January 5, 1988

Docket Nos.: 50-275
and 50-323

Mr. J. D. Shiffer, Vice President
Nuclear Power Generation
c/o Nuclear Power Generation, Licensing
Pacific Gas and Electric Company
77 Beale Street, Room 1451
San Francisco, California 94106

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Dear Mr. Shiffer:

SUBJECT: ISSUANCE OF AMENDMENTS (TAC NOS. 60065 AND 60066)

The Commission has issued the enclosed Amendment No. 27 to Facility Operating License No. DPR-80 and Amendment No. 26to Facility Operating License No. DPR-82 for the Diablo Canyon Nuclear Power Plant, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letter dated October 24, 1985 (LAR 85-11).

The amendments revise the limiting conditions for operation for the pressurizer power-operated relief valves and clarify the requirements for startup reports.

As discussed in the enclosed Safety Evaluation, we have not taken any action with respect to your proposal to modify the heatup and cooldown curves at this time because further changes will probably be needed based on the results of analysis of the Unit 1 reactor vessel surveillance capsule "S" and our evaluation of your pressurized thermal shock submittal sent to you on October 30, 1987 wherein we evaluated a slightly higher copper content in the controlling beltline material for Unit 1. Accordingly, we request that you submit revised heatup and cooldown curves within 30 days following the submittal of the capsule "S" summary technical report, which is now due by January 31, 1988.

Also, these amendments do not include technical specifications for loose part detection system instrumentation as explained in more detail in the Safety Evaluation.

A Notice of Issuance will be included in the Commission's next regular bi-weekly Federal Register notice.

Sincerely,

/S/

Charles M. Trammell, Project Manager
Project Directorate V
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No. 27 to DPR-80
2. Amendment No. 26 to DPR-82
3. Safety Evaluation

cc w/enclosures:
See next page

*See previous concurrence 1/5/88

*DRSP/PD5	*DRSP/PD5	*EMTB	*OTSB	OGC	DRSP/D:PD5
JLee	CTrammell:cd	CYCheng	EButcher		GKnighton
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Mr. J. D. Shiffer
Pacific Gas and Electric Company

Diablo Canyon

cc:
Richard F. Locke, Esq.
Pacific Gas & Electric Company
Post Office Box 7442
San Francisco, California 94120

Janice E. Kerr, Esq.
California Public Utilities Commission
350 McAllister Street
San Francisco, California 94102

Ms. Sandra A. Silver
660 Granite Creek Road
Santa Cruz, California 95065

Mr. W. C. Gangloff
Westinghouse Electric Corporation
P. O. Box 355
Pittsburgh, Pennsylvania 15230

Managing Editor
San Luis Obispo County Telegram
Tribune
1321 Johnson Avenue
P. O. Box 112
San Luis Obispo, California 93406

Mr. Leland M. Gustafson, Manager
Federal Relations
Pacific Gas and Electric Company
1726 M Street, N. W.
Washington, DC 20036-4502

Dian M. Grueneich
Marcia Preston
Law Office of Dian M. Grueneich
380 Hayes Street, Suite 4
San Francisco, California 94102

NRC Resident Inspector
Diablo Canyon Nuclear Power Plant
c/o U.S. Nuclear Regulatory Commission
P. O. Box 369
Avila Beach, California 93424

Mr. Dick Blakenburg
Editor & Co-Publisher
South County Publishing Company
P. O. Box 460
Arroyo Grande, California 93420

Bruce Norton, Esq.
c/o Richard F. Locke, Esq.
Pacific Gas and Electric Company
Post Office Box 7442
San Francisco, California 94120

Dr. R. B. Ferguson
Sierra Club - Santa Lucia Chapter
Rocky Canyon Star Route
Creston, California 93432

Chairman
San Luis Obispo County Board of
Supervisors
Room 220
County Courthouse Annex
San Luis Obispo, California 93401

Director
Energy Facilities Siting Division
Energy Resources Conservation and
Development Commission
1516 9th Street
Sacramento, California 95814

