

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

# PACIFIC GAS AND ELECTRIC COMPANY

# DOCKET NO. 50-275

# DIABLO CANYON NUCLEAR POWER PLANT, UNIT NO. 1

# AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 108 License No. DPR-80

- The Nuclear Regulatory Commission (the Commission) has found that: 1.
  - The application for amendment by Pacific Gas and Electric Company Α. (the licensee) dated September 30, 1995, 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;
  - The facility will operate in conformity with the application, the Β. provisions of the Act, and the rules and regulations of the Commission:
  - There is reasonable assurance (i) that the activities authorized С. 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;
  - The issuance of this amendment will not be inimical to the common D. defense and security or to the health and safety of the public; and
  - The issuance of this amendment is in accordance with 10 CFR Ε. Part 51 of the Commission's regulation: and all applicable requirements have been satisfied.
- Accordingly, the license is amended by changes to the Technical 2. 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:

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#### **Technical Specifications** (2)

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 108, are hereby incorporated in the license. Pacific Gas and 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.

This license amendment is effective as of its date of issuance. 3.

FOR THE NUCLEAR REGULATORY COMMISSION

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William H. Bateman, Director Project Directorate IV-2 Division of Reactor Projects III/IV Office of Nuclear Reactor Regulation

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Attachment: Changes to the Technical Specifications

Date of Issuance: October 1, 1995



UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

### PACIFIC GAS AND ELECTRIC COMPANY

#### DOCKET NO. 50-323

#### DIABLO CANYON NUCLEAR POWER PLANT, UNIT NO. 2

# AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 107 License No. DPR-82

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Pacific Gas and Electric Company (the licensee) dated September 30, 1995, 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 rules and 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.
- 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) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 107, are hereby incorporated in the license. Pacific Gas and 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.

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3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

William H. Bateman, Director Project Directorate IV-2 Division of Reactor Projects III/IV Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: October 1, 1995

#### ATTACHMENT TO LICENSE AMENDMENTS

# AMENDMENT NO. 108 TO FACILITY OPERATING LICENSE NO. DPR-80

## AND AMENDMENT NO. 107 TO FACILITY OPERATING LICENSE NO. 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 Amendment number and contain marginal lines indicating the areas of change. The corresponding overleaf pages are also provided to maintain document completeness.

F	EMOVE	INSERT			
	/4 7-3 /4 7-1	В	3/4 3/4		

1.0

# TABLE 3.7-2

# STEAM LINE SAFETY VALVES PER LOOP

LIFT SETTING*	ORIFICE SIZE
1065 psig (-2%, +3%)**	4.515 inches
1078 psig (±3%)**	4.515 inches
1090 psig (±3%)**	4.515 inches
1103 psig (±3%)**	4.515 inches
1115 psig (±3%)**	4.515 inches

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Unit 1 - Amendment No. 108 Unit 2 - Amendment No. 107

<sup>\*</sup> The lift setting pressure shall correspond to ambient conditions of the valve at nominal operating temperature and pressure.

<sup>\*\*</sup>Within ±1% following main steam line Code safety valve testing.

## PLANT SYSTEMS

## AUXILIARY FEEDWATER SYSTEM

#### LIMITING CONDITION FOR OPERATION

3.7.1.2 At least three steam generator auxiliary feedwater pumps and associated flow paths shall be OPERABLE with:

- a. Two motor-driven auxiliary feedwater pumps, each capable of being powered from separate vital busses, and
- b. One steam turbine-driven auxiliary feedwater pump capable of being powered from two OPERABLE and redundant steam supply sources.

APPLICABILITY: MODES 1, 2 and 3.

## ACTION:

- a. With one auxiliary feedwater pump inoperable, restore the required auxiliary feedwater pumps to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. With two auxiliary feedwater pumps inoperable, be in at least HOT STANDBY within 6 hours and in HOT SHUTDOWN within the following 6 hours.
- c. With three auxiliary feedwater pumps inoperable, immediately initiate corrective action to restore at least one auxiliary feedwater pump to OPERABLE status as soon as possible.

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#### SURVEILLANCE REQUIREMENTS

4.7.1.2.1 Each auxiliary feedwater pump shall be demonstrated OPERABLE:

- a. At least once per 31 days by:
  - 1) Deleted.

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#### 3/4.7 PLANT SYSTEMS

#### BASES

#### 3/4.7.1 TURBINE CYCLE

# 3/4.7.1.1 SAFETY VALVES

The primary purpose of the main steam safety valves (MSSVs) is to provide overpressure protection for the secondary system. The MSSVs also provide protection against overpressurizing the reactor coolant pressure boundary by providing a heat sink for the removal of energy from the reactor coolant system if the preferred heat sink, provided by the condenser and the circulating water system, is not available.

