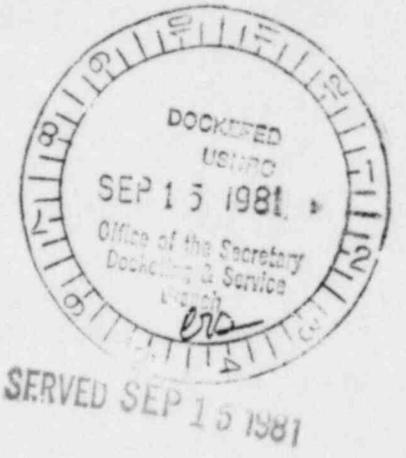




UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

BEFORE ADMINISTRATIVE JUDGES  
James L. Kelley, Chairman  
Elizabeth B. Johnson  
Cadet H. Hand



In the Matter of  
  
SOUTHERN CALIFORNIA EDISON COMPANY,  
ET AL.  
  
(San Onofre Nuclear Generating  
Station, Units 2 and 3)

Docket Nos. 50-351-0L  
50-362-0L

September 14, 1981

ORDER  
(Modifying Prior Orders Concerning Earthquakes  
and Emergency Planning and Referring Such Orders  
to the Atomic Safety and Licensing Appeal Board)

Introduction

On July 29 and August 7, 1981, the Board issued orders on its own motion raising certain issues concerning the possible effects on emergency plans of an earthquake of a magnitude greater than the Safe Shutdown Earthquake determined for the San Onofre facility. We hypothesized the occurrence of such an earthquake with resulting structural damage to the facility, to communications and highways designated as evacuation routes, and with resulting radiological releases at a level sufficient to trigger evacuation of the plume exposure pathway EPZ. In these assumed circumstances, we asked -

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... what steps could be taken by the applicants and responding jurisdictions to carry out evacuation in a timely manner and/or protect those in the EPZ pending evacuation? What federal resources, including military resources, could be brought in to assist in this situation, and how would federal assistance be accomplished?

While the quoted language is an accurate general statement of our concerns as they were first developed during the seismic part of these hearings, we believe it would be helpful to particularize further the questions we want the parties to address and the degree of proof we expect on some questions, in light of the record as now developed in the emergency planning part of these hearings.

#### Board Questions

The situation we have hypothesized reflects our concern that substantial numbers of people might be trapped by the damaged highways in the populated areas of the EPZ<sup>1/</sup> and unable to evacuate until after some of them received injurious or lethal doses of radiation. In order to explore this possibility, the Board wishes the parties to address the following questions:

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<sup>1/</sup> As initially formulated, our questions assumed "a need to evacuate virtually all of the people in the plume exposure pathway EPZ." In view of the tendency of radioactive releases to travel in plumes and the fact that virtually all of the people in the EPZ live near the coast to the north and west of the facility (except for Camp Pendleton) the parties should focus their attention on what the Applicants have termed the North Sector of the "extended EPZ." See Wilbur Smith and Associates Evacuation Time Study, Revision 2, Figure 7a. Because of the special training and equipment available to residents of Camp Pendleton, it appears that they would be much less vulnerable to radiological injury than civilians in the North Sector.

1. Evacuation time. Approximately how long might earthquake damage to highways and structures (e.g., bridges, overpasses) delay evacuation, assuming that evacuation is precluded by such damage for some period? This question does require some expert assessment of the kind and extent of highway damage to be anticipated.<sup>2/</sup> But we do not expect, for example, structure-by-structure detailed engineering analyses, or ground motion studies related to particular faults; rough estimates from qualified experts will suffice. In addition, this question will require some rough estimate of speed of repairing or construction of alternate route capabilities available from Caltrans, Camp Pendleton, and perhaps other sources. Might completion of evacuation be delayed by as long as 48 hours from the time the need for it was determined?

