

NOV 30 1981
FEDERAL BUREAU OF INVESTIGATION
WASHINGTON, D. C. 20535

PACIFIC GAS AND ELECTRIC COMPANY
DIABLO CANYON NUCLEAR POWER PLANT, UNIT 1
DOCKET NO. 50-275
FACILITY OPERATING LICENSE

License No. DPR-80

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for licenses by Pacific Gas and Electric Company 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, and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of the Diablo Canyon Nuclear Power Plant, Unit 1 (the facility), has been substantially completed in conformity with Provisional Construction Permit No. CPPR-39 and the application, as amended, the provisions of the Act, and the regulations of the Commission;
 - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission, except as exempted from compliance in Section 2.D below;
 - D. There is reasonable assurance (i) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the regulations of the Commission set forth in 10 CFR Chapter I, except as exempted from compliance in Section 2.D below;
 - E. The Pacific Gas and Electric Company is technically qualified to engage in the activities authorized by this operating license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;
 - F. The Pacific Gas and Electric Company has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements", of the Commission's regulations;
 - G. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public;

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- ii. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Facility Operating License No. DPR-80, subject to the conditions for protection of the environment set forth herein, is in accordance with applicable Commission regulations governing environmental reviews (10 CFR Part 50, Appendix D and 10 CFR Part 51) and all applicable requirements have been satisfied; and
 - I. The receipt, possession, and use of source, byproduct, and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70.
2. Pursuant to Commission's Memorandum and Order CLI-84-13, dated August 10, 1984, Facility Operating License No. DPR-76 issued September 22, 1981, as subsequently amended, is superseded by Facility Operating License No. DPR-80, hereby issued to Pacific Gas and Electric Company to read as follows:
 - A. This License applies to the Diablo Canyon Nuclear Power Plant, Unit 1, a pressurized water nuclear reactor and associated equipment (the facility), owned by the Pacific Gas and Electric Company (PG&E). The facility is located in San Luis Obispo County, California, and is described in PG&E's Final Safety Analysis Report as supplemented and amended, and the Environmental Report as supplemented and amended.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses the Pacific Gas and Electric Company:
 - (1) Pursuant to Section 104(b) of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities", to possess, use, and operate the facility at the designated location in San Luis Obispo County, California, in accordance with the procedures and limitations set forth in this license;
 - (2) Pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
 - (3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

- (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
 - (5) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. This License shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
- (1) Maximum Power Level

The Pacific Gas and Electric Company is authorized to operate the facility at reactor core power levels not in excess of 3338 megawatts thermal (100% rated power) in accordance with the conditions specified herein.
 - (2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated in this license. The Pacific Gas and Electric Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.
 - (3) Initial Test Program

The Pacific Gas and Electric Company shall conduct the post-fuel-loading initial test program (set forth in Section 14 of Pacific Gas and Electric Company's Final Safety Analysis Report, as amended), without making any major modifications of this program unless modifications have been identified and have received prior NRC approval. Major modifications are defined as:

 - a. Elimination of any test identified in Section 14 of PG&E's Final Safety Analysis Report as amended as being essential;

- b. Modification of test objectives, methods, or acceptance criteria for any test identified in Section 14 of PG&E's Final Safety Analysis Report, as amended, as being essential;
- c. Performance of any test at a power level different from that described in the program; and
- d. Failure to complete any test included in the described program (planned or scheduled for power levels up to the authorized power level).

(4) Special Tests

PG&E is authorized to perform steam generator moisture carryover studies and turbine performance tests at the Diablo Canyon Nuclear Power Plant, Unit 1. These studies involve the use of an aqueous tracer solution of three (3) curies of sodium-24. PG&E's personnel shall be in charge of conducting these studies and be knowledgeable in the procedures. PG&E shall impose personnel exposure limits, posting, and survey requirements in conformance with those in 10 CFR Part 20 to minimize personnel exposure and contamination during the studies. Radiological controls shall be established in the areas of the chemical feed, feedwater, steam, condensate and sampling systems where the presence of the radioactive tracer is expected to warrant such controls.. PG&E shall take special precautions to minimize radiation exposure and contamination during both the handling of the radioactive tracer prior to injection and the taking of system samples following injection of the tracer. PG&E shall ensure that all regulatory requirements for liquid discharge are met during disposal of all sampling effluents and when re-establishing continuous blowdown from the steam generators after completion of the studies.

