

May 9, 1986



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

In the Matter of )  
)  
PACIFIC GAS AND ELECTRIC ) Docket Nos. 50-275 OLA  
COMPANY ) 50-323 OLA  
)  
(Diablo Canyon Nuclear Power Plant )  
Units 1 and 2) )

RESPONSE OF THE NRC STAFF TO THE AMENDED  
PETITIONS FOR LEAVE TO INTERVENE FILED BY  
SAN LUIS OBISPO MOTHERS FOR PEACE, CONSUMERS ORGANIZED  
FOR DEFENSE OF ENVIRONMENTAL SAFETY AND THE SIERRA CLUB

I. INTRODUCTION

On January 13, 1986, the Nuclear Regulatory Commission published in the Federal Register (51 Fed. Reg. 1451) a notice entitled "Consideration of Issuance of Amendments to Facility Operating Licenses DPR-80 and DPR-82 for Diablo Canyon Nuclear Power Plant, Units 1 and 2, Respectively, and Proposed No Significant Hazards Consideration Determination and Opportunity for Hearing". This related to the request by Pacific Gas and Electric Company (Licensee) for amendments to Facility Operating License Nos. DPR-80 and DPR-82 which would authorize the Licensee to increase the Diablo Canyon Nuclear Power Plant, Unit 1 and Unit 2, spent fuel storage capacity from 270 to 1324 storage locations for each unit. In response to this notice the San Luis Obispo Mothers for Peace ("Mothers for Peace"), Consumers Organized for Defense of Environmental Safety (CODES) and the Sierra Club, Santa Lucia Chapter (Sierra Club) filed timely petitions for leave to intervene.

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By Order of March 28, 1986, the Licensing Board in this proceeding scheduled a prehearing conference for May 13, 1986 and set April 29, as the deadline for receipt of supplements to the intervention petitions. Each of the petitioners timely filed supplements to their intervention petitions. The Staff response to each of these supplements is set forth below.

## II. NRC STAFF RESPONSE

### A. Satisfaction of the "Interest Requirements"

#### 1. Mothers for Peace

In its response to the original petition to intervene, filed on behalf of the Mothers for Peace, the Staff noted that the petitioner had not shown its standing to intervene because it had neither demonstrated injury to itself from the proposed license amendments nor sufficiently identified at least one member who has standing and has authorized Mothers for Peace to represent his or her interests. <sup>1/</sup> The supplemental information filed on March 17, 1986, identifying the address of a member, Nancy Culver, within close proximity to Diablo Canyon and her authorization of the Mothers for Peace to represent her interest in the proceeding rectifies these deficiencies. Accordingly, the Staff submits that the Mothers for Peace has adequately demonstrated its standing through the interest of at least one member.

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<sup>1/</sup> Response of the NRC Staff to the Petitions for Leave to Intervene Filed by San Luis Obispo Mothers for Peace, February 27, 1986, at 6-7.

2. CODES

In its response to the original petition to intervene filed on behalf of CODES, the Staff noted that the petitioner had not shown its standing to intervene because it had neither demonstrated injury to itself from the proposed license amendments nor sufficiently identified at least one member who has standing and has authorized CODES to represent his or her interests. <sup>2/</sup> The supplemental information filed on April 26, 1986, identifying the address of a member, Laurie McDermott, within close proximity to Diablo Canyon and her authorization of CODES to represent her interest in the proceeding, rectifies these deficiencies. Accordingly, the Staff submits that CODES has adequately demonstrated its standing through the interest of at least one member.

3. Sierra Club

In its response to the original petition to intervene filed on behalf of the Sierra Club, the Staff noted that the petitioner had not shown its standing to intervene because it had neither demonstrated injury to itself from the proposed license amendments nor sufficiently identified at least one member who has standing and has authorized the Sierra Club to represent his or her interests. <sup>3/</sup> The supplemental information filed on March 12 and April 8, 1986 identifying the address of a member, June A. vonRuden, within close proximity to Diablo Canyon and her authorization of the Sierra Club to represent her interest in the proceeding

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<sup>2/</sup> Response of the NRC Staff to the Petitions for Leave to Intervene Filed by Consumers Organized for Defense of Environmental Safety and the Sierra Club, March 3, 1986, at 6-7.

<sup>3/</sup> Id. at 8.

rectifies these deficiencies. Accordingly, the Staff submits that the Sierra Club has adequately demonstrated its standing through the interest of at least one member.

B. Legal Standard Governing Admissibility of Contentions

Only those contentions which fall within the scope of issues set forth in the Federal Register notice of opportunity for hearing and comply with the requirements of 10 C.F.R. § 2.714(b) and applicable Commission case law may be admitted for litigation in NRC licensing proceedings. See, e.g., Commonwealth Edison Co. (Zion Station, Units 1 and 2), ALAB-616, 12 NRC 419, 426 (1980); Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), ALAB-245, 8 AEC 873, 875 (1974); Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20 (1974); Commonwealth Edison Co. (Byron Station, Units 1 and 2), LBP-80-30, 12 NRC 683, 689 (1980). See also Portland General Electric Co. (Trojan Nuclear Plant), ALAB-534, 9 NRC 287, 289 n.6 (1979).

