



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 71 TO FACILITY OPERATING LICENSE NO. DPR-80  
AND AMENDMENT NO. 70 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 June 5, 1991, as supplemented by letter dated May 19, 1992, Pacific Gas and Electric Company (PG&E or the licensee) requested amendments to Facility Operating Licenses DPR-80 and DPR-82 for Diablo Canyon Units 1 and 2, respectively. The amendment application is designated License Amendment Request LAR 91-05. The amendments change the combined Diablo Canyon technical specifications (TS) to relocate certain cycle-specific information from the TS to the Core Operating Limits Report (COLR) in accordance with Generic Letter (GL) 88-16, "Removal of Cycle-Specific Parameter Limits from Technical Specifications," dated October 4, 1988.

The May 19, 1992, submittal provided additional references to clarify the methodology used in determining the parameters relocated to the COLR by these amendments. Inclusion of these references is consistent with GL 88-16 and is within the scope of the initial notice and did not effect the Commission's initial determination.

The COLR for Diablo Canyon Units 1 and 2 was established on October 20, 1989, by Amendments 45 and 44 to Facility Operating License Nos. DPR-80 and DPR-82, respectively. Those amendments relocated the limiting values of three cycle-specific parameters from the TS to the COLR in conformance with the guidance of GL 88-16. The three limiting values relocated by Amendments 45 and 44 were (1) the shutdown rod insertion limits, (2) the control rod insertion limits, and (3) the axial flux difference limits. These amendments relocate additional cycle-specific parameters to the COLR in a manner similar to the relocation of the above three parameters in Amendments 45 and 44.

2.0 EVALUATION

The licensee's proposed changes to the TS are in accordance with the guidance provided by GL 88-16 and are addressed below.

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- A. The Definitions section of the TS was modified by Amendments 45 and 44 to include a definition of the COLR that requires cycle/reload-specific parameter limits to be established on a unit-specific basis in accordance with an NRC-approved methodology that maintains the limits of the safety analysis. The definition notes that plant operation within these limits is addressed by individual specifications. Because the definitions section of the TS was appropriately modified by previous amendments, no additional modification was necessary for these amendments.
- B. These amendments revise the following specifications to replace the cycle-specific parameter limits with a reference to the COLR that provides these limits.
1. TS 3/4.2.2, "Heat Flux Hot Channel Factor  $F_0(Z)$ ," has been changed to relocate the  $F_0(Z)$  and  $K(Z)$  functions to the COLR. The numerical  $F_0$  limit referenced in TS 3/4.2.2 has been replaced with the function  $F_0^{RTP}$  (rated thermal power), which is specified in the COLR. TS Figure 3.2-2, "K(Z) - Normalized  $F_0(Z)$  as a Function of Core Height" has been deleted from the TS and relocated to the COLR.
  2. TS 3/4.2.2 and TS 3/4.10 have also been modified to cross-reference the appropriate section of the modified TS or the COLR, as appropriate. Also, requirements specific to Unit 2 Cycle 3 have been deleted from the TS, because the unit is now on Cycle 5.
  3. TS 3/4.2.3, "RCS Flow Rate and Nuclear Enthalpy Rise Hot Channel Factor," has been changed to relocate  $F^N \Delta H$  to the COLR. The numerical values for the  $F^N \Delta H$  limit and part power multiplier have been replaced by the parameter  $F^{RTP} \Delta H$  and Power Factor  $\Delta H$  (PF  $\Delta H$ ), which are defined in the COLR. TS Figures 3.2-3a and 3.2-3b have been revised to be consistent with TS 3/4.2.3.
  4. TS Bases 2.1.1, "Reactor Core," and 3/4.2.2 and 3/4.2.3, "Heat Flux Hot Channel Factor, and RCS Flowrate and Nuclear Enthalpy Rise Hot Channel Factor," have been modified to reflect the changes made in TS 3/4.2.2 and TS 3/4.2.3.
- C. Specification 6.9.1.8 was added to the TS by Amendments 45 and 44 to augment the reporting requirements of the Administrative Controls section of the TS. This specification requires that the COLR be submitted, upon issuance, to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector. The report provides the values of cycle-specific parameter limits that are applicable for the current fuel cycle. This specification requires that the values of these limits be established using NRC-approved methodology, consistent with all applicable limits of the safety

analysis. This specification also requires that all changes in cycle-specific parameter limits be documented in the COLR before each reload cycle or remaining part of a reload cycle and submitted upon issuance to the NRC, prior to operation with the new parameter limits. Since this specification is already in the TS, only minor modifications were required by these amendments. Specifically, TS 6.9.1.8.a, "Core Operating Limit Report," has been modified to delete references to surveillance requirements for  $W(Z)$  and  $F_{xy}$ . The modified COLR references the entire TS for  $W(Z)$  and  $F_{xy}$ . Also, TS 6.9.1.8.b is modified to include references to the methodology used in the analysis of large and small break LOCAs. These analyses have previously been approved by the NRC staff, and provide the basis for determining the  $F_a(z)$  and  $K(z)$  functions which are related to the COLR by these amendments.

On the basis of its review of the above items, the NRC staff concludes that the licensee provided an acceptable response to those items as addressed in the NRC guidance in Generic Letter 88-16 for modifying cycle-specific parameter limits in technical specifications. Because plant operation continues to be limited in accordance with cycle-specific parameter limits that are established using an NRC-approved methodology, the NRC staff concludes that this change is administrative in nature, and that there is no impact on plant safety as a consequence. Accordingly, the staff finds the proposed changes to be acceptable.

In summary, the NRC staff has reviewed the technical specification changes proposed by the licensee in its application for amendments to relocate additional cycle-specific parameter limits from the TS to the COLR. The staff finds that the changes conform to the guidance contained in Generic Letter 88-16 for relocation of cycle-specific parameter limits from the TS to the COLR. On the basis of its review of this issue, the NRC staff finds that the proposed changes to the Diablo Canyon TS are acceptable.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the California State official was notified of the proposed issuance of these amendments. The State official had no comments.

### 4.0 ENVIRONMENTAL CONSIDERATION

These amendments involve change in requirements with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and change surveillance requirements. The staff has 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 (56 FR 37587). 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.

#### 5.0 CONCLUSION

The Commission 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, (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.

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Date: July 1, 1992