#### UNITED STATES OF AMERICA

DOCKETED NUCLEAR REGULATORY COMMISSION USNRC

#### BEFORE THE ATOMIC SAFETY & LICENSING APPEAL BOARD '84 JII 27 P1:35

In the Matter of PACIFIC GAS AND ELECTRIC COMPANY (Diablo Canyon Nuclear Power Plant, Units 1 and 2)

Docket Nos. 50-274 O.L. 50-323 O.L.

50-275/323-ac

JOINT INTERVENORS' APPLICATION FOR A STAY

Pursuant to 10 C.F.R. § 2.788, the SAN LUIS OBISPO MOTHERS FOR PEACE SCENIC SHORELINE PRESERVATION CONFERENCE, INC., ECOLOGY ACTION CLUB, SANDRA SILVER, GORDON SILVER, ELIZABETH APFELBERG, and JOHN FORSTER ("Joint Intervenors") hereby apply for an order staying the effectiveness of (1) the Atomic Safety and Licensing Board's ("Licensing Board") August 31, 1982 Initial Decision authorizing the issuance of a license for full power operation of Diablo Canyon Nuclear Power Plant ("Diablo Canyon"), and (2) the issuance of such license in the event the Commission authorizes full power operation. The Joint Intervenors request the stay in order to prevent irreparable harm and to preserve the status quo until administrative and judicial review of all issues underlying issuance of the license are complete. This application is filed in anticipation of the Commission's scheduled July 30, 1984 vote on issuance of a full power license for Diablo Canyon, 8407300425 84072 PDR ADDCK 050002

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Unit 1.

#### I. SUMMARY OF THE DECISION TO BE STAYED

The Licensing Board's August 31, 1982 Initial Decision authorized issuance of a full power license for Diablo Canyon. No decision by the Appeal Board has yet been issued on appeal of that decision.

## II. GROUNDS FOR THE STAY 1/

A. <u>The Joint Intervenors' Likelihood of Prevailing on the</u> <u>Merits Is Strong</u>

1. <u>Class Nine Accident Analysis</u>. In the past, the Commission did not require consideration under the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4321 <u>et seq</u>., of the effect on the environment of core melt accidents ("Class 9" accidents). The premise was that occurrence of a Class 9 accident was of such low probability that neither NEPA nor the Atomic Energy Act required its consideration. The accident at Three Mile Island ("TMI") destroyed that premise, and the Commission recognized this fact in its "Statement of Interim Policy" by amending its prior policy to require NEPA consideration of Class 9

 $\frac{1}{}$  The factors prescribed by 10 C.F.R. § 2.788(e) to be considered by the Appeal Board in connection with a request for stay are:

(1) whether the moving party has made a strong showing that it is likely to prevail on the merits;

(2) whether the party will be irreparably harmed unless a stay is granted;

(3) whether the granting of a stay would harm other parties; and

(4) where the public interest lies.

accident sequences.<sup>2/</sup> But despite the Commission's explicit recognition that the prior policy was erroneous, it limited this amendment to prospective application absent "special circumstances," and as a result has repeatedly denied Joint Intervenors' requests for NEPA consideration of a Class 9 accident. The Commission's action is illegal for two reasons. First, NEPA imposes a statutory duty to supplement an Environmental Impact Statement ("EIS") to reflect significant new information or changed circumstances occurring after the filing of the final EIS. $\frac{3}{}$  By the Commission's own admission, the TMI accident constitutes such significant new information, and the Commission cannot legally limit a pre-existing statutory requirement merely by stating that it shall apply only to future EISs. Second, apart from NEPA requirements, the Commission has violated its own policy that consideration of a Class 9 accident is required where special circumstances exist, including -- as at Diablo Canyon -- the proximity of the plant to a man-made or natural hazard.4/ On either basis, therefore, issuance of a license for Diablo Canyon absent consideration of the effects of a Class 9 accident is unlawful.

