



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, IL 60532-4352

April 19, 2010

MEMORANDUM TO: Thomas B. Blount, Deputy Director
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

FROM: Gary L. Shear, Deputy Director */RA/*
Division of Reactor Projects
Region III

SUBJECT: TASK INTERFACE AGREEMENT – EVALUATION OF
APPLICATION OF TECHNICAL SPECIFICATION
SURVEILLANCE REQUIREMENT 3.0.3,
“SURVEILLANCE REQUIREMENT APPLICABILITY,”
AT CLINTON POWER STATION (TIA 2010-001)

This Task Interface Agreement (TIA) documents the regulatory position as determined through consultation between Region III and the Office of Nuclear Reactor Regulation regarding the application of Technical Specification (TS) Surveillance Requirement (SR) 3.0.3, “Surveillance Requirement Applicability” at Clinton Power Station (CPS).

Background

On November 18, 2008, the licensee identified that in March 2002, nine excess flow check valves, 1CM002A, 1CM002B, 1CM003A, 1E22-F330, 1E22-F332, 1E51-F377A, 1E51-F377B, 1SM008 and 1SM009, were incorrectly removed from its Inservice Testing (IST) Program required by 10 CFR 50.55a(f), Inservice testing requirements. The licensee entered the issue into its corrective action program (AR 00846540) and revised the IST Program documents to incorporate testing of these valves on January 27, 2009. The valves have a supporting safety function for the Suppression Pool Makeup (SPMU) System (Limiting Condition for Operation (LCO) 3.3.6.4) to re-open following a design basis accident in order for required instrumentation to be available post-accident. The American Society of Mechanical Engineering/American National Standards Institute Operations and Maintenance Code (OM 1988, Part 10) required a biennial position verification test for these valves and an opening test once every three months, with exceptions allowed for refueling cycle frequency. The valves had not been tested since the refueling outage in 2000. The licensee discovered this problem while the plant was in a TS Mode of applicability, which requires the valves to be functioning to support LCO 3.3.6.4.

CONTACT: Jamie C. Benjamin, Project Engineer, DRP, Region III
(630) 829-9753

The licensee successfully completed both the position verification test and the opening test for one valve, 1E22-F332, which could be tested with the unit in Mode One. This testing was accomplished on March 6, 2009, and again on June 5, 2009. The licensee completed a risk evaluation and scheduled the performance of the other eight tests in the next refueling outage, which would be the first reasonable opportunity for performance due to required cold shutdown conditions.

Upon discovery of the above testing issue, the licensee utilized the delay period afforded by TS SR 3.0.3 for non-performance of a surveillance to allow up to the limit of the specified surveillance frequency to perform surveillances. During review of the testing issue, the U.S. Nuclear Regulatory Commission (NRC) inspectors questioned the licensee whether it was appropriate to utilize the delay period allowed by TS SR 3.0.3.

Subsequently, on June 20, 2009, the licensee revised the calculation defining the design basis function for the excess flow check valves to remove the active support safety function of five of the check valves. Of the remaining four check valves that have an active support safety function, 1CM002B, 1E22-F332, 1E51-F377B, and 1SM008, one check valve, 1E22-F332, has been tested satisfactorily as discussed above. In response to the inspectors' questions, on June 24, 2009, the licensee completed an evaluation for the remaining three check valves, which the inspectors reviewed and subsequently discussed with the licensee's staff. The inspectors did not believe that the licensee's supporting basis provided a high degree of confidence that the valves would function as required; however, without actually testing the valves, the inspectors were unable to prove that the valves would not function. The licensee maintained that it was satisfied with its determination in the evaluation. The licensee subsequently tested the three excess flow check valves satisfactorily during an unplanned forced outage that began on September 29, 2009. The inspectors still question that TS SR 3.0.3 is applicable to this case. This TIA responds to the inspectors concern about SR 3.0.3 as applied to TS 5.5.6 for the CPS issue.

Licensee Position

The licensee's position is that TS SR 3.0.3 is applicable in this case.

Regulatory Evaluation

1. CPS TS 5.5.6, Inservice Testing Program Requirements

TS 5.5, Programs and Manuals requirements relate to procedures that are necessary to assure operation of the facility in a safe manner in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.36(c)(5), Administrative Controls. TS 5.5.6 has four subparts. Each part contains a clarifying statement about applicability of SR frequencies for SRs that are performed to meet 10 CFR 50.36. TS 5.5.6.d states that nothing in the ASME Boiler and Pressure Vessel Code shall supersede the requirements of any TS for TS SRs.

2. Effect of SR 3.0.3 on the IST program

For those SRs that are implemented with reliance on the frequencies of the IST program, such as SR 3.4.4.1, all of the TS section 3.0 Surveillance Requirement Applicability provisions are applicable. The provisions of SR 3.0.1 include, in pertinent part, the requirement that "[f]ailure

to perform a Surveillance within the specified Frequency shall be failure to meet the LCO except as provided in SR 3.0.3.” SR 3.0.3 is quoted below (emphasis added).

