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

November 2, 1984

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 83 TO PROVISIONAL OPERATING LICENSE DPR-13

SOUTHERN CALIFORNIA EDISON COMPANY

SAN ONOFRE NUCLEAR GENERATING STATION UNIT NO. 1

DOCKET NO. 50-206

1.0 INTRODUCTION AND BACKGROUND

In November 1980, the staff issued NUREG-0737, "Clarification of TMI Action Plan Requirements," which included all TMI Action Plan items approved by the Commission for implementation at nuclear power reactors. NUREG-0737 identifies those items for which Technical Specifications (TSs) are required. A number of items which require TSs were scheduled for implementation after December 31, 1981. The staff provided guidance on the scope of TSs for all of these items in Generic Letter 83-37. Generic Letter 83-37 was issued to all Pressurized Water Reactor (PWR) licensees on November 1, 1983. In this generic letter, the staff requested licensees to:

1) review their facility's TSs to determine if they were consistent with the guidance provided in the Generic Letter, and

2) submit an application for a license amendment where deviations or absence of TSs were found.

A similar request had been issued earlier on September 20, 1982 (Generic Letter 82-16) covering items scheduled for implementation prior to December 31, 1981.

By letter dated July 9, 1984, Southern California Edison Company (the licensee) responded to Generic Letter 83-37 by submitting a TS change request for San Onofre Unit 1.

A Notice of Consideration of Issuance of Amendment to License and Proposed No Significant Hazards Consideration Determination and Opportunity for Hearing related to the requested action was published in the Federal Register on August 22, 1984 (49 FR 33371). A request for hearing and public comments were not received.

2.0 DISCUSSION AND EVALUATION

This evaluation is organized as follows:

1) Changes to make San Onofre Unit 1 TS conform more closely with Standard Technical Specifications (STS)

2) TS changes for GL - 83-37.

3) Anticipatory Reactor Trip on turbine trip (GL - 82-16).

4) Other TS changes on reactor trip system operability/surveillance requirements.

The proposed TSs were evaluated against the model TSs provided by the applicable generic letters and also against the Westinghouse STS where appropriate.

2.1 Changes for Closer Conformance to STS

2.1.1 Section 1.0 - Definitions

The following changes are proposed:

1) Add definitions for terms used elsewhere in the TS such as RATED THERMAL POWER and STAGGERED TEST BASIS.

2) Reorganize definitions into alphabetical order and number them sequentially.

3) Change wording in definition of OPERABLE to correspond to the STS definition.

4) Capitalize defined terms in a consistent manner and where applicable, capitalize in other places in the TSs where the term is used.

A complete set of definitions for terms already used in the TSs as well as a few terms associated with pending changes to the TSs are included. Also, TS paragraph 3.1.1.c would be deleted since its contents are included as part of the definition of DOSE EQUIVALENT I-131. These changes are administrative, are in conformance with the STS and are therefore acceptable.

2.1.2 TS Section 3.0 - Limiting Conditions for Operation (LCO) (General) and 4.0 - Surveillance Requirements (General)

Existing TS 3.0 is proposed to be modified to conform to the wording of the Westinghouse STS. TS 4.0 would be added. These specifications provide general requirements to ensure safe plant operation when circumstances arise that are not specified in the individual LCOs. The general requirements on surveillance define conditions under which the Chapter 4 surveillances are applicable. For instance, TS 4.0.3 states that failure to perform a surveillance within the specified time interval constitutes a failure to meet the operability requirement of the corresponding LCO. These TSs conform to the STS requirements and the staff finds them acceptable.

Some TS sections (3.1.1, 3.1.5, 3.5.5, 3.5.6, 3.5.10) would be modified to make the provisions of TS 3.0.4 not applicable. Section 3.0.4 provides that entry into an OPERATIONAL MODE shall not be made unless the conditions for the LCO are met without reliance on the provisions contained in the ACTION requirements. The intent is to ensure that facility operation is not initiated with required equipment inoperable. Specific exceptions are proposed for a limited number of TSs where such action would not affect safe plant operation.

