



UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges

Robert M. Lazo, Chairman
Gustave A. Linenberger
David R. Schink



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In the Matter of
PACIFIC GAS AND ELECTRIC COMPANY
(Humboldt Bay Power Plant
Unit No. 3 - Amendment to Facility
Operating License)

Docket No. 50-133

July 14, 1981

MEMORANDUM AND ORDER

1. Pacific Gas and Electric Company (Licensee) has moved pursuant to the provisions of 10 C.F.R. 2.107 to withdraw its May 20, 1977 license amendment application to permit resumption of operation of Humboldt Bay Power Plant, Unit No. 3 and thereby to terminate the above-identified proceeding without prejudice.^{1/} The NRC Staff has no objection to the withdrawal of the subject application nor the termination of this proceeding.^{2/}

Thomas K. Collins, Dr. Elmont Honea, Frederick P. Cranston, Wesley Chesbro, Demetrias L. Mitsanas, the Six Rivers Branch of Friends of the Earth, and the Sierra Club (Joint Intervenors) in an answer filed on January 15, 1981, have opposed the motion to the extent that it requests this Board to issue an order terminating further action on Licensee's

^{1/} "Motion to Withdraw Application For License Amendment", dated December 31, 1980.

^{2/} See Staff's January 21, 1981 response to the present motion.

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amendment application without prejudice. Instead, Joint Intervenors urge the Board to terminate this proceeding with prejudice by issuing an order denying the application and ordering that Licensee's nuclear unit at Humboldt Bay be permanently shut down and decommissioned.

In a filing dated January 22, 1981, the State of California (California) also has opposed Licensee's motion to withdraw its amendment application.^{3/} California asserts that Licensee's request to withdraw its May 1977 application, but with the option of filing another application sometime in the future, is unreasonable, and argues that the fate of the Humboldt Bay plant should be resolved within the context of this proceeding.

2. Humboldt Bay Unit No. 3 is a 63 Mwe boiling water reactor for which a Provisional Operating License was issued to Licensee on August 28, 1962. In connection with the Advisory Committee on Reactor Safeguards and Staff review of the Licensee's application for a Full-Term Operating License, the Licensee agreed to perform an updated seismic review to define the proper seismic accelerations and spectra applicable to the plant site and, if necessary, to perform a dynamic analysis of safety related components.

^{3/} See "Notice of the People of the State of California and the Public Utilities Commission of the State of California of Participation as an Interested State", dated December 1, 1980. In the absence of opposition by any party, the Board hereby grants California's request to participate in this proceeding as an interested State pursuant to the provisions of 10 C.F.R. 2.715(c).

Following issuance of Full-Term Operating License No. DPR-7 on January 21, 1969, the Licensee submitted updated geologic and seismic studies in April 1969. A report on soil structure interaction was submitted in May 1971. During the course of the review of the Licensee's reports by the Staff several areas were identified which required further study. Based upon Staff review of the seismic studies performed for the Humboldt Bay plant through 1973, it was determined that a seismic event of 0.25g was appropriate as the Operating Basis Earthquake (OBE) for this site and that the dynamic response of the facility, as a result of a 0.25g event, could result in actual loads greater than those calculated for design purposes using a 0.25g static load factor. Accordingly, the Staff required that the Licensee update the seismic design analysis of safety related structures, systems and components for the Humboldt Bay plant. In addition, it was requested that more data be provided for geological and seismological determinations of the magnitude and location for the Safe Shutdown Earthquake (SSE), and for determining the geological significance of nearby faults.

Based upon its review and evaluation of the reports submitted during the conduct of the above programs, the Staff concluded in 1976 that the seismic qualification (to the 0.25g OBE) of the safety related equipment should be completed in a timely manner and that in the absence of seismic qualification of this equipment, operation of the Humboldt Bay plant should not be allowed beyond the next refueling outage. Thereupon, on May 21, 1976, the Commission issued an "Order for Modification of License" for the plant, which added the new provision as paragraph E to Licensee's operating license.

Subparagraph E(1) required Licensee to upgrade the plant so as "to meet current regulatory requirements with respect to withstanding the effects of the Operating Basis Earthquake of 0.25g", and subparagraph E(2) required Licensee to conduct geologic and seismic investigations in order to demonstrate, in essence, that the plant is seismically safe.

In particular, among other specific items, the Commission ordered Licensee to locate accurately and assess the capability of the Bay Entrance and Little Salmon faults. With regard to the Bay Entrance fault, the Commission ordered that "If this fault cannot be shown to be noncapable within the meaning of Appendix A, Section IIIg(1), it must be demonstrated that movement on it cannot be expected to cause surface displacement within the plant area." Paragraph E(2)(a). With respect to the Little Salmon fault, the Commission ordered that "An upper limit for the age of the last movement must be established by reliable dating techniques sufficient to demonstrate that the fault is noncapable." Paragraph E(2)(b).

In June 1976, the Humboldt Bay nuclear plant was shut down for refueling and seismic modifications. It has not restarted.

3. The present proceeding was initiated by the May 20, 1977 filing by Licensee of an application for amendment of its operating license. More specifically, Licensee requested deletion of paragraph E and sought authorization to return the plant to power operation on July 15, 1977, on the basis of satisfactory completion of the requirements of the May 21, 1976 Order.

On June 9, 1977, the Commission issued a Notice of Proposed Amendment to Facility Operating License in this proceeding (42 Fed. Reg. 31847, June 23, 1977). Pursuant to that notice Joint Intervenors each filed petitions for leave to intervene which were granted by the Board on May 15, 1978. Meanwhile, the Staff on August 5, 1977, informed Licensee that it could not support the Company's application to resume operation based on the information currently available to it concerning geologic and seismic issues pertaining to the facility.

