



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 58 TO FACILITY OPERATING LICENSE NO. DPR-80
AND AMENDMENT NO. 57 TO FACILITY OPERATING LICENSE NO. DPR-82
PACIFIC GAS AND ELECTRIC COMPANY
DIABLO CANYON NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2
DOCKET NO. 50-275 AND 50-323

1.0 INTRODUCTION

By letter dated September 11, 1990, Pacific Gas and Electric Company (PG&E or the licensee) requested amendments to the combined Technical Specifications (TS) appended to Facility Operating License Nos. DPR-80 and DPR-82 for the Diablo Canyon Power Plant (DCPP), Unit Nos. 1 and 2, respectively. These amendments revise the TS for Diablo Canyon to permit a one-time extension of the inspection period, for the case of one inoperable snubber of a given type, from 12 months plus or minus 25 percent to 15 months plus or minus 25 percent for Unit 1, Cycle 4. The change is needed to avoid an otherwise unnecessary unit shutdown and the associated potential challenges to plant safety systems. The NRC staff has reviewed the proposed change to the TS and has found it acceptable, based on the evaluation discussed below.

2.0 EVALUATION

Snubbers are installed to ensure that the structural integrity of the reactor coolant system and all other safety-related systems is maintained during and following a seismic or other event that imposes dynamic loads on safety-related systems. To periodically verify snubber operability, TS 4.7.7.1.b requires that a visual inspection of snubbers be performed at a surveillance interval determined by the number of inoperable snubbers found during the previous inspection.

For Diablo Canyon Unit 1, the current inspection interval for small, inaccessible, Anchor-Darling snubbers is 12 months plus or minus 25 percent because one snubber of this type was found to be inoperable during the previous inspection on October 3, 1989.

Since the inoperable snubber (22-543SL) was found on October 3, 1989, the subsequent visual inspection of the affected group of Anchor-Darling snubbers is required to be performed between July 13, 1990 and January 13, 1991, in accordance with TS 4.7.7.1.b. Inspection of all 46 Anchor-Darling snubbers requires that the unit be in Mode 5 or 6 since the snubbers are located in high radiation areas. Unit 1 is scheduled to start the next refueling outage on February 15, 1991. Therefore, performance of the snubber visual inspection in accordance with TS 4.7.7.1.b would require an unscheduled and otherwise unnecessary unit shutdown.

These amendments modify TS 4.7.7.1.b to allow continued operation of Diablo Canyon Unit 1 until the scheduled refueling outage begins. This increase in the visual inspection surveillance interval has certain safety advantages. Specifically, it eliminates an extra plant shutdown and restart, thereby reducing the probability of transient events, which are more likely to occur during heatup and cooldown than during full power, steady-state operation. Also, performing the visual inspections during a refueling outage is beneficial from an ALARA (as low as reasonably achievable) standpoint, because radiation levels in the area of the inaccessible snubbers will be substantially lower than during an outage of shorter duration.

The increased inspection period allowed by these amendments reduces, to some extent, confidence in snubber operability during the approximately one month extension of the inspection period. However, the licensee states that "The current inspection period and attendant confidence level for large snubber populations is very conservative. Diablo Canyon has a snubber population of 633 in Unit 1 and 463 in Unit 2. Since 1986, Diablo Canyon has performed over 10,000 visual snubber inspections in Units 1 and 2. There has been one snubber declared inoperable in this time period, corresponding to a failure rate of 0.01 percent [...]. This, coupled with the June 1990 inspections and findings and because the procedures have been modified to preclude this problem from recurring, increases PG&E's confidence that a similar condition will not be found in this population."

The licensee also states that "Based upon this inspection history and a BNL [Brookhaven National Laboratory] study, PG&E believes that the proposed one-time extension of the visual inspection surveillance interval from 12 months [plus or minus] 25 percent to 15 months [plus or minus] 25 percent will not significantly affect the probability or consequences of an accident."

In addition, the licensee states that "Past operating experience indicates that PG&E's current snubber program adequately minimizes snubber failures. The probability of a snubber failure occurring during the increased visual inspection time interval, which is still less than the normal 18 month interval for no observed failures, is not significant."

Finally, the licensee states that "Based on the history of a limited number of snubber failures at Diablo Canyon and the visual inspection in June 1990, PG&E believes there is reasonable assurance that the one-time extension of the snubber surveillance test period for the 46 Anchor-Darling, smell, inaccessible snubbers will not adversely affect the health and safety of the public.

The NRC staff has reviewed the licensee's basis for the proposed changes to the Combined Technical Specifications for Diablo Canyon Units 1 and 2 finds them acceptable.

3.0 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 changes a surveillance requirement. The staff has determined that these 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 these 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 this amendment.

4.0 CONCLUSION

The Commission made a proposed determination that this amendment involves no significant hazards consideration. The proposed determination was published in the Federal Register on November 14, 1990 (55 FR 47574). No public comments or requests for hearing were received.

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, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

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Dated: January 8, 1991