<sup>2/ &</sup>quot;Nuclear Power Plant Accident Consideration Under the National Environmental Policy Act of 1969," 45 Fed.Reg. 40101 (June 1980).

See, e.g., Warm Springs Dam TAsk Force v. Gribble, 621
F.2d 1017, 1023-24, (9th Cir. 1980) (per curiam); Aluli v. Brown, 437 F.supp. 602, 606 (D.Hawaii 1977), rev'd in part on other grounds, 602 F.2d 876 (9th Cir. 1979).

<sup>&</sup>lt;sup>4</sup>/ In the Matter of Public Service Company of Oklahoma (Black Fox Station, Units 1 and 2), CLI-80-8, at 434-35 (March 21, 1980).

2. Earthquake Emergency Preparedness. The Commission's regulations explicitly provide that "no operating license for a nuclear power reactor will be issued unless a finding is made by the NRC that adequate protective measures can and will be taken in the event of a radiological emergency." 10 C.F.R. § 50.47(a)(1) (emphasis added). Particularly in light of the Commisison's appreciation of the greater seismic risk associated with nuclear plants in California and the continuing importance of seismic safety in this proceeding, the failure to permit consideration of seismic effects on emergency response is a critical deficiency in emergency preparedness at Diablo Canyon. Nevertheless, the Appeal Board concluded that the licensing board was without jurisdiction to consider the issue, citing the Commission's San Onofre decision, issued in December 1981. In so doing, the Board violated the Joint Intervenors' right to a hearing guaranteed by § 189(a) of the Atomic Energy Act, 42 U.S.C. § 2239(a), with respect to a safety issue unique to Diablo Canyon. Because its decision was without independent factual basis, there has been a clear failure by the agency to consider a relevant safety issue, either on a generic basis or within individual licensing proceedings.<sup>5/</sup> Accordingly, issuance of a license is unlawful.

3. <u>Operator Training and Experience</u>. The Commission's regulations regarding reactor operator training explicitly require "extensive actual operating experience" as a prerequisite to

5/ See Natural Resources Defense Council v. Nuclear Regulatory Commission, 685 F.2d 459 (D.C.Cir. 1982), rev'd on other grounds sub nom. Baltimore Gas and Electric Co. v. Natural Resources Defense Council, U.S. , 103 S.Ct. 2246 (1983).

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issuance of such a license based on a test taken on a simulator rather than in an operating plant. 10 C.F.R. § 55.25(b). As the Commission's own General Counsel has conceded, neither the regulations nor their legislative history contemplates the use of simulators as an adequate or acceptable substitute for such "actual operating experience."

Because it is undisputed that the reactor operators at Diablo Canyon have not satisfied this requirement, the Commission cannot find (1) that the "facility will operate in conformity with the application as amended, the provisions of the Act, and the rules and regulations of the Commission," or (2) that the "applicant is technically . . . qualified to engage in the activities authorized by the operating license in accordance with the regulations in this chapter." 10 C.F.R. § 50.57(a). Accordingly, no license for Diablo Canyon may legally be issued by the Commission.

4. <u>FEMA Finding on State Emergency Plan</u>. Section 50.47(a)(1) of 10 C.F.R. Part 50 explicitly requires that no license may be issued prior to a finding of reasonable assurance that the various emergency plans for the facility in question can and will be implemented in the event of a radiological emergency. Section 50.47(a)(2) requires, with regard to offsite plans, that the NRC's finding "shall" be based on findings and determinations by the Federal Emergency Management Agency ("FEMA").

In this case, there is no dispute that such detailed findings have not been made by FEMA regarding the State of California Emergency Response Plan, and the Licensing Board so found in its August 30, 1982 Initial Decision. Although the Licensing Board conditioned licensing of Diablo Canyon on the

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issuance of a finding by FEMA, this Board reversed, and the Commission has not yet ruled on the Joint Intervenors' appeal. Because issuance of a license in the absence of a formal FEMA finding would violate the express terms of the Commission's regulations, no license may be issued until the requisite FEMA findings have been issued and fully reviewed.

