

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

DOCKETED
USNRC

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

'85 JUL 25 P2:30
Docket Nos. 50-275 O.L.
50-323 O.L.
OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

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 the issuance of a license for full power operation of Diablo Canyon Nuclear Power Plant, Unit 2, ("Diablo Canyon") in the event the Commission authorizes such 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, 1985 vote on issuance of a full power license for Diablo Canyon, Unit 2.

I. SUMMARY OF THE DECISIONS TO BE STAYED

The Joint Intervenors seek a stay of the Commission's anticipated authorization of full power operation of Unit 2 and all orders previously issued by the Commission or its licensing boards underlying the licensing of such reactor, including ALAB-781, -782, and -811.

II. GROUND FOR THE STAY^{1/}

A. The Joint Intervenors' Likelihood of Prevailing on the Merits Is Strong

1. 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 Commission'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

^{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.

permit consideration of seismic effects on emergency response is a critical deficiency in emergency preparedness at Diablo Canyon. Nevertheless, the Commission concluded that its licensing boards are without jurisdiction to consider the issue. 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 material safety issue unique to Diablo Canyon.^{2/}

Although a panel of the U.S. Court of Appeals for the District of Columbia Circuit affirmed the Commission's action by a vote of 2-1 on December 31, 1984, the full Court of Appeals vacated the panel majority's decision on May 1, 1985 by a vote of 9-1, granting rehearing en banc and scheduling oral argument on October 3, 1985. That decision is premised on previously unavailable closed meeting transcripts, which portray the extraordinary struggle by the Commission to evade its unequivocal obligations under § 189(a) of the Atomic Energy Act as recently applied by the Court of Appeals in Union of Concerned Scientists v. NRC, 735 F.2d 1437 (D.C. Cir. 1984), by disregarding the materiality of a significant safety issue initially raised by its own staff, considering off-the-record material, and ultimately adopting a rationale that was without factual or rational basis in

^{2/} 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); Union of Concerned Scientists v. NRC, 735 F.2d 1437 (D.C. Cir. 1984).

the record, despite warnings to that effect by its staff.^{3/} And, as Commissioner Asselstine charged, the Commission's overriding objective was not compliance with the law but "avoiding delay in issuing a full power license for the Diablo Canyon plant."^{4/}

This new evidence -- and, in particular, the extraordinary action by the U.S. Court of Appeals in granting rehearing en banc -- provide strong support for the Joint Intervenors' contention that the Commission acted illegally in licensing Diablo Canyon, notwithstanding its failure to allow any consideration of the complicating effects of an earthquake or response to an emergency at Diablo Canyon. Accordingly, licensing of Unit 2 is unlawful.

2. Seismic Safety. 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 year and a half -- 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

^{3/} As stated in a memorandum from the Office of General Counsel to the Commissioners:

Based on the record in this proceeding, we have been unable to develop any convincing rational basis for the PG&E and NRC staff view that the complicating effects of earthquakes on emergency response deserves no consideration.

OGC Memorandum, at 5 (July 18, 1984).

^{4/} Deukmejian, et al. v. NRC, slip op., at 69 n.224.

information undermines the Board's findings regarding ground acceleration, focusing, location and nature of the Hosgri Fault, and seismicity of the region.

Although this Board found 2-1 in ALAB-782 that the Commission's licensing boards have no jurisdiction to consider the issue, the Commission has not yet ruled on the Joint Intervenors' Petition for Review. 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' Petition has been decided, the record reopened, and PGandE has demonstrated that the plant complies with the Commission's seismic design regulations.

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

In ALAB-811, this Board approved the design adequacy of Unit 2. It did so, however, without the benefit of an independent design verification program for Unit 2 analogous to that deemed necessary prior to licensing of Unit 1 despite the fact that Unit 2 was designed and constructed pursuant to the same deficient quality assurance program as Unit 1. For the reasons stated in

the Joint Intervenor's Petition for Review of ALAB-811, a copy of which has previously been served on this Board, the Commission, and the parties, the Joint Intervenor's 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 for Unit 2 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, Unit 2, has been designed and constructed consistent with the Commission's regulations. Accordingly, no full power license may be issued.