(5) Fire Protection

- a. PG&E shall maintain in effect and fully implement all provisions of the approved fire protection plan and of the NRC staff's Fire Protection Evaluation in Supplements 8, 9, 13, 23, and 27 to the Diablo Canyon Safety Evaluation Report, subject to provisions b and c below.
- b. The licensee shall make no change to features of the approved fire protection program which would decrease the level of fire protection in the plant without prior approval of the Commission. To make such a change the licensee must submit an application for license amendment pursuant to 10 CFR 50.90.

- c. The licensee may make changes to features of the approved fire protection program which do not decrease the level of fire protection without prior Commission approval after such features have been installed as approved, provided such changes do not otherwise involve a change in a license condition or technical specification or result in an unreviewed safety question (see 10 CFR 50.59). However, the licensee shall maintain, in an auditable form, a current record of all such changes including an evaluation of the effects of the change on the fire protection program and shall make such records available to NRC inspectors upon request. All changes to the approved program made without prior Commission approval shall be reported to the Director of the Office of Nuclear Reactor Regulation, together with supporting analyses, annually.

(6) NUREG-0737 Conditions

Each of the following conditions shall be completed to the satisfaction of the NRC as indicated below. Each of the following conditions references the appropriate Section in SER Supplements No. 10 and/or No. 12.

a. Shift Technical Advisor (Section I.A.1.1)

PG&E shall provide a fully-trained, on-shift technical advisor to the Shift Foreman.

b. Shift Staffing (Section I.A.1.3)

Until the plant has completed its startup test program, licensed personnel who are not regularly assigned members of the shift staff, including but not limited to the Operations Supervisor, shall not be assigned shift duties to satisfy the minimum staffing requirements for operation in Modes 1, 2, 3 and 4 except for cases of emergencies such as unexpected illness. Exceptions to this requirement may be made only after prior consultation with and approval by the NRC.

c. Management of Operations (Section I.B.1)

The Pacific Gas and Electric Company shall augment the plant staff to provide on each shift an individual experienced in comparable size pressurized water reactor operation. These individuals shall have at least one year of experience in operation of large pressurized

water reactors or shall have participated in the startup of at least three pressurized water reactors. At least one such experienced individual shall be on duty on each shift through the startup test program whenever the reactor is not in a cold shutdown condition for at least the first year of operation or until the plant has attained a nominal 100% power level, whichever occurs first.

d. Procedures for Verifying Correct Performance of Operating Activities (Section I.C.6)

Procedures shall be available to verify the adequacy of the operating activities.

e. Post Accident Sampling (Section II.B.3)

PG&E shall provide the capability to promptly obtain and perform radioisotopic and chemical analyses of reactor coolant and containment atmosphere samples under degraded core conditions without excessive exposure.

f. Relief and Safety Valve Test Requirements (Section II.D.1)

PG&E shall implement the results of the EPRI test program.

g. Containment Isolation Dependability (Section II.E.4.2)

PG&E shall limit the 12-inch vacuum/overpressure relief valve opening to less than or equal to 50 degrees.

h. Calculations for Small-Break LOCAs (Sections II.K.3.30 and II.K.3.31)

PG&E is participating in the Westinghouse Owners Group effort for this item and shall conform to the results of this effort. Within one year of staff approval of the Westinghouse generic methodology for calculating small break LOCAs (II.K.3.30), PG&E shall submit a plant specific calculation (II.K.3.31) for staff review and approval.

i. Long-Term Emergency Preparedness (Section III.A.2)

(1) PG&E shall submit a detailed control room design review summary report by December 31, 1984.

(2) PG&E shall complete operator training on the Safety Parameter Display System and emergency operating procedures by March 28, 1985.

- (3) PG&E shall implement emergency operating procedures based upon Westinghouse Owners Group guidelines by March 28, 1985.

(7) Seismic Design Bases Reevaluation Program (SSER 27 Section IV.5)

PG&E shall develop and implement a program to reevaluate the seismic design bases used for the Diablo Canyon Nuclear Power Plant.