5. <u>Seismic Safety</u>. In ALAB-644, this Board approved the seismic design criteria for Diablo Canyon, concluding that they satisfied 10 C.F.R. Part 100, Appendix A, of the Commission's regulations. Since that decision was issued -- and, in particular, within the past six months -- significant new information has arisen out of recent seismic events and geologic studies, which establish that this Board's findings and conclusions in ALAB-644 were erroneous. In particular, the new information undermines the Board's findings regarding ground acceleration, focusing, location and nature of the Hosgri Fault, and seismicity of the region.

The Joint Intervenors have filed a motion to reopen the record to consider this new information, but no decision has yet been issued. Because this new information undermines conclusions essential to the issuance of an operating license for Diablo Canyon, no license may be issued until the Joint Intervenors' motion has been decided, the record reopened, and PGandE has demonstrated that the plant complies with the Commission's seismic design regulations.

6. <u>Quality Assurance</u>. As a precondition to licensing, the Commission's regulations require compliance with certain standards for quality assurance in design and construction of the

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facility. When the facility was licensed for low power operation in 1981, the full record on this issue consisted of a half day hearing at which only the NRC and PGandE witnesses were allowed to present evidence. Since 1981, thousands of errors in the design and construction of the plant have been discovered, and further hearings have been held, but limited only to certain design issues.

Now pending before the Commission are several petitions for review filed by the Joint Intervenors with respect to this Board's (1) denial of reopening on construction quality assurance (ALAB-756); (2) denial of reopening on construction and certain design quality assurance issues (ALAB-775); and (3) approval of PGandE's design quality assurance program (ALAB-763). For the reasons stated in those petitions,  $\frac{6}{}$  copies of which have previously been served on this Board, the Commission, and the parties, the Joint Intervenors submit that this Board has failed adequately to address the issue of quality assurance in this proceeding; that this Board's approval of the quality assurance record is arbitrary and capricious, an abuse of discretion, and not supported by substantial evidence; and, consequently, that there is no reasonable assurance that Diablo Canyon has been

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<sup>6/</sup> The specific challenges to this Board's adjudication of the quality assurance issues include, <u>inter alia</u>, its misapplication of the standard of review, both as to the motions to reopen and the evidence offered at hearing; its failure to state adequately its reasons for rejecting competent evidence; its treatment of the 1977 NSC Pullman audit report and the testimony of the Joint Intervenors' expert testimony on construction quality assurance; its failure to require compliance with 10 C.F.R. Part 50, Appendix A; and, generally, the lack of substantial evidence to conclude that Diablo Canyon has been designed and constructed consistent with 10 C.F.R. Part 50, Appendix B.

designed and constructed consistent with the Commission's regulations. Accordingly, no full power license may be issued for Diablo Canyon.

# B. Joint Intervenors Will Be Irreparably Injured in the Absence of a Stay

If a license is issued for full power operation at Diablo Canyon, Joint Intervneors will be irreparably harmed in several significant respects. First, the Joint Intervneors and the public generally will be endangered by the full power operation of the facility, an activity generally recognized to pose substantial risk, particularly where, as here, the facility is not designed and constructed consistent with the Commission's regulations. As the TMI accident demonstrated, the consequences in the event of a major accident at a facility operating at full power could be catastrophic, both in terms of injury and death to persons and property damage. <u>See</u> Affidavit of Dale Bridenbaugh (attached hereto as Exhibit 1).

Second, the level of radioactive contamination of the facility will be significantly increased, thereby prejudicing the Joint Intervenors' rights on appeal and making future necessary plant modifications less likely, more costly, and more difficult to implement. See Bridenbaugh Affidavit, Exhibit 1.

