



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 161 TO FACILITY OPERATING LICENSE NO. NPF-10

AND AMENDMENT NO. 152 TO FACILITY OPERATING LICENSE NO. NPF-15

SOUTHERN CALIFORNIA EDISON COMPANY

SAN DIEGO GAS AND ELECTRIC COMPANY

THE CITY OF RIVERSIDE, CALIFORNIA

THE CITY OF ANAHEIM, CALIFORNIA

SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3

DOCKET NOS. 50-361 AND 50-362

1.0 INTRODUCTION

By letter dated November 10, 1999 (PCN-510), Southern California Edison (SCE or the licensee) proposed changes to the San Onofre Nuclear Generating Station (SONGS) Units 2 and 3 Technical Specifications (TSs) relating to the pressurizer. Specifically, the licensee requested a revision to the Limiting Condition for Operation (LCO) 3.4.9.b to delete the phrase stating that two groups of pressurizer heaters be "capable of being powered from an emergency power supply."

2.0 BACKGROUND

At SONGS, the pressurizer design includes 30 immersion heaters, which are grouped into eight banks. Two banks of heaters are connected to proportional controllers that adjust the heat input as required to compensate for steady-state losses and to maintain the desired reactor coolant pressure. The remaining six banks of backup heaters are connected to on-off controllers. These heaters, normally deenergized, are turned on automatically by either pressure or level error signals.

The proportional heater banks and four of the six backup heater banks are powered from non-safety-related buses. Power to each of the two remaining backup heater banks is from separate safety-related class 1E buses under all conditions. These buses are 2B04 and 2B06 for Unit 2, and 3B04 and 3B06 for Unit 3.

Since the pressurizer heater elements are non-safety grade, the two banks powered from class 1E buses are automatically isolated by safety injection actuation or emergency feedwater actuation signals. Power to the heaters is automatically disconnected to ensure that the safety-grade power systems required for emergency core cooling and secondary cooling systems are not degraded. An operator override of the automatic disconnect is provided.

Currently TS 3.4.9, requires that two groups of pressurizer heaters be OPERABLE with the capacity of each group ≥ 150 kW and capable of being powered from an emergency power supply. The phrase "and capable of being powered from an emergency power supply" was unnecessarily retained when SONGS converted to the Standard TS For Combustion Engineering Plants, NUREG-1432. PCN-510 requests deletion of this phrase. The proposed amendments would revise the SONGS TS to be consistent with the Standard TS.

3.0 EVALUATION

TS 3.4.9, "Pressurizer," is intended, in part, to assure that pressurizer heater capacity is sufficient to maintain the reactor coolant system near normal operating pressure to account for heat losses through the pressurizer insulation under conditions that include a loss of offsite power. By maintaining the pressure near the operating conditions, a wide subcooling margin to saturation can be maintained in the loops. The proposed change to the plant TS will eliminate the requirement for the two required heaters to be capable of being powered from an emergency power supply. However, the two TS-required pressurizer heaters are attached to separate safety-related Class 1E buses under all conditions. These buses are 2B04 and 2B06 for Unit 2, and 3B04 and 3B06 for Unit 3. This is part of the current SONGS design and the Updated Final Safety Analysis Report (UFSAR) for SONGS 2 and 3 describes the pressurizer heaters and each of the associated power supplies. As a result, this change to the TS will not result in a change to the actual design of the plant. The requirements for emergency power for pressurizer heaters come from the Three Mile Island (TMI) action item requirements, as described in item II.E.3.1, "Emergency Power Supply For Pressurizer Heaters," of NUREG-0737, "A Clarification of TMI Action Plan Requirements." However, because the pressurizer heaters are permanently attached to Class 1E supplied power, NUREG-0737 item II.E.3.1, continues to be satisfied. Additionally, the changed TS is consistent with the intent of the Standard TSs for Combustion Engineering (CE STS) plants with pressurized heaters that are permanently installed on Class 1E safety buses. Because (1) the pressurizer heaters are permanently installed on Class 1E safety-related buses, (2) this design is described in the UFSAR and TS Bases, (3) the relevant TMI action item requirements continue to be met, and (4) the change is consistent with the CE STS, the staff finds the proposed change acceptable.

