Safe Shutdown Earthquake (ML11312A166) (Oct. 20, 2011)… ……...24, 27, 28

PG&E, UFSAR Change Request…..……..13

PG&E, Withdrawal of License Amendment Request 11-05, "Evaluation Process for New Seismic Information and Clarifying the Diablo Canyon Power Plant Safe Shutdown Earthquake" (ML12300A105) (Oct. 25, 2012)….. ……24

Technical Specifications for Diablo Canyon Power Plant, Units 1 and 2 (ML053140349) (Rev. Feb. 27, 2014)… ……28

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	)	Docket Nos. 50-275
	)	50-323
PACIFIC GAS & ELECTRIC COMPANY	)	
	)	ASLBP No. 15-941-05-LA-BD01
(Diablo Canyon Nuclear Power Plant, Units 1 and 2)	)	

FRIENDS OF THE EARTH'S BRIEF IN SUPPORT OF APPEAL OF LBP-15-27

I. INTRODUCTION

Pursuant to 10 C.F.R. § 2.311(c), Friends of the Earth ("Friends") hereby appeals the Memorandum and Order issued by the Atomic Safety and Licensing Board ("Board") on September 28, 2015, denying Friends' Petition to Intervene and Request for a Hearing ("Petition").[1] In the Petition, Friends asserts that the Staff has engaged in a proceeding to amend, *de facto,* the operating licenses for Diablo Canyon Power Plant ("Diablo Canyon") to allow the plant to continue operating without improved safety measures, despite the 2008 discovery of the Shoreline Fault located approximately 300 meters from the plant's intake structure. Through this *de facto* license amendment process, PG&E has been granted greater operating authority—the right to operate with a decreased margin of safety—without the opportunity for public review mandated by section 189a of the Atomic Energy Act (AEA).

The Board erred when it failed to find that the Staff has engaged in a *de facto* license proceeding to amend Diablo Canyon's licenses. Petitioner showed how the Staff and PG&E

[1] *Pacific Gas & Elec. Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-15-27 (Sep. 28, 2015) ("LBP-15-27").

engaged in a series of actions—a proceeding—that together resulted in a revision of the PG&E licenses to allow continued operation without including additional safety precautions in the licenses, despite the discovery of potentially more powerful faulting just offshore from the plant. Rather than focusing on whether the process engaged in by the Staff and the licensee amounted to an unlawful *de facto* license amendment *proceeding* —as required by the AEA—the Board focused myopically on whether each separate NRC Staff and PG&E action relating to the new seismic information, *standing on its own and without any consideration of the significance of that action in relation to other actions*, met the criteria for a *de facto* license amendment proceeding. But the AEA requires the Board to consider whether the series of actions, taken together, amounts to a *de facto* license amendment "proceeding."[2] The AEA requires a hearing opportunity for any "proceeding" for the "amending of any license."[3]

The Board focused on individual bricks, but failed to notice that together they form a brick house. When viewed together, the actions taken by the Staff in response to new seismic data, including the discovery of a new fault zone, constitute a proceeding that in fact amends the licenses. Denial of a public hearing under these circumstances thwarts the AEA's requirement that the public be afforded a right to a hearing in any proceeding to amend a license.

Moreover, the Board failed to see that specific Staff actions themselves amount to *de facto* license amendments. For example, the Board reasoned that since the Staff typically does not approve revisions submitted by the licensee to a Final Safety Analysis Report as Updated (FSARU), it could not have approved PG&E's Revision 21 to the plant's FSARU. This finding

---

[2] Section 189(a)(1)(A) of the Atomic Energy Act, 42 U.S.C. § 2239(a)(1)(A), provides that "[i]n any proceeding under this chapter, for the granting, suspending, revoking, or amending of any license or construction permit, or application to transfer control, . . . the Commission *shall* grant a hearing upon the request of any person whose interest may be affected by the proceeding." (Emphasis added).

[3] *Id.*

is illogical, since "not typical" and "impossible" are quite different concepts. Their ruling is also contrary to *de facto* amendment case law.[4] The Board endorsed the Staff's abdication of its duty to offer an opportunity for a public hearing before an operating license is amended. To vindicate the AEA and applicable federal court of appeals case law, the Commission needs to reverse the Board's erroneous decision.

The Board committed a number of other errors that, standing alone, require reversal of the Board's ruling. The Board repeatedly accepted the label placed on an action by the Staff, rather than examining the substance of the action, as federal appellate case law requires.[5] The Board failed to look behind the Staff's label when it determined that neither a Staff Inspection Report nor the Staff's approval of Revision 21 *de facto* granted greater operating authority or otherwise altered the terms of the plant's licenses.

The Board also mistakenly found that the 1977 evaluation of an earthquake on the Hosgri fault ("Hosgri Evaluation") was part of the plant's seismic design basis and that this analysis could be used as a basis for comparison with new seismic data without securing a license amendment.

The Board inexplicably refused to assign significance to the filing and subsequent withdrawal by PG&E of a license amendment request. The amendment request would have affected the plant's seismic design basis in nearly the same way as the *de facto* license amendment challenged by Petitioner. In a proceeding where the Board is considering whether the Staff unlawfully sidestepped required procedure to amend Diablo Canyon's operating licenses, the licensee's filing and subsequent abandonment of the explicit license amendment

[4] *Citizens Awareness Network v. NRC*, 59 F.3d 284, 294-95 (1st Cir. 1995).

[5] *Id.* at 295.

process is, by any measure, relevant to deciding whether the nearly identical change accomplished through Revision 21 constitutes a *de facto* license amendment.

Finally, the Board failed entirely to address Friends' argument that the Staff violated its own regulations by altering the plant's seismic design basis without amending its technical specifications. Under Commission regulations, a plant's technical specifications can be altered only through an amendment to the plant's license, a procedure not followed here.

Because the Board erred in failing to find that the Staff has been conducting a *de facto* license amendment proceeding for Diablo Canyon, and therefore denying Friends' Petition to Intervene and Request for Hearing, the Commission should reverse the Board's order and grant Friends' petition to intervene and request for a hearing.

