

**BEFORE THE PUBLIC UTILITIES COMMISSION OF
THE STATE OF CALIFORNIA**

Application of Pacific Gas and Electric)
Company for Approval of Ratepayer)
Funding to Perform Additional Seismic)
Studies Recommended by the California)
Energy Commission. (U 39 E))

Application No. 10-01-014

**REBUTTAL TESTIMONY OF ROCHELLE BECKER
ON BEHALF OF
THE ALLIANCE FOR NUCLEAR RESPONSIBILITY**

Rochelle Becker
Executive Director
Alliance For Nuclear Responsibility
PO Box 1328
San Luis Obispo, CA 93406
Rochelle@a4nr.org
(858) 337-2703

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SUMMARY AND CONCLUSIONS

The Alliance for Nuclear Responsibility (A4NR) shares DRA's concern that a quadrupling in costs of PG&E's proposed seismic studies without adequate justification is indicative of a program in serious disarray. A4NR is astonished, however, at DRA's apparent indifference to the obvious red flags that signal the study program's severe scoping deficiencies. Rather than roll its sleeves up and assure that the study program is repurposed to accomplish the worthy objective of better seismic risk assessment at Diablo Canyon, DRA resorts to tired and ineffectual remedies like imposition of a removable cost cap and threats of after-the-fact audits. DRA's unexplained rejection of cost-sharing to compel a modicum of business prudence by the utility is baffling.

This sets up a replay of the CPUC staff's uninformed and remarkably uncurious rubber stamping of Southern California Edison's proposed seismic study program.¹ A4NR believes that the DRA is abdicating its responsibilities to ratepayers by not conducting—with due diligence—first, complete scrutiny of the scope of work proposed by PG&E; and second, a review of the line-item costs associated with the work proposed. From its testimony, it appears that DRA has not kept abreast of the ongoing concerns and requests of the Independent Peer Review Panel established in D.10-08-003, including

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- Q** Does the DRA have expertise to analyze seismic studies?
A We have the expertise to analyze utility forecasts of costs in all kinds of subject areas, but we do not have a nuclear expert or experts reviewing this Application.
Q Do you have a seismic expert?
A Not that I'm aware of.

Transcript of proceeding A.11-04-006, November 9, 2011, p. 178.

- Q** I have asked several times if you have a seismic consultant. I just want to ask, do you think you could use one?
A ... At this point in time, it is just my personal judgment, it would be -- obviously it would be a DRA management decision to make, but if DRA management was to ask me at this point in time whether we should engage an expert consultant, which does involve cost, I would not recommend we engage in an expert consultant.

Transcript of proceeding A. 11-04-006, November 9, 2011, p. 199

those concerns that were raised as recently as the week before DRA filed its report. Absent the development of a well-substantiated analysis of PG&E's Application, it will be impossible for the Commission to make a decision on the reasonableness of PG&E's request for ratepayer funds.

A4NR believes that cost-sharing for the studies should be imposed on PG&E, that the IPRP review process should be redirected to greater intellectual rigor and improved transparency, and that efforts should be stepped up to secure the active input and participation of the United States Geological Survey.

Costs for a Poorly Defined Project Have Quadrupled With No Clear Explanation

These costs should not be the exclusive responsibility of the ratepayers. Customers are on the hook to pay for the current operation of the plant, but the seismic study expenditures also relate to the investment and development cost of a relicensed Diablo Canyon as well. PG&E shareholders ought to shoulder responsibility for that portion until the licenses are extended. How else will the CPUC get the focused attention of PG&E's management on the prudent design and execution of these studies? Dividing those costs on the basis of reactor years seems logical, with the customers responsible for that portion represented by the time from decision to November 1, 2024 (Unit 1) and August 1, 2025 (Unit 2) and the shareholders responsible initially for the portion represented by the 20 years for each unit thereafter. Depending upon how quickly this proceeding moves to a Commission decision, that formula would assign roughly 61 – 62% of the study costs to the shareholders (until, of course, the relicensing occurs).

The IPRP Is Not Functioning as Envisioned in D.10-08-003

The most visible sign of how far this process has gone off track is the degree to which the CPUC Energy Division staff has allowed PG&E to debase the IPRP. The two published reports by the IPRP make clear that several of the state agencies are chafing under the indefensible constraints that have been placed on their review. How PG&E can be allowed to simply show up to a meeting with a Power Point presentation in the face of

repeated demands for more detail and more time to review materials defies credulity. That PG&E is not required to formally respond to IPRP comments or document its scientific reasons for rejecting IPRP recommendations is deplorable. The CPUC staff's continued foot dragging in retaining the promised technical consultants for the IPRP—an 18-month fiasco at this point—suggests the CPUC's creation of the IPRP was for window dressing, not for meaningful review.