Pursuant to 10 C.F.R. § 2.714(b), a petitioner is required to file "a list of contentions which petitioner seeks to have litigated in the matter, and the bases for each contention set forth with reasonable specificity." A petitioner who fails to file at least one contention which satisfies the requirements of § 2.714(b) will not be permitted to participate as a party. A proffered contention must be rejected where:

- (1) it constitutes an attack on applicable statutory requirements;
- (2) it challenges the basic structure of the Commission's regulatory process or is an attack on the regulations;
- (3) it is nothing more than a generalization regarding the Petitioner's view of what applicable policies ought to be;

- (4) it seeks to raise an issue which is not proper for adjudication in the proceeding or does not apply to the facility in question; or
- (5) it seeks to raise an issue which is not concrete or litigable.

Peach Bottom, supra, 8 AEC at 20-21. The purpose of the basis requirement of 10 C.F.R. § 2.714(b) is: (a) to assure that the matter sought to be put into question does not suffer from any of the infirmities listed above; (b) to establish sufficient foundation to warrant further inquiry into the subject matter; and (c) to put the other parties sufficiently on notice "so that they will know at least generally what they will have to defend against or oppose." Id. at 20.

At the early stages of a proceeding, petitioners need to identify only the reasons "(i.e., the basis)" for each contention. Houston Lighting and Power Co. (Allens Creek Nuclear Generating Station, Unit 1), ALAB-590, 11 NRC 542, 548 (1980). The basis stated for each contention need not "detail the evidence which will be offered in support of each contention." Mississippi Power & Light Co. (Grand Gulf Nuclear Station, Units 1 and 2), ALAB-130, 6 AEC 423, 426 (1973). Accordingly, in examining contentions and the bases therefor to determine admissibility, a licensing board may not reach the merits of contentions. Id.; Peach Bottom, supra, 8 AEC at 20. Nevertheless, the basis for contentions must be sufficiently detailed and specific: (a) to demonstrate that the issues raised are admissible and further inquiry into the matter is warranted; and (b) to put the parties on notice as to what they will have to defend against or oppose. This is particularly important where, as here, a hearing is not mandatory, in order to assure that an asserted contention raises an issue which clearly is open to adjudication. Cincinnati Gas

Electric Co. (William H. Zimmer Nuclear Power Station), ALAB-305, 3 NRC 8, 12 (1976); Gulf States Utilities Co. (River Bend Station, Units 1 and 2), ALAB-183, 7 AEC 222, 226 (1974).

In addition, a board is not authorized "to admit conditionally for any reason, a contention that falls short of meeting the specificity requirements." Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 466 (1982), modified on other grounds, CLI-83-19, 17 NRC 1040 (1983). The NRC's Rules of Practice do not permit "the filing of a vague, unparticularized contention, followed by an endeavor to flesh it out through discovery against the application or staff." Id., at 468.

Finally, a licensing board has no duty to recast contentions offered by a petitioner to remedy the infirmities of the type described in Peach Bottom, supra, in order to make inadmissible contentions meet the requirements of 10 C.F.R. § 2.714. Commonwealth Edison Co. (Zion Station, Units 1 and 2), ALAB-226, 8 AEC 381, 406 (1974). Should a board nevertheless elect to rewrite a petitioner's inadmissible contentions so as to eliminate the infirmities which render the contentions inadmissible, the scope of the reworded contentions may be made no broader than the bases that were previously provided by the petitioner for the inadmissible contentions. Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2), ALAB-675, 15 NRC 1105, 1114-16 (1982).

1. Contentions Proposed by Mothers for Peace

Contention 1 - The Applicant has not adequately considered alternatives to the proposed reracking of the spent fuel pools. In particular, because of the increased danger posed by the close proximity of the Hosgr fault, alternatives should be considered. Some alternatives include:

- a. The contracting out of trans-shipment of spent fuel for storage at a government owned spent fuel facility;
- b. Derating the facility or reducing the plant output and thereby reducing the generation of spent fuel.
- c. Closing or shutting down the facilities.

Staff Response

In this contention, Mothers for Peace asserts that alternatives have not been adequately considered to the proposed reracking scheme. Mothers for Peace specifies three alternatives that should be considered based on their assertion of the "increased danger posed by the close proximity of the Rosgri fault".

The Staff does not oppose the admission of this contention provided the contention is limited to the basis and particulars, alternatives a. through and including c. As limited, the Staff believes the contention raises an issue within the scope of the proceeding, is adequately specific, and is supported by minimally sufficient basis.

Contention 2 - The Applicant failed to evaluate the overall cost (in terms of both health effects and potential associated medical costs) associated with the additional exposures of the plant personnel to increased radioactivity levels due to the increased spent fuel storage.

Staff Response

In this contention Mothers for Peace asserts a failure to consider in the environmental analysis, the health effects and potential associated medical costs associated with the additional exposures of plant personnel due to increased radioactivity resulting from the increased storage capacity.

The Staff does not oppose the admission of this contention provided it is limited to consideration of the health effects and potential

associated medical costs due to the increased storage capacity of the reracked fuel pools under normal operating conditions.

As limited, the Staff believes the contention raises an issue within the scope of the proceeding, is adequately specific, and is supported by a minimally sufficient basis.

Contention 3 - No analysis has been made of the overall costs (in terms of both health effects and potential associated medical costs associated with the additional exposures of persons off the Diablo Canyon site to increased radioactivity levels due to the increased spent fuel storage.

Staff Response

In this contention Mothers for Peace asserts a failure to consider in the environmental analysis the health effects and associated medical costs to persons off-site resulting from the increased storage capacity due to the reracking proposal.

The Staff does not oppose the admission of this contention provided it is limited to consideration of such health and medical costs due to the increased storage capacity of the reracked fuel pools under normal operating conditions.