2. Shelter from radiation. The plans generally prescribe taking shelter to avoid exposure to a radioactive plume or to radioactive particulate debris after the plume passes. The Board assumes that an earthquake of a magnitude sufficient to cause a radioactive release at the

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<sup>2/</sup> In our Order of August 7, we made it clear that we were not exclusively interested in situations where evacuation was entirely precluded by damage to highways. We stated that we did not know what magnitude earthquake would be required to render the highways temporarily impassable. Since then, however, the Applicants have virtually conceded that damage to highways from an earthquake at or below the SSE could take away the evacuation option. Tr. 8346. And we have heard testimony from a Caltrans official concerning the 1971 San Fernando earthquake and its devastating effect on the highways in that area. Tr. 8413-8415. That earthquake was a magnitude  $M_s=6.3$ , well below the level proposed by the Staff and Applicants in this case as the SSE for the San Onofre facility. Accordingly, our interest is now focused primarily, if not exclusively, on the case where highway damage does temporarily preclude evacuation.

facility and highway damage severe enough to temporarily preclude evacuation would also cause serious damage to many residences and other structures. Again, without undertaking structure-by-structure engineering analyses, the parties should attempt to provide expert gross estimates of the extent of structural damage to be anticipated. Would such damage (a) not affect, (b) seriously impair, or (c) totally destroy the usefulness of many or most structures in the EPZ as a shelter from radiation?

3. Radiation dose estimates. Assuming that the evidence will show some substantial delay in evacuation and degraded capability to take shelter, the Board asks the parties to provide an envelope of radiation dose estimates that will result, both in terms of magnitude and numbers of persons effected. Assumed radiation releases should be those postulated in the PWR-2 accident in the Reactor Safety Study, WASH-1400 (NUREG-75/014) and referred to in the affidavit of Brian K. Grimes dated August 4, 1981. In addition, the Board asks the parties for their gross estimates of the acute and chronic radiation effects, including fatalities, that may occur as a result of such exposures. The Board is aware of the controversies surrounding some aspects of the health effects of radiation. It would be both unnecessary and inappropriate for this proceeding to attempt to explore in any depth these essentially generic issues. We ask for gross estimates of health effects only because they are necessary for us to arrive at a reasoned (albeit very approximate) assessment of the risks to people posed by the postulated accident. Assuming that the parties may present differing gross estimates of health effects in prepared direct testimony, such a range may be adequate for our limited purposes.

Accordingly, we intend to impose very strict limits on cross-examination, if any, to be allowed on this issue.

4. Methods of evacuation. Given the possible radiation injuries that may result from long delayed evacuation by motor vehicle, are effective alternatives available? For example, would it be possible for the able-bodied population to walk safely out of the EPZ (less than five miles for most of those involved) after the plume passes, even though the ground may be contaminated? Presumably, those who are unable to walk could be ferried out by helicopter or other special vehicles. What are the capabilities of nearby federal military forces in assisting in a timely evacuation?<sup>3/</sup>

#### Other Issues Concerning the Order

In light of the fact that we are today referring this issue to the Atomic Safety and Licensing Appeal Board for its review, it will be helpful if we state our position on three points that are raised in memoranda from the Applicants and the Staff in opposition to the issue and in support of referral.

So-Called "Multiple Disasters." A "multiple disaster" in this context is a phrase coined by the Applicants to describe the coincident

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<sup>3/</sup> Col. Jack Wallace, representing the U.S. Marine Corps at Camp Pendleton, testified about plans to evacuate the Camp Pendleton sector of the EPZ. Tr. 9315, et seq. He expressed confidence that the Marines, with their overland vehicles, could also evacuate the rest of the EPZ, if necessary. However, the present emergency plans do not address such a contingency in any detail. Apparently, no in depth consideration has been given to this approach, apart from the general readiness of military forces to render aid in an emergency.

happening of two events that are very unlikely even when separately considered -- e.g., a major earthquake near a nuclear power plant and a major radiological emergency arising at the same time, but from independent (non-earthquake) causes. In a prehearing order rejecting this concept, we made it crystal clear that such an exceedingly remote contingency "can be safely disregarded for any regulatory purpose."<sup>4/</sup> Our only concern here is with the more credible event of an earthquake exceeding the SSE which causes a major radiological emergency and also delays evacuation.