Third, when an agency has taken an action in violation of NEPA -- such as the failure to supplement in the instant case -- there is a presumption that injunctive relief should be granted against the continuation of that action until the agency complies with the Act. See Realty Income Trust v. Eckerd, 564 F.2d 447,

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456 (D.C.Cir. 1977).<sup>7/</sup> Environmental factors must be fully considered not only before actual harm occurs, but before the agency's plans are so advanced that they acquire "irreversible momentum." <u>Id</u>. at 511; <u>Lathan v. Volpe</u>, 455 F.1d 1111, 1121 (9th Cir. 1971) (It is "especially important" that an EIS be prepared early so that "flexibility in selecting alternative plans" is not lost.)

### C. The Granting of a Stay Will Not Harm Others

The grant of a stay will postpone full power operation only until review has been completed. While some delay is inherent when a stay is granted, the period of several months necessary in this case is <u>de minimis</u> relative to (1) the fifteen year history of this administrative proceeding, necessitated in substantial part by PGandE's own failures in siting, designing, and constructing the facility, and (2) the long and intense participation in this proceeding by the Joint Intervenors for over a decade.

#### D. The Public Interest Favors a Stay

The public interest would be best served by granting a stay in order to ensure that operation of the plant will be safe

The purpose of such relief is two-fold. First, NEPA was intended not only to prevent harm to the environment, but to ensure that agency decision-makers fully explore the consequences of their actions. Consequently, "courts will not hesitate to stop projects that are in the process of affecting the environment when the agency is in illegal <u>ignorance</u> of the consequences, as when it should have prepared an EIS but failed to do so." <u>Id</u>. (emphasis in original). Second, injunctive relief against non-compliance with NEPA preserves the agency's freedom to choose alternative, less environmentally damaging methods of proceeding in the future. State of Alaska v. Andrus, 580 F.2d 465, 485 (D.C.Cir. 1978).

and will comply with all applicable regulations. Deferring safety reviews until <u>after</u> the plant has already been licensed and commenced operation makes a mockery of the regulatory process and undermines public confidence in the agency's willingness to place the public health and safety ahead of the economic interests of those whom the agency is charged to oversee.

#### IV. CONCLUSION

For the reasons stated above, Joint Intervenors hereby request this Appeal Board to stay the effectiveness of the decisions cited herein.

Lated: July 25, 1984

Respectfully submitted,

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By R. REYNOLDS

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#### UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

In the Matter of )
PACIFIC GAS AND ELECTRIC COMPANY )
(Diablo Canyon Nuclear Power )
Plant, Unit Nos. 1 and 2) )

DOCKET Nos. 50-275 O.L. 50-323 O.L.

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#### AFFIDAVIT OF DALE G. BRIDENBAUGH

DALE G. BRIDENBAUGH, being first duly sworn, state under oath as follows:

 In 1981 I, Dale G. Bridenbaugh, coauthored an affidavit with Richard B. Hubbard regarding the risks surrounding operation of Diablo Canyon, Units 1 and 2 at low power. This affidavit, entitled <u>Affidavit of Dale G.</u> <u>Bridenbaugh and Richard B. Hubbard</u>, was dated August 11, 1981, and was submitted to the Nuclear Regulatory Commission. A copy is attached.

2. Paragraphs 11 and 12 of the 8/11/81 affidavit address the potential hazards resulting from a release of built up fission products as a result of an accident during 5% power operation. It also discusses the radioactive contamination and irradiation of plant systems and components that would occur as a result of the 5% power operation.

3. It is my understanding that PG&E is now seeking approval for a full power license for Diablo Canyon Unit 1. The granting of such full power approval is potentially hazardous and needs to be carefully considered. The risks outlined in the above paragraphs of the 8/11/81 affidavit are still present and would be increased by a significant factor by operation at full power. It is therefore of even greater importance that the plant has been adequately designed and constructed and that PG&E is properly qualified to operate it than was the case for low power operation. Accordingly, the risks described in paragraphs 11 and 12 of the 8/11/81 affidavit continue to be of concern.