As limited, the Staff believes this contention raises an issue within the scope of the proceeding, is adequately specific, and is supported by a minimally sufficient basis.

Contention 4 - The expansion of the spent fuel storage capacity will have a significant effect on the quality of the human environment and therefore requires the preparation of an Environmental Impact Statement.

Staff Response

The Mothers for Peace has not stated any basis for this contention. Accordingly, it fails to meet the basis and specificity requirements of 10 C.F.R. § 2.714 and should, therefore, be rejected.



Contention 5 - Applicant's proposal does not ensure that spent fuel pool conditions will be maintained within regulatory or design limits in the event of a Class 9 accident or other extreme accident in the main reactor. The Applicant has not shown that in such cases the electrical systems, cooling systems and plant personnel will function sufficiently well to ensure continued safe operation of the spent fuel pools.

Staff Response

In this contention Mothers for Peace asserts that that the Applicant's proposal does not ensure that spent fuel conditions will be maintained in the event of a Class 9 accident and that the Applicant has not shown that the electrical systems, cooling systems and plant personnel will function sufficiently well to ensure continued safe operation of the fuel pool in the event of such Class 9 accident.

This contention must be rejected for failure to identify the requisite basis. There is no identification of the Class 9 accident Mothers for Peace is asserting will occur nor has there been any identification of how such accident is likely to occur. Absent such basis the parties could not be given sufficient notice "so that they will know at least generally what they will have to defend against or oppose." Peach Bottom, supra, at 20.

Moreover, in the Commissioner's "Policy Statement on Severe Reactor Accidents Regarding Future Designs and Existing Plants (50 Fed. Reg. 32138, August 8, 1985), the Commission stated at 32,144:

Operating nuclear power plants require no further regulatory action to deal with severe accident issues unless significant new safety information arises to question whether there is adequate assurance of no undue risk to public health and safety.

The Mothers for Peace has not asserted any "significant new safety information" that would affect Diablo Canyon facility let along the spent fuel pool reracking which is the subject of this proceeding.

The Commission further stated at 32,144-45:

Individual licensing proceedings are not appropriate forums for a broad examination of the Commission's regulatory policies relating to evaluation, control and mitigation of accidents more severe than the design basis (Class 9). The Commission has announced a policy regarding Class 9 environmental reviews and hearings in its Statement of Interim Policy on "Nuclear Power Plant Accident Considerations Under the National Environmental Policy Act of 1969" (45 FR 40101, June 13, 1980), and expects to continue this policy. The environmental issues deal essentially with the estimation and description of the risk of severe accidents. The Commission believes that considerations which go beyond that to the possible need for safety measures to control or mitigate severe accidents in addition to those required for conformance with the Commission's safety regulations or conformance with the Clarification of TMI Action Plan Requirements, should not be addressed in case-related safety hearings.

For these reasons, Contention 5 should be rejected.

Contention 6 - The application for reracking is premature in that no need for the immediate expansion has been shown. Applicant will have no need for the increased storage capacity for the next 4 years.

Staff Response

This contention must be rejected for failure to specify the requisite basis. The premise of the contention is that not only must there be a need for the proposed reracking but that such need must be an immediate need. However, Mothers for Peace cites no authority for this proposition. The Appeal Board has indicated that the incremental impact of a proposed action, not need, is the principal issue in amendment proceedings. The Appeal Board has stated with respect to amendment proceedings that under the National Environmental Policy Act (NEPA) " . . .

all that need be undertaken is consideration of whether the amendment itself would bring about significant environmental consequences beyond those previously assessed and, if so, whether those consequences (to the extent unavoidable) would be sufficient on balance to require a denial of the amendment application." See Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), ALAB-455, 7 NRC 41, 46 n.4 (1978), and see Portland General Electric Co. (Trojan Nuclear Plant), ALAB-531, 9 NRC 263, 266 n.6 (1979).

The Appeal Board added that the inquiry concerning incremental impacts is the principal issue even if ". . . by happenstance, the particular amendment is necessary in order to enable continued reactor operation (although such a factor might be considered in balancing the environmental impact flowing from the amendment against the benefits to be derived from it)". Id. Accordingly, Contention 6 must be rejected.

Contention 7 - The NRC has ordered PG&E to conduct a long-term seismic program and submit the results of the study to the Commission by 1988. In view of the fact that the study is still in the early planning stages, any seismic analyses done on the spent fuel pools as well as on the racks are inadequate. It also makes consideration of reracking premature, and woefully inadequate.

#### Staff Response

The essence of Mothers for Peace Contention 7 is that the reracking proposal is "premature" and "inadequate" in light of the ordered long-term seismic evaluation of the site to be completed by 1988. The premise of this contention is that the seismic design of the Diablo Canyon Facility is inadequate. This is not the case. The seismic design of the Diablo Canyon facility was found adequate by the Appeal Board, Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-644, 13 NRC 903, 966 (1981); the Commission declined to

review ALAB-644 rendering the Appeal Board's decision final on March 18, 1982 (letter from S. J. Chilk of the NRC to the parties, dated March 18, 1982). Further the Commission has stated that the information being evaluated in connection with the long-term seismic reevaluation program does not have an immediate effect on the current operation of the facility. See Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-84-5, 19 NRC 953, 961-2 (1984); see also Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-84-12, 20 NRC, 249, 251 n.3 (1984); and see CLI-84-13, 20 NRC 267, 276 (1984). The seismic design basis of the Diablo Canyon facility is, therefore appropriate for the proposed reracking. Accordingly, Contention 7 is without any basis and, therefore, should be rejected.