Five MSSVs are located on each main steam header, outside containment, upstream of the main steam isolation valves. The MSSV design includes staggered setpoints, according to Table 3.7-2 so that only the needed valves will actuate. Staggered setpoints reduce the potential for valve chattering that is due to steam pressure insufficient to fully open all valves following a turbine reactor trip.

The design basis for the MSSVs comes from ASME Code Section III, and its purpose is to limit the secondary system pressure to less than or equal to 110% of design pressure. This design basis is sufficient to cope with any anticipated operational occurrence or accident considered in the design basis accident and transient analysis. The tolerance on the MSSV setpoints assures that the secondary system will not be overpressurized if the MSSVs lift at the high end of their tolerance band, and assures that the steam generators (SGs) will not be overfilled during a SG tube rupture if the MSSVs lift at the low end of their tolerance band. A minimum of two OPERABLE safety valves per SG ensures that sufficient relief capacity is available for the allowable THERMAL POWER restriction in Table 3.7-1.

STARTUP and/or POWER OPERATION is allowable with safety valves inoperable within the limitations of the ACTION requirements on the basis of the reduction in Secondary Coolant System steam flow and THERMAL POWER required by the reduced Reactor trip settings of the Power Rangé Neutron Flux channels. The Reactor Trip Setpoint reductions are derived on the following bases:

$$SP = \frac{(X) - (Y)(V)}{X} \times (109)$$

Where:

- SP = Reduced Reactor Trip Setpoint in percent of RATED THERMAL POWER,
- V = Maximum number of inoperable safety valves per steam line,
- 109 Power Range Neutron Flux-High Trip Setpoint.
  - X = Total relieving capacity of all safety valves per steam line in lb/hour, and
  - Y . Maximum relieving capacity of any one safety valve in 1b/hour.

## PLANT SYSTEMS

#### BASES

#### 3/4.7.1.2 AUXILIARY FEEDWATER SYSTEM

The OPERABILITY of the Auxiliary Feedwater System ensures that the Reactor Coolant System can be cooled down to less than 350°F from normal operating conditions in the event of a total loss of off-site power.

Each electric motor-driven auxiliary feedwater pump is capable of delivering a total feedwater flow of 440 gpm at a pressure of 1135 psig to the entrance of the steam generators. The steam-driven auxiliary feedwater pump is capable of delivering a total feedwater flow of 880 gpm at a pressure of 1135 psig to the entrance of the steam generators. The capacity of one motor-driven AFW pump (440 gpm) delivered to at least two steam generators is sufficient to ensure that adequate feedwater flow is available to remove decay heat and reduce the Reactor Coolant System temperature to less than 350°F when the Residual Heat Removal System may be placed into operation.

## 3/4.7.1.3 AUXILIARY FEEDWATER SOURCE

The principal function of the Auxiliary Feedwater (AFW) Source is to provide a qualified source of water to the steam generators via the AFW System for removal of decay and sensible heat from the Reactor Coolant System (RCS) through generation and release of steam.

The minimum usable water volume in the Condensate Storage Tank (CST) ensures the availability of sufficient water for cooldown of the RCS to less than 350°F in the event of a total loss of offsite power. This minimum volume is also sufficient to remove decay heat sufficient to maintain the RCS at HOT STANDBY conditions for 8 hours with steam discharge to the atmosphere.

An alternate plant cooldown scenario has been postulated for the loss of offsite power, which assumes a reduced Reactor Coolant System cooldown rate and provides credit only for seismically qualified water sources. The lower rate increases the cooldown time period until the Residual Heat Removal System can be used to remove further decay heat. The capacity of the seismically qualified portion of the CST is less than the total amount of water needed for the extended time period. The Fire Water Storage Tank (FWST) has been identified as the seismically qualified source of additional water in the event of an extended cooldown without offsite power.

With the CST less than the required volume, the volume must be restored to the limit. Four hours provides time to restore the required volume from the condenser, or other source, and is a reasonable time to limit the risk from accidents requiring the plant to cool down.

With the FWST unable to supply the required backup volume of cooling water to the AFW System, the operability of the supply must be restored within seven days. This is considered a reasonable time to limit the risk of an accident which would require the use of the backup volume in addition to the primary volume maintained in the CST. Alternate non-seismically qualified water sources are also available to supply water to supplement the CST volume.

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