Enclosure 12 Case Study 8: Applicability of SR 3.0.3 to SR's that Have Never Been Performed Meeting Summary of the January 27 & 28 Meeting with NRC/TSTF Dated March 9, 2009

Case Study 8: Applicability of SR 3.0.3 to SRs that Have Never Been Performed

Day 2

SR 3.0.3 states:

"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 SR 3.0.3 Bases state:

"SR 3.0.3 establishes the flexibility to defer declaring affected equipment inoperable or an affected variable outside the specified limits when a Surveillance has not been completed within the specified Frequency. A delay period of up to 24 hours or up to the limit of the specified Frequency, whichever is greater, applies from the point in time that it is discovered that the Surveillance has not been performed in accordance with SR 3.0.2, and not at the time that the specified Frequency was not met.

•<u>The basis for this delay period includes</u> consideration of unit conditions, adequate planning, availability of personnel, the time required to perform the Surveillance, the safety significance of the delay in completing the required Surveillance, and <u>the</u> <u>recognition that the most probable result of any particular Surveillance being performed</u> is the verification of conformance with the requirements.

If a Surveillance is not completed within the allowed delay period, then the equipment is considered inoperable or the variable is considered outside the specified limits and the Completion Times of the Required Actions for the applicable LCO Conditions begin immediately upon expiration of the delay period. If a Surveillance is failed within the delay period, then the equipment is inoperable, or the variable is outside the specified limits and the Completion Times of the Required Actions for the variable is outside the specified limits and the Completion Times of the Required Actions for the applicable LCO Conditions begin immediately upon the failure of the Surveillance."

SR 3.0.1 states:

"SRs shall be met during the MODES or other specified conditions in the Applicability for individual LCOs, unless otherwise stated in the SR. <u>Failure to meet a Surveillance</u>, whether such failure is experienced during the performance of the Surveillance or between performances of the Surveillance, shall be failure to meet the LCO. Failure to perform a Surveillance within the specified Frequency shall be failure to meet the LCO except as provided in SR 3.0.3. Surveillances do not have to be performed on inoperable equipment or variables outside specified limits." (emphasis added)

The Bases of SR 3.0.1 state:

"Systems and components are assumed to be OPERABLE when the associated SRs have been met. Nothing in this Specification, however, is to be construed as implying that systems or components are OPERABLE when:

- a. The systems or components are known to be inoperable, although still meeting the SRs; or
- b. The requirements of the Surveillance(s) are known not to be met between required Surveillance performances."

and

"Upon completion of maintenance, appropriate post maintenance testing is required to declare equipment OPERABLE. This includes ensuring applicable Surveillances are not failed and their most recent performance is in accordance with SR 3.0.2. Post maintenance testing may not be possible in the current MODE or other specified conditions in the Applicability due to the necessary unit parameters not having been established. In these situations, the equipment may be considered OPERABLE provided testing has been satisfactorily completed to the extent possible and the equipment is not otherwise believed to be incapable of performing its function. This will allow operation to proceed to a MODE or other specified condition where other necessary post maintenance tests can be completed.

Some examples of this process are:

- a. Auxiliary feedwater (AFW) pump turbine maintenance during refueling that requires testing at steam pressures > 800 psi. However, if other appropriate testing is satisfactorily completed, the AFW System can be considered OPERABLE. This allows startup and other necessary testing to proceed until the plant reaches the steam pressure required to perform the testing.
- b. High pressure safety injection (HPI) maintenance during shutdown that requires system functional tests at a specified pressure. Provided other appropriate testing is satisfactorily completed, startup can proceed with HPI considered OPERABLE.

This allows operation to reach the specified pressure to complete the necessary post maintenance testing."

Discussion

As stated in SR 3.0.1, SR 3.0.3 is an exception to the requirement that a Surveillance be <u>performed</u> within the specified Frequency. It is not an exception to the requirement for SRs to be <u>met</u> during the MODES or other specified conditions in the Applicability. This is a key consideration. SR 3.0.3 also states, "If it is discovered that a Surveillance was not <u>performed</u>..."

The Bases of SR 3.0.3 state, "The basis for this delay period includes ... the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the requirements." The Bases of SR 3.0.3 also state, "If a Surveillance is failed within the delay period, then the equipment is inoperable, or the variable is outside the specified limits and the Completion Times of the Required Actions for the applicable LCO Conditions begin immediately upon the failure of the Surveillance." This also supports the position that SR 3.0.3 is an exception to performing the SR within the Frequency, not to the requirement that SRs must be met.