We find it necessary to refer once more to this matter only because much of the Applicants' Memorandum in Opposition to the Board's issue, while acknowledging our rejection of the concept, is nevertheless cast as an attack on "multiple disaster" planning. See Memorandum at pp. 4, 10-15, 19, 27-28. This may be explained in part by the Applicants' argument (Memorandum at p. 27) that because consideration of an earthquake in excess of the SSE is allegedly beyond our authority, the Board is "forced to assume that an earthquake and the release would be coincident events" (emphasis added) -- i.e., a "multiple disaster." We are not "forced to assume" anything of the sort. Although the question is not free from doubt, we think that the issue we have raised and now refer is within our authority. But if we are wrong and are later reversed, we will simply drop the issue. Nothing will "force" us to explore our concerns in the wholly unrealistic framework of the Applicant's "multiple disaster" scenario.

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<sup>4/</sup> Memorandum and Order of April 17, 1981, pp. 3-7. A copy of the relevant portion of this order is attached.

Factual Basis for the Board's Issue. Both the Applicant and the Staff question the sufficiency of the factual basis for the Board's issue. Without reference to the seismic record developed in this case, the Applicants find a "total absence of facts suggesting the existence of a serious ... safety issue." Memorandum, pp. 35-36. The Staff does refer to the seismic record, but contends that it is "totally devoid of any factual basis" for the Board's issue. Memorandum, pp 11-12.

These contentions raise a question about how far a Board must go in the way of analyzing evidence and making detailed findings as a predicate to raising an issue on its own motion. In our Order of July 29, we gave our reasons for raising this issue and concluded with a finding that the issue is a serious safety matter within the meaning of 10 CFR 2.760a. We think that this complies with the Commission's recent directive to the Board on this subject<sup>5/</sup> and that no more is required by 10 CFR 2.760a.

We referred to the Commission's Vermont Yankee<sup>6/</sup> decision for the general proposition that successively more conservative accident assumptions may be postulated for different regulatory purposes. The Staff seeks support in that case for a different proposition -- that a Licensing Board must establish some unspecified level of factual basis (assertedly

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<sup>5/</sup> Memorandum from the Secretary of the Commission to the Chairman of the Licensing Board Panel dated June 30, 1981, concerning sua sponte issues.

<sup>6/</sup> Vermont Yankee Nuclear Power Corp., 8 AEC 809 (1974).

absent here), before it can "extend consideration of severe earthquakes in the context of emergency planning." In the first place, Vermont Yankee did not involve or speak to the basis a Board must have to raise an issue. Secondly, the case does not support the Staff even inferentially because, as we read it, it deals only with the findings that are a necessary prerequisite to imposition of a regulatory requirement, not to the factual basis, if any, that must precede consideration of whether such a requirement should be imposed.

There are other reasons for holding that very specific or detailed findings are not a prerequisite under 10 CFR 2.760a to Board consideration of the question we have posed. Issues raised on a Board's own motion are necessarily raised at a preliminary stage, hopefully prior to hearing and at least well before initial decision. To force a Board to premature detailed findings on what may be contested issues in order to raise a related issue suggests some serious prejudgment problems, problems we have been at pains to avoid in this case. Beyond that, the whole concept of prior findings -- beyond the generalized safety finding required by 10 CFR 2.760a -- is fundamentally inconsistent with the purpose of sua sponte Board issues, namely, to find out whether a possible problem affecting the public health and safety requires remedial action.

The foregoing reasons explain why we have not, to date, explicitly predicated our Orders of July 29 and August 7 on analysis and findings based upon the evidentiary record in this case. In fact, however, these orders are supported by evidence adduced during the seismic portion of the hearings conducted between June 22 and August 4, 1981. The Intervenor Carstens, et al. put on a substantial case. The general thrust of their

position was that the Safe Shutdown Earthquake previously determined and now proposed by the Applicants and the Staff is not sufficiently conservative -- i.e., than an earthquake of greater magnitude or one producing more destructive shaking at the site could occur. As illustrative of this evidence, we refer to the testimony of Dr. James Brune (following Tr. 4122), Dr. J. Enrique Luco (Tr. 4976-5036), and Dr. Clarence Allen (Tr. 4725-4733).