Ms. Jacquelyn Wheeler
3033 Barranca Court
San Luis Obispo, California 93401

cc:
Ms. Laurie McDermott, Coordinator
Consumers Organized for Defense
of Environmental Safety
731 Pacific Street, Suite 42
San Luis Obispo, California 93401

Mr. Joseph O. Ward, Chief
Radiological Health Branch
State Department of Health
Services
714 P Street, Office Building #8
Sacramento, California 95814

Regional Administrator, Region V
U.S. Nuclear Regulatory Commission
1450 Maria Lane
Suite 210
Walnut Creek, California 94596

Ms. Nancy Culver
192 Luneta Street
San Luis Obispo, California 93401

President
California Public Utilities
Commission
California State Building
350 McAllister Street
San Francisco, California 94102

Michael M. Strumwasser, Esq.
Special Assistant Attorney General
State of California
Department of Justice
3580 Wilshire Boulevard, Room 800
Los Angeles, California 90010

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

PACIFIC GAS AND ELECTRIC COMPANY

DIABLO CANYON NUCLEAR POWER PLANT, UNIT 1

DOCKET NO. 50-275

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 27
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 October 24, 1985 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. 27, 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 at the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

George W. Knighton, Director
Project Directorate V
Division of Reactor Projects - III,
IV, V and Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 5, 1988

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

PACIFIC GAS AND ELECTRIC COMPANY

DIABLO CANYON NUCLEAR POWER PLANT, UNIT 2

DOCKET NO. 50-323

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 26
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 October 24, 1985 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. 26, 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 at the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

H. Rood for

George W. Knighton, Director
Project Directorate V
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 5, 1988

January 5, 1988

ATTACHMENT TO LICENSE AMENDMENT NOS. 27 AND 26

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

DOCKET NOS. 50-275 AND 50-323

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change.

Remove	Insert
3/4 4-10	3/4 4-10
-	3/4 4-10a
B 3/4 4-2	B 3/4 4-2
-	B 3/4 4-2a
6-16	6-16

REACTOR COOLANT SYSTEM

3/4.4.4 RELIEF VALVES

LIMITING CONDITION FOR OPERATION

3.4.4 All power-operated relief valves (PORVs) and their associated block valves shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTION:

a. With one or more PORV(s) inoperable because of excessive seat leakage, within 1 hour either restore the PORV(s) to OPERABLE status or close the associated block valve(s); otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

b. With one or more PORV(s) inoperable due to causes other than excessive seat leakage, within 1 hour either restore the PORV(s) to OPERABLE status or close the associated block valve(s) and remove power from the block valve, and

   1. With only one Class 1 PORV OPERABLE, restore at least a total of two Class 1 PORVs to OPERABLE status within the following 72 hours or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours, or

   2. With no Class 1 PORVs OPERABLE, restore at least one Class 1 PORV to OPERABLE status within 1 hour and follow ACTION b.1, above, with the time requirement of that ACTION statement based on the time of initial loss of the remaining inoperable Class 1 PORV or be in HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the following 30 hours.

c. With one or more block valve(s) inoperable, within 1 hour

   1. Restore the block valve(s) to OPERABLE status, or

   2. Close the block valve(s) and remove power from the block valve(s), or

   3. Close the PORV(s) and remove power from its associated solenoid.

   Also, comply with ACTION b, as appropriate, for the isolated PORV(s).

d. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.4.4.1 In addition to the requirements of Specification 4.0.5, each PORV shall be demonstrated OPERABLE at least once per 18 months by:

a. Operating the valve through one complete cycle of full travel, and

b. Performing a CHANNEL CALIBRATION of the actuation instrumentation.

4.4.4.2 Each block valve shall be demonstrated OPERABLE at least once per 92 days by operating the valve through one complete cycle of full travel unless the block valve is closed in order to meet the requirements of ACTION a. and b. in Specification 3.4.4.

SAFETY VALVES (Continued)

In the event that no safety valves are OPERABLE, an operating RHR loop, connected to the RCS, provides overpressure relief capability and will prevent RCS overpressurization. In addition, the Overpressure Protection System (relief valves) provides a diverse means of protection against RCS overpressurization at low temperatures.

