



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 31 TO FACILITY OPERATING LICENSE NO. DPR-80
AND AMENDMENT NO. 30 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 October 29, 1986, as supplemented by letter dated July 5, 1988 (Reference LAR 86-11), 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 decrease the maximum closure time for the containment vacuum/overpressure relief valves from 10 seconds to 5 seconds.

2.0 DISCUSSION

The staff reported its evaluation of the Diablo Canyon Unit 1 and Unit 2 containment isolation dependability with regard to NUREG-0737, Item II.E.4.2 in Supplemental Safety Evaluation Report (SSER) 9 (June 1980), SSER 14 (April 1981), and SSER 31 (April 1985). With respect to containment purge and vent valve operability (Position 6 of II.E.4.2), it is necessary to demonstrate the operability of these valves during a design basis accident in order to assure containment isolation. This demonstration of operability is recommended by Standard Review Plan (SRP) 6.2.4, Branch Technical Position (BTP) CSB 6-4, and SRP 3.10 for containment purge and vent valves which are not sealed closed during Modes 1, 2, 3 and 4. In SSERs 14 and 31, the staff required that the 12-inch vacuum/overpressure relief valves be limited to opening angles of 50 degrees or less until their operability under accident conditions had been fully demonstrated. Accordingly, a license condition to this effect was included in the operating license for both units, and the 10-second closing time was accepted pending an analysis of full qualification at a 5 second closing rate.

In its October 29, 1986 application for amendments, PG&E provided information to demonstrate operability of the 12-inch containment vacuum/overpressure relief valves. The information was reviewed by our contractor, EG&G, who prepared the attached Technical Evaluation Report (TER), "Demonstration of Containment Vacuum/Overpressure Relief Valve Operability", EGG-NTA-7841, dated September 1987. We have reviewed this report and agree with its conclusion that the Diablo Canyon relief valves are qualified to properly close against the buildup of containment pressure in the event of a design-basis loss-of-coolant accident, provided that the 12-inch valves are limited to a 50° opening as was assumed in the licensee's analysis. The requirement to limit the opening to 50° is already included in technical specification 3.6.1.7 for both units, thereby satisfying license conditions 2.C(6)g. for Unit 1 and license condition 2.C.(5)b. for Unit 2 which state the same requirement. Thus, the limitation on valve opening that was thought to be temporary is now permanent.

The decrease in the valve closure time will ensure earlier containment isolation and thus will reduce the radiological consequences following a LOCA. Therefore, the more rapid closure is more conservative from the standpoint of offsite releases. The 5-second valve closure time is consistent with Branch Technical Position CSB 6-4, Item B.1f, and Standard Review Plan Section 6.2.4.

By letter dated July 5, 1988, the licensee provided additional analyses revising the evaluation given in the October 29, 1986 letter. However, the revised evaluation did not change the conclusions reached in the earlier evaluation, nor the staff's conclusions on this issue.

Based on the above, the staff finds the proposed TS change to reduce the closure time for the containment vacuum/overpressure relief valves from 10 seconds to 5 seconds to be acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

These amendments involve changes in the installation or use of facility components 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 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.

4.0 CONTACT WITH STATE OFFICIAL

The NRC staff has advised the Chief of the Radiological Health Branch, State Department of Health Services, State of California, of the proposed determination of no significant hazards consideration. No comments were received.

5.0 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 the health and safety of the public.

Principal Contributors: Chang-Yang Li
Goutam Bagchi
Charles M. Trammell
Harry Rood

Dated: August 29, 1988