Both the Applicants and the Staff also put on substantial cases on these issues and we will be deciding them later in the fall. Our reference to the Intervenors' evidence here should not be read to imply any judgment on these issues at this point. We refer to this evidence to show that we did consider it in raising the issue in question and to refute suggestions that we were acting in a vacuum. We add only that, considered with reference to the issue we have raised, we think this evidence is "sufficient to require reasonable minds to inquire further." Consumers Power Co. (Midland Plant), 7 AEC 19, 32, note 27 (1974), aff'd sub nom. Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, 435 U.S. 519, 554 (1978).

Site Specific Accident Analyses. The Staff argues that --

an adequate planning basis is assured by conformance with the Commission's regulations and site specific analyses are not required for the extremely large releases already generically considered in establishing the regulations.

We agree with this argument as it applies to one provision of the emergency planning regulations -- establishing a plume exposure pathway EPZ of "about 10 miles," subject to minor adjustments for local conditions. § 10 CFR 50.47(c)(2). In this case, we rejected as an impermissible attack

on the rule a proposed contention that postulated a need for an EPZ of about twice that size. Tr. 3497-3499.

But many aspects of emergency plans, particularly evacuation routes, are by their very nature site specific. We doubt whether the Commission could prescribe, by rule, a generic emergency plan suitable for all reactor sites, as the Staff's argument seems to suggest. In any event, the Commission did not try to do that, either in 10 CFR 50.47(b) or in Appendix E to Part 50. Except for the specific 10 mile EPZ, the rule speaks in general terms, such as "adequate" emergency facilities, equipment, methods, systems. § 50.47(8), (9). A Board can only judge "adequacy" with reference to levels of risk, some aspects of which vary from site to site. In addition, Licensing Boards are required to make an overall general finding of "reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency." § 50.47(a). Such a finding goes beyond a check-list determination whether a plan meets the standards of 10 CFR 50.47(b). And when, as here, a particular facility is built in a seismically active area, we read the rule as requiring us to consider the possible effects on emergency plans of a very large earthquake.

The Applicants' and the Staff have advanced some other legal arguments against the Board's order which we have considered and with which we disagree. Separate discussion of all these arguments is unnecessary to an understanding of our position and would unduly prolong this order.

Referral of the Board's Rulings

The Applicants have requested us to refer<sup>7/</sup> our orders of July 29 and August 7 to the Commission. The Staff supports that request. We are granting that request, subject to the qualifications noted below.

First, both the Applicants and the Staff mischaracterize the issue, as the Board views it. The Applicants' characterization states that we are acting "without factual basis" and requiring consideration of "multiple disasters." Request for Certification, p. 2. As discussed above, neither of these claims has any merit. The Staff's proposed formulation of the issue also seems to contemplate a "multiple disaster" scenario, because it speaks of a "severe natural phenomena" occurring "during" a radiological emergency, implying a lack a causal relationship between the phenomenon and the emergency. Staff Response to Applicants' Request, p. 1.

The issue we are referring for review is the issue as we have stated it in our Orders of July 29 and August 7, as further specified in this Order. The basic legal question is whether, in the site-specific circumstances of this case, we are within our authority in postulating an earthquake exceeding the SSE for the San Onofre facility in order to test the

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<sup>7/</sup> Both parties use the term "certify" rather than "refer." The rules appear to contemplate "certification" under 10 CFR 2.718(i) where a board does not first decide the disputed question, and "referral" under 10 CFR 2.730(f) where the board first rules and then requests interlocutory review. Since we have ruled in this case, we are in a referral posture. Except for the fact that the rules and cases speak in these different terms, the distinction appears to be unimportant.

adequacy of the Applicants' emergency plans.<sup>8/</sup> The arguments of the parties address this basic question and related issues in detail.

Rulings may be referred where necessary "to prevent detriment to the public interest or unusual delay or expense." 10 CFR 2.730(f). See Public Service Co. of Indiana (Marble Hill), 5 NRC 1190, 1192 (1977), and cases cited. In addition, the Commission has recently encouraged referrals "if a significant legal or policy question is presented." Statement of Policy on Conduct of Licensing Proceedings, 46 Fed Reg. 28533, 28535.