Licensee then retained Woodward-Clyde Consultants ("WCC") to conduct a series of geologic and seismic studies designed to resolve the concerns expressed by the Staff. While these studies were in progress, Licensee sought and received several continuances in this proceeding to allow completion of these studies. The latest of these continuances was granted to October 1, 1980, in order to allow Licensee to receive, evaluate, and file with the Board the Report of WCC containing the results of its geologic and seismic studies. This Report (filed with the Board on October 6, 1980) concluded that the seismic and geologic issues raised by the Staff appear capable of resolution.

However, the WCC Report does not appear to imply that the resolution of these issues will necessarily be in favor of Licensee. The principal substantive findings that the WCC Report does make are that both the Bay Entrance and Little Salmon faults are in fact "capable", and that a previously unmentioned third fault, called the Buhne Point fault, lies within the immediate vicinity of the plant site, and is also "capable." Thus, the WCC Report serves to justify and underscore the Staff's concern that

this plant is located in the middle of an active earthquake zone immediately adjacent to at least three capable faults.

At the time the WCC Report was filed with the Board Licensee asked the Board to delay further action on its application to December 31, 1980, to enable it to analyze the results of its studies and those of its consultant, Bechtel Power Corporation, relating to the costs and economics of returning the unit to operation. Those studies have been completed and indicate that the potential costs of additional equipment and operating personnel are high when measured against the size of the facility and its remaining useful life. However, a substantial portion of the potential costs contained in the Bechtel Report - some \$40-\$80 million - represent a judgment of potential costs of items that are not currently backfit requirements on operating plants, but which might become backfit items depending on future NRC policy. Licensee suggests that when NRC retrofit standards become better known, it may well be that the currently projected costs will turn out to be less than expected and it may then be economic to make the required plant modifications.

Using the conclusions of the WCC Report and the Bechtel studies, Licensee now asks that the Board allow it to withdraw its May 20, 1977 application to restart its nuclear plant at Humboldt Bay, "without prejudice", thus leaving the door open for a renewed application in the future. Meanwhile, the plant would remain in a shutdown condition as it has been since the plant was closed in June 1976 pursuant to the Commission's May 21, 1976 Order.

4. The Staff has raised the question of jurisdiction and argues that this Board lacks the jurisdiction to grant the relief requested by the Joint Intervenors and California, namely, that the current proceeding should be the procedural vehicle which ultimately resolves the future of Licensee's Humboldt Bay nuclear facility. According to the Staff, whatever the disposition is of this proceeding, it cannot operate to terminate the operating license itself nor accelerate its expiration date. We are told that initiation of decommissioning procedures must be pursued in a separate context and in a separate forum and that all we can do is to deny the motion, which would leave the facility in an ambivalent status, or grant the motion, which would restore the status quo at the shutdown facility. We are not comfortable with this position of the Board with respect to a licensed, albeit non-operating reactor.

The Board, as noted by the Staff, derives its jurisdiction in this matter solely from the Commission's June 9, 1977 notice of opportunity for hearing in connection with the license amendment application which forms the subject of this proceeding. This amendment would delete requirements in the license relating to seismic upgrading of safety related equipment and resolution of geologic/seismic concerns based upon satisfactory completion of these requirements, and allow for the restart of Humboldt Bay Power Plant, Unit No. 3. Thus, the Board has been given certain responsibilities regarding the present geologic/seismic requirements of the license. By simply offering to withdraw its request that these requirements of its license be deleted, the Licensee cannot avoid the necessity of complying with them, nor can it relieve the Board of its responsibilities regarding same.

In our view, Licensee has in effect conceded that presently it is unable or unwilling to expend the funds necessary either to complete the seismic and geologic investigations ordered by the Commission more than five years ago, and to upgrade the plant as necessary, or to bring the plant into compliance with newly issued post-Three Mile Island safety regulations promulgated by the Commission. It is apparent that the design of Humboldt Bay Unit 3 has become deficient in a number of respects.

Since June 1976, License No. DPR-7 has been an "operating" license in name only. We understand that spent fuel is being stored in the spent fuel pool and that some spent fuel may reside in the reactor vessel. While we do not regard the presence of this fuel in the facility as an undue risk to the health and safety of the public, we are concerned about the lack of definitive plans and schedules for either upgrading of the facility or disposition of the spent fuel.

Since Humboldt Bay Power Plant, Unit 3 does not meet current operational requirements and, to our knowledge, no plans exist for bringing it into compliance with current requirements, this Board has under consideration the issuance of an order requiring Licensee to show cause why the operating authority provided in Facility Operating License No. DPR-7 should not be revoked and why Licensee should not submit a plan to decommission Humboldt Bay Power Plant, Unit 3. Accordingly, we will defer ruling on Licensee's motion to withdraw its application for a license amendment and at this time require Licensee to provide us with a definitive statement of its present intentions regarding required plant modifications and a schedule for completing them.

ORDER

For all the foregoing reasons upon consideration of the entire record in this matter, it is this 14th day of July, 1981

ORDERED

That within thirty days of the date of this Order, Licensee shall file a written statement under oath or affirmation setting forth its intentions regarding plant modifications required to bring Humboldt Bay Power Plant, Unit 3 into compliance with current NRC requirements. If Licensee desires to retain the operating authority provided in Facility Operating License No. DPR-7, such statement shall include a proposed schedule for completing the required plant modifications.

FOR THE ATOMIC SAFETY AND
LICENSING BOARD

Robert M. Lazo
Robert M. Lazo, Chairman
ADMINISTRATIVE JUDGE

July 14, 1981
Bethesda, Maryland