B. Joint Intervenor's Will Be Irreparably Injured in the Absence of a Stay

If a license is issued for full power operation at Diablo Canyon, Unit 2, the Joint Intervenor's will be irreparably harmed in several significant respects. First, the Joint Intervenor's 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 damage to property. See San Luis Obispo Mothers for Peace v. NRC, No. 84-1410, Order (August 17, 1984) (granting stay pending review) (attached hereto). See also Affidavits of Bridenbaugh and Hubbard (attached hereto and

previously filed with this Board on July 25, 1984 in support of application for stay of Unit 1 license).

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

Third, where, as here, violations of federal statutes and regulations enacted to protect the public health and safety underlie the challenged agency action, effectuation of the congressional or agency intent in adopting or promulgating such requirements mandates issuance of an injunction. See, e.g., Atchison, Topeka and Santa Fe Railway Co. v. Lennen, 640 F.2d 255, 259 (10th Cir. 1981); UV Industries, Inc. v. Posner, 466 F.2d 1251, 1255-56 (D. Maine 1979). Moreover, because the Commission's own regulations require injunctive relief upon a showing that the Atomic Energy Act or its regulations have been violated, 10 C.F.R. § 55.50, a stay is necessary to prevent irreparable harm to the Joint Intervenor and to the public. See National Ass'n of Farmworkers Organizations v. Marshall, 628 F.2d 604, 613 n.39 (D.C. Cir. 1980) ("In the context of safety regulations, risk is itself the harm prohibited by law. Exposure to that harm thus is irreparable injury").

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 de minimis 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 and will comply with all applicable regulations. Deferring safety reviews until after 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.

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IV. CONCLUSION

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

Dated: July 24, 1985

Respectfully submitted,

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VIII-6 D.C. Cir.

United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 84-1410

September Term, 1983

San Luis Obispo Mothers for Peace;
Scenic Shoreline Preservation Conference,
Inc.; Ecology Action Club; Sandra Silver;
Gordon Silver; Elizabeth Apfelberg; and
John J. Forster,

Petitioners

v.

United States Nuclear Regulatory Commission
and United States of America,
Respondents

United States Court of Appeals
for the District of Columbia Circuit

FILED AUG 17 1984

GEORGE A. FISHER
CLERK

BEFORE: Wright and Ginsburg, Circuit Judges, and
Robb, Senior Circuit Judge

ORDER

Petitioners seek a stay pending this court's review of the Nuclear Regulatory Commission's (NRC or the Commission) decision authorizing full-power operation of the Diablo Canyon Nuclear Power Plant (Unit 1). The licensing proceedings for the Diablo Canyon facility have had a troubled history. When Pacific Gas and Electric Company (PG&E) commenced construction of the plant, it was assumed that the closest earthquake fault was about twelve miles away, with a postulated magnitude of 6.75 on the Richter scale. Four years later, however, it was discovered that the plant site was only three miles from a major active offshore earthquake fault -- the Hosgri Fault -- with a postulated magnitude of 7.5 on the Richter scale. Construction of the plant continued after discovery of its proximity to the Hosgri Fault, with concurrent reanalysis of the facility's seismic design.

In 1981, the Commission authorized low-power (less than 5% of full power) operation and testing of the Diablo Canyon facility. Two months later, however, the NRC suspended the low-power license after learning of newly discovered errors in the seismic design of equipment and

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United States Court of Appeals

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pipng and of weaknesses in PG&E's quality assurance program. The Commission lifted the low-power license suspension in part on November 8, 1983, and lifted the remainder of the suspension on April 13, 1984.

On August 10, 1984, a divided Commission issued the order at issue here, authorizing PG&E to operate the Diablo Canyon facility at full power. Three of the five Commissioners voted for the order. One of the Commissioners, Lando W. Zech, Jr., stated he "would need several more weeks before [he] could come to a decision." Another, James K. Asselstine, expressed grave concern about "the Commission's treatment of two issues: the complicating effects of earthquakes on emergency planning, and the re-evaluation of the adequacy of seismic design for small and large bore piping in the plant." As to the first matter, Commissioner Asselstine stated his view that "the Commission is compelled as a matter of law and logic to afford the parties to this proceeding an opportunity to litigate the issue prior to authorizing the issuance of a full power license for the plant." With regard to seismic design, Commissioner Asselstine reported he is "not yet satisfied that the Commission has the information needed to conclude, with a high degree of confidence, that all significant seismic design errors for this plant have been identified and corrected." He considered the Commission's immediate final disposition of the adequacy of the plant's seismic design "particularly unfortunate" since exploration of the questions involved in sufficient detail "could be completed in a matter of a few weeks."

