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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 119 TO PROVISIONAL OPERATING LICENSE NO. DPR-13

SOUTHERN CALIFORNIA EDISON COMPANY

SAN DIEGO GAS AND ELECTRIC COMPANY

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT NO. 1

DOCKET NO. 50-206

1.0 INTRODUCTION

By letter dated October 30, 1987 Southern California Edison Company (the licensee) requested Change No. 172 to the plant Technical Specifications (TS) for the San Onofre Nuclear Generating Station, Unit 1. The proposed TS change modifies TS Section 3.1.4 "Leakage" and adds Section 4.1.13, "Leakage and Leakage Detection Systems." TS 3.1.4 currently requires the reactor coolant system (RCS) to be monitored for evidence of leakage. However, the specification does not include the methods and systems to be used for RCS leakage detection. Therefore, it does not define Limiting Conditions for Operation (LCOs) and Surveillance Requirements for necessary leakage detection systems. This deficiency was identified as an open issue in Section 4.18 of NUREG-0829, "Integrated Plant Safety Assessment, Systematic Evaluation Program, San Onofre Nuclear Generating Station, Unit 1," regarding SEP Topic V-5, Reactor Coolant Pressure Boundary Leakage Detection. The proposed TS changes in Section 3.1.4 and the addition of Section 4.1.13 provide LCOs and Surveillance Requirements for the RCS leakage detection systems at San Onofre Unit 1.

2.0 EVALUATION

The proposed revision to TS Section 3.1.4 lists three RCS leakage detection systems, namely: the containment atmosphere radiation monitors, sphere sump level control and sump level monitor systems, and the steam generator blowdown effluent monitor. Similar to the Westinghouse Standard Technical Specifications (STS), NUREG-0452, Revision 4, the proposed TS Section 3.1.4 requires the above detection systems to be OPERABLE during Modes 1, 2, 3, and 4. However, in the case of the containment atmosphere radiation monitors and the steam generator blowdown effluent monitor, the proposed operability requirements permit grab samples at a 12 hour frequency to be analyzed within the following 6 hours when these monitors are inoperable. Further, with only two of the above required leakage detection systems/methods operable, operation may continue for up to 30 days provided a RCS water inventory balance is performed every 24 hours; otherwise, the plant must be in at least HOT STANDBY within the next 6 hours and in

COLD SHUTDOWN within the following 30 hours. The proposed TS changes also add Section 4.1.13 "LEAKAGE AND LEAKAGE DETECTION SYSTEMS" which incorporates the surveillance requirements for monitoring RCS leakage and verifying operability of the RCS leakage detection systems required to be operable by the revised TS Section 3.1.4.

The staff has compared the above proposed TS changes with the STS LCOs in Section 3.4.6.1 and surveillance requirements in Section 4.4.6.1 and 4.4.6.2 and concludes that the licensee proposed TS LCOs and surveillance requirements for the RCS leakage detection systems are similar to those in the STS, and meet the intent of the STS for ensuring RCS leakage detection system operability. They are, therefore, acceptable.

In addition to the staff concern for TS requirements on RCS leakage detection system operability, the staff previously recommended in NUREG-0829 that at least one reactor coolant pressure boundary (RCPB) containment leakage detection system be seismically qualified in accordance with the guidance in Regulatory Guide 1.45. The licensee states in its letter of October 30, 1987 that containment sump level monitors LIS 2001 and 3001, which are to be operable per the proposed changes to TS 3.1.4, are designed to remain operable following a safe shutdown earthquake (SSE). The staff reviewed these monitors previously in NUREG-0829 and found that their sensitivity was adequate for prompt determination of RCPB leakage, but was concerned that there were no control room alarms for these monitors to alert the operator to unacceptable leakage. To resolve the above staff concern, the licensee modified the San Onofre Unit 1 SSE recovery procedures to require the control room indication from LIS 2001 and 3001 to be monitored once per hour until it is established that there is no leakage, and then the frequency will be relaxed to once per eight hours. The monitoring of LIS 2001 and 3001 will be discontinued when it is established that the remaining leakage detection systems subject to the proposed LCOs are operable or the plant is in Mode 5. The staff finds that the containment sump level monitors satisfy the guideline that at least one RCPB leakage detection system remain operable following a seismic event, and the licensee procedures for leakage verification will adequately alert the operator to unacceptable leakage conditions.

Based on the above, the staff concludes that the proposed TS change No. 172 meets the intent of the Westinghouse STS for ensuring operability of RCS leakage detection systems. Also, the open item identified in NUREG-0829 for SEP Topic V-5 regarding provision for a seismically qualified RC leakage detection system is resolved by use of the containment sump level monitors and corresponding leakage verification procedure. The staff, therefore, finds the proposed RCS leakage and leakage detection TS are acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves changes 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 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.

4.0 CONCLUSION

We have 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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

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Dated: February 6, 1989