August 31, 1981

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
SOUTHERN CALIFORNIA EDISON COMPANY, ET AL.	)	Docket Nos. 50-361 OL 50-362 OL
	)	
(San Onofre Nuclear Generating Station, Units 2 and 3)	)	

NRC STAFF'S RESPONSE TO APPLICANTS' REQUEST FOR CERTIFICATION TO THE NUCLEAR REGULATORY COMMISSION

INTRODUCTION

On August 17, 1981, Southern California Edison Company and San Diego Gas and Electric Company (Applicants) requested this Board to certify an issue to the Commission which was raised by the Board sua sponte in its August 7, 1981 Order (Modifying an Issue Concerning Earthquake and Emergency Planning). The NRC Staff supports certification of the issue but would clarify and restate the question to be certified as follows:

> Whether the Commission's Rules permit inquiry into the effects on a licensee's emergency response capability of severe natural phenomena which are not reasonably postulated to occur during a radiological emergency throughout the facility's operating lifetime.

Certification is appropriate because the Board's Order raises issues currently pending before other licensing boards, could have severe adverse impacts on the timely completion of the licensing process and could jeopardize not only the orderly conduct of this proceeding but of other ongoing proceedings as well.

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BACKGROUND

The Licensing Board in this proceeding has had before it for some time the issue of the extent to which consideration of earthquakes should play a role in assessing the adequacy of emergency preparedness for the San Onofre Nuclear Generating Stations, Units 2 and 3 (SONGS 2 & 3). In its April 8, 1981 Memorandum and Order (Rulings on Motions to Compel Answers to Interrogatories), the Board recognized that discovery on an issue involving the extent to which a "major earthquake" could impact upon the functioning of Applicants' emergency plan raised a new matter in this proceeding.[1/] In its Memorandum and Order of April 17, 1981 (Ruling on Motion for Protective Order), the Board recognized that no contentions in the proceeding encompassed earthquake considerations. Nonetheless the Board permitted Intervenors to continue discovery on this matter to assist the Board in determining whether it would itself pursue these concerns sua sponte.[2/] Subsequently, the Board called for briefs on the issue in its revised Prehearing Conference Order of May 28, 1981. The NRC Staff filed its views with the Board on June 22, 1981. On July 29, 1981, the Board issued its Order (Raising on Board's Motion an Issue Concerning Earth-

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1/ April 8, 1981 Memorandum and Order, pp. 1-2.

2/ April 17, 1981 Memorandum and Order, p. 7.

quakes and Emergency Planning) and permitted the parties to comment on this issue.

The NRC Staff, following the guidance in NUREG-0654, Rev. 1, pp. 4-6, to consider natural phenomena which may be projected to be experienced in the plant vicinity, has requested applicants in earthquake prone regions to consider earthquakes as a part of their emergency planning. This is consistent with the consideration of other environmental factors such as blizzards, fog, tornados or hurricanes in other geographical climates. The phenomena to be considered are those reasonably anticipated in the geographical region where the site is situated but do not include severity levels not reasonably expected to be experienced during the facility's operating lifetime. To avoid the problem of determining what severity of earthquake should be considered as prudent for planning purposes the Staff indicated in its June 22, 1981 brief that the SSE level of severity would bound even the most conservative planning assumptions.3/

In view of the level of seismic activity in California, prudent emergency planning in the Staff's view, requires some consideration of the ability to transport necessary personnel to the plant to cope with the earthquake. In addition, there should be assurance of continued communication between the plant and off-site agencies. Capability should exist to obtain damage estimates both to the plant and to communication and transportation facilities off site to prepare a data base to factor

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3/ The OBE appears, by definition, to more closely reflect the severity that might reasonably be expected to occur, 10 C.F.R. Part 100, App. A. III(d).

into the decisionmaking process. Finally, the Applicants should have available a range of recommendations to off-site authorities taking into account the degree of damage to the plant caused by an earthquake and to transportation and communication facilities off site. These factors warrant consideration to assure that Applicants and other emergency response agencies have the capability to appropriately implement their emergency plans. 10 C.F.R. 50.47(a).