We share the view, supported by the statements of Commissioners Zech and Asselstine, that if a close call is involved, the past history of this project and the public concerns at stake counsel adding to the balance an extra measure of caution. Although respondent and intervenor suggest that the probability is very low than any accident with significant off-site consequences will occur while the petition for review of the Commission's licensing decision is pending, we conclude that the magnitude of the harm that could result should that probability eventuate warrants grant of a stay. Accordingly, it is

ORDERED by the Court that the NRC's August 10, 1984, Order authorizing full-power operation of the Diablo Canyon Nuclear Power Plant (Unit 1) is stayed pending the court's review. It is

United States Court of Appeals

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FURTHER ORDERED by the Court that this case be expedited, and the case shall be scheduled for oral argument during this court's November-December 1984 sitting period. The case shall be scheduled for argument on the same day and before the same panel as San Luis Obispo Mothers for Peace, et al. v. NRC, No. 81-2035 and consolidated cases. The following briefing schedule shall apply:

Certified index to the record to be filed	-- August 27, 1984
Petitioners' brief to be served and filed	-- September 17, 1984
Respondent's brief to be served and filed	-- October 9, 1984
Brief of intervenor in support of respondent to be served and filed	-- October 22, 1984
Petitioners' reply brief, if any, to be served and filed	-- November 6, 1984

To the extent that the issues in No. 81-2085 overlap with the issues presented in this case, the parties may incorporate by reference portions of their briefs in No. 81-2035.

Per Curiam

Senior Circuit Judge Robb would not grant the stay.

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.

AFFIDAVIT OF DALE G. BRIDENBAUGH

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

1. 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 Affidavit of Dale G. Bridenbaugh and Richard B. Hubbard, 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

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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.


DALE G. BRIDENBAUGH

Subscribed and sworn to before me on this 24th day of July, 1984.




Notary Public

Commission expires: 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.

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

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 after 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 PG&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.^{*/} 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

^{*/} A recent Nucleonics Week article indicates that all steps prior to fuel load will be completed by approximately August 12, 1981 (p. 4, Nucleonics Week, 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 San Francisco Chronicle, which is attached hereto as Attachment B). 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.^{*/}

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 Luis 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

^{*/} It has been reported that PG&E expects fuel loading to take no longer than two weeks (p. 4, Nucleonics Week, July 23, 1981).

program are set forth in the recent decision by the Board at page 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. Thornberry, 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,

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 unforeseen 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

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 pre-operational 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

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, only 192 curies of iodine-131 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^{*/} 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

^{*/} 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.

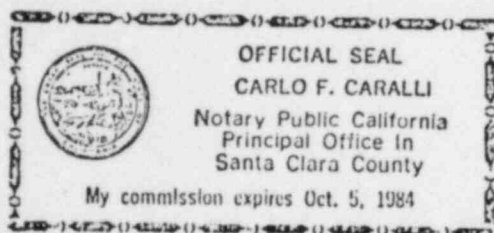
13. Based on the foregoing, we conclude that fuel loading, initial criticality, and low power testing, including the special low power tests, can be accomplished at Diablo Canyon Unit 1 within approximately 60 days, with an outside maximum elapsed time of approximately 90 days, after issuance of the 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 after fuel has been loaded and power operation commenced.

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

Dale G. Bridenbaugh
DALE G. BRIDENBAUGH

Richard B. Hubbard
RICHARD B. HUBBARD

Subscribed and sworn to before me this 11th day of August, 1981.



Carlo F. Caralli
Notary Public

My commission expires: 10/5/84

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NUCLEAR REGULATORY COMMISSION
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Docket Nos. 50-275 O.L.
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CERTIFICATE OF SERVICE

I hereby certify that on this 24th day of July, 1985, I have served copies of the foregoing JOINT INTERVENORS' APPLICATION FOR A STAY, mailing them via Federal Express or through the United States mails, first class, postage prepaid, as indicated on the attached list.



Paula M. Klein

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