I have read the foregoing and swear that it is true and accurate to the best of my knowledge.

ele Jonnale DALE G. BRIDENBAUGH

Subscribed and sworn to before me on this  $24^{tt}$  day of fully.



rystal L. Rave

Commission espires: 1/26/88

#### UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

#### BEFORE THE COMMISSION

In the Matter of PACIFIC GAS AND ELECTRIC COMPANY (Diablo Canyon Nuclear Power Plant, Unit Nos. 1 and 2)

Docket Nos. 50-275 O.L. 50-323 O.L.

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#### AFFIDAVIT OF DALE G. BRIDENBAUGH AND RICHARD B. HUBBARD

DALE G. BRIDENBAUGH and RICHARD B. HUBBARD, being first duly sworn, state under oath as follows:

1. In preparing this affidavit, affiant Richard B. Hubbard reviewed PG&E's proposed special low power test program as set forth in the low power license application and as further described in PG&E's safety analysis report provided to the NRC Staff on February 6, 1981. He also attended, as a consultant to Governor Brown's counsel, all sessions of the recent low power test proceedings which were held in San Luis Obispo from May 19 to May 22, 1981. Thus, he is familiar with the duration of the low power tests as postulated by PG&E and Staff witnesses. Further, he has reviewed the actual schedule for fuel loading, initial criticality and zero power testing, and low power testing of large PWR's which have occurred in the

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post-TMI period, particularly North Anna-2, Salem-2, and Sequoyah-1. In addition, on July 10, 1981, Hubbard accompanied Commissioner Gilinsky on his tour of the Diablo Canyon facility. A recent statement of Hubbard's professional qualifications and experience is set forth in Exhibit 16 of "Opposition of Governor Edmund G. Brown, Jr. to the NRC Staff and Pacific Gas and Electric Company Motions for Reconsideration and Summary Disposition," dated April 24, 1981.

2. Affiant Dale G. Bridenbaugh is a Professional Nuclear Engineer, technical consultant, co-founder and president of MHB Technical Associates, technical consultants on energy and environment, with offices at 1723 Hamilton Avenue, Suite K, San Jose, California. He has participated as an expert witness in licensing proceedings before the U.S. Nuclear Regulatory Commission (NRC); has served as a consultant to the NRC; has testified at the request of the Advisory Committee on Reactor Safeguards; has appeared before various committees of the U.S. Congress and testified in various state licensing and regulatory proceedings. Additional details of Bridenbaugh's experience and qualifications are set forth in Attachment A, which is attached hereto.

3. The purpose of this affidavit is twofold: First, to estimate the elapsed time which is likely to be required after issuance of a low power operating license to load fuel and to

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complete the special low power tests at or below 5% of Rated Thermal Power as Pacific Gas and Electric Company has proposed for Diablo Canyon Unit 1; second, to identify the technical difficulties and increased costs associated with modifying the structures, systems, and components of the plant should further modifications be required <u>after</u> fuel has been loaded and operation commenced. The results of our review are summarized in the following paragraphs.

4. During Commissioner Gilinsky's tour of the Diablo Canyon facility, both NRC and PB&E personnel emphasized PG&E's readiness to load fuel. The necessary fuel is presently onsite in a building immediately adjacent to the Containment Building. Further, due to the duration of the licensing process, PG&E has had sufficient time to conduct, and in some cases reconduct, its pre-operational tests as set forth in Section 14.1 of the Final Safety Analysis Report. Thus, we conclude that Diablo Canyon Unit 1 equipment is in an advanced state of readiness to load fuel, and that virtually all preliminary testing (see FSAR Table 14.1-1) possible prior to fuel loading has been completed.<sup>\*/</sup> Further, we conclude that PG&E should be able to promptly load fuel once such authorization is received from the NRC.

5. We estimate that the fuel loading task should be completed in less than one week elapsed time. For example, at

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<sup>\*/</sup> A recent <u>Nucleonics Week</u> article indicates that all steps prior to fuel load will be completed by approximately August 12, 1981 (p. 4, <u>Nucleonics Week</u>, July 23, 1981). In general, all pre-operational testing will be completed before fuel loading (FSAR, p. 14.1-8).