DRA Is Not Up to Speed on the IPRP's Current Status

A4NR questions whether DRA has been following the developments occurring at the IPRP publicly noticed meetings of January 23 and February 6, 2012. At both of those meetings, discussion between the IPRP and the State Lands Commission regarding PG&E's "re-drawn" maps of the proposed survey area remained unresolved. PG&E only presented the State Lands Commission and the IPRP with its redrawn map on January 19, 2012. The State Lands Commission has yet to release its draft EIR for public comment. The issue of "24/7 marine survey operations" remains unresolved. How can DRA make any informed analysis or recommendation on the proposed scope of the work absent resolution of these issues? Further, how does DRA's recommendation that costs "should be capped" in any way protect ratepayers if the need for high-quality scientific data on which to make reasonable assumptions should require additional expenditures?

Regarding one of PG&E's principal justifications for the seismic budget overruns, DRA notes that the increased costs are partially based on "PG&E's meetings with members of the Commission's Independent Peer Review Panel (IPRP)."² Yet DRA is willing to accept unanswered queries to PG&E for clarification of the concerns raised by the IPRP. DRA writes, "...it is difficult to discern from the reports which recommendations, if any, contribute to PG&E's increased cost estimate."³

² Report on the Pacific Gas & Electric Company Diablo Canyon Power Plant Seismic Studies Program Application 10-01-014 Reopening, Division of Ratepayer Advocates, California Public Utilities Commission, February 10, 2012, p. 2.

³ Ibid. p. 5.

A4NR also sought clarification, asking PG&E:

Question 1

Please provide an explanation for funding increase due to PG&E's meetings with the Commission's IPRP.

Answer 1

PG&E's seismic studies funding request cannot be broken down in this manner. The IPRP has reviewed and agreed, generally, with PG&E's seismic study plans, including the expansion of the areas to be studied using 2D and 3D technology.⁴

A4NR then followed up by asking:

Question 2

Please provide the specific details of each additional or enhanced seismic study activity attributed to addressing a concern or request of the IPRP and the specific written statement from the IPRP requesting the action be addressed.

Answer 2

The IPRP has not made specific written statements or requests regarding any of its concerns or requests.⁵

How can PG&E assert, as DRA notes, that the increased cost of the proposed seismic studies is based on the comments of the IPRP, when PG&E admits that no such comments or answers can be produced and documented? The CPUC shouldn't accept these blanket assertions without evidence, and the DRA abrogates its responsibility to ratepayers if it chooses to do so.

⁴ PGE response to A4NR Data Request: DR A4NR 005-Q01, January 4, 2012

⁵ PGE response to A4NR Data Request: DR A4NR 005-Q02, January 4, 2012

DRA then notes that,

The biggest expense in the new PG&E study cost estimate is for data acquisition for the Offshore High-Energy 3-D Seismic Surveys (\$23.7 million). The activity will involve highly specialized survey vessels operated by a 3rd-party vendor. PG&E indicates that three proposals were evaluated and one was selected, based on “overall cost and their ability to conduct the proposed survey.” PG&E provided the three proposals to DRA. As the contract with the vendor has not yet been executed, it is premature to assess the reasonableness of the procurement.⁶

A4NR offers two comments: First, the author of AB 1632, Senator Sam Blakeslee made a request to PG&E that it provide him the Requests for Proposal (RFP) for the 3-D surveys on January 18, 2012.⁷ As of this filing, Senator Blakeslee reports that PG&E’s response “failed to disclose the requested details regarding the proposed study plan.”⁸ Second, Dr. Bruce Gibson, at the January 23 public meeting of the IPRP made the same request of the PG&E representatives in attendance. As of this filing, neither he nor the IPRP have received a reply. At both the January 23 and February 6 meetings of the IPRP, panel members raised questions regarding the quality and competence of the vendors to be selected for the acquisition and processing of the 3-D study data. As of this filing, their queries remain unanswered.

DRA’s own admission, that “it is premature to assess the reasonableness of the procurement” should place its own tacit approval of the Application on hold, as the determination of the proper scoping of the entire seismic study program is at the core of this Commission proceeding.

⁶ Report on the Pacific Gas & Electric Company Diablo Canyon Power Plant Seismic Studies Program Application 10-01-014 Reopening, Division of Ratepayer Advocates, California Public Utilities Commission, February 10, 2012, p. 6.

⁷ Letter from Senator Sam Blakeslee to Anthony F. Early, CEO, PG&E, January 18, 2012.

⁸ E-mail communication from the office of Senator Sam Blakeslee, February 17, 2012.

The USGS Is Conspicuously Missing in this Peer Review Process

DRA makes note of PG&E's vague reliance on "public comments by the United States Geological Survey (USGS)" as a justification for the increase in costs of its proposed seismic study program. When DRA asked for a copy of the public comments, PG&E provided a web link to a video showing a representative of the USGS making a presentation. DRA says it "has viewed the video but cannot verify if the presenter made such comments as an individual or whether they represent the position of the USGS."