The proposed exceptions are consistent with those in the STS. The staff therefore finds these proposed changes acceptable.

2.1.3 Format Changes

For several TSs, such as 3.1.1, 3.1.5, 3.5.1, 3.5.5 and 3.5.6, the licensee proposes that the specification be reformatted to clearly separate out the LCO from the ACTION to be performed if the specified LCO is not satisfied. This change is consistent with the STS.

It is proposed that some surveillance requirements be moved from one place to another in the TSs so related requirements are grouped together. For example, the surveillance on refueling water storage tank level, presently in Table 4.1.1 would be in Table 4.1.5 (Accident Monitoring Instrumentation) instead. The allowable intervals for performing surveillance requirements would be moved from Table 1.1 to TS Section 4.0.

As orignally proposed, new TS sections on Radiation Monitoring and RCS Vents would have been numbered 4.1.10 and 4.1.11 respectively. To accommodate another proposed TS change, the staff renumbered them as 4.1.11 and 4.1.12 respectively.

The numbering scheme for the action statements in the tables establishing operability requirements for plant instrumentation (Tables 3.5.1-1, 3.5.5-1, etc.) would be changed from letters to numbers such that each action is uniquely identified. This change is consistent with the STS. The above changes do not alter the provisions of the TSs and the staff finds them acceptable.

2.2 Generic Letter 83-37

The following items which were subject to Generic Letter 83-37 are included in the proposed change. The balance of such TMI items will be addressed separately.

2.2.1 Reactor Coolant System (RCS) Vents (II.B.1) - TS 3.1.7 and 4.1.12

Staff guidance for RCS vents identified the need for at least one operable vent path at the reactor vessel head and the pressurizer steam space for Westinghouse reactors. Generic Letter 83-37 also provided LCOs and the surveillance requirements for the RCS vents. The licensee has proposed TSs that are consistent with the guidance. The staff finds the proposed TSs to be acceptable.

2.2.2 Noble Gas Effluent Monitors (II.F.1.1) - TS 3.5.10 and 4.1.11

The licensee has supplemented the existing normal range monitors to provide noble gas monitoring in accordance with Item II.F.1.1. Proposed TSs were submitted that are consistent with the guidelines provided in Generic Letter 83-37. The proposed changes submitted July 9, 1984 included surveillance requirements for the new noble gas effluent monitor also known as the wide range gas monitor (R-1254). However, by Amendment 79, issued on August 27, 1984, surveillance requirements for channel check, calibration and test for this monitor were implemented in Table 4.1.3.1. To avoid unncecessary duplication or confusion, the licensee therefore requested by letter dated October 24, 1984 to change Table 4.1.11-1 to refer to Table 4.1.3.1 for the surveillance requirements for this monitor. This format has also been used in the San Onofre 2/3 Technical Specifications. The staff therefore finds the TSs for Item II.F.1.1 acceptable.

2.2.3 Containment High-Range Radiation Monitor (II.F.1.3) - TS 3.5.10 and 4.1.11

The licensee has installed two in-containment monitors in San Onofre Unit 1 that are consistent with the guidance of TMI Action Plan Item II.F.1.3. Generic Letter 83-37 provided guidance for LCOs and surveillance requirements for these monitors. The licensee proposed TSs that are consistent with the guidance provided in Generic Letter 83-37.

The alarm set point for the high-level containment radiation monitors was initially proposed to be 1 R/hr. However, since this value is at the low edge of the instrument range, this setpoint could interfere with resetting the channel if it alarms. By letter dated September 4, 1984, the licensee requested that the proposed setpoint be changed to 10 R/hr. As discussed in Generic Letter 83-37, the exact alarm setpoint is not especially critical as long as it is chosen so as to minimize spurious alarms; the generic letter notes that 10 R/hr is an acceptable setpoint. These monitors provide an indication of containment radiation levels over a range of 1 R/hr to 1 x 10^8 R/hr and are intended to provide a monitoring function in post-accident situations where levels might exceed the range of other radiation monitoring equipment. For these reasons, the staff considers that the revised setpoint is not a substantive change and does not expand the scope of the opportunity for hearing provided by the notice of proposed issuance.