II. STATEMENT OF THE CASE

A. Procedural history

Over a year ago, Friends of the Earth filed a Petition to Intervene and Request for Hearing (Aug. 26, 2014). Friends requested (1) that it be permitted to intervene in the *de facto* license amendment proceeding; (2) that the Commission empanel an Atomic Safety and Licensing Board to conduct a public adjudicatory hearing regarding the ability of Diablo Canyon to be safely shut down in the event of the peak ground motion that is now known to be possible given today's understanding of the surrounding seismic risks, as required by the section 189a(a)(1)(A) of AEA, 42 U.S.C. § 2239(a)(1)(A); and (3) that the NRC order PG&E to suspend operations at Diablo Canyon pending a determination, following a public hearing, that it can be safely operated under its licenses as amended.[6] The Staff and PG&E each filed an answer

[6] Petition to Intervene at 7.

opposing the relief requested in the Petition and asserting that no *de facto* license amendment had occurred or was occurring.[7] Friends filed a reply in support of the Petition.[8]

On May 21, 2015, the Commission filed a Memorandum and Order referring to a panel of the Atomic Safety and Licensing Board the question "whether Friends of the Earth has identified an NRC activity that requires an opportunity to request an adjudicatory hearing" pursuant to section 189a of the AEA.[9]

The Atomic Safety and Licensing Board empaneled under the Commission's order then issued an order allowing the Staff and PG&E to file additional briefs responding to Friends' assertion that the Staff granted PG&E greater operating authority and altered the terms of the operating licenses when it approved Revision 21 to the FSARU.[10] The Staff and PG&E each filed briefs on this point.[11] In response to Friends' motion for additional briefing,[12] the Board permitted Friends to file a supplemental brief, notwithstanding opposition by the Staff and PG&E, in recognition that "[s]ubstantial time has passed between [Friends'] original petition in

---

[7] NRC Staff Answer to Petition to Intervene and Request for Hearing by Friends of the Earth (Oct. 6, 2014); Pacific Gas and Electric Company's Answer to Friends of the Earth Hearing Request (Oct. 6, 2014). Nuclear Energy Institute moved for *amicus curiae* status. Nuclear Energy Institute Motion for Leave to File *Amicus Curiae* Brief (Oct. 6, 2014). This request was eventually granted by the Board. Notice and Order (Scheduling Oral Argument) (June 2, 2015) at 3.

[8] Friends of the Earth's Reply to NRC Staff's and Pacific Gas & Electric Company's Answers and Proposed *Amicus Curiae* Nuclear Energy Institute's Brief in Response to Petition to Intervene and Request for Hearing (Oct. 14, 2014).

[9] CLI-15-14, 81 NRC __, __ (slip op. at 2) (May 21, 2015). The Commission also (1) denied the "request for an adjudicatory hearing on operational safety and safe-shutdown" and the request to suspend plant operations but referred "the concerns underlying th[ose] request[s]" to the Executive Director for Operations for consideration under 10 C.F.R. § 2.206; and (2) denied without prejudice Friends' request for a discretionary hearing. *Id.* at 2, 12.

[10] Notice and Order (Scheduling Oral Argument) (June 2, 2015).

[11] NRC Staff Answer to Friends of the Earth's *De Facto* License Amendment Claims Related to PG&E's Updated Final Safety Analysis Report, Revision 21 (June 15, 2015); Pacific Gas and Electric Company's Supplemental Brief Regarding UFSAR Revision 21 (June 15, 2015).

[12] Petitioner Friends of the Earth's Motion to Allow Supplemental Briefing (June 5, 2015).

August 2014 and the Commission's referral on May 21, 2015."[13] Friends filed a supplemental brief, and the Staff and PG&E each filed a response in opposition.[14] On July 9, 2015, the Board held oral argument.[15]

B. The Board's Memorandum and Order

On September 28, 2015, the Board issued a Memorandum and Order determining that the Staff had neither granted PG&E greater authority nor otherwise altered the terms of Diablo Canyon's licenses.[16] Thus the Board ruled that Friends was not entitled to an opportunity to request a hearing pursuant to section 189a of the AEA.[17]

The Board ruled that none of the Staff actions identified by Friends individually effected a *de facto* license amendment.[18] As to two Staff letters dated March 12, 2012 and October 12, 2012, the Board concluded that the letters did not constitute a *de facto* license amendment because the letters were merely "requests" to licensees to submit certain information regarding the plants' seismic design basis, even though both letters were issued pursuant to the Staff's

[13] Order (Allowing Supplemental Briefing) (June 12, 2015) at 1.

[14] Petitioner Friends of the Earth's Supplemental Brief (June 19, 2015); NRC Staff Response to the Friends of the Earth's Supplemental Brief (June 26, 2015); Pacific Gas and Electric Company's Response to FOE's Supplemental Brief (June 26, 2015).

[15] Shortly before oral argument, former NRC Commissioner Dr. Victor Gilinsky filed a Limited Appearance Statement elaborating on the history of Diablo Canyon's seismic issues and arguing that this history "and the continued emergence of new issues argue strongly for a thorough and credible reassessment of the plant's seismic safety." Limited Appearance Statement of Dr. Victor Gilinsky (July 7, 2015) at 6.

[16] LBP-15-27 at 1-2. The Board briefly addressed issues of standing, timeliness, and scope and, given its decision that Friends had not established a right to a public hearing, determined that it need not rule on these issues. *Id.* at 6-7.

[17] *Id.* at 19.

[18] *Id.* at 10-18.

authority to *order* a licensee to submit certain information and the letters in fact ordered licensees to employ specific methods in submitting the required information.[19]

The Board held that the Staff's approval of Revision 21 of the FSARU was not a *de facto* license amendment.[20] Despite a Staff memo finding that Revision 21 satisfied the requirements of 10 C.F.R. § 50.71(e), the Board held that the Staff had not approved Revision 21, relying on the Staff's general policy not to approve revisions to an FSARU.[21]

The Board discounted certain PG&E documents' value in showing that the Staff was conducting a *de facto* license amendment proceeding on the grounds that they were licensee rather than Staff actions.[22] The PG&E documents—(1) a March 2015 seismic hazard report issued by PG&E upon the Staff's order and (2) Revision 21 itself—were disregarded despite the context in which these actions were taken—namely, to comply with specific Staff "requests" or directives.

The Board held that two other Staff actions—(1) Research Information Letter 12-01, which documented the Staff's assessment of the newly discovered Shoreline Fault, and (2) the Staff's May 13, 2015 letter responding to PG&E's March 2015 seismic hazard report—did not *de facto* amend the licenses.[23] The Board found that the Hosgri Evaluation had been part of the plant's design basis prior to Revision 21 and, therefore, that these two actions did not alter the role of the Hosgri Evaluation in the plant's licenses.[24]

---

[19] *Id.* at 11, 13-14; *see* 10 C.F.R. § 50.54(f).

[20] LBP-15-27 at 14-16.

[21] *Id.*

[22] *Id.* at 14, 17.

[23] *Id.* at 12-13, 18.

[24] *Id.* at 12.

The Board also held that a December 2014 inspection report assessing and approving PG&E's operability determination following the issuance of a seismic report, was not part of a *de facto* license amendment proceeding because the inspection report was an oversight document rather than a licensing document.[25]

III. STANDARD OF REVIEW

An order by a presiding officer denying a petition to intervene is appealable as to whether the petition should have been granted.[26] The Commission "generally defer[s] to board contention admissibility rulings" but will not defer if the Commission finds "an error of law or abuse of discretion."[27]

IV. ARGUMENT

A. The Board erred as a matter of law by failing to consider whether the events and actions identified and described by Friends, taken together, constitute a *de facto* license amendment proceeding.