4.0 STATEMENT OF EXIGENT CIRCUMSTANCES

The Commission's regulation, as stated in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.91, provides special exceptions for the issuance of amendments when the usual 30-day public notice cannot be met. One type of special exception is an exigency. An exigency exists when the staff and the licensee need to act quickly and time does not permit the staff to publish a *Federal Register* notice allowing 30 days for prior public comment, and the staff also determines that the amendment involves no significant hazards consideration. In accordance with 10 CFR 50.91(a)(6)(i)(B), the staff used local media to provide reasonable notice to the public in the area surrounding the SONGS of the proposed amendments and proposed finding of no significant hazards consideration, and reasonable opportunity to comment thereon. The notice was published in the *Orange County Register*, San Clemente, California, on November 15 and 16, 1999, and requested any comments be submitted by November 19, 1999, by telephone, facsimile, e-mail, or mail. No comments were received.

In its submittal, the licensee discussed the need for an exigent review of the proposed license amendments. The licensee stated that it interpreted the requirement for pressurizer heater power "capable of being powered from an emergency power supply" to mean "powered from a class 1E bus." Recent conversations with NRC staff in conjunction with planning for online maintenance of the diesel generators (DGs) scheduled to begin November 29, 1999, have led the licensee to become aware that these words can be interpreted to mean "from an OPERABLE diesel generator." The licensee stated that prior to that time it was not aware of this interpretation and is not creating an exigency to take advantage of the regulation in this respect. The proposed TS change will not result in a change to the design of the plant. These pressurizer heaters will continue to be powered from the 1E buses and meet the requirements of NUREG-0737, item II.E.3.1, "Emergency Power Supply For Pressurizer Heaters."

Because planning for the DG outages is far advanced and the scheduled preventive maintenance is due, it is impractical to delay the scheduled maintenance while the NRC pursues the normal public notice process. Therefore, the licensee requested NRC review and approval of PCN-510 on an exigent basis.

On the basis of the above discussion, the staff has determined that exigent circumstances exist and that the licensee used its best efforts to make a timely application and did not cause the exigent situation.

4.0 STATE CONSULTATION

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

5.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

In accordance with the criteria set forth in 10 CFR 50.91 and 50.92, the licensee has evaluated this proposed TS change and determined it does not represent a significant hazards consideration. The following is provided by the licensee in support of this conclusion.

1. Will operation of the facility in accordance with this proposed change involve a significant increase in the probability or consequences of any accident previously evaluated?

Response: No

The proposed change would delete the phrase in Limiting Condition For Operation (LCO) 3.4.9.b that the pressurizer heaters be "capable of being powered from an emergency power supply." The Bases for Technical Specification 3.4.9 state that safety analyses presented in the Updated Final Safety Analysis Report do not take credit for pressurizer heater operation. Therefore, the consequences of any accident previously evaluated are not increased by the proposed change. The pressurizer heaters are not themselves a credible initiator of any accident, and the requested amendment makes no change to the heaters themselves, so the probability of an accident will not be increased. Therefore, the probability or consequences of any accident previously evaluated will not be increased by the proposed change.

2. Will operation of the facility in accordance with this proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

This amendment request does not involve any change to plant equipment or operation. It is a request to bring the Technical Specifications (TS) for San Onofre Nuclear Generating Station Units 2 and 3 (SONGS 2 & 3) into agreement with NUREG-1432, "Standard Technical Specifications Combustion Engineering Plants." Deleting the phrase "capable of being powered from an emergency power supply" will not create the possibility of a new or different kind of accident from any previously evaluated.

3. Will operation of the facility in accordance with this proposed change involve a significant reduction in a margin of safety?

Response: No

This amendment does not change the manner in which safety limits or limiting safety settings are determined. The Bases for TS 3.4.9 state that, while pressurizer heaters are needed to maintain subcooling in the long term to maintain natural circulation of the reactor coolant after a loss of offsite power, maintaining hot, high pressure conditions over an extended time period is not evaluated in the accident analyses. The heaters will continue to be powered from class 1E buses under all conditions, as designed. SONGS 2 & 3 will continue to meet the requirements of section II.E.3.1, "Emergency Power Supply For Pressurizer Heaters," of NUREG-0737, "Clarification of TMI Action Plan Requirements." Therefore, the proposed change will not involve a significant reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis, and based on this review, concludes that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff has made a final determination that the amendment request does not involve a significant hazards consideration.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC 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 made a final finding that the amendments involve no significant hazards consideration. Accordingly, the 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 the amendments.

6.0 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 the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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