



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 138 TO FACILITY OPERATING LICENSE NO. NPF-2
AND AMENDMENT NO. 130 TO FACILITY OPERATING LICENSE NO. NPF-8

SOUTHERN NUCLEAR OPERATING COMPANY, INC., ET AL.

JOSEPH M. FARLEY NUCLEAR PLANT, UNITS 1 AND 2

DOCKET NOS. 50-348 AND 50-364

1.0 INTRODUCTION

By letter dated May 27, 1997, the Southern Nuclear Operating Company, Inc. (SNC, the licensee) et al., submitted a request for changes to the Joseph M. Farley Nuclear Plant (FNP), Units 1 and 2, Technical Specifications (TSs). The requested changes revise the TSs Applicable Modes for Source Range (SR) Nuclear Instrumentation (NI) (TS 3/4.3.1, "Reactor Trip System Instrumentation"), provide allowances for an exception to the requirements for the state of the power supplies for residual heat removal (RHR) discharge to charging pump suction valves following Mode changes (TS 3/4.5.2, "ECCS Subsystems - $T_{avg} > 350^{\circ}\text{F}$ " and 3/4.5.3, "ECCS Subsystems - $T_{avg} < 350^{\circ}\text{F}$ "), and delete cycle-specific guidance concerning manual engineered safety feature functional input checks.

2.0 EVALUATION

Current FNP TS 3/4.3.1 requires that the SR NI provide visual indication in operational Modes 3, 4, and 5. In Mode 3, with the plant power level above Permissive P-6, the SR NI is deenergized. A design feature of the plant is to automatically reenergize the SR NI when the power level is below Permissive P-6 (approximately 10^{-10} amps on the Intermediate Range Neutron Detector).

By procedure, FNP operators verify that the SR NI automatically reenergizes below Permissive P-6. The channel check for the source range detector cannot be performed with the power level above Permissive P-6 while the SR NIs are deenergized. Therefore, a revision to the existing TS note to allow time to perform the channel check after the automatic reenergization of the SR NI below Permissive P-6 is needed. The proposed revision incorporates such a change to the TSs. To be consistent with the existing TS action statement for an inoperable SR NI, SNC selected the time limit of 1 hour to perform the SR NI channel check. The staff considers this change acceptable since it is consistent with the current FNP TSs.

In Modes 1, 2, and 3, TS 3/4.5.2 requires that two independent emergency core cooling system subsystems be operable, with each subsystem comprised of an operable flow path capable of taking suction from the refueling water storage tank on a safety injection signal and transferring

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suction to the containment sump during the recirculation phase of operation. In order to allow transfer to the recirculation phase, the TSs require that the RHR discharge to charging pump suction valves be closed with power supplied to the valves to allow realignment. In Mode 4, TS 3/4.5.3 requires that the RHR discharge to charging pump suction valves be open with power removed from the valves to prevent possible overpressurization of the charging pump suction line piping.

In order to satisfy TS Surveillance Requirement 4.5.3.2, which specifies that the RHR discharge to charging pump suction valves be open with the power removed prior to entry into Mode 4 from Mode 3, the requirements of TS 3.5.2 would be violated. This conflict exists because the current TSs do not allow time between Modes 3 and 4 to open the valves and remove power from the valves, or to close the valves and restore power to the valves during the transition from Mode 4 to Mode 3. The proposed TS change adds notes to TS 3/4.5.2 and TS 3/4.5.3 allowing 4 hours after transitioning between Modes 3 and 4 to allow repositioning of the valves and to restore or remove power to the valve operators as required. This change corrects an inconsistency in the current FNP TSs, and is consistent with allowances provided in the Westinghouse Standard Technical Specifications, NUREG-1431, Revision 1, dated April 7, 1995, to address similar situations and is, therefore, acceptable.

In other administrative TS changes, the licensee proposed to delete the cycle-specific guidance concerning manual engineered safety feature functional input checks. Because the cycle-specific surveillance has been completed in Operating Cycle 14, the TS guidance is no longer needed nor applicable. The staff considers this editorial change acceptable.

3.0 STAFF CONCLUSION

The staff has reviewed the licensee's proposed TS changes to resolve compliance issues related to the SFR NI and RHR discharge to charging pump suction valves. Based on its review, the staff concludes that the proposed TS changes are acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the State of Alabama official was notified of the proposed issuance of the amendments. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC 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 the amendments involve no significant hazards consideration, and there has been no public comment on such finding (62 FR 33134, June 18, 1997). Accordingly, the 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 the amendments.

6.0 CONCLUSION

The Commission 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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Date: October 15, 1998