



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 160 TO FACILITY OPERATING LICENSE NO. NPF-10  
AND AMENDMENT NO. 151 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 October 20, 1998, Southern California Edison Company, the licensee for San Onofre Nuclear Generating Station (SONGS), proposed technical specification (TS) changes to add a response time testing (RTT) requirement for the control room isolation signal. Currently, the SONGS TS for Units 2 and 3, Section 3.3.9, Control Room Isolation Signal (CRIS), does not require a response time surveillance test for the control room airborne radiation monitors; however, Title 10 of the *Code of Federal Regulations* (10 CFR ) Part 50, Appendix A, General Design Criterion (GDC) 19 requires that "adequate radiation protection shall be provided to permit access and occupancy of the control room under accident conditions without personnel receiving radiation exposures in excess of 5 rem whole body, or its equivalent to any part of the body, for the duration of the accident." The licensee proposes to add a new Surveillance Requirement (SR) 3.3.9.6, to ensure that the CRIS actuation response time is less than or equal to the maximum time assumed in the control room radiation dose calculations, and to satisfy the GDC 19 requirements. Additional information concerning the response time limit was provided by letter dated August 13, 1999. The licensee's August 13, 1999, letter provided clarifications and additional information that were within the scope of the original *Federal Register* notice and did not change the staff's initial proposed no significant hazards determination.

2.0 DESCRIPTION OF TS CHANGE

For both Units 2 and 3 TSs, the licensee proposes to add a new SR 3.3.9.6 which will read as follows: "Verify that response time of required CRIS channel is within limits." The frequency of this surveillance will be 18 months. The actual response time limit will be included in the Licensee Controlled Specification Section 3.3.100. The proposed SR is intended to ensure that the train actuation response times are less than or equal to the maximum times assumed in the control room radiation dose analyses. A time limit to isolate the control room is needed to

ensure compliance with 10 CFR Part 50, Appendix A, GDC 19. The 18-month frequency is based upon plant operating experience, which shows that random failures of instrumentation components causing serious response time degradation, but not channel failure, are infrequent occurrences. The response time is tested from the module input, that is, the radiation detector response is not measured.

### 3.0 EVALUATION

The current TSs for SONGS Units 2 and 3 do not have a requirement to test the response time of the CRIS. The regulation at 10 CFR Part 50, Appendix A, GDC 19 and NRC Regulatory Guide 1.52, "Design, Testing, and Maintenance Criteria for Postaccident Engineered-Safety-Feature Atmosphere Cleanup System Air Filtration and Adsorption Units of Light-Water-Cooled Nuclear Power Plants," Section C.2.i, require that the control room have an atmosphere cleanup system that automatically activates in the event of a design-basis accident. The licensee's limiting control room dose calculation requires that the CRIS be activated within 3 minutes after a high radiation signal and a safety injection actuation signal (SIAS) is generated. The proposed SR requires verification of the CRIS time to ensure that it is consistent with the control room dose calculation. In accordance with the staff guidance in the Generic Letter 93-08, "Relocation of Technical Specification Tables of Instrument Response Time Limits," the licensee proposes to include the actual limit for the response time test in the Licensee Controlled Specification. The licensee, in its August 13, 1999, letter indicated that the response time test value for the CRIS will be 2 minutes.

The value of 2 minutes is based on the worst case of transients, which generates a significant activity release before an SIAS-initiated CRIS, and for transients without an SIAS-initiated CRIS. In these cases, control room dose calculations currently assume, if necessary, that the control room is isolated on a high radiation-initiated CRIS within 3 minutes of the radioactive releases reaching the control room normal ventilation intake louvers.

The electronic response time of the radiation monitor and the closure time for the damper will be conservatively set at 2 minutes. The remaining 60 seconds of the 3-minute required control room isolation time is allocated to the sample transport time from the control room normal ventilation intake louvers to the radiation monitor detector. The analysis of record shows the transport time from the louvers to the radiation detector to be less than 15 seconds, thus allowing a 45-second margin. The proposed 2-minute electronic response time for CRIS actuation plus the 15 seconds transport time is less than the 3 minute CRIS time required by the analysis and therefore, acceptable.

The proposed 18-month surveillance frequency for the CRIS response time test is consistent with the other CRIS surveillance frequencies and therefore, acceptable.

### 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 and change surveillance requirements. 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 (64 *FR* 55311). 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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