

May 25, 1995

Mr. D. N. Morey, Vice President
Southern Nuclear Operating Company, Inc.
Post Office Box 1295
Birmingham, AL 35201-1295

SUBJECT: CHANGE TO TECHNICAL SPECIFICATION BASES SECTION 2.2.1 LIMITING
SAFETY SYSTEM SETTINGS, JOSEPH M. FARLEY NUCLEAR PLANT, UNITS 1
AND 2

Dear Mr. Morey:

By letter dated May 15, 1995, Southern Nuclear Operating Company (SNC) provided the staff revised pages for the Technical Specification (TS) Bases Section 2.2.1 for the Joseph M. Farley Nuclear Plant, Units 1 and 2. The revisions to this Bases Section provided clarification of the function of the undervoltage and underfrequency reactor coolant pump trips. These changes were the result of a safety evaluation performed by SNC that reclassified these reactor coolant pump trips as anticipatory trips, and identified that no credit for the operation of these trips has been taken in the accident analyses. The staff has reviewed these revisions to Bases Section 2.2.1 and has no objection to the changes made.

Enclosed is a copy of the Farley revised TS Bases pages B 2-6 and B 2-7 for Units 1 and 2 that have been dated to correspond to the issue date of this letter.

Sincerely,

Original signed by:
Byron L. Siegel, Senior Project Manager
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-348 and 50-364

Enclosure: Units 1 and 2 Revised
Bases Section

cc w/encl: See next page

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UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

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Sincerely,

A handwritten signature in cursive script that reads "Byron L. Siegel".

Byron L. Siegel, Senior Project Manager
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-348 and 50-364

Enclosure: Units 1 and 2 Revised
Bases Section

cc w/encl: See next page

Mr. D. N. Morey
Southern Nuclear Operating
Company, Inc.

Joseph M. Farley Nuclear Plant

cc:
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FARLEY, UNIT 1

BASES CHANGE

Remove Pages

B 2-6

B 2-7

Insert Pages

B 2-6

B 2-7

LIMITING SAFETY SYSTEM SETTINGS

BASES 2.2.1 (Continued)

latter trip will ensure that the DNB design criterion is met during normal operational transients and anticipated transients when 2 loops are in operation and the Overtemperature delta T trip setpoint is adjusted to the value specified for all loops in operation. With the Overtemperature delta T trip setpoint adjusted to the value specified for 2 loop operation, the P-8 trip at 66% RATED THERMAL POWER will ensure that the DNB design criterion is met during normal operational transients and anticipated transients with 2 loops in operation.

Steam Generator Water Level

The Steam Generator Water Level Low-Low trip provides core protection by preventing operation with the steam generator water level below the minimum volume required for adequate heat removal capacity. The specified setpoint provides allowances that there will be sufficient water inventory in the steam generators at the time of trip to allow for starting delays of the auxiliary feedwater system.

Undervoltage and Underfrequency - Reactor Coolant Pump Busses

The Undervoltage and Underfrequency Reactor Coolant Pump Bus trips are provided as anticipatory trips for reactor core protection against DNB as a result of loss of voltage or underfrequency to more than one reactor coolant pump bus. Primary core protection for these events is provided by the Loss of Flow trips. The specified setpoints for undervoltage and underfrequency generate an anticipatory reactor trip signal before the low flow trip setpoint is reached.

No credit was taken in accident analyses for the operation of these trips. Their functional capability enhances the overall reliability of the Reactor Protection System.

Time delays are incorporated in the underfrequency and undervoltage trips to prevent spurious reactor trips from momentary electrical power transients. For undervoltage, the delay is set so that the time required for a signal to reach the reactor trip breakers following the simultaneous loss of power of two or more reactor coolant pump busses shall not exceed 0.9 seconds (an additional time delay is allotted for EMF decay). For underfrequency, the delay is set so that the time required for a signal to reach the reactor trip breakers after the underfrequency trip setpoint is reached shall not exceed 0.6 seconds.

LIMITING SAFETY SYSTEM SETTINGS

BASES 2.2.1 (Continued)

Turbine Trip

A Turbine Trip causes a direct reactor trip when operating above P-9. Each of the turbine trips provide turbine protection and reduce the severity of the ensuing transient. No credit was taken in the accident analyses for operation of these trips. Their functional capability at the specified trip settings is required to enhance the overall reliability of the Reactor Protection System.

Safety Injection Input from ESF

If a reactor trip has not already been generated by the reactor protective instrumentation, the ESF automatic actuation logic channels will initiate a reactor trip upon any signal which initiates a safety injection. This trip is provided to protect the core in the event of a LOCA. The ESF instrumentation channels which initiate a safety injection signal are shown in Table 3.3-3.

Reactor Coolant Pump Breaker Position Trip

The Reactor Coolant Pump Breaker Position Trips are anticipatory trips which provide reactor core protection against DNB resulting from the opening of any one pump breaker above P-8 or the opening of two or more pump breakers below P-8. These trips are blocked below P-7. The open/close position trips assure a reactor trip signal is generated before the low flow trip setpoint is reached. No credit was taken in the accident analyses for operation of these trips. Their functional capability at the open/close position settings is required to enhance the overall reliability of the Reactor Protection System.

FARLEY, UNIT 2

BASES CHANGE

Remove Pages

B 2-6

B 2-7

Insert Pages

B 2-6

B 2-7

LIMITING SAFETY SYSTEM SETTINGS

BASES 2.2.1 (Continued)

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LIMITING SAFETY SYSTEM SETTINGS

BASES 2.2.1 (Continued)

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