A hearing on the referred issue need not cause delay, unusual or otherwise, in deciding this case. The Applicants have filed a motion for a fuel loading and low-power license. Such a license would be predicated on a partial initial decision on the seismic issues and a showing of comparative lower risks, for emergency planning purposes, from low-power operations. This means that given the present posture of the case and assuming the Applicants prevail, they could receive a low-power license toward the end of November. On that schedule, they probably would not be ready for full power operations before February, 1982, and perhaps later. In the meantime, we expect to finish the emergency planning hearings, minus the referred issue, in early October, and to be ready to decide those

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<sup>8/</sup> Arguably our basic question about the adequacy of the Applicants' emergency plans might have been raised in a different way, namely by postulating an earthquake of a magnitude slightly below the SSE which causes a major facility accident and highway damage precluding rapid evacuation. Although there is no issue in this case about the actual integrity of the facility, a Board might hypothesize such a failure for the sole purpose of testing emergency planning capabilities. Although we have not chosen to frame the issue in this way, either approach presumably would raise the planning issues that concern us.

issues in January. This means that if the Appeal Board can decide the legal challenges to the Board's referred ruling by about the end of October, this issue can be heard in a week or so and factored into our decision on all remaining issues without any additional delay.<sup>9/</sup>

Nor do we see unusual expense resulting to the Applicants from going to hearing on the Board's issue. They contend that the issue will require them to develop a new emergency plan. But it is premature to speculate about what the Board may require, if anything, in the way of additional planning; all we are seeking at this point is information on the dimensions of the risk.

We believe that the Board's issue may have significant ramifications for some other cases. That and the fact that it interprets a newly-adopted, broad regulatory scheme for emergency planning suggests the advisability of early appellate review. We have considerable doubt, however, whether our issue has the sweeping ramifications envisioned by the Staff. Staff Response, pp. 9-10. Since seismic standards are set at some level for all reactors, even in areas not regarded as seismically active, the Staff argues that there are "no distinguishing characteristics which would prevent the application of the Board's approach to all Part 50 facilities." We think this is an unrealistic appraisal of the situation. The San Onofre facility has been constructed in a seismically active area;

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<sup>9/</sup> We sought the views of the parties on whether we should go ahead and hear this issue while the referral was pending, or await the result of the referral. No party took any firm position on the question. Tr. 9387-9392. Given the possibility of reversal and the present demands on our time, the Board intends to await the result of the referral, at least if it will be forthcoming by the end of October.

earthquakes are a serious safety concern. In areas of very low seismicity (much of the United States) presumably no comparable concerns would arise.

The Staff also suggests that regulatory consideration of earthquakes can be equated with other natural phenomena, such as "blizzards, fog, tornados or hurricanes." With the possible exception of fog, it appears that these phenomena could temporarily close an evacuation route. But we question whether they could, at the same time, cause a serious radiological accident at a nuclear power plant. Large earthquakes appear to be unique in their sudden destructive force and therefore to require special regulatory consideration.

In conclusion, both the Applicants and the Staff seek referral from us direct to the Commission, by-passing the Appeal Board. At least prior to the Commission's recent Statement of Policy on Conduct of Licensing Proceedings, it has always been the practice to refer and certify issues from Licensing Boards to the Appeal Board, not to the Commission.<sup>10/</sup> In the Policy Statement, however, the Commission did speak of referring or certifying to the Appeal Board "or the Commission."

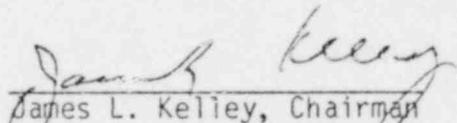
We are uncertain whether this statement represents a deliberate departure from prior practice and, if so, what standards we should follow in deciding where to refer a ruling. Moreover, we are reluctant to by-pass our immediate reviewing body in the absence of a strong reason for doing so. Accordingly, we are denying this aspect of the Applicants' request and

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<sup>10/</sup> Although the rules, 10 CFR 2.718 and 730 refer to the "Commission," the Commission's functions under those rules are delegated to the Appeal Board by 10 CFR 2.785(b)(1).

referring our ruling to the Appeal Board. However, since this is an issue raised on the Board's own motion, we are instructed, serving a copy of this Order on the General Counsel and the Commissioners. The Commission can, of course, take up this matter at any time on its own motion.<sup>11/</sup>

FOR THE ATOMIC SAFETY AND  
LICENSING BOARD

  
James L. Kelley, Chairman  
ADMINISTRATIVE JUDGE

Dated at Bethesda, Maryland  
this 14th day of August 1981.

