

April 17, 1992

Docket Nos. 50-275  
and 50-323

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Mr. Gregory M. Rueger  
Senior Vice President and General Manager  
Nuclear Power Generation Business Unit  
Pacific Gas and Electric Company  
77 Beale Street, Room 1451  
San Francisco, California 94106

Dear Mr. Rueger:

SUBJECT: ISSUANCE OF AMENDMENTS FOR DIABLO CANYON NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2 (TAC NOS. M80245 AND M80246)

The Commission has issued the enclosed Amendment No. 69 to Facility Operating License No. DPR-80 and Amendment No. 68 to Facility Operating License No. DPR-82 for the Diablo Canyon Nuclear Power Plant, Unit Nos. 1 and 2, respectively. The amendments respond to your amendment application dated March 18, 1991, as supplemented by your letters dated May 3 and November 22, 1991 (License Amendment Request LAR 91-01).

These amendments revise the combined technical specifications (TS) for the Diablo Canyon Power Plant (DCPP) Unit Nos. 1 and 2 to delete the requirement to verify that the containment fan cooler unit (CFCU) dampers transfer from the normal to the accident position, subsequent to a planned CFCU modification that will secure the dampers in their accident position.

A copy of the related Safety Evaluation is enclosed. A notice of issuance will be included in the Commission's next regular biweekly Federal Register notice.

Sincerely,

Original signed by

Harry Rood, Senior Project Manager  
Project Directorate V  
Division of Reactor Projects III/IV/V  
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 69 to DPR-80
2. Amendment No. 68 to DPR-82
3. Safety Evaluation

cc w/enclosures:  
See next page

OFC :	LA:PD5 <i>[Signature]</i>	PM:PD5 <i>[Signature]</i>	DIABLO PD5 <i>[Signature]</i>	OGC
NAME :	DFoster	HRood	JGagliardo	BMB
DATE :	3/30/92	3/30/92	4/17/92	3/31/92

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

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Sincerely,

A handwritten signature in cursive script that reads "Harry Rood".

Harry Rood, Senior Project Manager  
Project Directorate V  
Division of Reactor Projects III/IV/V  
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 69 to DPR-80
2. Amendment No. 68 to DPR-82
3. Safety Evaluation

cc w/enclosures:  
See next page

Mr. Gregory M. Rueger  
Pacific Gas and Electric Company

Diablo Canyon

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

PACIFIC GAS AND ELECTRIC COMPANY  
DIABLO CANYON NUCLEAR POWER PLANT, UNIT NO. 1

DOCKET NO. 50-275

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 69  
License No. DPR-80

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Pacific Gas & Electric Company (the licensee) dated March 18, 1991, as supplemented by letters dated May 3 and November 22, 1991, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-80 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 69 , are hereby incorporated in the license. Pacific Gas & Electric Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan, except where otherwise stated in specific license conditions.

3. This license amendment becomes effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



James E. Gagliardo, Acting Director  
Project Directorate V  
Division of Reactor Projects III/IV/V  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: April 17, 1992



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

PACIFIC GAS AND ELECTRIC COMPANY  
DIABLO CANYON NUCLEAR POWER PLANT, UNIT NO. 2  
DOCKET NO. 50-323  
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 68  
License No. DPR-82

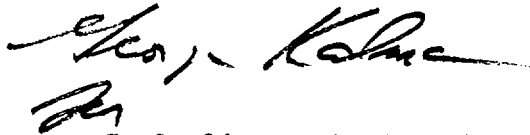
1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Pacific Gas & Electric Company (the licensee) dated March 18, 1991, as supplemented by letters dated May 3 and November 22, 1991, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-82 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 68, are hereby incorporated in the license. Pacific Gas & Electric Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan, except where otherwise stated in specific license conditions.

3. This license amendment becomes effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



James E. Gagliardo, Acting Director  
Project Directorate V  
Division of Reactor Projects III/IV/V  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: April 17, 1992

ATTACHMENT TO LICENSE AMENDMENT NOS. 69 AND 68

FACILITY OPERATING LICENSE NOS. DPR-80 AND DPR-82

DOCKET NOS. 50-275 AND 50-323

Revise Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change. Overleaf pages are also included, as appropriate.

REMOVE PAGE

3/4 6-14  
B 3/4 3-1

INSERT PAGE

3/4 6-14  
B 3/4 3-1



## CONTAINMENT SYSTEMS

### CONTAINMENT COOLING SYSTEM

#### LIMITING CONDITION FOR OPERATION

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3.6.2.3 The Containment Cooling System shall be OPERABLE with either:

- a. At least three electrically independent groups of containment fan cooler units with a minimum of one unit in each group, or
- b. At least two electrically independent groups of containment fan cooler units with a minimum of two units in each group.