The program shall include the following Elements:

- (1) PG&E shall identify, examine, and evaluate all relevant geologic and seismic data, information, and interpretations that have become available since the 1979 ASLB hearing in order to update the geology, seismology and tectonics in the region of the Diablo Canyon Nuclear Power Plant. If needed to define the earthquake potential of the region as it affects the Diablo Canyon Plant, PG&E will also reevaluate the earlier information and acquire additional new data.
- (2) PG&E shall reevaluate the magnitude of the earthquake used to determine the seismic basis of the Diablo Canyon Nuclear Plant using the information from Element 1.
- (3) PG&E shall reevaluate the ground motion at the site based on the results obtained from Element 2 with full consideration of site and other relevant effects.
- (4) PG&E shall assess the significance of conclusions drawn from the seismic reevaluation studies in Elements 1, 2 and 3, utilizing a probabilistic risk analysis and deterministic studies, as necessary, to assure adequacy of seismic margins.

PG&E shall submit for NRC staff review and approval a proposed program plan and proposed schedule for implementation by January 30, 1985. The program shall be completed and a final report submitted to the NRC three years following the approval of the program by the NRC staff.

PG&E shall keep the staff informed on the progress of the reevaluation program as necessary, but as a minimum will submit quarterly progress reports and arrange for semi-annual meetings with the staff. PG&E will also keep the ACRS informed on the progress of the reevaluation program as necessary, but not less frequently than once a year.

(8) Control of Heavy Loads (SSER 27, Section IV.6)

Prior to startup following the first refueling outage, the licensee shall submit commitments necessary to implement changes and modifications as required to satisfy the guidelines of Section 5.1.2 through 5.1.6 of NUREG-0612 (Phase II: 9-month responses to the NRC Generic Letter dated December 22, 1980).

(9) Emergency Preparedness (SSER 27, Section IV.3)

In the event that the NRC finds that the lack of progress in completion of the procedures in the Federal Emergency Management Agency's final rule, 44 CFR Part 350, is an indication that a major substantive problem exists in achieving or maintaining an adequate state of preparedness, the provisions of 10 CFR Section 50.54(s)(2) will apply.

(10) Masonry Walls (SSER-27, Section IV.4; Safety Evaluation of November 2, 1984)

Prior to start-up following the first refueling outage, the licensee shall (1) evaluate the differences in margins between the staff criteria as set forth in the Standard Review Plan and the criteria used by the licensee, and (2) provide justification acceptable to the staff for those cases where differences exist between the staff's and the licensee's criteria.

D. Exemption

Exemption from certain requirements of Appendix J to 10 CFR Part 50 is described in the Office of Nuclear Reactor Regulation's Safety Evaluation Report, Supplement No. 9. This exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest. Therefore, this exemption, previously granted in Facility Operating License No. DPR-76, is hereby reaffirmed. The facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission.

E. Physical Protection

The licensee shall fully implement and maintain in effect all provisions of the Commission approved physical security, guard training and qualification, and safeguards contingency plans, including amendments made pursuant to the authority of 10 CFR 50.54(p). The approved plans, which contain safeguards information as described in 10 CFR 73.21 are entitled "Diablo Canyon

"Nuclear Plant Physical Security Plan," Revision 11 dated May 27, 1982, as revised July 19, August 12, September 17, 1982; February 4, August 3, 1983; January 11, February 6, March 19, April 19, August 29, 1984; "Diablo Canyon Nuclear Plant Guard Training and Qualification Plan," Revision 2 dated February 4, 1983 as revised August 29, 1984; "Diablo Canyon Nuclear Plant Safeguards Contingency Plan," Revision 2 dated February 4, 1983 as revised August 3, 1983, August 29, 1984.

F. Antitrust

Pacific Gas and Electric Company shall comply with the antitrust conditions in Appendix C to this license.

G. Reporting

PG&E shall report any violations of the requirements contained in Sections 2.C(3) through 2.C(10), 2.E and 2.F, of this License within 24 hours. Initial notification shall be made in accordance with the provisions of 10 CFR 50.72 with written follow-up in accordance with the procedures described in 10 CFR 50.73 (b), (c), (d) and (e).


H. Financial Protection

PG&E shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.

I. Term of License

This License is effective as of the date of issuance and shall expire at midnight on April 23, 2008.

FOR THE NUCLEAR REGULATORY COMMISSION


Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Attachments:

1. Appendix A - Technical Specifications
2. Appendix B - Environmental Protection Plan
3. Appendix C - Antitrust Conditions

Date of Issuance: November 2, 1984