Attachments:

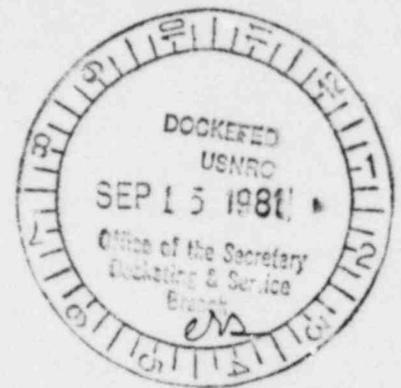
1. List of Documents
2. Portion of Licensing Board Order dtd 4/17/81

cc: Chairman Palladino  
Commissioner Gilinsky  
Commissioner Bradford  
Commissioner Ahearne  
Commissioner Roberts  
Leonard Bickwit, Jr., GC

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<sup>11/</sup> Strictly speaking, there is no "record" underlying these rulings. Attached hereto, however, is a list of documents in this case which bear directly on the questions presented and which may be helpful to the Appeal Board.

Lists of Documents Relating  
to the Licensing Board's  
Referred Issue



<u>Title</u>	<u>Date</u>
Board's Memorandum and Order (Ruling on Motion for Protective Order)	April 17, 1981
Applicants' Memorandum of Law Opposing any Exercise of ASLB Authority ...	June 22, 1981
NRC Staff Views ... in the Area of Emergency Planning	June 22, 1981
Intervenor GUARD's Comments Concerning Emergency Planning	June 23, 1981
Intervenor Carstens' Comments Concerning Emergency Planning	June 22, 1981
Board Order (Raising on the Board's Motion an Issue Concerning Earthquakes and Emergency Planning)	July 29, 1981
NRC Staff Comments on Board's Order of July 29, 1981	August 4, 1981
Board's Order (Modifying an Issue Concerning Earthquakes and Emergency Planning)	August 7, 1981
Applicants' Request for Certification to the Commission and Accompanying Memoranda in Support	August 17, 1981
NRC Staff's Response to Applicants' Request for Certification	August 11, 1981

PORTION OF BOARD'S  
MEMORANDUM AND ORDER OF  
APRIL 17, 1981

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that approach when a case can be allowed to proceed in a leisurely fashion, it is certainly outweighed by the resultant delay where, as here, construction is almost complete and efforts are being made to conclude discovery so that the case can go to hearing.

To alleviate this delay problem, objecting parties are directed from now on to notify the Board Chairman's office by telephone if they intend to file an answer to a motion to compel. If no such message is timely received, the Board will proceed to rule on motions to compel as soon as practicable following their receipt. Beyond that, the Board is considering other measures it might adopt to expedite the remaining discovery in this proceeding, including the elimination of answers to motions to compel. Such measures will be discussed at the upcoming prehearing conference.

In the present circumstances, however, the Board has considered the Applicants' motion for protective order and reconsidered each of the pertinent rulings in our April 8 Order. For the reasons that follow, the Board declines to change its April 8 rulings, except in the few minor respects noted below.

Earthquakes and Emergency Planning. The Order of April 8 expressed the Board's tentative conclusion that the effects of earthquakes should be factored into emergency plans under 10 CFR 50.47 and Appendix E. We accordingly directed the Applicants to answer FOE's interrogatories about earthquake effects.

The Applicants' motion is largely devoted to presentation of their position that they have:

"...no legal obligation under applicable NRC regulations to fashion plans to consider or mitigate the consequences of a major earthquake on the capability of Applicants and offsite assistance agencies to respond to a radiological emergency at SONGS 2 and 3." Motion, p. 5

We stated in the April 8 Order and we repeat here, for emphasis, that our present rulings on legal issues "are for purposes of discovery only, and are without prejudice to their subsequent reconsideration." At the upcoming prehearing conference we intend to call for briefs from the parties on several legal questions, including this one, that need to be addressed and decided before the hearing. In these circumstances, therefore, we will not speak to each of the points advanced in the Applicants' lengthy legal argument. Suffice it to say that they have not yet changed the Board's tentative view that possible earthquake effects are at least relevant to emergency planning, and may require that additional precautions be taken. It may be helpful, however, to discuss briefly two considerations that are influencing the Board's present thinking on this difficult legal question.