SR 3.0.3 If it is discovered that a Surveillance was not performed within its specified Frequency, then compliance with the requirement to declare the LCO not met may be delayed, from the time of discovery, up to 24 hours or up to the limit of the specified Frequency, whichever is greater. This delay period is permitted to allow performance of the Surveillance. A risk evaluation shall be performed for any Surveillance delayed greater than 24 hours and the risk impact shall be managed.

If the Surveillance is not performed within the delay period, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

When the Surveillance is performed within the delay period and the Surveillance is not met, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

The “requirement to declare the LCO not met” referred to in SR 3.0.3 is contained in SR 3.0.1 and the allowance to delay compliance with that requirement is available for TS SRs that have Frequencies governed by the IST program such as SR 3.4.4.1.

Invoking SR 3.0.3 merely allows delaying the declaration that an LCO is not met and does not modify the separate requirement of the LCO that the associated systems be operable. Failure to perform a Surveillance of this nature is also a noncompliance and should be resolved as discussed in Regulatory Issue Summary (RIS) 2005-20 Revision 1, “Revision to NRC Inspection Manual Part 9900 Technical Guidance, ‘Operability Determinations & Functionality Assessments for Resolution of Degraded or Nonconforming Conditions Adverse to Quality or Safety,” (Agencywide Documents Access and Management System Accession No. ML073531473).

Invoking SR 3.0.3 for an IST test that is not a TS SR would be inappropriate because there has been no Surveillance that was not performed within its specified Frequency, which is necessary to invoke SR 3.0.3, and there is no associated requirement from SR 3.0.1 to declare an LCO not met. This noncompliance should also be resolved as discussed in RIS 2005-20, Revision 1.

Staff Guidance

The statement of applicability of SR 3.0.3 in TS 5.5.6 is to maintain the allowances for surveillance frequency extensions for TS required surveillances. The administrative change to the CPS TS to bring them into conformance with NUREG-1434 by addressing surveillance frequency applicabilities in TS 5.5.6, clearly did not apply the surveillance extensions to excess flow check valves because the excess flow check valves are not tested in accordance with TS required surveillances. Thus, the provisions of SR 3.0.3 did not apply to the excess flow check valves before they were removed from the IST program or after they were added back into the IST program.

In accordance with 10 CFR 50.36, TS are derived from the analyses and evaluation included in the safety analysis report. In applying the criteria of 10 CFR 50.36(c)(2)(ii) to adopt the staff precedents in NUREG-1434, CPS TS require the safety systems containing the nine excess flow check valves to be operable. In accordance with the CPS license basis described in the Final Safety Analysis Report, excess flow check valves are necessary attendant equipment that are required for instrumentation to perform their specified safety function and, therefore, the excess flow check valves must also be capable of performing their related support function(s). By applying the guidance as to the preferred format of TS in NUREG-1434, CPS TS do not include surveillance requirements to periodically test the excess flow check valves, therefore, there is no regulatory basis for applying SR 3.0.3 to these excess flow check valves. Instead, the regulatory requirements for testing excess flow check valves are included in the IST program in accordance with the requirements of 10 CFR 50.55a(f).

The Technical Specification definition of OPERABLE does not allow a grace period before a component that is not capable of performing its specified function is declared inoperable. Thus, an assessment of the functionality of these valves was required to establish whether the degraded condition warranted starting the TS ACTION time for the supported system. This is consistent with NRC staff's Operability Determination Process guidance in Inspection Manual Part 9900 for addressing degraded and nonconforming conditions because these valves perform specified functions described in the UFSAR or other elements of the current license basis. As stated in this guidance:

"There is no explicit time limit for completing a prompt determination. Nevertheless, timeliness is important and should depend on the safety significance of the issue. For example, it may be appropriate to make a prompt operability determination within a few hours for situations involving highly safety significant SSCs [structures, systems, or components]. Prompt determinations can often be done within 24 hours of discovery even if complete information is not available. If more time is needed to gather additional information (such as a vendor analyses or calculations) the licensee can evaluate the risk importance of the additional information to decide whether to prolong the operability determination. TSs completion time is one factor that can be used in determining an appropriate time frame within which a prompt determination should be completed."

In the current instance, inoperability of the affected SPMU instrumentation would require declaring the SPMU subsystem inoperable within one hour (LCO 3.3.6.4). Inoperability of one SPMU subsystem would require restoring it to operable status within 7 days or changing to Modes 3 and 4 in 12 and 36 hours, respectively. In this context, the delay in conducting an operability determination from November 18, 2008, until June 24, 2009, would be considered excessive.

Conclusion

The licensee's position that SR 3.0.3 is applicable to missed inservice testing of the excess flow check valves discussed above is incorrect due to the lack of an associated SR.

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