
Industry/TSTF Standard Technical Specification Change Traveler

LCO 3.1.9.c removal of extraneous detail

Priority/Classification 1) Correct Specifications

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

Description:Modify LCO 3.1.9.c to remove the words "source range and intermediate range"

Justification:

LCO 3.1.9.c, as written, would require the high startup rate control rod withdrawal inhibits associated with the source range to be operable during conditions where the neutron power is above the upper indication range of the instrument. When the source range indication is above the upper indication range, the source range can not be demonstrated operable and the rod withdrawal inhibit is also bypassed. This change results in a requirement that nuclear instrumentation high startup rate rod withdrawal inhibit capability exists. The Bases have been revised to clarify that this can be satisfied by the intermediate range or source range depending on the neutron power in relation to the upper ranges of the intermediate range and startup range nuclear instrumentation.

Revision History**OG Revision 0****Revision Status: Closed**

Revision Proposed by: ANO-1

Revision Description:

Original Issue

Owners Group Review Information

Date Originated by OG: 17-Sep-96

Owners Group Comments

Designated ANO-1-04

Owners Group Resolution: Approved Date: 17-Sep-96

TSTF Review Information

TSTF Received Date: 01-Nov-96

Date Distributed for Review 05-Dec-96

OG Review Completed: ☒ BWO ☒ WOG ☒ CEOG ☒ BWROG

TSTF Comments:

CEOG - Not applicable, accepts

WOG - Not applicable, accepts

BWROG - Not applicable

Additional comments received from the BWO on 1/13/97. On hold for resolution.

TSTF Resolution: Approved Date: 07-Jan-97

2/17/98

NRC Review Information

NRC Received Date: 24-Jan-97

NRC Reviewer: Tjader, R.

NRC Comments:

NOTE: TSTF-155 through 160 were inadvertently submitted to the NRC without BWO-26 approval. The NRC was informed in February to ignore the travelers until BWO-26 review and approval could be obtained.

Final Resolution: TSTF Withdraws

Final Resolution Date: 27-Mar-97

TSTF Revision 1**Revision Status: Active****Next Action: NRC**

Revision Proposed by: TSTF

Revision Description:

After further review, BWO-26 (TSTF-156), was approved by the BWO-26 without changes. Revision 1 was issued to facilitate tracking.

Owners Group Review Information

Date Originated by OG: 06-Nov-97

Owners Group Comments
(No Comments)

Owners Group Resolution: Approved Date: 06-Nov-97

TSTF Review Information

TSTF Received Date: 06-Nov-97

Date Distributed for Review 06-Nov-97

OG Review Completed: ☒ BWO-26 ☒ WOG ☒ CEOG ☒ BWOG

TSTF Comments:

(No Comments)

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

LCO 3.1.9 Physics Tests Exceptions - Mode 2

LCO 3.1.9 Bases Physics Tests Exceptions - Mode 2

Action 3.1.9.C Bases Physics Tests Exceptions - Mode 2

2/17/98

TSTF-15.6; Rev. 1

3.1 REACTIVITY CONTROL SYSTEMS

3.1.9 PHYSICS TESTS Exceptions—MODE 2

LCO 3.1.9 During performance of PHYSICS TESTS, the requirements of

- LCO 3.1.3, "Moderator Temperature Coefficient (MTC)";
- LCO 3.1.4, "CONTROL ROD Group Alignment Limits";
- LCO 3.1.5, "Safety Rod Insertion Limits";
- LCO 3.1.6, "AXIAL POWER SHAPING ROD (APSR) Alignment Limits";
- LCO 3.2.1, "Regulating Rod Insertion Limits," for the restricted operation region only; and
- [LCO 3.4.2, "RCS Minimum Temperature for Criticality"]

may be suspended, provided:

- a. THERMAL POWER is $\leq 5\%$ RTP;
- b. Reactor trip setpoints on the OPERABLE nuclear overpower channels are set to $\leq 25\%$ RTP;
- c. Nuclear instrumentation ~~source range and intermediate range~~ ^{high startup rate} CONTROL ROD withdrawal inhibit ~~is~~ ^{is} OPERABLE; and
- d. SDM is $\geq [1.0]\% \Delta k/k$.