As made clear by the U.S. Court of Appeals for the First Circuit, a nuclear power plant operating license is by its nature an exclusive—not an inclusive—regulatory device.[28] Any "regulated conduct which is neither delineated [in the license], nor reasonably encompassed within delineated categories of authorized conduct, presumptively remains unlicensed."[29] In short, the authority granted by an operating license is to be construed narrowly.

---

[25] *Id.* at 16-17.

[26] 10 C.F.R. § 2.311(c).

[27] *Exelon Generation Co.* (Limerick Generating Station, Units 1 and 2), CLI-12-19, 76 NRC 377, 379-80 (2012).

[28] *Citizens Awareness Network*, 59 F.3d at 294.

[29] *Id.* at 294.

A *de facto* amendment to an operating license occurs where NRC actions "permit the licensee to go beyond its existing license authority," without complying with the AEA's public participation requirements.[30] A *de facto* license amendment has occurred whenever an action results in granting the licensee "greater operating authority," or otherwise "alter[s] the original terms of the license," or permits the licensee to go beyond its existing license authority.[31]

Section 189a, and the *de facto* license amendment claim that is derived from that statute, is intended to ensure that interested parties have an opportunity to engage with the agency before it takes licensing actions. "[I]f section 189a is to serve its intended purpose, surely it contemplates that parties in interest be afforded a meaningful opportunity to request a hearing *before* the Commission *retroactively* reinvents the terms of an extant license by voiding its implicit limitations on the licensee's conduct."[32]

In making a determination whether the Staff has engaged in a *de facto* amendment proceeding, "it is the *substance* of the NRC action" that matters, "*not* the particular label the NRC chooses to assign to its action."[33] This principle is the essence of a *de facto* license amendment claim; the very basis of the claim is to prevent the Staff from mislabeling a licensing action, which is subject to public participation requirements, in a way that avoids the public hearing requirement of section 189a.

The Board's decision repeatedly runs afoul of this principle. Instead, the Board erroneously accepted the bald assertion that, because the Staff classified an action as "oversight"

---

[30] LBP-15-27 at 8.

[31] *Cleveland Elec. Illuminating Co*. (Perry Nuclear Power Plant), CLI-96-13, 44 NRC 315, 326-27 (1996) (footnotes omitted).

[32] *Citizens Awareness Network*, 59 F.3d at 294-95.

[33] *Id.* at 295.

rather than licensing, that action *ipso facto* cannot affect the authority granted by the licenses.[34] The Board erred by (1) accepting the Staff's pronouncement that individual actions taken with respect to new seismic data were enforcement-related and (2) ignoring that the actions, when viewed in total, grant greater operating authority and alter the terms of the licenses for Diablo Canyon.

1. The Board failed to consider whether the Staff has engaged in a "proceeding" to *de facto* amend Diablo Canyon's licenses.

The Commission's *de facto* license amendment case law is derived from the AEA's requirement that for every "proceeding" for the "amending of any license," the Commission must grant a hearing upon the request of any person whose interest may be affected by the proceeding.[35] Rather than considering Friends' arguments that the Staff has engaged in a "proceeding" made up of a series of events to amend Diablo Canyon's licenses, the Board segregated Friends' Contention 1, as supplemented by Friends' Supplemental Brief, into discrete and unrelated Staff actions.[36]

Endorsing the course taken by the Board—reviewing each Staff action without context—would obliterate the Commission's *de facto* license amendment case law. Doing so would allow the Staff and licensee to alter the terms of a license while avoiding the public participation requirement, so long as the change was effected through a piecemeal approach. Such a holding would open up a regulatory loophole and violate the AEA's guarantee of public participation for *any* proceeding to amend a license, without regard to whether that proceeding is made up of a single discrete action or a collection of actions.

---

[34] LBP-15-27 at 14-17.

[35] 42 U.S.C. § 2239(a)(1)(A); *Perry*, 44 NRC at 326-27.

[36] LBP-15-27 at 10-18; *see* Petition to Intervene at 4 (arguing that Staff "began a public process to amend Diablo Canyon's license through closed-door negotiations with PG&E, in violation of the AEA").

2. The Board erred by finding that the Staff had not approved the changes contained in Revision 21.

In determining that Revision 21 to the plant's FSARU, and the Staff's approval of that Revision, did not *de facto* amend the plant's licenses, the Board relied on the flawed logic that because Staff does not *typically* approve FSARU revisions, no FSARU revision could *ever* be a *de facto* license amendment. This conclusion is not only logically unsound, but also runs afoul of case law providing that it is the effect of the Staff's action, not its label, that is the focus of a *de facto* license amendment inquiry.[37] Whatever role or lack thereof the Staff *generally* plays in approving FSARU revisions is not material to the inquiry whether a *de facto* license amendment proceeding has occurred in this instance. Rather, the Staff's actions with regard to *this* revision—the memo concluding that Revision 21 satisfied the requirements of 10 C.F.R. § 50.71(e) (the "Bamford memo") and precedent events—is part of a process that effected a *de facto* license amendment.[38]

[37] *Citizens Awareness Network*, 59 F.3d at 295.

[38] NRC, Memorandum from Peter J. Bamford to Michael T. Markley (June 23, 2014) (ML14022A120). 10 C.F.R. § 50.71(e) provides in relevant part:

> Each person licensed to operate a nuclear power reactor . . . shall update periodically, as provided in paragraphs (e) (3) and (4) of this section, the final safety analysis report (FSAR) originally submitted as part of the application for the license, to assure that the information included in the report contains the latest information developed. This submittal shall contain all the changes necessary to reflect information and analyses submitted to the Commission by the applicant or licensee or prepared by the applicant or licensee pursuant to Commission requirement since the submittal of the original FSAR, or as appropriate, the last update to the FSAR under this section. The submittal shall include the effects of all changes made in the facility or procedures as described in the FSAR; all safety analyses and evaluations performed by the applicant or licensee either in support of approved license amendments or in support of conclusions that changes did not require a license amendment in accordance with § 50.59(c)(2) or, in the case of a license that references a certified design, in accordance with § 52.98(c) of this chapter; and all analyses of new safety issues performed by or on behalf of the applicant or licensee at Commission request. The updated information shall be appropriately located within the update to the FSAR.

