

SAFETY EVALUATION

AMENDMENT NO. 24 TO NPF-10 AND 13 TO NPF-15

SAN ONOFRE NUCLEAR GENERATING STATION (SONGS), UNITS 2 AND 3

DOCKET NOS. 50-361 AND 50-362

Introduction and Summary

By letters dated July 23, 1982, August 16, 1982, December 17, 1982, January 28, 1983, January 25, 1984, and April 13, 1984, the licensees (Southern California Edison Company, San Diego Gas and Electric Company, the City of Anaheim, California, and the City of Riverside, California) requested that amendments be issued to Facility Operating Licenses NPF-10 and NPF-15 for operation of the San Onofre Nuclear Generating Station, Units 2 and 3.

The proposed change would revise note (4) of Table 4.3-2 of Technical Specifications 3/4.3.2, Engineered Safety Features Actuation System (ESFAS) Instrumentation, to exempt from testing during plant operation the 23 subgroup relays associated with ESFAS equipment which cannot be safely actuated during plant operation or would trip the plant. The proposed change would require testing of each of these 23 relays during each cold shutdown of duration exceeding 24 hours unless the relay was tested during the previous six months. Since the maximum operating time between refuelings is 18 months, the maximum interval between testing of ESFAS subgroup relays exempted from testing during power operation by the proposed change is 18 months, although it may be less. Therefore, the proposed change will result in a change in the maximum surveillance interval of the 23 affected relays from 6 months to 18 months.

Background

Based on the NRC staff's review of the application for operating licenses, it was the staff's understanding that the SONGS 2 and 3 design complied with the provisions of Regulatory Guide (R.G.) 1.22 and IEEE Standard-338. The staff understood during the OL review that all subgroup relays within the protection system could be tested with the plant at power. This included all the ESFAS subgroup relays associated with the actuated equipment (various valves) listed in FSAR Table 7.3-16A even though the equipment itself cannot

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be operated while the plant is at power. The licensees committed to meet R.G. 1.22 and IEEE-338 in Sections 7.2.1.1.9 and 7.3.1.1.1.9 of the FSAR and agreed to a 6-month surveillance requirement for all ESFAS subgroup relays during development of the SONGS Technical Specifications.

Subsequently, the licensees informed the staff by letter dated July 23, 1982 and in a meeting on July 29, 1982, that the SONGS 2 and 3 design does not allow the subgroup relays associated with the actuated equipment identified in FSAR Table 7.3-16A to be tested during reactor operation. The staff then requested that the licensees justify the adequacy of the protection system design with respect to the capability for testing at power. The staff noted that it would grant exceptions to the 6-month test interval for cases where the subgroup relay is associated with actuated equipment that cannot be operated while the plant is at power, provided that a plant specific justification is provided to demonstrate that relay assignments have been made in a manner that minimizes the number which cannot be tested at power and that the relay testing which will be performed is sufficient to verify continuing high reliability of the protection system. The licensees responded to the above staff request by letters dated August 16, 1982, December 17, 1982 and January 28, 1983. By letter dated January 25, 1984, the licensees proposed the technical specification change described above. The staff's evaluation of the proposed technical specification change is discussed below.

Evaluation

The licensees' January 28, 1983 letter includes a table which identifies all the active ESFAS subgroup relays (102 total) and defines which can and cannot be tested while the plant is at power. For the 23 relays that cannot be tested during plant operation, the licensees have provided the required justification. The staff has reviewed the information and finds it acceptable since it appears that testing of the 23 subgroup relays while the plant is at power could adversely affect plant safety or operability. Also, the actuated equipment assignments to the subgroup relays were made in a manner to minimize the number of components which cannot be tested with the plant at power. The staff has also determined that the reliability of the subgroup relays can be adequately maintained and verified through the six month periodic testing of those relays which can be tested at power in conjunction with the testing of the remaining relays when the plant is in a cold shutdown condition.

After being advised of the staff's conclusions described above, the licensees, by letter dated January 25, 1984, proposed to incorporate this ESFAS subgroup relay test requirement into the SONGS Technical Specifications by modifying Note (4) to Table 4.3-2 to read:

"(4) A subgroup relay test shall be performed which shall include the energization/deenergization of each subgroup relay and verification of the OPERABILITY of each subgroup relay. Relays exempt from testing during plant operation shall be limited only to those relays associated with equipment which cannot be operated during plant operation. Relays not testable during plant operation shall be tested during each COLD SHUTDOWN exceeding 24 hours unless tested during the previous 6 months."

This note will ensure that the testing requirements for all but a limited number of subgroup relays are consistent with the provisions of the regulatory guidance provided in R.G. 1.22 and IEEE-338 (i.e., the subgroup relays which are associated with actuated equipment that can be operated at power will be tested every 6 months). Since all the ESFAS subgroup relays for SONGS are the same type, the 6 month surveillance testing for those (79) that can be operated while at power in conjunction with the less frequent required testing of the remaining relays will provide sufficient, plant specific operational data to verify the reliability of all the relays. On this basis, the staff finds the proposed change to be acceptable.

Contact With State Official

By copy of a letter dated July 6, 1984 to the licensees, the NRC staff advised the Chief of the Radiological Health Branch, State Department of Health Services, State of California, of its proposed determination of no significant hazards consideration. No comments were received.

Environmental Consideration

The amendments involve a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. 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 this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in CFR 51.22 (c)(9). Pursuant to 10 CFR 51.22(b), no environmental assessment need be prepared in connection with the issuance of the amendments.

Conclusion

Based upon our evaluation of the proposed changes to the San Onofre 2 and 3 Technical Specifications, we have concluded that: there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public. We, therefore, conclude that the proposed changes are acceptable.

Dated: SEP 24 1984

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ISSUANCE OF AMENDMENT NOS. 24 AND 13 TO FACILITY
OPERATING LICENSES NPF-10 AND NPF-15
SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3

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