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SOUTHERN COMPANY
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50-364

10 CFR 50.90

U. S. Nuclear Regulatory Commission
ATTN.: Document Control Desk
Washington, DC 20555

Joseph M. Farley Nuclear Plant
Request to Revise Technical Specifications
Technical Specification Compliance Issues Amendments

Ladies and Gentlemen:

Southern Nuclear Operating Company (SNC) has recently identified two Technical Specification (TS) compliance issues. These issues were reported in shared LERs 97-003 and 97-005. As a result of recent phone conversations between SNC and NRR to resolve these issues, it was determined that entry into TS condition 3.0.3 for the referenced conditions of shared LER 97-003 would be reportable under 50.73(a)(2)(i) as a 30-day LER. While voluntary entry into 3.0.3 is not a desirable condition, this case would require a short period of entry into 3.0.3 because the design features of the system were not correctly addressed in the TS. The safety significance of these compliance issues is low. The NRC staff concurred with this.

In accordance with the provisions of 10 CFR 50.90, SNC proposes to amend the Joseph M. Farley Nuclear Plant Units 1 and 2 Technical Specifications. The proposed changes will revise the Applicable Modes for Source Range Nuclear Instrumentation (Specification 3/4.3.1, "Reactor Trip System Instrumentation") and provide allowances for an exception to the requirements for the state of the power supplies for RHR Discharge to Charging Pump Suction Valves (MOVs 8706A and 8706B) following Mode changes (Specifications 3/4.5.2, "ECCS Subsystems - $T_{avg} > 350^{\circ}F$", and 3/4.5.3, "ECCS Subsystems - $T_{avg} < 350^{\circ}F$"). These changes will allow transitioning between Modes where conflicting requirements exist or where TS requirements conflict with design features, and provide time to allow interlocks to function and to realign power supplies to the appropriate status. These proposed changes are technically consistent with the requirements and standard format of NUREG-1431, Revision 1, "Westinghouse Standard Technical Specifications," issued on April 7, 1995. In addition, an allowance for time to perform the Source Range channel check after the auto re-energization of the SR NI below P-6 is added to be consistent with the above Applicability change. Finally, cycle-specific guidance concerning manual ESF functional input checks has been deleted since the surveillances have been completed and the allowance is no longer needed.

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The basis for the proposed technical specification changes is provided in Enclosure 1. The supporting significant hazards evaluation pursuant to 10 CFR 50.91 is provided in Enclosure 2. Based upon the evaluation provided, SNC has determined the proposed changes to the technical specifications do not involve a significant hazards consideration as defined by 10 CFR 50.92. SNC has also determined

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that the proposed license amendment will not significantly affect the quality of the human environment. The revised typed pages of the proposed technical specifications, including page change instructions, are included in Enclosure 3. The marked pages are provided in Enclosure 4. A copy of these proposed changes is being sent to Dr. Donald E. Williamson, the Alabama State Designee, in accordance with 10 CFR 50.91(b)(1).

NRC review and approval of these proposed changes is requested on an expedited basis. 10 CFR 50.73 requires reporting each entry into TS 3.0.3. With the FNP Units 1 and 2 TS as currently written, this will occur each time normal unit operations require transitioning between Modes 3 and 4. Therefore, 10 CFR 50.73 reports (LERs) will be required for non-safety significant reasons due to the current TS wording. SNC will revise shared LER 97-003 each time unit operations require transitioning between Modes 3 and 4 until these TS changes are approved.

If there are any questions, please advise.

Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY

D. Morey

Dave Morey

Sworn to and subscribed before me this 7th day of May 1997

Martha Gayle Dow

Notary Public

My Commission Expires: November 1, 1997

WAS:clt:IRHRTSCH.DOC

Enclosures:

1. Basis for Change Request
2. 10 CFR 10.92 Evaluation
3. Page Change Instructions and Revised Pages
4. Hand Marked Pages

cc: Mr. L. A. Reyes, Region II Administrator
Mr. J. I. Zimmerman, NRR Project Manager
Mr. T. M. Ross, Plant Sr. Resident Inspector
Dr. D. E. Williamson, State Department of Public Health

ENCLOSURE 1

Joseph M. Farley Nuclear Plant
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Basis for Change Request

Currently, the Technical Specifications (TS) for Farley Nuclear Plant (FNP) Units 1 and 2 require plant configurations in various Modes which are either in conflict with plant design features or do not provide adequate time in which to comply when changing Modes. The proposed changes would revise TS 3/4.3.1, 3/4.5.2, and 3/4.5.3 for both Units 1 and 2. The TS changes would allow the demonstration of operability during plant Mode and condition changes. Currently, TS 3/4.5.2 (Modes 1-3) requires that the RHR Discharge to Charging Pump Suction Valves be closed with power supplied to the valves while TS 3/4.5.3 (Mode 4) requires that the RHR Discharge to Charging Pump Suction Valves be closed with power removed from the valves. In addition, TS 3/4.3.1 requires that the Source Range Nuclear Instrumentation (SR NI) provide visual indication in Modes 3, 4, and 5. In Mode 3, above Permissive P-6, the SR NI is de-energized. A design feature of the plant is to auto re-energize the SR NI below P-6. Manually unblocking the SR NI between P-10 and P-6 may cause a reactor trip. By procedure, FNP verifies that the SR NI auto re-energize below P-6. The channel check for the source range detector can not be performed above the P-6 while the SR NIs are de-energized. Therefore, a revision to the existing TS note to allow for time to perform the channel check after the auto re-energization of the SR NI below P-6 is needed. Because of the specific wording that presently exists, the operability of the ECCS System and the Reactor Trip System Instrumentation (Source Range) cannot be demonstrated while changing Modes. The area of concern for the SR NI Applicability was suitably addressed when the improved Westinghouse Standard Technical Specifications (STS) NUREG-1431, Revision 1 were issued on April 7, 1995. The note concerning the RHR Discharge to Charging Pump Suction Valves follows the standard format of the STS. These changes are technically consistent with the requirements and standard format of the STS. The literal compliance issue related to the inability to perform the surveillance prior to the applicability was not addressed in the STS and has been addressed using a time allowance consistent with the action statement for an inoperable Source Range channel below P-6. Finally, cycle-specific guidance concerning manual ESF functional input checks has been deleted since the surveillances have been completed and the allowance is no longer needed. This is deemed an administrative change.

ENCLOSURE 2

Joseph M. Farley Nuclear Plant
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Technical Specification Compliance Issues Amendments

10 CFR 50.92 Evaluation

Pursuant to 10 CFR 50.92 each application for amendment to an operating license must be reviewed to determine if the proposed change involves a significant hazards consideration. The amendments, as defined below, describing the changes to the Technical Specifications for the requirements associated with the Source Range Nuclear Instrumentation and the Residual Heat Removal (RHR) Discharge to Charging Pump Suction Valves (Motor Operated Valves (MOVs) 8706A and 8706B) has been reviewed and deemed not to involve a significant hazards consideration. The basis for this determination follows.

BACKGROUND

The purpose of surveillances 4.5.2 a and b, 4.5.3.1, and 4.5.3.2 is to ensure that the Emergency Core Cooling System (ECCS) System is aligned properly such that the assumptions used in the safety analyses are met. In Modes 1-3, power is removed from certain valves which, if they were to change position as a result of an active failure or an inadvertent misalignment, could disable the function of both ECCS trains and invalidate the accident analyses. TS 3.5.2 requires that in Modes 1, 2, and 3, two independent ECCS 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 suction to the containment sump during the recirculation phase of operation. In order to transfer to the recirculation phase of operation as assumed in the Farley Nuclear Plant Final Safety Analysis Report (FSAR) in Modes 1, 2 and 3, power to the valve operators would be required for the realignment of the RHR discharge to charging pump suction MOVs 8706A (Train A RHR to charging pump suction) and 8706B (Train B RHR to charging pump suction). In Mode 4, Surveillance 4.5.3.2 specifies that MOVs 8706A and 8706B be closed with the breaker/disconnect for the respective valve operator locked open. The reason for ensuring the breakers/disconnects remain open during Mode 4 operation is to prevent possible overpressurization of the charging pump suction line piping. Therefore, in order to comply with TS surveillance requirement 4.5.3.2 concerning the removal of power from MOVs 8706A and 8706B prior to Mode 4 entry from Mode 3, FNP would have to be in a condition prohibited by TS 3.5.2. Therefore, due to an inconsistency existing within TS, upon changing Modes between Modes 3 and 4 it is not possible to comply fully with the TS. Specifically, TS fails to provide an allowed time between Modes 3 and 4 to lock open the MOV breakers/disconnects or to close the breakers/disconnects when transitioning between Modes 4 and 3.

