



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 95 TO PROVISIONAL OPERATING LICENSE NO. DPR-13
SOUTHERN CALIFORNIA EDISON COMPANY
SAN ONOFRE NUCLEAR GENERATING STATION, UNIT NO. 1
DOCKET NO. 50-206

1.0 INTRODUCTION

By letter dated February 14, 1985, Southern California Edison Company (SCE) (the licensee) proposed changes to the San Onofre Nuclear Generating Station, Unit No. 1 (SONGS-1) Technical Specifications (TS).

The amendment modifies the TS to incorporate load limitations for emergency diesel engine testing and to modify the monthly surveillance test conditions and the duration of the 18-month test run. The remaining changes requested by the above submittal relate to modification of the existing requirements to specify when the engines should be started by a "slow" starting procedure and when a "fast" start should be performed. These changes are still under staff review and will be addressed by a separate evaluation.

2.0 DISCUSSION

By letter dated November 19, 1984, from D. M. Crutchfield (NRC) to K. Baskin (SCE), the staff provided a safety evaluation which concluded that the SONGS-1 emergency generator diesel engines made by Transamerica-DeLaval, Inc. (TDI) possessed the necessary operability and reliability to fulfill their intended emergency power function, at least until the next refueling outage, subject to several conditions. One of these conditions was that the licensee must propose TS changes so that engine load shall not exceed 4500kW \pm 5% for engine testing and emergency service requirements. By letter dated December 19, 1984, SCE stated that loading limits pertaining to emergency service would be handled by the San Onofre Unit 1 Emergency Operating Instructions. By letter dated February 14, 1985, the licensee proposed the requested TS changes for limiting engine load during testing. Also included in this application were proposed changes to (1) perform "slow" engine starts during the monthly surveillance testing, but retain the refueling interval "fast" start test which simulates design basis emergency power requirements, (2) delete the requirement to run the diesel generators for 60 minutes at 4422kW load during the refueling interval test (TS 4.4.F.2(d)), and (3) specify that the monthly surveillance and refueling interval tests start from "standby conditions" rather than "ambient conditions."

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As discussed in Section 1.0 above, the staff's review of changes related to "slow" vs. "fast" starts is still ongoing and will be addressed by a separate evaluation. The staff's evaluation of the other proposed changes is provided in Section 3.0.

3.0 EVALUATION

3.1 Limit Engine Load to 4500 kW \pm 5%

The staff's November 19, 1984 Safety Evaluation, which is incorporated herein by reference, concluded that a load limitation was required so that the Brake Mean Effective Pressure (BMEP) of the engines does not exceed 114 psig during steady-state operation. The limit is required because the type AF piston skirts used in the SONGS-1 engines are not considered adequate for long-term service at pressures greater than 114 psig. A detailed explanation of the basis for this conclusion is found in Section 3.2.6 of the Technical Evaluation Report prepared by the NRC's contractor, Pacific Northwest Laboratory, which was provided as an enclosure to the staff's November 19, 1984 Safety Evaluation.

The NRC staff has reviewed the licensee's proposed changes to technical specifications 4.4.B.1 and 4.4.F.2 to limit the engine loading to 4500 kW \pm 5% and has determined that they are adequate to satisfy the condition imposed by the staff's previous evaluation. Thus, the proposed changes are acceptable.

3.2 Deletion of the One-Hour Run Requirement from TS 4.4.F.2.(d)

TS 4.4.F.2(d) currently requires that the diesel generators run for 60 minutes at 4422 kW load as part of the refueling outage test that simulates safety injection demand concurrent with loss of offsite power. The licensee has proposed to delete this Technical Specification and has stated that it is considered superfluous in view of existing TS 4.4.F.2(b) which verifies the capability of the diesel to automatically take on emergency loads and then run for five minutes.

The staff has reviewed and concurs with the licensee's basis for the proposed change. The staff has also confirmed that deletion of the requirement to run the diesel for 60 minutes during this refueling outage test is consistent with the NRC Standard Technical Specifications and is, therefore, acceptable.

3.3 Changing Test Requirements to Indicate Starting from "Standby" Conditions Rather Than "Ambient" Conditions

Existing Technical Specifications 4.4.B.1 and 4.4.F.2 currently specify that the monthly surveillance and refueling interval diesel generator test starts shall be from "ambient" conditions. The licensee's February 14, 1985 proposed change specifies that these starts shall be from "standby" conditions. The licensee stated that "ambient" is considered misleading for a diesel generator system that is normally maintained above ambient temperature.

The staff has reviewed and concurs with the licensee's basis for the requested change. The staff concludes that the proposed change is administrative in nature and more clearly describes the actual conditions of the test. Thus, the staff concludes that the change is acceptable.

4.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change to 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 staff has determined that the amendment involves 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, this amendment meets 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 this amendment.

5.0 CONCLUSION

The staff 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, and (2) 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.

6.0 ACKNOWLEDGEMENT

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