The Staff is, however, of the further view that consideration need not be given to a very severe seismic event coincident or nearly coincident with a significant accident posing a radiological hazard due to the very low likelihood of occurrence of such a coincident or nearly coincident set of events. The Board apparently shares the Staff's view on this point for it stated in its April 17, 1981 Memorandum and Order:

> We would go much further. Without in any sense questioning the need for guarding against the event, and whatever the mathematical odds may be, one can say that the likelihood of a major radiological emergency with serious offsite effects at a particular nuclear power plant is "relatively improbable." Similarly, even in a seismically active area, one can say that the chances of a major earthquake's occurring in the forty-year life of a nuclear plant and disrupting key elements of its emergency plan is "relatively improbable." That both of these "relatively improbable" events could occur at or about the same time--the Applicants' "multiple disaster"--seems virtually inconceivable. Such a remote contingency can be safety disregarded for any regulatory purpose (footnote omitted). At p. 5.

Nonetheless, the Board subsequently determined to inquire, on its own, into the impacts of earthquakes greater than the SSE.[4/] The Board specifically indicated in its August 7, 1981 order.

> In posing the foregoing the Board wishes to learn what the physical consequences of earthquakes, in a scale of increasing severity beyond the SSE, would be upon the emergency plans as they relate to communications and evacuations up to some presumed point where evacuation would become a physical impossibility in any reasonable time frame. A point of beginning should relate to the presumed consequences of an SSE magnitude earthquake upon evacuation and the necessary related communications and highways. At p. 3. [Emphasis added.]

The Staff's comments were filed on August 4, 1981, and on August 7, 1981, the Board issued its Order (Modifying an Issue Concerning Earthquakes and Emergency Planning). On August 17, 1981, the Applicants filed their Request for Certification to the Nuclear Regulatory Commission. In the cover letter accompanying Applicants' request, Applicants sought expedited consideration of this question by the Licensing Board. The Staff supports expedited consideration of this question by the Licensing Board and strongly supports Applicants' request for certification to the Nuclear Regulatory Commission of the appropriateness of consideration in this proceeding of the issue identified by the Board in its August 7, 1981 Order.

4/ Although consideration of the effect of an SSE in itself imposes a very conservative level of severity, the Staff did not object to offering evidence to this extent. The Board Order, however, clearly goes beyond.

DISCUSSION

A. Standards for Certification

The standards to be applied in determining whether an interlocutory appeal will be considered have been stated to be where the ruling either (1) threatened the party adversely affected by it with immediate and serious irreparable impact which, as a practical matter, could not be alleviated by later appeal, (2) affected the basic structure of the proceeding in a pervasive or unusual manner or (3) presents a significant legal or policy question on which Commission guidance is needed. Public Service Company of Indiana (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-405, 5 NRC 1190 (1977), U.S. Nuclear Regulatory Commission Statement of Policy on Conduct of Licensing Proceedings, dated May 20, 1981, at p. 7; see also Houston Lighting & POwer Company (Allens Creek Nuclear Generating Station, Unit No. 1), ALAB-635, 13 NRC 309 (1981). The instant request for certification meets all three tests.

Applicants assert that the Board's sua sponte issue will require the development of a new emergency plan and the presentation of testimony on that plan. Memorandum of Points and Authorities in Support of Request for Certification to the Nuclear Regulatory Commission (Memo. in Support), at p. 4. Applicant also asserts, and the Staff agrees, that this new requirement will lead to additional delays to the conclusion of this proceeding which could cause them irreparable harm. With respect to the second criterion, the proposed issue will pervasively affect the basic structure of this proceeding by requiring a restructuring of the hearing schedule and a burdensome expansion of the scope of required evidence. (Memo. in Support, p. 4). While the Staff believes that the meeting of the first

and second criteria establish that certification is appropriate in this case, it is the third criterion which the Staff believes establishes a compelling reason for certification.

The action taken by the Licensing Board has implications with respect to the regulatory program which the Commission should consider. Simply put, the Licensing Board's Order of August 7, 1981, in its two and one-half typewritten pages, extends this Commission's emergency planning regulations to require explicit consideration in this proceeding of the Applicants' emergency planning capability complicated by an earthquake in excess of the Safe Shutdown Earthquake (SSE). However, this expansion of the scope of emergency preparedness issues which must be considered will, if adopted by other boards affect all Part 50 license applications since it calls for explicit consideration of the effects of emergency planning of very severe natural phenomena, in fact, of a severity beyond that considered in establishing the fundamental safety integrity of the facility.

