

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 130 TO FACILITY OPERATING LICENSE NO. NPF-10

AND AMENDMENT NO. 119 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By application dated June 3, 1996, as superseded by application dated June 25, 1996, Southern California Edison Company (SCE or the licensee) requested changes to the Technical Specifications (Appendix A to Facility Operating License Nos. NPF-10 and NPF-15) for San Onofre Nuclear Generating Station (SONGS), Unit Nos. 2 and 3. The proposed changes would revise Improved Technical Specification (TS) 3.3.11, "Post Accident Monitoring Instrumentation (PAMI)," and Improved TS 5.5.2.13, "Diesel Fuel Oil Testing Program." These TS changes reinstate provisions of the current SONGS Units 2 and 3 TS revised as part of NRC Amendment Nos. 127 and 116 for SONGS Units 2 and 3 (referred to herein as the Improved TS).

2.0 BACKGROUND

NRC Amendment Nos. 127 and 116, dated February 9, 1996, approved a license amendment request by SCE that adopted the recommendations of NUREG-1432, "Standard Technical Specifications - Combustion Engineering Plants." These amendments revised, in their entirety, the TS and the Bases for SONGS Units 2 and 3. These Improved TS are to be implemented by the licensee no later than August 9, 1996.

During preparation of the procedure changes necessary to implement NRC Amendment Nos. 127 and 116, the licensee identified certain provisions of the current TS that were not properly incorporated into the Improved TS. In its letter dated June 25, 1996, the licensee requested that these provisions be restored into the Improved TS.

9608130120 960801 PDR ADDCK 05000361 PDR PDR

3.0 EVALUATION

The licensee has proposed changes to TS 3.3.11, "Post Accident Monitoring Instrumentation (PAMI)," and TS 5.5.2.13, "Diesel Fuel Oil Testing Program," of the Improved TS. The changes would reinstate provisions of the current SONGS Units 2 and 3 TS. Each of the proposed changes to the Improved TS are evaluated in detail below.

Improved TS 3.3.11, "Post Accident Monitoring Instrumentation (PAMI)"

Under the current TS, TS 3/4.3.3.6, "Accident Monitoring Instrumentation," requires operability of two channels of reactor coolant inlet temperature (T_{cold}) and two channels of Reactor Coolant Outlet Temperature (T_{Hot}) . Improved TS 3.3.11, "Post Accident Monitoring Instrumentation (PAMI)," which is based on the model TS contained in NUREG-1432, identifies two channels of reactor coolant inlet temperature (T_{cold}) per loop, and two channels of reactor coolant outlet temperature (T_{Hot}) per loop. Therefore, there was an unintentional increase in the number of instruments required when the licensee incorporated this section of NUREG-1432 into the SONGS Improved TS. The currently installed instrumentation satisfies the current TS, but cannot satisfy the specification inadvertently directly transcribed from NUREG-1432.

The SONGS requirements for PAMI are based on analyses performed to support Regulatory Guide (RG) 1.97, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following an Accident," Revision 2, 1980. T_{cold} and T_{wot} are identified as plant specific parameters considered Type A variables. SCE identified that the instrumentation to measure these parameters deviates from the RG in that the measurement range is 50°F to 710°F rather than the specified range of 50°F to 750°F. This was found acceptable by the NRC in its May 26, 1987, letter, "Safety Evaluation for Conformance to Regulatory Guide 1.97."

The only difference between the SONGS current TS and the NUREG TS (and current version of the Improved TS) for these parameters is the number of instruments per loop, and RG 1.97 provides guidance on the redundancy needed for these parameters. RG 1.97 states, "Where failure of one accident-monitoring channel results in information ambiguity (that is, the redundant displays disagree) that could lead operators to defeat or fail to accomplish a required safety function, additional information should be provided to allow the operators to deduce the actual conditions in the plant. This may be accomplished by providing additional independent channels of information of the same variable (addition of an identical channel) or by providing an independent channel to monitor a different variable that bears a known relationship to the multiple channels (addition of a diverse channel)."

The redundancy recommendations of RG 1.97 are met for T_{cold} and T_{Hot} at SONGS through the use of diverse channels. The cold leg temperature can be derived by measuring the steam generator pressure and converting to temperature using the steam tables. The SONGS steam generator pressure instrumentation fully meet the RG 1.97 Category 1 recommendations and are acceptable diverse indications for providing operators with unambiguous information on

temperature conditions in the cold legs. The hot leg temperature can be directly determined from the core exit thermocouples. The core exit thermocouples fully meet the RG 1.97 Category 1 recommendations, and are acceptable diverse indications for providing operators with unambiguous information on temperature conditions in the hot legs.

Therefore, the staff finds acceptable the restoration of the current TS requirement of two cold leg and two hot leg RCS temperature channels. The proposed change to the Improved TS will clarify that the two channels required include one cold leg indication and one hot leg indication per steam generator. The Bases for TS 3.3.11 will also be revised accordingly.

Improved TS 5.5.2.13, "Diesel Fuel Oil Testing Program"

Improved TS 5.5.2.13 is the diesel fuel oil testing program required by Surveillance Requirement (SR) 3.8.3.3 of Improved TS 3.8.3, "Diesel Fuel Oil, Lube Oil, and Starting Air." Section 5.5.2.13.a of the program includes various sampling and testing requirements, to be performed at least once every 92 days, and from new fuel oil prior to addition to the storage tanks. One of the tests verifies the kinematic viscosity. The limit currently specified in 5.5.2.13.a, is "greater than or equal to 4.1," which is incorrect. The Bases for SR 3.8.3 specifies the correct limit of "greater than or equal to 1.9, but less than or equal to 4.1." The range of 1.9 to 4.1 is also the acceptable viscosity range specified in ASTM-D975-81. The proposed change would revise the viscosity limit specified in the 5.5.2.13.a to be consistent with the Bases to SR 3.8.3.3. Also, a typographical error in paragraph b is corrected. The ASTM standard for sampling fuel oil is restored to ASTM-D4057-81.

The proposed changes restore the diesel fuel oil requirements to the existing requirements contained in the current TS. SR 4.8.1.1.2.c.1 of the current TS specifies the correct range of 1.9 to 4.1 for the kinematic viscosity, and SR 4.8.1.1.2.c.2 of the current TS specifies that a sample of fuel cil be obtained in accordance with ASTM-D4057-81. The staff finds acceptable the proposed changes to Improved TS 5.5.2.13.

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 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 previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (61 FR 34452). 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 masonable 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.

Principal Contributor: M. Fields

Date: August 1, 1996