APPLICABILITY: MODES 1, 2, 3, and 4.

#### ACTION:

- a. With one group of the above required containment cooling fans inoperable and both Containment Spray Systems OPERABLE, restore the inoperable group of cooling fans to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With two groups of the above required containment cooling fans inoperable, and both Containment Spray Systems OPERABLE, restore at least one group of cooling fans to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore both above required groups of cooling fans to OPERABLE status within 7 days of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With one group of the above required containment cooling fans inoperable and one Containment Spray System inoperable, restore the inoperable Spray System to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore the inoperable group of containment cooling fans to OPERABLE status within 7 days of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

#### SURVEILLANCE REQUIREMENTS

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4.6.2.3 Each containment fan cooler unit shall be demonstrated OPERABLE:

- a. At least once per 31 days by:
  - 1) Starting each containment fan cooler unit and verifying that each containment fan cooler unit operates for at least 15 minutes,

## CONTAINMENT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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- 2) Verifying a cooling water flow rate of greater than or equal to 2000 gpm to each cooler, and
  - 3) For Units 1 and 2, Cycle 5:  
Verifying that each containment fan cooler unit starts on low speed and the dampers transfer to the accident position.  
For Units 1 and 2, Cycle 6 and after:  
Verifying that each containment fan cooler unit starts on low speed.
- b. At least once per 18 months by verifying that each containment fan cooler unit starts automatically on a Safety Injection test signal.

### 3/4.3 INSTRUMENTATION

#### BASES

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#### 3/4.3.1 and 3/4.3.2 REACTOR TRIP SYSTEM and ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION

The OPERABILITY of the Reactor Trip System and Engineered Safety Features Actuation System instrumentation and interlocks ensure that: (1) the associated ACTION and/or Reactor trip will be initiated when the parameter monitored by each channel or combination thereof reaches its Setpoint, (2) the specified coincidence logic and sufficient redundancy is maintained to permit a channel to be out of service for testing or maintenance consistent with maintaining an appropriate level of reliability of the Reactor Protection and Engineered Safety Features instrumentation, and (3) sufficient redundancy is maintained to permit a channel to be out of service for testing or maintenance, and (4) sufficient system functional capability is available from diverse parameters.

The OPERABILITY of these systems is required to provide the overall reliability, redundancy, and diversity assumed available in the facility design for the protection and mitigation of accident and transient conditions. The integrated operation of each of these systems is consistent with the assumptions used in the accident analyses. The Surveillance Requirements specified for these systems ensure that the overall system functional capability is maintained comparable to the original design standards. The periodic surveillance tests performed at the minimum frequencies are sufficient to demonstrate this capability. Specified surveillance intervals and surveillance and maintenance outage times have been determined in accordance with WCAP-10271, "Evaluation of Surveillance Frequencies and Out of Service Times for the Reactor Protection Instrumentation System," and supplements to that report. Surveillance intervals and out-of-service times were determined based on maintaining an appropriate level of reliability of the Reactor Protection System.

The Engineered Safety Features Actuation System senses selected plant parameters and determines whether or not predetermined limits are being exceeded. If they are, the signals are combined into logic matrices sensitive to combinations indicative of various accidents, events, and transients. Once the required logic combination is completed, the system sends actuation signals to those engineered safety features components whose aggregate function best serves the requirements of the condition. As an example, the following actions may be initiated by the Engineered Safety Features Actuation System to mitigate the consequences of a steam line break or loss of coolant accident: (1) safety injection pumps start and automatic valves position, (2) Reactor trip, (3) feedwater isolation, (4) startup of the emergency diesel generators, (5) containment spray pumps start and automatic valves position, (6) containment isolation, (7) steam line isolation, (8) Turbine trip, (9) auxiliary feedwater pumps start and automatic valve position, (10) containment fan cooler units start, and (11) component cooling water pumps start and automatic valves position.