Contention 8 - The Applicant has not adequately considered or analyzed the long term health, safety and environmental effects of the proposed re-racking with respect to such periods of time over which the spent fuel pool is likely to be used beyond the expiration of Applicant's operating license.

#### Staff Response

This contention raises an issue for litigation (the health and safety impacts of storage of spent fuel beyond plant operation) that has been addressed by the Commission in its Waste Confidence Rulemaking in which the Commission concluded:

1. The Commission finds reasonable assurance that safe disposal of high-level radioactive waste and spent fuel in a mined geologic repository is technically feasible.
2. The Commission finds reasonable assurance that one or more mined geologic repositories for commercial high-level radioactive waste and spent fuel will be available by the years 2007-09, and that sufficient repository capacity will be available within 30 years beyond expiration of any reactor operating license to dispose of existing commercial high-level radioactive waste and spent fuel

originating in such reactor and generated up to that time.

3. The Commission finds reasonable assurance that high-level radioactive waste and spent fuel will be managed in a safe manner until sufficient repository capacity is available to assure the safe disposal of all high-level radioactive waste and spent fuel.

4. The Commission finds reasonable assurance that, if necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 30 years beyond the expiration of that reactor's operating license at that reactor's spent fuel storage basin, or at either onsite or offsite independent spent fuel storage installations.

5. The Commission finds reasonable assurance that safe independent onsite or offsite spent fuel storage will be made available if such storage capacity is needed. [emphasis added]

Rulemaking on the Storage and Disposal of Nuclear Waste (Waste Confidence Rulemaking), CLI-84-15, 20 NRC 288, 293 (1984). Since Contention 8 seeks to raise an issue (impacts of long term storage of spent fuel) which the Commission has addressed in a rulemaking proceeding (concluding such storage to be safe and without significant environmental impact) it is not proper for adjudication in the instant proceeding. See Peach Bottom, supra, at 20-21. Accordingly, Contention 8 should be rejected.

Contention 9 - The Applicant has not shown that people could safely be evacuated in the event of a simultaneous earthquake and accident at Diablo Canyon's spent fuel pools. Current evacuation times are inadequate to preserve the health and safety given the increased quantity of radiation that would occur with a spent fuel pool storage expansion.

#### Staff Response

In this contention Mothers for Peace raises the issue of complicating effects of earthquakes in the context of adequacy of emergency planning. Mothers for Peace attempts to fit this issue within the scope of the instant proceeding by asserting that the evacuation time would not be

adequate "given the increased quantity of radiation that would occur with a spent fuel pool storage expansion."

The Commission has ruled that the NRC regulations "do not require consideration of the impacts on emergency planning of earthquakes which cause or occur during an accidental radiological release." Diablo Canyon, CLI-84-12, supra, at 250 (quoting Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), CLI-81-33, 14 NRC 1091, at 1091). This Commission decision was affirmed by the Court of Appeals. San Luis Obispo Mothers for Peace v. NRC, 751 F.2d 1287 (D.C. Cir. 1984), vacated in part and rehearing en banc granted, 760 F.2d 1320, affirmed en banc. No. 84-1410, slip op. at 5 (D.C. Cir. April 25, 1986).

In light of the fact that the Commission has previously rejected the issue of complicating effects of earthquakes on planned emergency responses and has determined that the Commission's regulations do not require such considerations, Contention 9 must be rejected.

Contention 10 - The Applicant has not analyzed nor considered the consequences of an accidental impact from an aborted, misfired, misguided or exploded missile launched from the Vandenberg missile range. Vandenberg is a major launch facility for the U.S. Air Force, and soon will become a prime launching facility for NASA. Accidental explosions have been occurring with increased frequency.

#### Staff Response

This contention fails to meet the basis and specificity requirements of 10 C.F.R. § 2.714 and must, therefore, be rejected. As phrased the contention has no relationship to the expansion of the spent fuel pools, the only issue before this Board. Rather, this contention

appears to relate to the initial siting of the facility which is a matter long since resolved and not before this Board.

Contention 11 - In light of increased terrorist activities, the Applicant has not adequately analyzed nor considered the consequences of sabotage of the spent fuel facilities. The possibility of increased harm due to sabotage of the spent fuel pools will necessitate increased security measures over and above current forces.

Staff Response

There is insufficient basis to meet the requirement of 10 C.F.R. § 2.714 since there is no basis stated for the proposition that the present security plan is inadequate. It should be noted that the issue of the adequacy of PG&E's security measures was previously litigated and resolved. See Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-653, 14 NRC 629, 630 (1981).

2. Contentions Proposed by CODES

Contention 1 - Adequate consideration has not been given to alternatives to reracking the spent fuel ponds at Diablo Canyon. Under the Nuclear Waste Policy Act of 1982, Public Law 97-425, January 7, 1983, the Federal Government has the responsibility to provide interim storage of spent nuclear fuel for civilian nuclear power reactors that cannot reasonably provide adequate storage capacity at the sites of such reactors when needed to assure the continued, orderly operation of such reactors (emph. added). PG&E and its wholly owned subsidiary, Pacific Energy Trust (P.E.T.) have a contract with the Department of Energy for storage of high level radioactive waste at this time.

Staff Response

The basis stated for this broad assertion is a reference to the Nuclear Waste Policy Act of 1982 stating that under this Act "the Federal Government has the responsibility to provide interim storage of spent fuel for civilian nuclear power reactors that cannot reasonably provide adequate storage capacity at the sites of such reactors when needed to

assure the continued, orderly operation of such reactors" [emphasis supplied by CODES].