B. Standards for Raising Issues Sua Sponte

With respect to the Licensing Board's exercise of its sua sponte power under 10 C.F.R. § 2.760a, the Staff would note that the Commission has limited the use of that authority by regulation to "... serious safety, environmental, or common defense and security matter[s]...." 10 C.F.R. § 2.760a. Although under 10 C.F.R. 2.760(a) a Board is required to find that a serious safety, environmental, or common defense and security matter exists in order to consider a new issue sua sponte, the Licensing Board has made no such finding here. Indeed, quite to the contrary, as the exerpts from the Board Orders of April 17 and July 29, 1981, supra at pp. 5-7, indicate, the Board is of quite the contrary view, namely, that

the potential for a serious earthquake in excess of the SSE is "relatively improbable." Neither the July 29, 1981 Order nor the August 7, 1981 Order lays a foundation for the exercise of the Board's sua sponte authority. Certification of this question to the Commission would provide the Licensing Board with an opportunity to fully outline its thinking on this point to assist the Commission in making a determination as to whether sua sponte authority was properly exercised in this case.

C. Applicants' Arguments for Certification

Applicants' arguments may be categorized as raising two significant issues which meet the second or third Marble Hill, supra, standards for certification (unusual or pervasive effect on the basis structure of the proceeding or presents a significant legal or policy question on which Commission guidance is needed).

First, reading 10 C.F.R. Part 50 § 50.47 in pari materia with 10 C.F.R. Part 100 Appendix A Applicants argue that the Board is legally barred from considering earthquakes more severe than the SSE identified for the site absent a finding pursuant to 10 C F.R. § 2.758 of special circumstances or at least a serious safety issue pursuant to 10 C.F.R. § 2.760a. (Memo In Opposition, pp. 38, 34, see also pp. 26, 30 and 40).

Second, Applicants take issue with the Board's application of the Vermont Yankee[5/] doctrine in this proceeding arguing that while boards may be permitted to investigate matters not specifically governed by regulations, they are not permitted to undertake investigations neither

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5/ Vermont Yankee Nuclear Power Corporation (Vermont Nuclear Power Station), CLI-74-40, 8 AEC 809 (1974).

required nor authorized by governing regulations because such inquiry constitutes either a challenge to the sufficiency of the Commission's regulations or an impermissible usurption of the Commission's rulemaking authority. (Memo In Opposition p. 39).

Applicants' first argument that the Commission's regulations bar boards from considering earthquakes more severe than the SSE is derived from an analysis of the history of emergency planning requirements. (Memo In Opposition pp. 4-24). Applicant also argues by analogy that since the finding required by 10 C.F.R. § 100.10(c)(1) is no less stringent than that required by 10 C.F.R. § 50.47(a)(1) it must be logically concluded that earthquakes no more severe than the SSE are to be considered pursuant to the emergency planning rules. (Memo p. 25). Although the Staff does not agree with Applicants' assertion that the rules prohibit consideration of earthquakes, the Staff agrees that both the Commission's prior practice and the logic of its regulatory scheme demonstrate that consideration of earthquake events more severe than the SSE is inappropriate. To abandon prior practice in this proceeding would unusually affect the basic structure of the proceeding and would present an issue on which Commission guidance should be sought.

The implications of the Licensing Board action in this matter are extensive. The same criteria are applied to all Part 50 licensees with respect to the General Design Criteria as well as for earthquake considerations. The earthquake criteria are set forth in 10 C.F.R. Part 100, Appendix A and are generically applied recognizing the seismic activity of the region in which a facility is located. The criteria are uniform

and their application should produce site-specific SSE's with approximately equivalent degrees of conservatism inherent in them. An SSE selected for a facility in California will be somewhat larger than an SSE selected for a facility in a less seismically active region. Consequently, there are no distinguishing circumstances which would prevent the application of the Board's approach to all Part 50 facilities. Indeed, if the Board's approach is valid, the Nuclear Regulatory Commission would in fact be compelled to require that the same type of examination sought by the Licensing Board in this proceeding be conducted for each facility licensed pursuant to Part 50. In effect then, the Licensing Board's action has dramatically increased the sweep of the Commission's emergency planning regulations and extended those regulations to require in each licensing proceeding explicit consideration of emergency planning complicated by an earthquake in excess of the SSE with its attendant radiological impacts as well as other severe natural occurrences which are not reasonably postulated to occur during the facility's operating lifetime. In fact one could, based on this Licensing Board's action further extend consideration to other events exceeding design basis criteria. While the Commission may view such an extension to be proper, such an expansion of the Commission's emergency planning regulations should be a question for the Commission to decide.