APPLICABILITY: MODE 2 during PHYSICS TESTS.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. THERMAL POWER not within limit.	A.1 Open control rod drive trip breakers.	Immediately

(continued)

BASES

APPLICABLE
SAFETY ANALYSES
(continued)

temperature to decrease to 520°F during MODE 2 PHYSICS TESTS, based on the low probability of an accident occurring and on prior operating experience.

PHYSICS TESTS include measurement of core nuclear parameters or exercise of control components that affect process variables.

PHYSICS TESTS satisfy Criteria 1, 2, and 3 of the NRC Policy Statement.

LCO

This LCO permits individual CONTROL RODS to be positioned outside of their specified group alignment and withdrawal limits and to be assigned to other than specified CONTROL ROD groups during the performance of PHYSICS TESTS. In addition, this LCO permits verification of the fundamental core characteristics.

This LCO also allows suspension of LCO 3.1.3, LCO 3.1.4, LCO 3.1.5, LCO 3.1.6, LCO 3.2.1, and LCO 3.4.2, provided:

- a. THERMAL POWER is $\leq 5\%$ RTP;
- b. Nuclear overpower trip setpoints on the OPERABLE nuclear power range channels are set to $\leq 25\%$ RTP;
- c. Nuclear instrumentation source range and intermediate range high startup rate CONTROL ROD withdrawal inhibit ^{is} ~~are~~ OPERABLE; and
- d. SDM is maintained $\geq [1.0]\% \Delta k/k$.

The limits of LCO 3.2.3 and LCO 3.2.4 do not apply in MODE 2. Inhibiting CONTROL ROD withdrawal, based on startup rate, also limits local linear heat rate (LHR), departure from nucleate boiling ratio (DNBR), and peak RCS pressure during accidents initiated from low power.

APPLICABILITY

This LCO is applicable in MODE 2 when the reactor is either not critical or when THERMAL POWER is $\leq 5\%$ RTP. This LCO is applicable for initial criticality or low power testing, as defined by Regulatory Guide 1.68 (Ref. 3). In MODE 1,

(continued)

BASES

ACTIONS

C.1 (continued)

Time is consistent with, or more conservative than, those specified for the individual LCOs addressed by PHYSICS TESTS exceptions.

If the nuclear instrumentation ~~source and intermediate range~~ high startup rate CONTROL ROD withdrawal inhibit functions ^(is) ~~are~~ inoperable, then 1 hour is allowed for the operator to restore the functions to OPERABLE status or to complete an orderly suspension of PHYSICS TESTS exceptions. Suspension of PHYSICS TESTS exceptions requires restoration of each of the applicable individual LCOs to within specification. This required Completion Time is consistent with, or more conservative than, those specified for the individual LCOs addressed by PHYSICS TESTS exceptions.

< INSERT B 3.1-56A > →

SURVEILLANCE
REQUIREMENTSSR 3.1.9.1

Performing a CHANNEL FUNCTIONAL TEST on each nuclear instrumentation source and intermediate range high startup rate CONTROL ROD withdrawal inhibit and nuclear overpower channel, ensures that the instrumentation required to detect a deviation from THERMAL POWER or to detect a high startup rate is OPERABLE. Performing the test once within 24 hours, prior to initiating PHYSICS TESTS, ensures that the instrumentation is OPERABLE shortly before PHYSICS TESTS begin and allows the operator to correct any instrumentation problems.

SR 3.1.9.2

Verification that THERMAL POWER is $\leq 5\%$ RTP ensures that an adequate margin is maintained between the THERMAL POWER level and the nuclear overpower trip setpoint. Hourly verification is adequate for the operator to determine any change in core conditions, such as xenon redistribution occurring after a THERMAL POWER reduction, that could cause THERMAL POWER to exceed the specified limit.

(continued)

<<Insert B 3.1-56A>>

The nuclear instrumentation high startup rate CONTROL ROD withdrawal inhibit function is not required when the reactor power level is above the operating range of the instrumentation channel. For example, if the reactor power level is above the source range channel operating range, then only the intermediate range high startup rate CONTROL ROD withdrawal inhibit is required to be functional.