

P/R section. Operator Awareness

TSAC Not Entered when Source Range Audible Count Rate Removed From Service

Failure to comply with Tech. Spec. Required Action in a timely manner

Licensee ID'ed

Introduction: A Non-Cited Violation (NCV) of TS having very low safety significance (Green), which was licensee identified, was found when the Nuclear Instrumentation source range audible count rate circuit was de-energized but the action for Technical Specification Action Condition (TSAC) 3.9.2, Condition C, was implemented after approximately 6 hours, rather than immediately as required.

Description: During refueling outage 1R28, 120 Volt Vital Instrument Panel 1Y-04 was de-energized for planned maintenance at 22:21 hours on May 3, 2004, which de-energized the nuclear instrumentation source range audible count rate circuit. TSAC 3.9.2 requires that two source range neutron flux monitors shall be operable and one source range audible count rate circuit shall be operable. Condition A was appropriately entered, but the licensee failed to enter Condition C for approximately 6 hours. Condition C exists when the required source range audible count rate circuit is inoperable. The required action for TSAC 3.9.2 C is, "Initiate action to isolate unborated water sources." The completion time is, "Immediately." The required action was completed at 04:20 hours on May 4, 2004.

The procedure, 1-SOP-Y-Y04, "1Y-04, Yellow 120V Vital Instrument Panel", provides guidance on affected loads, Technical Specifications, and plant requirements in Attachment A. For breaker 1Y-04-09, Attachment A lists the affected TS LCO as 3.9.2, and the plant requirements column states, "No refueling operations without audible flux monitoring in control room and containment." But Attachment A fails to list TSAC 3.9.2 C which requires, "Initiate action to isolate unborated water sources" with a completion time of "Immediately." SROs on multiple shifts were aware that the source range audible count circuit was de-energized but were not aware of the TSAC requirement.

The issue was entered into the licensee Corrective Action Program (Activity Request CAP056363). The CAP was assigned a Significance Level B (Condition Adverse to Quality) and an Apparent Cause Evaluation was performed and an LER was submitted.

Analysis: Inspectors reviewed the apparent cause evaluation report and the LER. The inspectors determined that failure to comply with the TS required action in a timely manner was a performance deficiency warranting a significance evaluation. The inspectors concluded that the finding was greater than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," issued on June 20, 2003. The inspectors concluded that the finding was greater than minor because it affected the Reactor Safety Initiating Events objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown, namely shutdown equipment lineup (configuration control) to provide early detection of a dilution accident. The finding also affected the cross-cutting area of Human Performance because the condition existed during multiple shifts and multiple SROs failed to recognize the applicability of the TSAC (NOTE: also discussed in Cross-Cutting section, 4OA4).

The inspectors attempted to complete a significance determination of this issue using IMC 0609, "Significance Determination Process (SDP)," dated March 21, 2003, Appendix G, "Shutdown Operations". The issue was not suitable for analysis using the SDP process because Appendix G does not include analysis of a dilution accident. The inspectors determined that the finding was considered to be of very low safety significance (Green) because a dilution accident did not occur and visual indication of source range flux was available. The finding was assigned to the reactor safety initiating events cornerstone for Unit one.

Enforcement: TS 3.9.2, requires that two source range neutron flux monitors shall be operable and one source range audible count rate circuit shall be operable when the unit is in Mode 6 (Refueling). Condition C requires that when the source range audible count rate circuit is inoperable, actions to isolate unborated water sources shall be initiated immediately. Contrary to these requirements, actions to isolate unborated water sources were delayed for approximately 6 hours. Because this violation was of very low safety significance and it was entered into the licensee's corrective action program, this violation is being treated as a Non-Cited Violation (NCV), consistent with Section VI.A of the NRC Enforcement Policy. (NCV 05000301/2004003-0X.