ESF response times specified in Table 3.3-5, which include sequential operation of the RWST and VCT valves (Table Notations 4 and 5), are based on values assumed in the non-LOCA safety analyses. These analyses take credit for injection of borated water from the RWST. Injection of borated water is

## INSTRUMENTATION

### BASES

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#### REACTOR PROTECTION SYSTEM and ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION (Continued)

assumed not to occur until the VCT charging pump suction isolation valves are closed following opening of the RWST charging pump suction isolation valves. When the sequential operation of the RWST and VCT valves is not included in the response times (Table Notation 7), the values specified are based on the LOCA analyses. The LOCA analyses takes credit for injection flow regardless of the source. Verification of the response times specified in Table 3.3-5 will assure that the assumptions used for the LOCA and non-LOCA analyses with respect to the operation of the VCT and RWST valves are valid.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 69 TO FACILITY OPERATING LICENSE NO. DPR-80  
AND AMENDMENT NO. 68 TO FACILITY OPERATING LICENSE NO. DPR-82  
PACIFIC GAS AND ELECTRIC COMPANY  
DIABLO CANYON NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2  
DOCKET NOS. 50-275 AND 50-323

1.0 INTRODUCTION

By letter dated March 18, 1991, as supplemented by letters dated May 3 and November 22, 1991, Pacific Gas and Electric Company (PG&E or the licensee) requested amendments to Facility Operating License Nos. DPR-80 and DPR-82 for Diablo Canyon Units 1 and 2, respectively. The amendment application is designated License Amendment Request LAR 91-01. The amendments change the combined Diablo Canyon technical specifications (TS) to delete the requirement to verify that the containment fan cooler unit (CFCU) dampers transfer from the normal to the accident position. Specifically, Surveillance Requirement 4.6.2.3.a.(3) of TS 3/4.6.2.3, "Containment Cooling System," will be modified to delete the requirement to verify that the containment fan cooler unit (CFCU) dampers transfer to the accident position. The requirement to verify damper position will not be necessary after a planned CFCU modification is made because the dampers will then be secured in the accident position. The CFCU modification will be made during the 5th refueling outage for each unit. Therefore, the revised TS 4.6.3.2.a.(3) is cycle dependent, and verification of CFCU damper position will not be required starting with Cycle 6.

2.0 EVALUATION

The containment fan cooler system at Diablo Canyon consists of five containment fan cooler units (CFCUs), each including moisture separators, high efficiency particulate air (HEPA) filters, cooling coils, direct drive fans, normal and accident air flow dampers, backdraft and pressure relief dampers, distribution ductwork and the associated controls. During normal operation, air is drawn through the CFCU cooling coils and is discharged through the ductwork to the containment atmosphere. During post-accident operation, the normally-open dampers are closed and the post-accident dampers are opened. These changes in damper position add the moisture separators and HEPA filters to the flow path. To assure operability of the system, TS 4.6.2.3 requires periodic verification that each CFCU starts in its low speed (accident) mode and that the dampers transfer to the accident position.

The licensee plans to simplify the system by permanently securing the CFCU normal-mode and accident-mode dampers in positions such that both the normal and accident-mode functions can be performed without changing the damper positions. After the change, the unit air flow rates will be in accordance with design air flow rates for both normal and accident modes of operation. This design change will make it unnecessary to verify that the dampers transfer to the accident position.

The design simplification is based on a safety analysis that did not take any credit for the containment air cleaning function of the accident flow path, i.e., no credit was taken for charcoal or HEPA filters. This analysis showed that with sprays alone and without particulate retention, the postulated post-accident conditions satisfy the dose requirements of 10 CFR Part 100.

The HEPA filters and moisture separators were originally installed as a radioiodine removal system during the postulated post-accident conditions to support the existing analysis. Subsequently, a revised analysis showed that the containment spray alone with no additional cleanup system was sufficient. The HEPA filters and moisture separators had already been installed when the revised analytical results became known, but the charcoal filters had not yet been installed. Based on the results of the revised analysis, the licensee decided not to install charcoal filters.

Although the revised analysis showed that the HEPA filters and moisture separators were not needed, they have been maintained in an operating condition since plant startup. The safety analysis upon which the above conclusion is based has been documented by the licensee in Chapter 15 of the Updated FSAR.

Based on this analysis, the licensee concludes that there is reasonable assurance that the health and safety of the public will not be adversely affected by the proposed CFCU simplification and TS changes. The staff concurs with this conclusion.

In summary, the Staff has reviewed the licensee's request and concludes that the proposed changes will maintain adequate safety margins and therefore will not significantly affect the public health and safety. On the basis of its review of this matter as described above, the NRC staff finds that the proposed changes to the Diablo Canyon TS are acceptable.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the California State official was notified of the proposed issuance of these amendments. The State official had no comments.

#### 4.0 ENVIRONMENTAL CONSIDERATION

These amendments involve changes with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and change surveillance requirements. The staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued (56 FR 24214) a proposed finding that the amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

#### 5.0 CONCLUSION

The NRC staff has concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: A. Drozd  
H. Rood

Dated: April 17, 1992