The requirements listed in Table 3.3-1 of TS 3/4.3.1, Functional Unit 6B, for the Source Range Nuclear Instrumentation are as follows in Modes 3, 4, and 5: One Source Range Nuclear Instrument is required to provide indication. Surveillance Requirement 4.3.1.1, Functional Unit 6, requires a channel check once per 12 hours below the P-6 (Block of Source Range Reactor Trip) setpoint. The requirement to have indication in Mode 3, above P-6 indicates an inconsistency existing within TS. Specifically, the indication is not available until the Source Ranges are energized which, due to plant design, does not occur until after Mode 3 entry during a shutdown. Therefore, the Surveillance 4.3.1.1, Functional Unit 6, channel check cannot be performed until the Source Range Nuclear Instrumentation are energized which, due to plant design, does not occur until after Mode 3 entry, below P-6, during a shutdown. Typically, following unit shutdown from at power conditions, it takes approximately 20 minutes for the neutron flux to decay to below an Intermediate Range Neutron Detector signal of 10^{-10} amps which corresponds to the P-6 setpoint. Note (7) of Table 4.3.1.1 is also being revised to allow for time to perform the channel check after the auto re-energization of the SR NI below P-6. The time limit of one hour was chosen to be consistent with the action statement for an inoperable Source Range channel below P-6. Finally, as a part of this change, cycle-specific guidance concerning manual ESF functional input checks has been deleted since the surveillances have been completed and the allowance is no longer needed. This is deemed an administrative change.

DESCRIPTION OF CHANGE REQUEST

The proposed changes would revise the Modes of Applicability for the SR NI, Functional Unit 6B, for both Units 1 and 2 to only require indication below the P-6 setpoint in Mode 3, and in Modes 4 and 5. In addition the sufficient time is provided to perform a channel check once P-6 is reached from Mode 2. Also, notes would be added to TS 3/4.5.2 and 3/4.5.3 to allow time after transitioning between Modes 3 and 4 to reposition the MOV breakers/disconnects as required in either Mode 3 or 4. The proposed changes will correct the inconsistencies which currently exist in TS. These proposed changes are technically consistent with the requirements and standard format of the improved Westinghouse Standard Technical Specifications (STS), NUREG-1431, Revision 1 issued on April 7, 1995. Finally, cycle-specific guidance concerning manual ESF functional input checks has been deleted since the surveillances have been completed and the allowance is no longer needed. This is deemed an administrative change.

Enclosure 2
10 CFR 50.92 Evaluation

ANALYSIS

Allowance to reposition the MOV breakers/disconnects as required in either Mode 3 or 4 upon transitioning between these two Modes, will continue to meet the necessary intent of the surveillance requirements. The time limit of 4 hours was chosen to be consistent with the standard format of the improved Westinghouse Standard Technical Specifications (STS), NUREG-1431, Revision 1 issued on April 7, 1995, where time is required to perform in-plant evolutions. The time limit of 4 hours is of sufficient duration to perform the task without adversely affecting operations shift resources during Mode changes. Also, the likelihood of a severe transient occurring in this time frame is very small. Therefore, allowing time to reposition the MOV breakers/disconnects as required in either Mode 3 or 4 upon transitioning between these two Modes is not a safety concern and does not pose undue risk to public health and safety.