This basis does not support CODES' assertion. The language of the Waste Policy Act cited by CODES in fact makes it clear that the Federal Government's interim storage option is only triggered where the reactor "cannot reasonably provide adequate storage capacity." The Nuclear Waste Policy Act of 1982, in § 111(a)(5), explicitly makes utilities primarily responsible for interim storage of spent nuclear fuel until a Federal repository is available. The Act provides for limited Federal interim storage for utilities, but only if requested by the utility and only if a determination is made that the utility is unable to provide its own storage through the use of spent fuel storage alternatives such as expansion of existing storage facilities by reracking. 10 C.F.R. § 53.13(c)(1). Part 53 makes clear that before such a determination can be made, a utility must demonstrate to NRC that it has "diligently" pursued the spent fuel storage alternatives including expansion of an existing fuel pool by the use of high-density fuel storage racks the action proposed here by PG&E. See 10 C.F.R. §§ 53.13(c)(1) and 53.27(a). In short, the asserted basis does not support the contention. Accordingly, this contention should be rejected.

Contention 2 - It is unreasonable and premature to consider the spent fuel pool's seismic design, as modified by the proposal; adequate when the long term seismic program (a licensing condition) is to be completed in 1988, 2 years from now.

Staff Response

See Staff's response to Mothers for Peace Contention 7, supra.

Contention 3 - By ordering the long term seismic program study, the Commission has indicated that there are



unanswered questions and possible seismic hazards that must be investigated.

Staff Response

This contention must be rejected for the reasons stated above regarding Contention 2.

Contention 4 - No site in California is being considered for a permanent waste repository for high-level radioactive waste partly because of the seismic conditions. It is unreasonable to extend the storage capacity of spent fuel pools for the same reasons.

Staff Response

The basis, above, that no site in California is being considered for a permanent waste repository for high-level radioactive waste does not support CODES assertion that "[i]t is unreasonable to extend the storage capacity" at the Diablo Canyon Facility. As noted above in response to Contention 2, the Commission has approved the seismic design basis for the Diablo Canyon Facility. Further, CODES has failed to explain how, if at all, any decision regarding the selection of permanent high-level waste repositories bears any relationship to the Commission's decision on the proposed reracking of the spent fuel pool at the Diablo Canyon Facility. Accordingly, this contention must be rejected.

Contention 5 - The additional spent fuel rods in the reracked spent fuel pools would increase radioactive contamination in an accident involving the fuel pools.

Staff Response

There is no basis stated for this contention and it is so broad that it seeks to raise an issue that is not concrete or litigable. See Peach Bottom, supra, 8 AEC at 20-21. Without knowing what kind of accident, the basis for such accident, and basis for increased radioactivity the parties would not be given sufficient notice "so that they will know

at least generally what they will have to defend against or oppose." Id. at 20. Accordingly, this contention does not satisfy the basis and specificity requirements of 10 C.F.R. § 2.714 and must, therefore, be rejected.

Contention 6 - Human error and its possible consequences in the operation of the reracked spent fuel pools have not been adequately considered.

Staff Response

There is no basis stated for this contention. Further, it is so broadly stated that it does not present a litigable issue. See Peach Bottom, supra, 8 AEC at 20-21. Absent the requisite basis and specificity regarding "[h]uman error and its possible consequences" the parties would not be given sufficient notice "so that they will know at least generally what they will have to defend against or oppose." Id. at 20. Accordingly, this contention does not satisfy the basis and specificity requirements of 10 C.F.R. § 2.714 and must, therefore, be rejected.

Contention 7 - Inadequate and/or faulty procedures combined with operator and technician errors has not been adequately considered.

Staff Response

There is no basis asserted for this contention and absent the requisite specificity regarding "inadequate and/or faulty procedures" and "operator and technician errors." The parties would not have sufficient notice to litigate this contention. See Peach Bottom, supra, at 20. Accordingly, this contention does not satisfy the basis and specificity requirements of 10 C.F.R. § 2.714 and must, therefore, be rejected.

Contention 8 - The adequacy of procedures, technical specifications, administrative controls and their implementation and training has not been considered adequately.

Staff Response

There is no basis asserted for this contention and absent the requisite specificity regarding "procedures, technical specifications, administrative controls and their implementation and training" the parties would not have sufficient notice to litigate this contention. See Peach Bottom, supra, at 20. Accordingly, this contention does not satisfy the basis and specificity requirements of 10 C.F.R. § 2.714 and must, therefore, be rejected.

Contention 9 - The possibility of faulty reasoning and inappropriate deviation from procedures during an emergency or accident has not been adequately considered.

Staff Response

There is no basis asserted for this contention and absent the requisite specificity regarding "faulty reasoning and inappropriate deviation from procedures" the parties would not have sufficient notice to litigate this contention. See Peach Bottom, supra, at 20. Accordingly, this contention does not satisfy the basis and specificity requirements of 10 C.F.R. § 2.714 and must, therefore, be rejected.

Contention 10 - The consequences of poor communications between site personnel and NRC personnel contributing to the severity of an emergency or accident involving the reracked spent fuel pools has not been given adequate consideration.