It should be noted that A4NR has previously brought to the Commission's attention the noticeable absence of the USGS as a participant in the IPRP.⁹

A4NR remains mystified by the absence of the USGS from the independent peer review process established by the CPUC. How can anyone consider the IPRP an adequate review process if the federal government's primary repository of seismic expertise isn't actively engaged? To point to just one obvious oversight that USGS might have corrected, wouldn't a scientifically-motivated use of the proposed ocean bottom seismometers have placements out to the edge of the continental shelf instead of restricting them to three miles from shore? This point was emphasized in correspondence between USGS scientist, Dr. Jeanne Hardebeck, and California Energy Commissioner James Boyd dated April 27, 2011.

A4NR is informed and believes that the web-linked video to which PG&E referred DRA is a recording of PG&E's so-called Senior Seismic Hazard Assessment Committee (SSHAC) public meeting held in San Luis Obispo from November 29 to December 1, 2012. The presentations made are of extreme relevance to this proceeding, and several of them seriously undermine the scope of seismic work that PG&E has settled upon and for which it is seeking ratepayer funding in this proceeding. A4NR repeatedly asked PG&E to make such videos public immediately after the meetings, but inexplicably nearly 10 weeks passed before this was done. At the Prehearing Conference on February 23, A4NR intends to ask that PG&E be directed to provide a transcript of these videos so that they can be more accessible in the record of this proceeding.

⁹ Ex-parte communication, Rochelle Becker to Michael Peevey, January 27, 2012.

Linkage With the SSHAC Process is of Vital Importance to this Proceeding

A4NR has previously circulated to members of the IPRP as well as CPUC staff a video clip¹⁰ from the SSHAC meetings in which PG&E geotechnical consultant William Lettis speaks of a list of potential Diablo Canyon seismic studies totaling more than \$1 billion, and says the projects will need to be assessed and prioritized by another peer review panel – not the IPRP – established for the SSHAC process. The video clip was played at the California Energy Commission’s February 8, 2012 business meeting.

The SSHAC process itself occupies a position of considerable significance to this proceeding. PG&E acknowledged in the November 29, 2011 public workshop in San Luis Obispo that it would only be performing a SSHAC Level 3 analysis. The SSHAC methodology, which Lloyd Cluff (the former Manager of PG&E’s Geosciences Department) played a major role in developing, has become the cornerstone of the Nuclear Regulatory Commission’s reliance on probabilistic seismic hazard analysis. It defines four different levels of study distinguished by an increasing level of sophistication, resources, and participation by technical experts. In PG&E’s words, it is intended for regions of “active, complex tectonic settings”; “potential for significant public impact/scrutiny”; and/or “significant Regulatory scrutiny.”¹¹ Apparently the utility has determined none of those conditions are present at Diablo Canyon. According to PG&E’s workshop presentation, “A SSHAC Level 4 study is not being used because of (1) significantly increased schedule requirement, (2) Iterative process of Evaluation and Integration, and (3) relatively minor increase in regulatory assurance associated with a Level 4 study.”¹²

Of course, PG&E would prefer to compartmentalize its seismic reviews, selectively categorizing some as safety-related and consequently outside the purview of the CPUC and others – without clear distinction, except that they are more truncated – acceptable for the CPUC’s consideration. A4NR urges this Commission not to succumb

¹⁰ <http://a4nr.org/?p=1917>

¹¹ Lettis, William; Powerpoint presentation, “Diablo Canyon SSHAC Level 3 Study,” SSHAC Conference, November 29, 2011, San Luis Obispo, slide 35.

¹²Ibid.

to this jurisdictional arbitrage, reminding it that ratepayers have a vital economic interest in the reliability of Diablo Canyon’s operation, the risk that it will be taken out of service and trigger a need for expensive replacement of capacity and energy, as well as the prospect that it may be required to undergo extensive seismic safety retrofits. Each of these economic concerns is at the heart of the CPUC’s jurisdictional authority.

A4NR is instinctively wary of regulatory recommendations that PG&E played such a heavy role in crafting and considers Mr. Cluff, before his recent retirement, to have been a major source of the Company’s close-mindedness on alternatives to his theory of seismic risks. But a reader of the original 1997 report itself (NUREG/CR-6372)¹³—especially its sections on intellectual honesty about uncertainties, structuring a broad and transparent analytic process, and the vital importance of robust peer review—will find a commendable humility that PG&E would do well to live by. The CPUC could learn quite a bit by reading it as well.

¹³ US Nuclear Regulatory Commission; NUREG/CR-6372 UCRL-ID-122160 Vol. 1, Recommendations for Probabilistic Seismic Hazard Analysis: Guidance on Uncertainty and Use of Experts, Prepared by: Senior Seismic Hazard Analysis Committee (SSHAC), Lawrence Livermore National Laboratory, 1997.