During operation, all pressurizer Code safety valves must be OPERABLE to prevent the RCS from being pressurized above its Safety Limit of 2735 psig. The combined relief capacity of all of these valves is greater than the maximum surge rate resulting from a complete loss of load assuming no Reactor trip until the first Reactor Trip System Trip Setpoint is reached (i.e., no credit is taken for a direct Reactor trip on the loss-of-load) and also assuming no operation of the power-operated relief valves or steam dump valves.

Demonstration of the safety valves' lift settings will occur only during shutdown and will be performed in accordance with the provisions of Section XI of the ASME Boiler and Pressure Code.

3/4.4.3 PRESSURIZER

The limit on the maximum water volume in the pressurizer assures that the parameter is maintained within the normal steady-state envelope of operation assumed in the SAR. The limit is consistent with the initial SAR assumptions. The 12-hour periodic surveillance is sufficient to ensure that the parameter is restored to within its limit following expected transient operation. The maximum water volume also ensures that a steam bubble is formed and thus the RCS is not a hydraulically solid system. The requirement that a minimum number of pressurizer heaters be OPERABLE enhances the capability of the plant to control Reactor Coolant System pressure and establish natural circulation.

3/4.4.4 RELIEF VALVES

The power-operated relief valves (PORVs) and steam bubble function to relieve RCS pressure during all design transients up to and including the design step load decrease with steam dump. Operation of the power-operated relief valves minimizes the undesirable opening of the spring-loaded pressurizer Code safety valves. Each PORV has a remotely operated block valve to provide a positive shutoff capability should a relief valve become inoperable.

The PORVs perform a safety-related function by providing an RCS depressurization path during certain event recovery sequences. The capability of the PORVs to perform this function is based on manual actuation and does not require the pressure setpoint function of the valve to be OPERABLE in order to meet its limiting condition for operation.

3/4.4.5 STEAM GENERATORS

The Surveillance Requirements for inspection of the steam generator tubes ensure that the structural integrity of this portion of the RCS will be maintained. The program for inservice inspection of steam generator tubes is based on a modification of Regulatory Guide 1.83, Revision 1. Inservice inspection of steam generator tubing is essential in order to maintain surveillance of the conditions of the tubes in the event that there is evidence of

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS

6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the Regional Administrator of the Regional Office of the NRC unless otherwise noted.

STARTUP REPORTS

6.9.1.1 A summary report of plant startup and power escalation testing shall be submitted following: (1) receipt of an operating license, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant.

6.9.1.2 The initial Startup Report shall address each of the startup tests identified in Chapter 14 of the FSAR and shall include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report. Subsequent Startup Reports shall address startup tests that are necessary to demonstrate acceptability of the change and/or modification.

6.9.1.3 Startup Reports shall be submitted within: (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events (i.e., initial criticality, completion of Startup Test Program, and resumption or commencement of commercial power operation), supplementary reports shall be submitted at least every three months until all three events have been completed.

ANNUAL REPORTS*

6.9.1.4 Annual Reports covering the activities of the unit as described below during the previous calendar year shall be submitted prior to March 31 of each year. The initial report shall be submitted prior to March 31 of the year following initial criticality.

Reports required on an annual basis shall include a tabulation on an annual basis of the number of station, utility and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man

*A single submittal may be made for a multiple-unit plant. The submittal should combine those sections that are common to all units at the plant.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 27 TO FACILITY OPERATING LICENSE NO. DPR-80

AND AMENDMENT NO. 26 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 October 24, 1985, Pacific Gas and Electric Company (PG&E or the licensee) requested amendments to the Technical Specifications appended to Facility Operating License Nos. DPR-80 and DPR-82 for the Diablo Canyon Nuclear Power Plant, Unit Nos. 1 and 2. The proposed amendments would revise the limiting conditions for operation for the pressurizer power-operated relief valves, clarify the requirements for startup reports, add requirements for the loose-part detection system, and modify the reactor coolant system heatup and cooldown limitation curves. The latter two proposed changes are not included with these amendments as explained in Section 2.0.