Salem-2, a Westinghouse-designed PWR similar in design and rating to Diablo Canyon, fuel loading began on May 23, 1980 and was completed on May 27, 1980. More specifically, a PG&E spokesman recently estimated that preparation and fuel loading of Diablo Canyon Unit 1 could be completed in about one month after issuance of a low power license (see July 18, 1981 article from the <u>San Francisco Chronicle</u>, which is attached hereto as <u>Attachment B</u>). Therefore, we conclude that it is reasonable to expect that fuel loading of Diablo Canyon could be completed in one to two weeks and certainly no more than 30 days after the issuance of a low power test license.<sup>\*/</sup>

6. The next phase of startup and testing includes initial criticality and low power testing. FSAR Table 14.1-2 summarizes the normal tests which will be performed. In addition, the scope and duration of the special low power tests were described in detail during the recent low power proceedings in San Luid Obispo. The Board, in the partial Initial Decision dated July 17, 1981, noted at page 24, paragraph 61, that PG&E has proposed a series of eight special low power tests. The proposed tests would probably last for no more than one month and in actuality, as cited by the Board, would perhaps take only about eighteen days (Tr. 10,726-10,728). Other references to the "relatively few days" encompassed by the proposed low power test

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<sup>\*/</sup> It has been reported that PG&E expects fuel loading to take no longer than two weeks (p. 4, <u>Nucleonics Week</u>, July 23, 1981).

program are set forth in the recent decision by the Board at pige 25 (paragraph 65), page 32 (paragraph 82), and page 33 (paragraph 83). Therefore, we believe that it is reasonable to expect that, absent major problems, initial criticality and low power testing can be conducted in an elapsed time of less than 30 days. Thus, assuming a 30-day period to complete fuel loading (which we believe to be very conservative), the entire fuel load and testing program can easily be completed in no more than 60 days.

7. The reasonableness of a 60-day cycle from license issuance to completion of the special low power tests was further confirmed during Commissioner Gilinsky's tour of the Diablo Canyon facility. In response to a question, the Diablo Canyon Plant Manager, Robert C. Thorn berry, stated in Hubbard's presence that PG&E's current schedules forecast that fuel loading, zero power testing, and the special low power test program will be completed approximately 58 days after receipt of a low power license. Mr. Thornberry added that the schedule might need to be increased if major unanticipated problems were encountered during the test program.

8. In order to be conservative, we believe it may be appropriate to add 15 to 30 days to the fuel loading and low power testing schedule to allow time for resolution of any routine unanticipated events. In reaching the preceding conclusions,

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we have assumed a routine startup during which no major accident, such as a seismically induced LOCA, occurs. Thus, we are not stating any conclusion on either the risk potential during low power testing or the probability of accidents occurring during such testing. Our sole purpose is to express the view that absent unforseen events, the PG&E startup and low power testing program should require no more than 30 days to complete after fuel is loaded.

9. The post-TMI experience and the current schedules for startup testing lend further support to the preceding conclusions. The first plant granted an operating license in the post-TMI period was Sequoyah-1, which received a low power license on February 29, 1980. Fuel loading commenced on March 2, 1980 and was completed on March 8, 1980. Two major problems thereafter seriously delayed the initial criticality of Sequoyah-1. First, in response to I&E Bull. 79-14, TVA required approximately 60 days to inspect and rework pipe hangers and supports. Second, in parallel with the hanger reinspection, TVA conducted a base line inspection of the turbine blades. The turbine reinspection required 4-5 weeks of elapsed time. Routine maintenance problems and pre-operational testing resulted in further delays. Initial criticality was achieved on July 5, 1980. Following zero power testing, the special low power testing program began on July 12 and was completed on

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July 18, 1980.