The licensee further proposed that Table 3.5.10-1 be modified to include an LCO for two area monitors (control room and spent fuel pool) which do not presently have such a requirement. Their surveillance requirements, formerly part of Table 4.1.1, are proposed to be included in Table 4.1.11-1 with the other radiation monitoring instrumentation. The staff finds these proposed TS changes acceptable.

2.2.4. Containment Pressure Monitor (II.F.1.4) - TS 3.5.6 and 4.1.5

San Onofre Unit 1 has been provided with two wide range channels for monitoring containment pressure following an accident. The licensee has proposed TSs that are consistent with the guidelines contained in Generic Letter 83-37. Therefore, the staff concludes that the proposed TSs for containment pressure monitor are acceptable.

2.2.5. Containment Water Level Monitor (II.F.1.5) - TS 3.5.6 and 4.1.5

Narrow range and wide range containment water level monitors provide the capability required by TMI Action Plan Item II.F.1.5. The TSs for both types contain LCOs and surveillance requirements that are consistent with the guidance contained in Generic Letter 83-37. Therefore, the staff concludes that the proposed TSs for containment water level monitors are acceptable.

2.2.6. Containment Hydrogen Monitor (II.F.1.6) - TS 3.6.3 and 4.3.3

The licensee installed containment hydrogen monitors that provide the capability required by TMI Action Plan Item II.F.1.6. The proposed Technical Specifications contain appropriate LCOs and surveillance requirements for these monitors. The proposed TSs on the hydrogen monitors are consistent with the generic letter guidance. In addition, the surveillance requirements for the hydrogen recombiner are proposed to be modified to reflect test recommendations from the manufacturer. The revised testing will better demonstrate operability of the recombiner units. The bases for these TSs would also be changed to delete references to the purge system as a means of hydrogen control. With installation of internal recombiners, operation of the purge system is not needed for post-accident hydrogen control. The staff finds these proposed TS changes acceptable.

2.3 Anticipatory Reactor Trip on Turbine Trip

To respond to item (13) of Generic Letter 82-16, the licensee proposes to modify Tables 3.5-1 and 4.1.1 to add operability and surveillance requirements for the reactor trip channels on low turbine oil pressure. The proposed changes meet the intent of generic letter guidance and are therefore acceptable.

2.4 Changes to TS 3.5.1 and 4.1.1

In addition to the above change to these sections, additional revisions are proposed. The first would rename Section 3.5.1 "Reactor Trip System Instrumentation"; this change reflects the fact that TSs on other protective features such as safety injection and containment isolation actuation are now located in other parts of TS 3.5.

Table 3.5-1 would be totally revised using the STS format. The existing TSs do not include much of the detail of the proposed TS such as total number of channels, applicable modes and time frames for performing action requirements. The proposed TSs are consistent to the extent practicable with the STS considering the San Onofre 1 trip system design.

The proposed changes would clearly specify LCOs (number of channels) and time periods in which inoperable channels must be restored and for other appropriate actions to be taken. The staff finds these proposed changes acceptable. In Table 4.1.1, changes are proposed in the applicability statements for minimum frequencies for channel checks, tests and calibrations. Such changes include switching from "Once/shift during operation," to "Once/shift" or to "Once/shift during MODES 1 and 2". The latter change is proposed for channels such as steam generator level mismatch, which are only applicable in certain modes. Removal of the ambiguous phrase "during operation" will minimize any possible confusion as to when such surveillances are required.

The proposed changes would also add a once per month test and a refueling interval calibration of the power range nuclear flux channels. The proposed frequencies for all of the tests, checks and calibrations are consistent with those in the STS. Therefore, the staff finds these changes acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined by 10 CFR Part 20, and to the surveillance requirements. 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 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

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

5.0 ACKNOWLEDGEMENT

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