Even if the Staff does not as a matter of course "approve" all revisions to a plant's FSARU, the effect of the Bamford memo in this particular case is unequivocally to endorse PG&E's changes to the FSARU for Diablo Canyon. In this instance, the Staff endorsed the changes PG&E described in Revision 21 to the FSARU. The Board erred by failing to address whether the Bamford memo satisfied the proper standard for whether a Staff action *de facto* amends a license. Instead, the Board ignored case law providing that it is the substance of the agency's action, not its label, that determines whether the action effects a *de facto* license amendment. Contrary to this principle, the Board held that because the Staff asserted that the Bamford memo did not constitute review or approval of PG&E's FSARU revision submittal, it therefore cannot effect a *de facto* license amendment.

The Board's decision here repeatedly misconstrues and mischaracterizes Friends' argument.[39] Friends does not contend that every submittal by a licensee of FSARU changes under 10 C.F.R. § 50.71(e) should be accompanied by a hearing opportunity. Rather, Friends' argument is much narrower and is based entirely on the AEA's provision for when a public hearing is required: *if* a revision to an FSARU alters the terms of the license or triggers the criteria of 10 C.F.R. § 50.59, the public is owed an opportunity for a hearing under section 189a, regardless of whether the agency typically does or does not formally approve FSARU revisions. This position accords with the AEA and the First Circuit's edict that, in determining whether a *de facto* license amendment has occurred, it is the substance and not the label of the NRC's action that matters.[40]

The Board's reliance on preambular language from a 1980 rule providing that "approvals of license amendments and technical specification changes are independent of the FSAR

[39] LBP-15-27 at 15-16.

[40] *Citizens Awareness Network*, 59 F.3d at 295.

updating process," says nothing about the substance of the changes made in Revision 21 or the Staff's approval.[41] Friends does not question the Commission's objectives in adopting the rule requiring regular revisions to FSARUs. Nor do we question that the label typically placed on approvals of FSARU revisions is "oversight" rather than "licensing." Rather, Friends asserts that, regardless of the Commission's intent to generally separate licensing actions and FSARU revisions, that separation was not maintained with respect to Revision 21 and, in this instance, resulted in a *de facto* license amendment. The Board's reliance on the Commission's labeling of FSARU revisions as "independent of" license amendments ignores the admonition of the court in *Citizens Awareness Network* to examine the *substance* of the action, *not just the label*, in order to determine whether the public has a right to an opportunity for a public airing of the issues.

Indeed, here, as PG&E itself stated, the licensee submitted Revision 21 at the direction of the agency and with its approval. PG&E's "UFSAR Change Request," explaining the changes proposed to be made by Revision 21, notes that the then-proposal "involve[s] changes to the UFSAR that explicitly identify the licensing basis design requirements and their bases *submitted to, and approved by, the NRC in docketed correspondence.*"[42] The Change Request notes repeatedly that the proposed changes "*are derived from correspondence with the NRC, NRC regulatory documentation, and specific UFSAR text*."[43] For these reasons, PG&E explained that "a 10 CFR 50.59 Screen is not required." Thus, PG&E's own words belie the Board's

[41] LBP-15-27 at 14-15 (citing "Periodic Updating of Final Safety Analysis Reports," 45 Fed. Reg. 30,614, 30,615 (May 9, 1980)).

[42] PG&E, UFSAR Change Request at 102 (emphasis added). This document was attached as Exhibit 1 to Friends' Supplemental Brief (June 19, 2015).

[43] *Id.* at 106-112 (emphasis added).

determination that the agency did not approve changes made to the operating authority by Revision 21.[44]

Moreover, the Staff's defense here, which was accepted by the Board, amounts to willful blindness to the licensee's unlawful actions. Through its claim that it does not review FSARU revisions, the Staff attempts to avoid responsibility for the accuracy and lawfulness of FSARU revisions and the public hearing requirements of the AEA. This is contrary to law. If an FSARU revision makes changes to the FSARU such that it crosses the line to requiring a license amendment, then the Staff's willful ignorance of the contents of that revision cannot obstruct the right to a hearing opportunity with respect to those changes.

The AEA's public hearing requirement does not depend on whether the agency expressly and formally approves a FSARU revision, or whether the approval is provided informally and implicitly. Nowhere does the statute draw such a distinction. The AEA is clear: where an action results in an effective amendment of the terms of a license, the public has a right to a hearing. The regulating agency cannot evade that requirement by willfully keeping itself ignorant of whether a FSARU revision crosses the line from a permissible amendment to an impermissible *de facto* license amendment.[45]

---

[44] The Board did not address Friends' arguments relying on these statements from PG&E's UFSAR Change Request. *See* Petitioner Friends of the Earth's Supplemental Brief (June 19, 2015) at 9-10, 17-18. Moreover, the Board's decision makes no attempt to address Friends' arguments explaining *how* the approval of Revision 21 expanded the terms of the licensee's operating authority and altered the terms of the licenses. Friends explained at length in its briefing how Revision 21 expanded the terms of PG&E's operating authority. *Id.* at 9-18.

[45] Citing dicta from a 1994 Commission decision, the Board notes that a "member of the public may challenge an action taken under 10 C.F.R. § 50.59 only by means of a petition under 10 C.F.R. § 2.206." LBP-15-27 at 16 (citing *Yankee Atomic Elec. Co.* (Yankee Nuclear Power Station), CLI-94-3, 39 NRC 95, 101 n.7 (1994)). Friends does not challenge an action taken by either the Staff or PG&E pursuant to section 50.59. Instead, Friends challenges the granting of greater operating authority by the Staff without required public participation. In any event, the Commission has already referred portions of Friends' petition to the Executive Director for Operations for consideration under section 2.206, leaving the issues under consideration here for the Board.

3. Prior to Revision 21, the Hosgri Evaluation was not the plant's safe shutdown earthquake and, therefore, not part of its seismic design basis.

The Board relied substantially on its finding that the Hosgri Evaluation "has been an established part of the Diablo Canyon design basis since the facility began operation."[46] But this conclusion is undermined by documents showing that the Hosgri Evaluation was not part of the design basis, and certainly was not the plant's safe shutdown earthquake. Moreover, none of the documents the Board relies on to assert that the Hosgri Evaluation has been part of Diablo Canyon's design basis support its conclusion that no *de facto* amendment proceeding has occurred.

Even if the Board's finding that the Hosgri Evaluation has been part of the design basis were true, it would not contradict the Petitioner's assertion that a *de facto* license amendment has occurred here. To the extent the Hosgri Evaluation has been part of the plant's seismic design basis, then the design basis also must include the assumptions and analytical methods used in that analysis. These cannot be altered without a license amendment. Both the Staff and PG&E, however, do just that: they employ different assumptions and analytical methods in their attempt to demonstrate that the Hosgri Evaluation bounds the updated ground motion response spectra of the Shoreline Fault.[47] Put another way, the Staff's and PG&E's claim that the Shoreline Fault creates no additional risks to Diablo Canyon depends on the changes in the assumptions and analytical methods added to the license through Revision 21. This alteration of the assumptions and analytical methods results in granting greater operating authority to the licensee—namely, the right to operate with a decreased margin of safety.