2.0 DISCUSSION AND EVALUATION

The proposed changes described above were submitted by PG&E in accordance with the NRC staff request contained in Diablo Canyon SSER 32, Section 8.3, "Unit 2 Technical Specification Considerations," which stated:

> "The final resolution for five specifications was achieved after the required Federal Register Notice for the Technical Specifications changes for the Unit 1 license amendment had been prepared (Ref. 71) as discussed in Section 8.2. The five specifications are:
>
> (1) administrative controls for startup test reports
> (2) reactor coolant system relief valves
> (3) loose-part detection system instrumentation
> (4) bases for electrical power systems
> (5) reactor coolant system pressure/temperature limits
>
> "Rather than issuing the combined Technical Specifications with substantially different requirements for Unit 1 and Unit 2 the staff determined that for an interim period the current low-power Technical Specifications of Unit 2, as reflected in the combined Technical Specifications, provide sufficiently conservative

requirements. PG&E, by letter dated June 20, 1985 (Ref. 64), identified the resolution to the five specifications and committed to submit an appropriate license amendment request for both units within 90 days after issuance of the Unit 2 full-power license. The staff finds this acceptable."

Item (4), above, regarding the bases for electrical power systems, was previously submitted in License Amendment Request 85-07, Revision 1, submitted to the NRC by letter dated August 27, 1985 and issued with Amendment No. 6 (Unit 1) and No. 4 (Unit 2) on April 18, 1986. Items (1), (2), (3), and (5) are discussed in turn below. Only items (1) and (2) are contained in the amendments.

a. The change regarding administrative controls for startup test reports would clarify that the initial Startup Report is to address each of the startup tests identified in Chapter 14 of the FSAR, and would add that subsequent Startup Reports need only address the startup tests that are necessary to demonstrate acceptability of the change or modification. This is a minor clarification and is acceptable.

b. The changes to the reactor coolant system relief valve specification involve more stringent operability requirements for these valves. The revised specification does not allow indefinite plant operation with these valves isolated or inoperable unless they are isolated merely for excessive operational seat leakage. The previous specification permitted continued operation with one or more PORVs inoperable for any reason provided the inoperable PORVs were restored within one hour or the associated block valves were closed within one hour. The revised specification is the same for PORVs inoperable due to excess seat leakage but for PORVs inoperable for any other reason the revised specification requires that inoperable PORVs be restored within 1 hour or that the associated block valve be closed within one hour and that a specified portion of the PORVs be restored within specified time periods or the reactor shutdown. The revised specification is consistent with such specifications being issued currently for new plants and is acceptable.

c. The proposed technical specification regarding the loose-part detection system instrumentation is not being issued with these amendments. The technical specification as proposed would require no action other than the submittal of a special report. Under today's criteria for technical specifications, specifications such as this are being dropped. The NRC does not today have any requirements for technical specifications for loose-part detection systems. This has been discussed with the licensee who has voiced no objection.

d. The proposed changes to the heatup and cooldown curves would change the applicability of the curves from 6 effective full-power years (EFPY) to 5 EFPY. The licensee is in the process of evaluating the first reactor vessel surveillance specimen (capsule S) from Unit 1. The results will be submitted to NRC by January 31, 1988. In addition, NRC's evaluation of pressurized thermal shock (10 CFR 50.61) for Diablo Canyon shows a

somewhat higher value of copper in the controlling beltline material for Unit 1. As a result, it is very likely the curves will need some changing again in the near future. Since this is the case, and since there is ample time until the present curves expire (about 3 EFPY or 3.75 calendar years), we will not issue revised curves now but instead request PG&E to submit revised curves based on the new information within 30 days of its submittal of the capsule S summary technical report required by 10 CFR 50, Appendix H. The NRC staff would therefore have in hand proposed revised curves by the end of February, 1988, thereby allowing ample time for review and issuance before they are needed.

3.0 ENVIRONMENTAL CONSIDERATION

The pressurizer relief valve technical specifications involve changes in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. We have 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 a proposed finding that the amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these amendments meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9).

The amendments for the Startup Reports relate to changes in recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10).

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.

4.0 CONCLUSION

We have 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, and (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 Contributor: Charles M. Trammell

Dated: January 5, 1988