Staff Response

There is no basis asserted for this contention and absent the requisite specificity regarding "consequences of poor communications between site personnel and NRC personnel" and "emergency or accident

involving the reracked spent fuel pools". The parties would not have sufficient notice to litigate this contention. See Peach Bottom, supra, at 20. Accordingly, this contention does not satisfy the basis and specificity requirements of 10 C.F.R. § 2.714 and must, therefore, be rejected.

Contention 11 - Adequate consideration of the loss of spent fuel cooling has not been considered for the reracked fuel pools.

Staff Response

This contention must be rejected since there is no basis stated to support it. There is no indication of the cause of the loss of fuel pool coolant. Further, the contention is so broadly stated that the parties would not have sufficient notice to "know at least generally what they will have to defend against or oppose." See Peach Bottom, supra, at 20. Accordingly, this contention does not satisfy the basis and specificity requirements of 10 C.F.R. § 2.714 and must, therefore, be rejected.

Contention 12 - The lack of resolution and action on critical issues being investigated by the Office of Investigation (OI) and Office of Inspection and Audit (OIA), issues which are directly related to the Significant Hazard Issue of the fuel pools reracking application have not been given any consideration.

Staff Response

Contention 12 must be rejected since it lacks the requisite 10 C.F.R. § 2.714 basis and is so vague that the parties would not be put on notice "so that they will know at least generally what they will have to defend against or oppose." See Peach Bottom, supra, at 20. These deficiencies are not cured by the assertion (even if true) that certain issues being investigated by OIA or OI "are directly related to the Significant Hazards Issue." The issue before the Licensing Board is

whether there is reasonable assurance of adequate protection of the public health and safety by operation of the facilities with the expanded storage capacity of the spent fuel pool, not whether or not there are significant hazards considerations. The latter issue is irrelevant in this proceeding since its only purpose is to determine the timing of the hearing (before or after the issuance of the amendment). See, Standards for Determining Whether License Amendments Involve No Significant Hazards Considerations, 48 Fed. Reg. 14,864, 14,865 (April 6, 1983); Notice and State Consultation, 48 Fed. Reg. 14,873, 14,876 (April 6, 1983). As the Commission stated in the "Final Procedures and Standards of No Significant Hazards Considerations" (51 Fed. Reg. 7744, 7746 (March 6, 1986),

[i]n short, the no "significant hazards consideration" standard is a procedural standard which governs whether an opportunity for a prior hearing must be provided before action is taken by the Commission . . .

Furthermore, CODES has failed to show any relationship between those matters which may be under consideration by OI and OIA and the spent fuel pool amendment being requested by PG&E.

Contention 13- The views of the population surrounding Diablo Canyon Nuclear Power Plant concerning the storage of high level radioactive waste have not been considered. This is inconsistent with and repugnant to the Nuclear Waste Policy Act of 1982.

#### Staff Response

There is absolutely no explanation how this assertion relates in any way to the proposed action. Accordingly, since CODES has failed to demonstrate how this contention falls within the scope of the proceeding, it must be rejected. See Zion, ALAB-616, supra, at 426.

Contention 14 - The uncertainties as to how long high level radioactive waste would be stored at the proposed Diablo Canyon facility, neutron embrittlement and other metallurgical deterioration and environmental stresses to

the structural integrity of the spent fuel ponds have not been adequately analyzed and determined.

Staff Response

In this contention, CODES asserts that the effects of neutron embrittlement and other metallurgical deterioration and environmental stresses to the "structural integrity of the spent fuel ponds" have not been adequately analyzed. As a basis for the contention, CODES cites the length of time of storage of the radioactive waste in the fuel pool.

The Staff does not oppose the admission of Contention 14 provided the length of storage period considered by the scope of this contention is not longer than the storage period authorized by the amendments (the Diablo Canyon Unit 2 operating license will expire December 9, 2010) and the contention is limited to the basis offered. This includes the assumption that CODES' concern with "structural integrity of the spent fuel ponds" is with the pool liner and racks. As limited, the contention raises an issue within the scope of the proceeding, is adequately specific and is supported by a minimally sufficient basis.

Contention 15 - The Applicant has not demonstrated the existence nor implementation of a detailed quality assurance program which would effectively detect and prevent defective work by contractors and vendors involved with the proposed spent fuel pool reracking.

Staff Response

The petitioner's basis is not correct. The Applicant has addressed the subject of its quality assurance program in Section 10 of its Report entitled "Reracking of Spent Fuel Pools, Diablo Canyon, Units 1 and 2, Pacific Gas and Electric Co.", dated September 19, 1985. In view of the foregoing, this contention must be rejected since it lacks the requisite basis and specificity.

Contention 16 - The contentions submitted above do meet the three standards (Fed. Reg. Vol. 51, No. 44, Thurs., March 6, 1986, Rules and Regulations, p. 7754) for a Significant Hazards Determination on the spent fuel pool reracking at Diablo Canyon Nuclear Power Plant.

Staff Response

This statement is not a contention but rather an assertion by CCDES that the contentions above do not meet the three Commission standards concerning significant hazards findings set forth in the Federal Register Notice (51 Fed. Reg. 7744, at 7754). The Staff has not addressed the question of significant hazards considerations in response to any of the contentions above because the legal standard for admissibility of contentions is based on the scope of the proceeding and the basis and specificity requirements of 10 C.F.R. § 2.714(b), discussed in IIB above. Further, as noted in response to Contention 12, above, the issue before the Licensing Board in this proceeding is whether there is reasonable assurance of adequate protection of the public health and safety by operation of the facilities with the expanded spent fuel pool storage capacity, not whether or not there are significant hazards considerations. The latter issue is irrelevant in this proceeding since its only purpose is to determine the timing of the hearing vis a vis the issuance of the amendment.

