



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 113 TO FACILITY OPERATING LICENSE NO. DPR-32
AND AMENDMENT NO. 118 TO FACILITY OPERATING LICENSE NO. DPR-37

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION, UNIT NOS. 1 AND 2
DOCKET NOS. 50-280 AND 50-281

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 identified those items for which Technical Specifications were scheduled for implementation after December 31, 1981. The staff provided guidance on the scope of the Technical Specifications for all of these items in Generic Letter 83-37, which 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 Technical Specifications 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 Technical Specifications were found.

The guidance on TMI Action Plan Item II.F.2, "Instrumentation for Detection of Inadequate Core Cooling" was also included in Generic Letter 83-37. By letter dated April 23, 1987, Virginia Electric and Power Company (the licensee) proposed Technical Specifications changes to include the core exit thermocouple (CET) system in the accident monitoring instrumentation in Tables 3.7-6 and 4.1-2 of the Technical Specifications (TS) for Surry Units 1 and 2. The proposed changes addressed the CET requirements of NUREG-0737, Item II.F.2.

In addition, by letter dated May 29, 1987, the licensee proposed to revise Table 3.21-1 of the Surry TS by adding two additional smoke detectors to the listing for the auxiliary building general area. The total number of smoke detectors would increase from 12 to 14 for this area.

DISCUSSION AND EVALUATION

Core Exit Thermocouple System

Generic Letter 83-37 provided guidance on TS for the subcooling margin monitors (SMM), reactor vessel coolant level indicating system (RVLIS) and CET. The TSs for the RVLIS and SMM are already included in the current TS for Surry Units 1 and 2.

However, the licensee recently completed the installation of an inadequate core cooling monitor (ICCM) in accordance with the requirements of NUREG-0737, Item II.F.2. The ICCM is a consolidated system comprised of the RVLIS, SMM and CET systems. Upon completion of the ICCM's installation and upgrading of the CET, the licensee proposed to include the TS for the CET system along with other accident monitoring instrumentation in Tables 3.7-6 and 4.1-2 of the Surry Units 1 and 2 Technical Specifications.

As discussed above, the CET system has been consolidated into the ICCM. The proposed changes will revise TS Table 3.7-6 to show this system consolidation by adding the CET along with the already present SMM and RVLIS as subsections under the ICCM. The proposed changes will also revise TS table 4.1-2 by deleting the individual surveillance requirements for the SMM and RVLIS, and by including the surveillance requirements for the consolidated ICCM.

The proposed changes do not affect the existing Limiting Conditions for Operation (LCO) for the RVLIS and SMM delineated in Table 3.7-6. The proposed LCO for the CET provides additional conservatism in the TS and is consistent with the guidelines provided by the staff in Generic Letter 83-37. Therefore, the staff finds the changes to be acceptable. Surveillance requirements for the RVLIS, SMM and CET are included in the surveillance requirements for ICCM. The surveillance requirements for the ICCM are consistent with the guidance provided by the staff in Generic Letter 83-37, and they are also consistent with other accident monitoring instrumentation at the Surry units. Therefore, they are acceptable to the staff. Some editorial changes in both of the above tables reflect the consolidation of the RVLIS and SMM into the ICCM. These changes are of an editorial nature and hence, they are acceptable to the staff.

Based on the above evaluation, the staff finds proposed changes in Tables 3.7-6 and 4.1-2 to be acceptable.

Smoke Detectors

By letter dated May 29, 1987, the licensee proposed to add two additional smoke detectors in Item No. 13, Auxiliary Building General Area, of Table 3.21-1 of the Surry Technical Specifications. The total number of detectors in this area will increase from 12 to 14. These additional smoke detectors were added to satisfy the requirements of 10 CFR Part 50, Appendix R, to provide fire detection capabilities in the auxiliary building in the vicinity of the charging pump-cooling water pumps.

The proposed change will enhance the ability to detect the fires in their early stages, and hence, reduce the potential for damage to safety-related equipment in the auxiliary building. Thus, the proposed change provides additional conservatism in the TS for both Surry units. Therefore, the staff finds the proposed change to be acceptable.

ENVIRONMENTAL CONSIDERATION

These amendments involve a change in the installation or use of the facilities components located within the restricted areas as defined in 10 CFR 20 or changes to surveillance requirements. The staff has determined that these 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 these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these 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 these amendments.

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, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: March 15, 1988

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