[46] LBP-15-27 at 12-13, 18.

[47] *See infra* at 20-21.

Since the parties dispute whether the Hosgri Evaluation has previously been included in Diablo Canyon's design basis and, if so, in what capacity, a brief recitation of the regulatory framework applicable to seismic design is appropriate. Diablo Canyon's seismic design basis is set forth by three "tiers" of Commission regulations: the current licensing basis, the General Design Criteria, and the seismic design basis, each discussed in turn below.

a. Current licensing basis

As defined by Commission regulations, the current licensing basis (CLB) is "the set of NRC requirements applicable to a specific plant and a licensee's written commitments for ensuring compliance with and operation within applicable NRC requirements and the plant-specific design basis."[48] The CLB consists of the following:

- NRC regulations contained in 10 CFR parts 2, 19, 20, 21, 26, 30, 40, 50, 51, 52, 54, 55, 70, 72, 73, 100 and appendices thereto;
- Commission orders;
- License conditions;
- Exemptions;
- Technical specifications;
- Plant-specific design basis information defined in 10 CFR 50.2 and documented in the most recent UFSAR (as required by 10 CFR 50.71);
- Licensee commitments remaining in effect that were made in docketed licensing correspondence (such as licensee responses to NRC bulletins, Licensee Event Reports, generic letters, and enforcement actions); and
- Licensee commitments documented in NRC safety evaluations.[49]

[48] 10 C.F.R. § 54.3(a).

[49] 10 C.F.R. § 54.3(a); NRC Inspection Manual, Ch. 0326, "Operability Determinations & Functionality Assessments for Conditions Adverse to Quality or Safety" (ML13274A578) at 2.

b. General Design Criteria

Each plant must meet each of 64 listed "General Design Criteria." These General Design Criteria, which as part of 10 C.F.R. Part 50 are included in each plant's CLB, "establish minimum requirements for the principal design criteria" for nuclear power plants.[50] General Design Criterion 2, "Design bases for protection against natural phenomena," provides as follows:

> Structures, systems, and components important to safety shall be designed to withstand the effects of natural phenomena such as earthquakes, tornadoes, hurricanes, floods, tsunami, and seiches without loss of capability to perform their safety functions. The design bases for these structures, systems, and components shall reflect . . . [a]ppropriate consideration of the most severe of the natural phenomena that have been historically reported for the site and surrounding area, with sufficient margin for the limited accuracy, quantity, and period of time in which the historical data have been accumulated . . . .[51]

c. Seismic design basis

"Design bases" are a subset of a plant's CLB and are used to demonstrate compliance with the General Design Criteria. Design bases are defined by regulation as:

> that information which identifies the specific functions to be performed by a structure, system, or component of a facility, and the specific values or ranges of values chosen for controlling parameters as reference bounds for design. These values may be (1) restraints derived from generally accepted "state of the art" practices for achieving functional goals, or (2) requirements derived from analysis (based on calculation and/or experiments) of the effects of a postulated accident for which a structure, system, or component must meet its functional goals.[52]

[50] 10 C.F.R. Part 50, App'x A.

[51] 10 C.F.R. Part 50, App'x A, at I.

[52] 10 C.F.R. § 50.2.

The seismic design basis for nuclear power plants is made up of an operating basis earthquake (OBE) and a safe shutdown earthquake (SSE).[53]

* * *

With this regulatory background in mind, it is clear that Revision 21 altered the seismic design basis. As pointed out by PG&E and the Staff in proceedings below, the Hosgri Evaluation has been part of Diablo Canyon's CLB for some time.[54] But prior to Revision 21, the Hosgri Evaluation was not the equivalent of the plant's safe shutdown earthquake and, therefore, not part of the plant's seismic design basis. As made clear above, a nuclear power plant's seismic design basis is made up of two postulated earthquakes—the operating basis earthquake and the safe shutdown earthquake. Prior to Revision 21, the Hosgri Evaluation was categorically not the equivalent to the plant's safe shutdown earthquake.[55]

The lesser role of the Hosgri Evaluation prior to Revision 21 is evidenced by the fact that the Commission did not require the Hosgri Evaluation analysis to be conducted in the same way as a safe shutdown earthquake analysis. Generally, as part of discharging its duties under General Design Criterion 2, a licensee is required to ensure that certain plant SSCs listed in Regulatory Guide 1.29, "Seismic Design Classification," will remain functional following the safe shutdown earthquake (which is "that earthquake which is based upon an evaluation of the maximum earthquake potential considering the regional and local geology and seismology and specific characteristics of local subsurface material…"[56]).[57] In the case of the Hosgri Evaluation,

---

[53] 10 C.F.R. Part 100, App'x A, at III(c), (d).

[54] PG&E Answer at 2-8; NRC Staff Answer at 27.

[55] *See* FSARU, Rev. 20 at 2.5-57 to 2.5-59, describing the double design earthquake as the "maximum earthquake" for the plant, as compared to FSARU, Rev. 21 at 2.5-82, delineating the postulated double design earthquake, Hosgri earthquake, and 1991 Long Term Seismic Program earthquake as "maximum earthquakes" for Diablo Canyon.

[56] 10 C.F.R. Part 100, App'x A, at III(c).

however, the Staff did not subject PG&E to this requirement. Instead, NRC allowed PG&E to analyze a more limited scope of SSCs, entirely divorced from the approved list in Regulatory Guide 1.29, to ensure they would remain functional following an earthquake like the one postulated in the Hosgri Evaluation.[58]

The Hosgri Evaluation, therefore, could not have functioned as the plant's safe shutdown earthquake prior to Revision 21. If the licensee or Staff subsequently determined to designate the Hosgri Evaluation as the plant's safe shutdown earthquake (which Revision 21 did), a license amendment was required. The Staff's endorsement of deviation from Commission regulations, through its direction to PG&E to amend its FSARU and subsequent approval of that revision, results in an unlawful expansion of operating authority under the license.

The Board cites a statement by the NRC in SSER 7, which was issued in 1978, to demonstrate that the Hosgri Evaluation has always been part of the plant's seismic design basis.[59] But SSER 7 was issued in 1978, well before the licensee received its operating licenses or even submitted the plant's original Final Safety Analysis Report. This statement therefore cannot serve as proof that, prior to Revision 21, the Hosgri Evaluation had been part of Diablo Canyon's seismic design basis, let alone its safe shutdown earthquake.

---

[57] NRC, Regulatory Guide 1.29, "Seismic Design Classification," Rev. 4 (Mar. 2007) at 3 (implementing General Design Criterion 2 and providing a list of SSCs that "must be designed to withstand the effects of the SSE and remain functional").

