

Response to NRC Questions on TSTF-541, "Add Exceptions to Surveillance Requirements When the Safety Function is Being Performed"

Background

SR 3.0.1 states that when a Surveillance Requirement (SR) is not met, the LCO is not met. In most cases, failure to meet the SR also results in the inoperability of the subject SSC (i.e., it cannot perform its specified safety function). However, there are instances in which an SSC is not capable of meeting a SR but is still capable of performing its specified safety function(s). The Improved Standard Technical Specifications (ISTS) contains notes for those circumstances. For example:

- NUREG-1431, SR 3.5.2.5, states, "Verify each ECCS automatic valve in the flow path *that is not locked, sealed, or otherwise secured in position*, actuates to the correct position on an actual or simulated actuation signal."
- NUREG-1432, SR 3.7.5.3, states, "Verify each AFW automatic valve *that is not locked, sealed, or otherwise secured in position*, actuates to the correct position on an actual or simulated actuation signal."
- NUREG-1433, SR 3.5.3.2, states, "Verify each RCIC System manual, power operated, and automatic valve in the flow path, *that is not locked, sealed, or otherwise secured in position*, is in the correct position."

The TS Bases for these SR notes are similar to the following:

This Surveillance also does not apply to valves that are locked, sealed, or otherwise secured in position since they are verified to be in the correct position prior to locking, sealing, or securing.

The SR exception for valves that are locked, sealed, or otherwise secured in position has appeared since the mid-1970s in the NRC's pre-ISTS standard Technical Specifications (NUREG-0452, NUREG-0123, NUREG-0212, and NUREG-0103), and appears many times in the ISTS:

NUREG-1430, B&W	18 times
NUREG-1431, Westinghouse	26 times
NUREG-1432, CE	22 times
NUREG-1433, BWR/4	16 times
NUREG-1434, BWR/6	18 times

Question

In a July 28, 2016 public meeting between the NRC, the Technical Specifications Task Force (TSTF), and the PWROG and BWROG chairmen, the NRC requested clarification on regulatory processes which control the use of these SR notes. The discussion was related to NRC review of TSTF-541, "Add Exceptions to Surveillance Requirements When the Safety Function is Being Performed," which proposed to add similar notes to additional SRs in the ISTS.

The NRC staff's questions were:

1. What processes ensure the valve is restored to the design, unlocked position?
2. How often is it confirmed that the valve is locked, and is there any time limit on the use of the SR notes?
3. How is the condition of the valve assessed if the SR is not applicable?
4. Could the SR note be used to change the plant design from an automatic valve to a locked valve without evaluating the change in accordance with 10 CFR 50.59?

Response

1. What processes ensure the valve is restored to the design, unlocked position?

If the component is locked, sealed, or otherwise secured to support plant operation (such as changing modes, or removing or placing systems in operation), restoration to the design condition is controlled by plant procedures, which are governed by 10 CFR 50.59.

If the component is locked, sealed, or otherwise secured to facilitate repair, restoration is governed by 10 CFR 50, Appendix B, Criterion XVI. IMC 0326, "Operability Determinations and Functionality Assessments for Conditions Adverse to Quality or Safety," Section 07.02, "Timing of Corrective Actions," states:

The licensee should establish a schedule for completing a corrective action when an SSC is determined to be degraded or nonconforming. Licensees should address any degraded or nonconforming condition in a time frame commensurate with the safety significance of the condition, even though 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," applies only to activities that affect the safety-related functions of SSCs.

Functions described in a TS SR would be safety-related functions of SSCs. The locked, sealed, or otherwise secured in place component must be returned to the design condition in a time frame commensurate with its importance to safety. These activities are routinely inspected by the NRC, such as in the Problem Identification and Resolution inspection, and during routine inspection of corrective actions.

2. How often is it confirmed that the valve is locked, and is there any time limit on the use of the SR notes?

There is no TS or regulatory requirement for periodic verification or that limits the period of time that the note may be applied. As stated in the TS Bases, the component is verified to be in the correct position prior to locking, sealing, or securing it in position, and indefinite operation is permitted in this condition. Practically, verification that the valve remains locked, sealed, or otherwise secured would be performed when the SR is required to be performed (i.e.; the SR frequency). Valves that are locked, sealed, or otherwise secured are controlled by the licensee's tagging program, which is routinely inspected by the NRC under various 71111 procedures in the NRC Inspection Manual. If the SR frequency has expired,

performance of the SR on the valve would be required when it is removed from the condition of being locked, sealed, or otherwise secured.

3. How is the condition of the valve assessed if the SR is not applicable?

Other testing requirements on the valve are not affected, such as ASME Code requirements, preventative maintenance, operational use of the valve, or SRs that test the valve that do not have such a note.

4. Could the SR note be used to change the plant design from an automatic valve to a locked valve without evaluating the change in accordance with 10 CFR 50.59?

No. Changes to the plant design are governed by 10 CFR 50.59. The industry implements 10 CFR 50.59 in accordance with NEI 96-07, Revision 1, "Guidelines For 10 CFR 50.59 Implementation," which was endorsed by the NRC in Regulatory Guide 1.187.