3. Contentions Proposed by the Sierra Club

Contention I(A) - It is the contention of the Sierra Club, San Lucia Chapter, (Sierra Club) that the report submitted to the Nuclear Regulatory Commission (NRC) entitled Reracking of Spent Fuel Pools Diablo Canyon Units 1 and 2 and other communications between Pacific Gas and Electric Company (PG&E) and the NRC which are available to the public on the same subject (the Reports) fail to contain certain relevant data necessary for independent verification of the claims made in the Reports regarding consistency of the proposed reracking

with the protection of the public health and safety, and the environment.

In particular, the Reports fail to contain data regarding:

- (1) the mass of a spent fuel assembly and masses of the loaded spent fuel racks (racks);
- (2) the spring constants used for the nonlinear springs (gap elements) to model the behavior of the racks (see e.g., p. 6-10ff of the Report);
- (3) the expected velocity and displacement of the spent fuel pools (pools) as a function of time in three dimensions during the postulated Hosgri earthquake (PHE);
- (4) the expected maximum velocity and displacement of the racks obtained from the computer modelling of rack behavior during the PHE;
- (5) the kinetic coefficients of friction appropriate for estimating the frictional forces between the pool floor liner and the racks when sliding of the racks occurs; and
- (6) the dimensions and configuration of rack "H".

Additional data may be needed to verify claims made in the Reports.

#### Staff Response

In this contention, the Sierra Club asserts that absent the information from PG&E set forth in Items (1) through (6), the NRC will not be able to conduct its independent verification of the reracking proposal.

The Staff does not oppose the admission of this contention provided the contention is limited to the bases and particulars offered, Items 1 through and including 6. As limited, the Staff believes the contention raises an issue within the scope of the proceeding, is adequately specific, and is supported by a minimally sufficient basis.

Contention I(B) - It is the contention of the Sierra Club that the Reports fail to include consideration of certain relevant conditions, phenomena and alternatives necessary for independent verification of claims made in the



Reports regarding consistency of the proposed reracking with public health and safety, and the environment, and with federal law.

In particular, the Reports fail to consider:

- (1) collisions between racks and pool walls and collisions of various types involving groups of racks sliding in contact with each other during the PHE;
- (2) the resonant behavior of the spent fuel assemblies in the racks in response to the PHE and the consequences of such behavior;
- (3) the effects of the possible loss of pool cooling capacity on the spent fuel assemblies;
- (4) the statistical nature of potential failure of the large number of spent fuel storage system components during the PHE;
- (5) the consequences of possible failure of welds, materials, or structural elements of spent fuel storage system components during the PHE;
- (6) the comparison of the proposed spent fuel storage system with other such systems at other reactor sites having less severe seismic design criteria;
- (7) alternative on-site storage facilities including:
  - (i) construction of new or additional storage facilities and/or;
  - (ii) acquisition of modular or mobile spent nuclear fuel storage equipment, including spent nuclear fuel storage casks;
- (8) the use of anchors, braces, or other structural members to prevent rack motion and subsequent damage during the PHE;
- (9) the use of "boraflex" neutron absorbing material for all spent fuel racks; and
- (10) the structural integrity of the pool following collisions of the racks with the pool walls as described in (I)(B)(1) above.

Additional information may be needed to verify claims made in the reports.

Staff Response

In this contention, the Sierra Club asserts that absent PG&E consideration in its report of certain conditions, phenomena and alternatives the NRC staff will not be able to adequately conduct its independent verification.

The Staff does not oppose the admission of this contention with respect to Item 1 (collisions between racks and pool walls, and between groups of racks during the postulated Hosgri earthquake), Item 2 (the resonant behavior of the assemblies in the racks in response to the postulated Hosgri earthquake), Item 5 (the consequences of possible failure of welds, materials, or structural elements of the spent fuel storage system components during the postulated Hosgri earthquakes), Item 8 (use of anchors, braces, or other structural members to prevent rack motion and subsequent damage during the postulated Hosgri earthquake), Item 9 (use of boroflex for all spent fuel racks), and Item 10 (the structural integrity of the pool itself following collisions of the racks with the pool walls). As limited, the Staff believes the contention raises issues within the scope of the proceeding, is adequately specific, and is supported by a minimally sufficient basis.

The Staff believes that the Sierra Club has failed to state sufficient basis and specificity with regard to Item 3 (the effects of the possible loss of pool cooling capacity on the assemblies), since it has failed to indicate any basis for such a loss of cooling capacity; Item 4 (statistical nature of potential failure of a large number of spent storage system components during a postulated Hosgri earthquake), since this item is so vague the parties would not be given sufficient notice "so that will know at least generally what they will have to defend against or oppose" (See

Peach Bottom, supra, at 20); and Item 6 (comparison of the proposed spent fuel storage system with other such systems at other reactors having less severe seismic design criteria), since the Sierra Club has not set forth the requisite basis or specificity indicating how such consideration is necessary to the Staff's independent verification.

Finally, with respect to Item 7, the Staff believes that Sierra Club raises a separate environmental issue, i.e., that there has been or will be a failure to consider (in compliance with the National Environmental Policy Act) the on-site storage alternatives of:

- (i) construction of new or additional storage facilities and/or;
- (ii) acquisition of modular or mobile spent nuclear fuel storage equipment, including spent nuclear fuel storage casks.

