Industry/TSTF Standard Technical Specification Change Traveler

Revise Shutdown Margin definition for stuck rod exception

Priority/Classification 1) Correct Specifications

NUREGs Affected: ☑ 1430 ☑ 1431 ☐ 1432 ☐ 1433 ☐ 1434

Description:

Revise the definition of SHUTDOWN MARGIN (SDM) item a to include the following as a new sentence: "However, with all CONTROL RODS verified as fully inserted by two independent means, it is not necessary to account for a stuck CONTROL ROD in the SDM calculation."

Justification:

The consideration of a stuck rod is provided only to allow for a single failure of one rod to not insert when a scram is initiated. However, with positive indication that all rods are already fully inserted, such a provision is overly conservative. This change is consistent with the definition of SDM provided in NUREG-1432 for CE plants.

Revision History

OG Revision 0 **Revision Status: Active** **Next Action: NRC**

Revision Proposed by: ANO-1

Revision Description:
Original Issue

Owners Group Review Information

Date Originated by OG: 15-Jul-97

Owners Group Comments
(No Comments)

Owners Group Resolution: Approved Date: 01-Feb-96

TSTF Review Information

TSTF Received Date: 06-Nov-97 Date Distributed for Review 15-Dec-97

OG Review Completed: ☑ BWOG ☑ WOG ☑ CEOG ☑ BWROG

TSTF Comments:

Applicable to WOG and BWOG.

TSTF Resolution: Approved Date: 05-Feb-98

Incorporation Into the NUREGs

File to BBS/LAN Date: TSTF Informed Date: TSTF Approved Date:

NUREG Rev Incorporated:

Affected Technical Specifications

1.1 Definitions - Shutdown Margin

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1.1 Definitions (continued)

SHUTDOWN MARGIN (SDM)	SDM shall be the instantaneous amount of reactivity by which the reactor is subcritical or would be subcritical from its present condition assuming: a. All full length CONTROL RODS (safety and regulating) are fully inserted except for the single CONTROL ROD of highest reactivity worth, which is assumed to be fully withdrawn. With any CONTROL ROD not capable of being fully inserted, the reactivity worth of these CONTROL RODS must be accounted for in the determination of SDM; b. In MODES 1 and 2, the fuel and moderator temperatures are changed to the [nominal zero power design level]; and c. There is no change in APSR position.
STAGGERED TEST BASIS	A STAGGERED TEST BASIS shall consist of the testing of one of the systems, subsystems, channels, or other designated components during the interval specified by the Surveillance Frequency, so that all systems, subsystems, channels, or other designated components are tested during *n* Surveillance Frequency intervals, where *n* is the total number of systems, subsystems, channels, or other designated components in the associated function.
THERMAL POWER	THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.

However, with all CONTROL RODS verified fully inserted by two independent means, it is not necessary to account for a stuck CONTROL ROD in the SDM calculation.

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1.1 Definitions

SHUTDOWN MARGIN (SDM) (continued)	a. All rod cluster control assemblies (RCCAs) are fully inserted except for the single RCCA of highest reactivity worth, which is assumed to be fully withdrawn. With any RCCA not capable of being fully inserted, the reactivity worth of the RCCA must be accounted for in the determination of SDM; and b. In MODES 1 and 2, the fuel and moderator temperatures are changed to the [nominal zero power design level].
SLAVE RELAY TEST	A SLAVE RELAY TEST shall consist of energizing each slave relay and verifying the OPERABILITY of each slave relay. The SLAVE RELAY TEST shall include, as a minimum, a continuity check of associated testable actuation devices.
STAGGERED TEST BASIS	A STAGGERED TEST BASIS shall consist of the testing of one of the systems, subsystems, channels, or other designated components during the interval specified by the Surveillance Frequency, so that all systems, subsystems, channels, or other designated components are tested during *n* Surveillance Frequency intervals, where *n* is the total number of systems, subsystems, channels, or other designated components in the associated function.
THERMAL POWER	THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.
TRIP ACTUATING DEVICE OPERATIONAL TEST (TADOT)	A TADOT shall consist of operating the trip actuating device and verifying the OPERABILITY of required alarm, interlock, display, and trip functions. The TADOT shall include adjustment, as necessary, of the trip actuating device so that it actuates at the required setpoint within the required accuracy.

However, with all RCCAs verified fully inserted by two independent means, it is not necessary to account for a stuck RCCA in the SDM calculation.