Therefore, if an SR has not been performed within the specified Frequency and it is known that the requirements of the SR are not met, then the equipment is inoperable and SR 3.0.3 cannot be applied.

This is further supported by the statement in SR 3.0.1 that SRs do not have to be performed on inoperable equipment. If it is known that the systems or components are inoperable, then the unperformed SR is not required to be performed and the SR is not considered missed.

Therefore, the discussion of whether SR 3.0.3 can be applied to a particular missed SR must start with whether the equipment being tested is believed to be OPERABLE or the variable being verified is believed to be within limits.

RIS 2005-05, "Operability Determination Process," section 3.9 states, "The discovery of a degraded or nonconforming condition may call the operability of one or more SSCs into question. A subsequent determination of operability should be based on the licensee's "reasonable expectation," from the evidence collected, that the SSCs are operable and that the operability determination will support that expectation. Reasonable expectation does not mean absolute assurance that the SSCs are operable. The SSCs may be considered operable when there is evidence that the possibility of failure of an SSC has increased, but not to the point of eroding confidence in the reasonable expectation that the SSC remains operable. The supporting basis for the reasonable expectation of SSC operability should provide a high degree of confidence that the SSCs remain operable. It should be noted that the standard of "reasonable expectation" is a high standard, and that there is no such thing as an indeterminate state of operability; an SSC is either operable or inoperable. "

This standard of "reasonable expectation" is directly applicable to the question of whether a licensee may apply SR 3.0.3 to a missed SR because in both cases the question to be addressed is

whether the associated equipment is OPERABLE or variables are within limits. If the licensee has a reasonable expectation that the equipment associated with a missed SR is OPERABLE or a variable to be verified is within limits, then SR 3.0.3 may be applied to the missed SR. If the licensee does not have this reasonable expectation, then under SR 3.0.1 the associated LCO is not met.

Post Maintenance Testing

In the majority of cases the Technical Specifications do not explicitly require post maintenance testing by performance of an SR. As SR 3.0.3 only applies to a missed Surveillance, SR 3.0.3 cannot be applied when post-maintenance testing not required by a Surveillance is missed.

In a few rare cases, post maintenance testing is required by an particular SR (usually through reference to a Program which requires compliance with a Regulatory Guide that discusses post maintenance testing). In this case, failure to perform a post maintenance test could be considered a missed surveillance and SR 3.0.3 may be applicable.

The SR 3.0.1 Bases state, "Post maintenance testing may not be possible in the current MODE or other specified conditions in the Applicability due to the necessary unit parameters not having been established. In these situations, the equipment may be considered OPERABLE provided testing has been satisfactorily completed to the extent possible and the equipment is not otherwise believed to be incapable of performing its function. This will allow operation to proceed to a MODE or other specified condition where other necessary post maintenance tests can be completed." Based on these statements and the discussion given above, if the licensee completed tests to the extent possible with the exception of the missed post maintenance test and there is a reasonable expectation that the associated equipment is OPERABLE, then SR 3.0.3 may be applied to a missed SR that required post-maintenance testing.

SRs that Have Never Been Performed

SR 3.0.3 may be applied if it has been discovered that an SR (or a portion of an SR) has never been performed provided that there is a reasonable expectation that the associated equipment is OPERABLE or that variables are within limit, and that it is expected that the SR could be performed successfully. An example would be a relay contact that has never been tested in accordance with the associated SR, but the adjacent, physically connected relay contacts have been tested. If there is a reasonable expectation that the historical testing of the relay or other tests or indications would indicate if the particular contact is inoperable, it could be considered that there is a reasonable expectation that the relay contact is OPERABLE and the SR will be successful when performed. In this case, SR 3.0.3 could be applied.

Summary

When applying SR 3.0.3, the following should be considered:

SR 3.0.3 is an exception to the performance frequency of an SR. It is not an exception to the SR 3.0.1 requirement that SRs be met between performances.

When applying SR 3.0.3, there must be a reasonable expectation that the associated equipment is OPERABLE or that variables are within limits and that, if performed, the SR would meet the acceptance criteria.

If at any point during the SR 3.0.3 delay period there is no longer a reasonable expectation that the SR acceptance criteria can be met, SR 3.0.3 is not applicable and the associated equipment should be declared inoperable or variables declared outside of their limits.

SR 3.0.3 cannot be applied to testing that is not required by an SR. (For SRs that are required to be performed by a Required Action, see Example 1.3-6 in the ISTS).