As characterized above the Staff believes that Contention I(B)(7) raises an issue within the scope of the proceeding, is adequately specific, and is supported by a minimally sufficient basis.

Contention II(A) and (B) - It is the contention of the Sierra Club that the proposed reracking is inconsistent with the protection of the public health and safety, and the environment, for reasons which include the following:

(A) during the PHE, collisions between the racks and the pool walls are expected to occur resulting in:

- (1) impact forces on the racks significantly larger than those estimated in the reports;
- (2) impact forces on the racks significantly larger than those expected to damage the racks;
- (3) significant permanent deformation and other damage to the racks;
- (4) reduction of the spacings between fuel assemblies;

(5) increase in the nuclear criticality coefficient  $k(\text{eff})$  above 0.95;

(6) release of large quantities of heat and radiation;

(7) radioactive contamination of the nuclear power plant and its employee above the levels permitted by federal regulations;

(8) radioactive contamination of the environment in the vicinity of the nuclear power plant above the levels permitted by federal regulations; and

(9) radioactive contamination of humans and other living things in the vicinity of the nuclear power plant above the levels permitted by federal regulations.

(B) during the PHE, collisions between groups of racks with each other and/or with the pool walls are expected to occur with results similar to those described in II(A) above.

#### Staff Response

In this contention the Sierra Club asserts that during the postulated Hosgri earthquake (1) collisions will occur between the racks or groups of racks and pool walls and (2) collisions will occur between groups of racks with each other resulting in:

(a) increase in the nuclear criticality coefficient  $K(\text{eff})$  above 0.95;

(b) release of large quantities of heat and radiation;

(c) radioactive contamination of the nuclear power plant and its employees above the levels permitted by federal regulations;

(d) radioactive contamination of the environment in the vicinity of the nuclear power plant above the levels permitted by federal regulations; and

(e) radioactive contamination of humans and other living things in the vicinity of the nuclear power plant above the levels permitted by federal regulations.

As basis the Sierra Club asserts in Items 1 through 5 at page 3 of their list of contentions that the impact forces on the racks are larger than those estimated by PG&E, that the impact forces on the racks are significantly larger than those expected to damage the racks, that the racks will be deformed and damaged, and that there will be reduction of the spacing between the fuel assemblies.

As characterized the Staff does not oppose the admission of this contention. As characterized, the Staff believes the contention raises issues within the scope of the proceeding, is adequately specific, and is supported by sufficient basis.

Contention III - It is the contention of the Sierra Club that:

(A) no attempt has been made to ascertain the views of the population surrounding the reactors at Diablo Canyon concerning the proposed spent fuel storage facilities and that the proposed reracking is probably inconsistent with these views; and that

(B) as discussed in Sec. II above, the proposed reracking is inconsistent with the protection of the public health and safety, and the environment; and that

(C) existing storage facilities at Diablo Canyon will be effectively used to the maximum extent practical within the next few years; and that

(D) adequate storage capacity at Diablo Canyon cannot reasonably be provided to assure the continued, orderly operation of the reactors.

Staff Response

The Sierra Club has failed to satisfy the basis and specificity requirements of 10 C.F.R. § 2.714 with respect to any of the parts to Contention III. Absent such basis and specificity the parties would not be given sufficient notice "so that they would know at least generally what they will have to defend against or oppose." Further, the Sierra Club has failed to establish how parts A, C and D fall within the scope of

the issues set forth in the Federal Register notice of opportunity for hearing. For these reasons, Contention III must be rejected.

Contention IV - In light of the foregoing, it is the contention of the Sierra Club that:

(A) the Federal Government has the responsibility to provide sufficient capacity for interim storage of spent fuel from Diablo Canyon; and that

(B) the Federal Government is required by law to offer to enter into contracts with PG&E for purposes of providing storage capacity for spent fuel produced at Diablo Canyon.

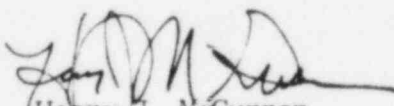
Staff Response

The Sierra Club has failed to satisfy the basis and specificity requirements of 10 C.F.R. § 2.714. The Sierra Club has not adequately specified the basis for its assertion that the Federal Government has the responsibility to provide sufficient storage capacity for spent fuel from Diablo Canyon and how such responsibility (if it does exist) relates to the scope of the instant proceeding. Accordingly, this contention must be rejected. See also Staff response to CODES's Contention 1.

III. CONCLUSION

For the reasons discussed above, the Staff is of the opinion that each of the petitioners has adequately demonstrated their standing to intervene, has proffered at least one admissible contention and should be admitted as a party to this proceeding.

Respectfully submitted,

  
Henry J. McGurren  
Counsel for NRC Staff

Dated at Bethesda, Maryland  
this 9th day of May, 1986

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
)  
PACIFIC GAS AND ELECTRIC ) Docket Nos. 50-275 OLA  
COMPANY ) 50-323 OLA  
)  
(Diablo Canyon Nuclear Power Plant )  
Units 1 and 2) )

CERTIFICATE OF SERVICE

I hereby certify that copies of "RESPONSE OF THE NRC STAFF TO THE AMENDED PETITIONS FOR LEAVE TO INTERVENE FILED BY SAN LUIS OBISPO MOTHERS FOR PEACE, CONSUMERS ORGANIZED FOR DEFENSE OF ENVIRONMENTAL SAFETY AND THE SIERRA CLUB" 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 through deposit in the Nuclear Regulatory Commission's internal mail system, this 9th day of May, 1986:

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