[58] This point is further demonstrated by a guidance document issued by *amicus curiae* Nuclear Energy Institute (NEI) intended to assist licensees in determining compliance with the Commission's seismic design basis requirements. That guidance document provides that compliance with seismic design basis is determined in accordance with NRC Regulatory Guide 1.29—the very guide that NRC declined to require PG&E to follow in developing the Hosgri Evaluation. *See* NEI 97-04, Revised Appendix B, "Guidance and Examples for Identifying 10 CFR 50.2 Design Bases" (ML003771698).

[59] LBP-15-27 at 13 n.56.

Not every statement made in a safety evaluation is included within a plant's CLB—only "licensee commitments documented in NRC safety evaluations."[60] The Staff's statement that it considers the Hosgri Evaluation to be the safe shutdown earthquake is not a licensee commitment and is therefore not part of Diablo Canyon's CLB. The mere fact that a statement by the Commission appears in an SSER does not result in a fundamental change to the role played by the Hosgri Evaluation as demonstrated by other documents.

Moreover, this statement is in direct contradiction to PG&E's stated belief in SSER 7 that the *Double Design Earthquake* (DDE), not the Hosgri Evaluation, was the plant's safe shutdown earthquake:

> [The Double Design Earthquake] was originally the equivalent of the event that was later formally defined as the safe shutdown earthquake in Appendix A to 10 CFR Part 100. The applicant calls it the safe shutdown earthquake following the original terminology. In previous supplements to the Safety Evaluation Report, we have called it the safe shutdown earthquake following the terminology of Appendix A to 10 CFR Part 100.
>
> *The applicant still considers this to be the appropriate safe shutdown earthquake for this site* as defined in Appendix A to 10 CFR Part 100.[61]

Even if the Hosgri Evaluation were considered to be part of the plant's design basis and, indeed, its safe shutdown earthquake (which it is not), the Staff's reliance on assumptions and analytical methods that differ from those in the design basis results in an expansion of operating authority under the licenses, in violation of the AEA. To the extent the Hosgri Evaluation is part of the seismic design basis, the analytical methods and assumptions used in the analysis are also included in the seismic design basis. Supplemental Safety Evaluation Report No. 34, one of the

---

[60] 10 C.F.R. § 54.3.

[61] NUREG-0675, "Safety Evaluation Report Related to the Operation of Diablo Canyon Power Plant, Units 1 and 2," Supplement No. 7 (May 26, 1978) ("SSER 7") at 2-3 to 2-4 (emphasis added).

documents relied on by the Board to determine that the Hosgri Evaluation is "part of the plant's seismic design basis," provides: "The staff notes that the seismic qualification basis for Diablo Canyon will continue to be the original design basis plus the Hosgri Evaluation basis, *along with the associated analytical methods, initial conditions, etc.*"[62] Any relaxation of those methods and assumptions, therefore, results in a grant of increased operating authority to the licensee.

4. Revision 21 contains changes to Diablo Canyon's seismic design basis to include Hosgri and the LTSP earthquakes as "maximum possible earthquakes" and thus *de facto* amends the licenses.

Revision 21 changed the design basis of the plant by modifying the description of the maximum earthquake from (1) the DDE to (2) the DDE, Hosgri Evaluation, or the LTSP spectrum for the purposes of establishing the parameters for meeting General Design Criterion 2 (GDC 2). This change to the disjunctive rather than the additive form alters the terms of the licenses and thus amounts to a *de facto* license amendment.

To understand how this change grants greater authority to PG&E, it may be helpful to outline the function of an FSARU and the seismic design basis. The initial FSAR, which supports an application for an operating license, specifies methods of analysis to be used to determine whether the plant can be safely operated. As discussed above, the seismic design basis, which is part of the plant's current licensing basis, implements GDC 2, "Design Bases for Protection against Natural Phenomena."[63] The designation and analysis of the safe shutdown earthquake satisfies GDC 2's requirement that the plant can be safely shut down in the event of

[62] NUREG-0675, "Safety Evaluation Report Related to the Operation of Diablo Canyon Power Plant, Units 1 and 2," Supplement No. 34 (ML9107100057) (June 30, 1991) at 1-7 (emphasis added).

[63] 10 C.F.R. Part 50, App'x A.

the "maximum earthquake potential" on a capable earthquake fault within 75 miles of the facility.[64]

Section 2.5 of the FSARU describes the seismology and geology of the plant site, which "guide[s] the regulatory staff in its evaluation of the acceptability of sites and seismic design bases."[65] Revision 21 not only added the Shoreline Fault as a lesser included scenario under the Hosgri Evaluation,[66] but it also added the Hosgri and LTSP evaluations to section 2.5, thus altering the foundation for the seismic design basis.

Prior to Revision 21, the Hosgri fault was only briefly mentioned in section 2.5.[67] Section 2.5.2.9 of Revision 20, titled "Maximum Earthquake," did not include a description of the Hosgri fault as it did for other faults surrounding the plant. For other faults, but not for the Hosgri, Revision 20 described the distance from Diablo Canyon and magnitude of possible earthquakes for which certain plant structures, systems and components were certified to implement GDC 2 design basis requirements.

The changes made to the FSARU in Revision 21 include designating the DDE, and the Hosgri Evaluation and LTSP earthquakes as the "maximum earthquakes" for the plant, and designating the Shoreline Fault Zone as a lesser-include scenario under the Hosgri Evaluation. Prior to these changes, the DDE had been the only "maximum earthquake" in the FSARU, and

[64] 10 C.F.R. Part 100, App'x A.

[65] AEC, Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants, Rev. 1 (Oct. 1972) (ML13350A352) at 2.5-1.

[66] FSARU, Rev. 21 at 2.5-61, 2.5-66.

[67] It stated: "PG&E was requested by the NRC to evaluate the plant's capability to withstand a postulated Richter Magnitude 7.5 earthquake centered along an offshore zone of geologic faulting, generally referred to as the 'Hosgri fault.' The detailed methods, results, and plant modifications performed based on this evaluation are dealt with in Section 3.7." FSARU, Rev. 20 at 2.5-58.

the Shoreline Fault Zone was not included at all.[68] These changes modify the basis for seismic qualification of the plant by adding the Hosgri and LTSP earthquakes to the description of the site geology, thereby allowing PG&E to effectively choose which earthquake provides the bounding scenario for new seismic hazards.[69] By the Staff's October 12, 2012 letter and the subsequent Bamford memo, the Staff directed and approved this change to the design basis. The Staff cannot approve such changes to the design basis without amending the license through a public notice and the opportunity for an adjudicatory hearing.[70]

5. Changing the maximum earthquakes identified for Diablo Canyon, as the Staff has directed, alters the terms of the licenses and grants greater operating authority by excusing PG&E from demonstrating that the licenses meet the terms of General Design Criterion 2.