10. The second plant to receive a post-TMI license to load fuel and conduct special low power tests was North Anna-2. The authorization to load fuel was issued on April 11, 1980 and the low power testing was completed by July 1, 1980, an elapsed time of less than 80 days. The Salem-2 low power license was issued on April 18, 1980. As set forth in paragraph 5, fuel loading was completed on May 27, 1980. Initial criticality was achieved on August 2, 1980 and the special low power test program was completed on August 29, 1980. The two months delay between fuel loading and initial criticality was largely due to the need to conduct routine pre-operational maintenance testing and surveillance testing (such as valve operability) which could have been accomplished prior to fuel load. As presented in paragraph 4, we believe that these preoperational tests will be accomplished at Diablo Canyon prior to mid-August, 1981. Thus, we conclude that the actual duration of the Salem-2, North Anna-2, and Sequoyah-1 fuel loading and low power testing programs is not inconsistent with our conclusions for Diablo Canyon as set forth herein.

11. Table I of the testimony of Applicant's witness, Dr. Brunot, in the low power test proceedings sets forth the fission product inventories which will be produced in the core during the proposed Diablo Canyon low power test program. For

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example, the inventory of iodine-131, one of the radionuclides which is a significant contributor to the dominant exposure modes for accidents requiring off-site emergency preparedness, is estimated by Dr. Brunot as 4,500,000 curies (approximately 1/20th the full power value as set forth in FSAR Table 11.1-4). In contrast, for the design basis LOCA addressed by the Applicant in the FSAR for full power operation, <u>only 192 curies of</u> <u>iodine-131</u> were postulated to be released to the environment in the first two hours (FSAR Table 15.5-12). Therefore, because of the relatively rapid buildup (half-life of hours to days) of the radioactive isotopes listed in Table 3 of NUREG- $0654 \frac{*}{}$  which dominate prompt health consequences resulting from postulated accidental releases, we conclude that even at 5% power the fission products available for release pose a significant potential hazard.

12. Operation at low power will not only cause a buildup of fission products within the reactor core, making it inaccessible for contact repair and/or modification but will also cause a spread of radioactive contaminants throughout the primary portion of the steam supply system. It will also contaminate certain auxiliary systems such as the Chemical and Volume Control System, Equipment and Floor Drainage Systems, and the Liquid Radioactive Waste System. If fuel failures and/or steam generator tube failures or leaks are experienced, a large number

<sup>\*/</sup> NUREG-0654, Rev. 1 (FEMA-REP-1), "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November, 1980.

of other systems, including the turbine, condensate, and other components within the Steam and Power Conversion System could become contaminated. Contamination and irradiation of such equipment greatly increases the care required and the time and cost of future modifications that could be required at the plant. It is, therefore, important that power operation, including low power testing, not be permitted until reviews and evaluations that could lead to required plant modifications have been completed.

13. Based on the foregoing, we conclude that fuel loading, initial criticality, and low power testing, including the special low power tests, can be accomplished at Diablo Canyon Unit 1 within approximately 60 days, with an outside maximum elapsed time of approximately 90 days, after issuance of the low power operating license. We further conclude that the fuel loading portion of the startup schedule should be completed within less than 30 days following issuance of the low power license. Finally, we conclude that operation at low power will contaminate some of the facility's components and systems. This unnecessary commitment of resources creates technical difficulties and increased costs associated with modifying the reactor, should further modification be required <u>after</u> fuel has been loaded and power operation commenced.

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I have read the foregoing and swear that it is true and accurate to the best of my knowledge.

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DALE G. BRIDENBAUGH

Orchard of Hu

RICHARD B. HUBBARD

Subscribed and sworn to before me this // day of August, 1981.



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Notary Public My commission expires: 10/5/

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#### UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION DOCKETED USNRC

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD 84 JUL 27 P1:35

In the Matter of )
PACIFIC GAS AND ELECTRIC COMPANY )
(Diablo Canyon Nuclear Power )
Plant, Units 1 and 2) )

Docket Nos. 50-275 O.L. 50-323 O.L.

#### CERTIFICATE OF SERVICE

I hereby certify that on this 25th day of July, 1984, I have served copies of the foregoing JOINT INTERVENORS' APPLICATION FOR A STAY, mailing them through the U.S. mails, first class, postage prepaid, to the attached list.

in

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