First, throughout their argument, the Applicants cast the earthquake-emergency planning issue in terms of whether they must engage in "multiple disaster" planning. As they acknowledge, neither that phrase nor any analogous term is used in NRC regulations. Motion, p. 2, note 1. The Applicants' definition of a "multiple disaster", as we understand it, can be roughly paraphrased as the simultaneous occurrence of a major earthquake (or other rarely

occurring disaster<sup>2/</sup>) and a radiological emergency at the reactor arising from other causes. They characterize a "multiple disaster," so defined, as "relatively improbable." Id. 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 would occur at or about the same time--the Applicants' "multiple disaster"--seems virtually inconceivable. Such a remote contingency can be safely disregarded for any regulatory purpose.<sup>3/</sup>

The Board's present concerns about earthquake effects arise not from "multiple disaster" scenarios, but from the possibility that a major earthquake might cause a radiological emergency at the site

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<sup>2/</sup> We confine this discussion to earthquakes for the sake of simplicity and because earthquakes appear to have the greatest potential for major damage to a reactor.

<sup>3/</sup> Conceivably, there are other natural disasters whose rate of frequency may be such that to postulate their happening concurrently with a radiological emergency would not be so far-fetched.

and also extensive damage to offsite transportation, communications and the like. One might respond that such concerns suggest an impermissible attack on the rules because they postulate an earthquake exceeding the "Safe Shutdown Earthquake" the facilities have been designed to (and, by hypothesis, will) withstand. In this connection, the Applicants express their opposition "to use of any 'earthquake' which exceeds the 'Safe Shutdown Earthquake' established for SONGS 2 and 3 for any regulatory purpose related to this proceeding." Motion, p. 3, note 2.

Which brings us to the second matter we wish the parties to consider. It is true as a general proposition that the Commission's rules are not subject to attack in adjudicatory proceedings. 10 CFR 2.758. Once an Applicant shows, for example, that its facility has been designed to withstand the applicable Safe Shutdown Earthquake, an effort to postulate a more severe earthquake for design purposes would be foreclosed as an impermissible attack on the rules. But it does not necessarily follow that the accident assumptions contained in or underlying one safety rule are also applicable to other safety rules. As the former Atomic Energy Commission stated in Vermont Yankee Nuclear Power Corp., 8 AEC 809, 812 (1971):

"Thus, the accident postulated in the ECCS criteria need not necessarily be regarded as the accident to be postulated for containment design purposes. Rather, as shown in our discussion of defense-in-depth...the use of successively increasing conservatism in postulated accidents contributes an added measure of protection to the public health and safety."

Were the Vermont Yankee principle to be found applicable in the present case, the earthquake hazards found to exist for SONGS design

purposes might not necessarily be the maximum hazards to be postulated for emergency planning purposes. Whether that principle should apply here might depend on the various factors, such as the different purposes to be served by the two rules, and comparative costs involved in design changes and emergency plans.

In addition to their legal argument, the Applicants now contend that FOE's earthquake interrogatories are not within its emergency planning contention admitted for discovery purposes. The thrust of that contention is toward coordination of emergency plans, earthquakes are not mentioned.

The Board agrees that FOE's emergency planning contention does not encompass its earthquake questions. Neither, for that matter, do the GUARD contentions. However, the Board has the authority to inquire into a matter on its own motion when it concludes that a serious safety issue is presented. 10 CFR 2.760a. See also Consolidated Edison Co. of New York (Indian Point, Unit 3), 8 AEC 7, 9 (1974). The Board has not yet reached such a conclusion in this instance. We believe, however, that a serious question may be presented and that the answers to the FOE earthquake interrogatories will assist us in determining whether to pursue these concerns further.

There does not appear to be any question of undue burden on the Applicants in requiring answers to FOE's earthquake questions. From what has been said on the subject, we gather that a simple "no" will answer most of these questions. Accordingly, Applicants are directed to answer FOE interrogatories 1-22 and 77(b). Upon reconsideration, it appears that the NRC Staff is in a better position to respond to