With respect to Applicants' second argument, the Staff has previously addressed the Vermont Yankee case in "NRC Staff Views ..." filed June 22, 1981. As we indicated in that pleading, while Vermont Yankee does not, as a matter of law, foreclose inquiry into earthquakes larger than an SSE, such inquiry must be based on a reasonable factual basis for asserting that consideration of such events is warranted. We disagree with the

Licensing Board's application of the Vermont Yankee doctrine to the facts in this proceeding in order to justify the issue posed by the Board. The mere fact that the SONGS facility is located in a region known for earthquake activity does not justify consideration of hypothetical earthquakes more severe than those which can be reasonably identified and/or expected to occur during the facility's operating life.

In Vermont Yankee the Commission concluded that if appropriate findings are made, consideration of criteria beyond that set forth in the rules may be acceptable. Whether such consideration is appropriate is a question to be determined based on the particular circumstances of the case involved. The Commission specifically held that such a determination must be appropriate in the circumstances of a specific case and must have a factual basis. On this point the Commission said in Vermont Yankee:

> Thus, we specifically hold that the phrase "degraded emergency core cooling functioning" as used in criterion 50, means emergency core cooling functioning degraded beyond the requirements of the acceptance criteria, though not to the point of ECCS failure. Reliance upon this concept in a licensing case must come of course, accompanied by a showing that the parties position has a factual basis. (Emphasis supplied). p. 8-12.

However, no analogy with Vermont Yankee can be made in this proceeding. The Licensing Board has not identified a regulatory requirement much less a General Design Criterion which would warrant extension of emergency planning considerations to earthquakes in excess of the SSE. The record before this Licensing Board is totally devoid of any factual basis for such an extension. In fact, the Board has recognized on a number of occasions the speculative nature of its inquiry. In its April 17, 1981 Memorandum and Order, the Board noted " ... even in a seismically active area, one can say that the chances of a major earthquake's occurring in

the forty-year life of a nuclear plant and disrupting key elements of its emergency plan is 'relatively improbable'". At p. 5. In its July 29, 1981 Order, the Board noted "although it is extremely unlikely, an earthquake in excess of the SSE could conceivably occur near the facility." (Emphasis supplied). At pp. 2-3. Presumably this last comment was made by the Board with appreciation of the extensive factual record which has been developed before it on the very question of the conservatism inherent in the SSE. The hearing before the Board had been in session for about twenty days solely on the geology-seismology contentions admitted yet neither its July 29, 1981 Order nor the August 7, 1981 Order contains any suggestion that the conservatism which both Applicants and NRC Staff argue is present in the SSE selected for SONGS 2 & 3 was questioned by the Board to the extent of rising to the level of a "... serious safety, environmental, or common defense and security matter...." 10 C.F.R. § 2.760a. Indeed, neither order even suggests that such a matter is raised.

The Licensing Board has not established the required factual basis to extend consideration of severe earthquakes in the context of emergency planning. Such basis must be stated by a Licensing Board if the parties are to have the due notice of the substance of the concern to which they are entitled to enable them to meaningfully address the matter in the context of the evidentiary hearing. Pacific Gas and Electric Company (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-504, 8 NRC 406 (1978) at 411.

Although not agreeing with Applicants' conclusion that the Board's sua sponte issue is a violation of the Administrative Procedure Act since it constitutes reulmaking without notice and comment, the NRC Staff does believe that the Board's action is not consistent with the Commission's intent in Vermont Yankee and thus, if not withdrawn, raises a significant legal and policy question on which Commission guidance is required.

CONCLUSION

The Staff supports Applicants' request for certification to the Commission of the issue framed by the Licensing Board in its August 7, 1981 Order. A major question of both law and policy is involved and the criteria of the Commission's Statement on Policy on Conduct of Licensing Proceedings is met. Furthermore, certification of the question would provide the Commission with additional information to assist in determining whether or not the Licensing Board properly exercised its sua sponte powers in taking this issue up on its own motion.

Respectfully submitted,

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Dated at Bethesda, Maryland
this 31st day of August 1981

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CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF'S RESPONSE TO APPLICANTS' REQUEST FOR CERTIFICATION TO THE NUCLEAR REGULATORY COMMISSION" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class or as indicated by an asterisk by deposit in the Nuclear Regulatory Commission internal mail system, this 31st day of August, 1981:

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