As acknowledged in the FSARU,[71] PG&E demonstrated that it met the GDC 2 design basis requirements with a safe shutdown earthquake analysis based on the *DDE* ground motion response spectrum. Nevertheless, each of PG&E's analyses of the new seismic information has treated the *Hosgri or LTSP* ground motion response spectra as the measure of whether the reanalyzed faults (Shoreline, Los Osos, and San Luis Bay) create additional, and unacceptable, risk. Based on this measure, PG&E asserts that the Shoreline fault should be treated as a lesser included scenario under the Hosgri Evaluation. But this ignores the fact that the safe shutdown scenario for Diablo Canyon remains the DDE.[72] In order to satisfy design basis requirements,

---

[68] *See* FSARU, Rev. 20 at 2.5-57 to 2.5-59.

[69] *See* FSARU, Rev. 21 at 2.5-82 ("The determination of the appropriate earthquake parameters for design of the plant SSCs is addressed throughout Section 2.5, and the maximum earthquakes for the plant site are presented in Sections 2.5.3.9.1 [(DE/DDE)], 2.5.3.9.2 [(Hosgri)], and 2.5.3.9.3 [(LTSP)].").

[70] 42 U.S.C. § 2239(a)(1)(A); 10 C.F.R. § 50.91.

[71] FSARU, Rev. 21 at 3.2-1, 3.7-2, 3.7-39.

[72] Revision 21 confusingly states that the safe shutdown earthquake for Diablo Canyon continues to be the double design earthquake. *See* FSARU, Rev. 21 at 3.2-1. Friends contends that other changes made in Revision 21 demonstrate that the safe shutdown earthquake, the maximum earthquake possible at the site, for which certain structures, systems, and components are designed to withstand, has in effect been

the Shoreline evaluations[73] must therefore be compared against the DDE scenario, not against the Hosgri Evaluation. For the Staff to allow the licensee to use the Hosgri Evaluation as the sole benchmark against which to measure new seismic risk, as Revision 21 does, alters the terms of the license and grants PG&E greater operating authority by eliminating some of the safety margin built into the licensing basis, thereby *de facto* amending the licenses.

6. PG&E's filing and subsequent withdrawal of a license amendment request to designate the Hosgri Evaluation as the plant's safe shutdown earthquake is probative to this matter.

In October 2011, PG&E filed License Amendment Request 11-05 ("LAR 11-05"), seeking "to revise the current licensing basis, as described in the [FSARU] and Technical Specifications, to provide requirements for the actions, evaluations, and reports necessary when PG&E identifies new seismic information relevant to the design and operation of" Diablo Canyon.[74] PG&E filed the amendment in order to "clarify . . . that the 1977 Hosgri earthquake is the equivalent of [Diablo Canyon's] safe shutdown earthquake, as defined in 10 CFR 100, Appendix A."[75] In October 2012, just over one year later, PG&E withdrew this license amendment request, citing authority granted by Staff letters and actions as the basis for its withdrawal.[76] In the Petition, Friends pointed out that even though PG&E withdrew LAR 11-05,

---

changed to any one of the postulated DDE, Hosgri, or 1991 Long Term Seismic Program earthquakes. *See* FSARU, Rev. 21 at 2.5-82. Changing the safe shutdown earthquake, part of the seismic design basis, requires a license amendment.

[73] The FSARU change in Revision 21 designates only that the Shoreline Fault Zone is a lesser-included scenario under the Hosgri evaluation. Other information from reanalyzed faults, such as the San Luis Bay fault, must also be shown not to exceed the loads calculated for the DDE.

[74] PG&E, License Amendment Request 11-05, Evaluation Process for New Seismic Information and Clarifying the Diablo Canyon Power Plant Safe Shutdown Earthquake (ML11312A166) (Oct. 20, 2011) at 1.

[75] *Id.*

[76] PG&E, Withdrawal of License Amendment Request 11-05, "Evaluation Process for New Seismic Information and Clarifying the Diablo Canyon Power Plant Safe Shutdown Earthquake" (ML12300A105) (Oct. 25, 2012), encl., at 1.

PG&E later cited subsequent Staff action as the basis for submitting Revision 21, which—precisely as LAR 11-05 would have done—effectively designated the Hosgri Evaluation as the plant's safe shutdown earthquake pursuant to 10 C.F.R. Pt. 100, Appendix A.

Despite that these startling events bear directly on the question referred to the Board, in its decision the Board noted that it "attaches little if any significance to the fact that, after discovery of the Shoreline Fault, PG&E initially elected to seek a license amendment, but then withdrew that request."[77] The Board was "not persuaded by [Friends'] argument that PG&E's actions in this regard are probative of whether the NRC Staff eventually granted PG&E greater authority or otherwise altered the terms of PG&E's licenses."[78] In light of the Board's charge to determine whether a "proceeding" has occurred to *de facto* amend Diablo Canyon's license outside the formal license amendment process, ignoring entirely the significance of PG&E's filing and subsequent withdrawal of LAR 11-05 is arbitrary, capricious, and contrary to law.

A juxtaposition of the scope of PG&E's operating authority *before* LAR 11-05 was filed with its authority *after* the licensee withdrew the request lays bare the expansion of authority granted by the Staff. When PG&E filed LAR 11-05, the *Double Design Earthquake* was clearly Diablo Canyon's safe shutdown earthquake.[79] After PG&E withdrew LAR 11-05 and submitted Revision 21 to the FSARU—and following other Staff and PG&E actions outlined above—the *Hosgri Evaluation* had effectively become the equivalent of the plant's safe shutdown earthquake.[80] This change expands the operating authority under the licenses because it reduces the safety margin of the plant's seismic design basis.

---

[77] LBP-15-27 at 8-9 n.39.

[78] *Id.*

[79] FSARU, Rev. 20, Section 2.5.

[80] FSARU, Rev. 21 at 2.5-82.

Surely the Commission is not so callow to presume that counsel for PG&E elected to file LAR 11-05 for any other reason than it was required by law. When a regulated party seeks to achieve a certain objective by filing an application with the regulator, and then withdraws its application and achieves the objective anyway, the regulator should be alert to the possibility that the filing of the application itself indicates, at the very least, a subjective belief by the regulated party that its objective could not be achieved without filing the application. Indeed, the Staff itself viewed LAR 11-05 as a "*necessary* and appropriate step to clarify and resolve" the licensing basis issue.[81] For the Board to attach "little if any significance" to these events is to disregard information that, at a minimum, provides important context to this matter—where the central issue is whether the regulated party, at the direction and approval of the regulator, sidestepped required procedure to amend its license. The Commission should ascribe all appropriate significance to PG&E's filing and subsequent withdrawal of LAR 11-05.

7. Changing the plant's seismic design basis requires changing the plant's technical specifications, which cannot be done without a license amendment and attendant opportunity for a public hearing.