Revising the Applicability of the TS for the Source Range Nuclear Instrumentation during Shutdown conditions to require indication only below the P-6 setpoint in Mode 3 and to allow for time to perform the channel check upon reaching P-6 from Mode 2 corrects the inconsistency which currently exists in the TS and brings the TS requirements into agreement with the design of the plant. The time limit of one hour to perform the Source Range channel check was chosen to be consistent with the action statement for an inoperable Source Range channel below P-6.

Deleting cycle-specific guidance concerning manual ESF functional input checks is deemed an administrative change and has no effect on the public health and safety.

These proposed changes are technically consistent with the requirements and standard format of NUREG-1431, Revision 1.

10 CFR 50.92 EVALUATION CONCLUSIONS

Based on the preceding evaluation, the following conclusions are provided with respect to the criteria contained in 10 CFR 50.92.

(1) The proposed changes do not significantly increase the probability or consequences of an accident previously evaluated in the FSAR. The purposes for repositioning the breakers/disconnects for MOVs 8706A and 8706B are to ensure that the ECCS System is aligned properly such that the assumptions used in the safety analyses are met and to prevent possible overpressurization of the charging pump suction line piping. The likelihood of a severe transient occurring in this time frame is very small and has to be weighed against the possibility of over pressurizing the CVCS charging pump suction piping. The allowance of a 4 hour time period to perform the required alignment appropriately weighs this risk. Changing the applicability of the requirement to have

indication from a Source Range Nuclear Instrument available to agree with the design of the plant does not change the physical design of the plant or affect any assumptions used in accident analyses and, therefore, has no effect on the probability or consequences of an accident previously evaluated in the FSAR. The allowance of 1 hour to perform the Source Range Channel Check upon reaching P-6 from Mode 2 is consistent with the current basis for a source range channel inoperable. Therefore, these changes do not involve a significant increase in the consequences of an accident previously evaluated.

(2) The proposed changes to the Technical Specifications do not increase the possibility of a new or different kind of accident than any accident already evaluated in the FSAR. No new limiting single failure or accident scenario has been created or identified due to the proposed changes. Safety-related systems will continue to perform as designed. Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any previously evaluated.

(3) The proposed changes do not involve a significant reduction in the margin of safety. The margin of safety is not significantly reduced due to the proposed changes to the breaker/disconnect positioning requirements of TS 3/4.5.2 and 3/4.5.3 when transitioning between Modes 3 and 4. The likelihood of either a severe transient occurring in Mode 3 or the possible overpressurization of the CVCS charging pump suction line by the RHR system in Mode 4 is very small. Changing the Applicability of the requirement to have indication from a Source Range Nuclear Instrument available to agree with the design of the plant does not change the physical design of the plant or affect any assumptions used in accident analyses and, therefore, has no effect on the margin of safety. These proposed changes are technically consistent with the requirements and standard format of NUREG-1431, Revision 1. Performing the source range channel check within 1 hour upon reaching P-6 from Mode 2 does not change the physical design of the plant or affect any assumptions used in accident analyses and, therefore, also does not effect the margin of safety. Thus, the proposed changes do not involve a significant reduction in the margin of safety.

Accordingly, Southern Nuclear Operating Company has determined that the proposed changes with respect to the Source Range Nuclear Instrumentation and the RHR Discharge to Charging Pump Suction Valves power alignment requirements do not involve a significant hazards consideration.

ENCLOSURE 3

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Changed Pages

Unit 1

Remove Page	Insert Page
Page 3/4 3-2	Replace
Page 3/4 3-6	Replace
Page 3/4 3-14	Replace
Page 3/4 5-3	Replace
Page 3/4 5-7	Replace

Unit 2

Remove Page	Insert Page
Page 3/4 3-2	Replace
Page 3/4 3-6	Replace
Page 3/4 3-14	Replace
Page 3/4 5-3	Replace
Page 3/4 5-7	Replace