Leaving Diablo Canyon's Technical Specifications unaltered in this case violates regulations requiring certain information, including an evaluation method for new seismic data, to be incorporated into the plant's Technical Specifications. Inserting this information into Diablo Canyon's license, without changing the plant's Technical Specifications, results in a *de facto* license amendment.[82]

The plant's Technical Specifications are required to contain certain information. If any one of the criteria in 10 C.F.R. § 50.36 is met, the information "*must* be retained in the technical

[81] NRC, Additional Branch Chief Comments Related to NCP 2012-011 With Annotations (ML12284A066) (Feb. 8, 2012) (emphasis added).

[82] Neither the Commission in its referral order, nor the Board in its memorandum and order denying Friends' Petition, addressed this argument. *See* Petition at 40-47.

specifications."[83] One of the categories required to be placed in the technical specifications is "administrative controls," which are defined as "the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner."[84] A program setting forth a method of evaluation for new seismic data satisfies this definition.

Here, the evaluation of newly discovered seismic data—which methodologies and assumptions to employ in analyzing a fault—is clearly necessary to assuring the safe operation of Diablo Canyon. Thus, this information, if it is to be in Diablo Canyon's licensing basis at all, must be retained in the Technical Specifications. And a plant's technical specifications cannot be changed without a license amendment.[85] Yet PG&E has managed to insert into its FSARU new methodologies and assumptions for use in analyzing new seismic information, without adding it to its Technical Specifications or securing a license amendment. This sidestepping of required procedure constitutes a *de facto* license amendment.

Recognizing that inserting a method regarding how it would evaluate newly discovered seismic faults required a change to the plant's Technical Specifications, PG&E in LAR 11-05 proposed to add two new sections to the "Administrative Controls" chapter in its Technical Specifications. The first proposed section, titled "Long Term Seismic Program," would have inserted into the Technical Specifications procedures for "ongoing review and evaluation of new seismic information and associated methodologies."[86] Confirming beyond dispute that the proposed change fits the definition of "administrative controls" in 10 C.F.R. § 50.36(c)(5),

---

[83] *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Stations, Units 2 and 3), CLI-01-24, 54 NRC 349, 352 (2001) (emphasis added).

[84] 10 C.F.R. § 50.36(c)(5).

[85] 10 C.F.R. § 50.59(c)(1).

[86] License Amendment Request 11-05, encl., attachment 1, at 2.

PG&E requested that this section be added to the chapter of its Technical Specifications titled "Administrative Controls."[87] The second proposed section, titled "Long Term Seismic Program Report," was also to be added to the "Administrative Controls" chapter of the Technical Specifications.

Notwithstanding the requirements that (1) any methodologies to assess new seismic information must be included in the technical specifications and (2) any change to the technical specifications can be achieved only through a license amendment, the Staff, through the approval of Revision 21, permitted PG&E to insert new methodologies into its licenses and utilized these new methodologies to assess the Shoreline Fault. The Staff has directed PG&E to use these changes and then approved its use of these methodologies, effecting a *de facto* license amendment.

Moreover, in the section of LAR 11-05's supporting documentation titled "Applicable Regulatory Requirements/Criteria," which includes the regulatory bases for the proposed license amendment, PG&E explicitly cites 10 C.F.R. § 50.36(c)(5).[88] That subsection requires that administrative controls be included in a plant's technical specifications. This admission further evidences that the Commission's attempt to designate a method of evaluation of the Shoreline Fault without modifying the technical specifications accordingly, is an unlawful *de facto* license amendment.

For the reasons recited above, designating a new seismic evaluation method without including that method in the plant's technical specifications, violates 10 C.F.R. §§ 50.36(c)(5) and 50.59(c)(1), and section 189a(a)(1)(A) of the AEA. Such a change must be made through

[87] *See* Technical Specifications for Diablo Canyon Power Plant, Units 1 and 2 (ML053140349) (Rev. Feb. 27, 2014).

[88] *See* License Amendment Request 11-05, encl., attachment 1, at 1-2.

the license amendment proceeding, with attendant rights to an adjudicatory hearing, which would consider the additional risks posed by the Shoreline Fault and the necessary revisions to Diablo Canyon's technical specifications.

8. The Staff's December 2014 Inspection Report is part of a proceeding to *de facto* amend Diablo Canyon's licenses.

The Board erred by holding that the Staff's December 2014 inspection report was not part of a proceeding that effected a *de facto* license amendment.[89] Ignoring case law providing that the effect of a Staff action rather than the label placed on the action is relevant to a determination of whether a *de facto* license amendment has occurred, the Board rejected Friends' argument on grounds that any document labeled an "inspection report" can never be part of a *de facto* license amendment proceeding. The Board made no effort to address the merits of Friends' argument on *how* this inspection report altered the terms of the plant's licenses and instead relied entirely on the fact that the inspection report fell under the label of "oversight," which, the Board reasoned, can never constitute a *de facto* license amendment. This is contrary to law.[90]

V. CONCLUSION

For the foregoing reasons, the Commission should grant Friends' Petition in its entirety. The Commission should empanel an Atomic Safety and Licensing Board to conduct a public adjudicatory hearing regarding Diablo Canyon's ability to be safely shut down in the event of the maximum expected ground motion, as required by section 189a of the AEA.

[89] LBP-15-27 at 16-17.

[90] *Citizens Awareness Network*, 59 F.3d at 294-95.

Respectfully submitted,

/s/ Richard Ayres

Richard Ayres
Jessica Olson
John Bernetich
AYRES LAW GROUP LLP
1707 L Street, NW, Suite 850
Washington, DC 20036
Tel: (202) 452-9200 / Fax: (202) 872-7739
ayresr@ayreslawgroup.com
olsonj@ayreslawgroup.com
bernetichj@ayreslawgroup.com

Dated: October 23, 2015

Counsel for Friends of the Earth

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	)	Docket Nos. 50-275
	)	50-323
PACIFIC GAS & ELECTRIC COMPANY	)	
	)	ASLBP No. 15-941-05-LA-BD01
(Diablo Canyon Nuclear Power Plant, Units 1 and 2)	)	

CERTIFICATE OF SERVICE

I hereby certify that the foregoing Friends of the Earth's Notice of Appeal of LBP-15-27, and Brief of Friends of the Earth in Support of Appeal of LBP-15-27, have been served through the Electronic Information Exchange (EIE) on the participants in the above-captioned proceeding, this 23rd day of October, 2015.

Signed (electronically) by Jessica L. Olson
Jessica L. Olson
Ayres Law Group LLP
1707 L Street, NW, Suite 850
Washington, DC 20036
Tel: (202) 452-9200
olsonj@ayreslawgroup.com

Counsel for Friends of the Earth

Executed in Accord with 10 C.F.R. § 2.304(d)