

FINAL SAFETY EVALUATION OF TECHNICAL SPECIFICATIONS TASK FORCE TRAVELER
TSTF-529, REVISION 4, "CLARIFY USE AND APPLICATION RULES," USING THE
CONSOLIDATED LINE ITEM IMPROVEMENT PROCESS
(TAC NOS. MF1406 AND MF1407)

1.0 INTRODUCTION

By letter dated February 29, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16062A271), the Technical Specifications Task Force (TSTF) Traveler TSTF-529, Revision 4, "Clarify Use and Application Rules." Traveler TSTF-529 proposes changes to NUREG-1430, "Standard Technical Specifications [(STS)] Babcock and Wilcox Plants," NUREG-1431, "Standard Technical Specifications Westinghouse Plants," NUREG-1432, "Standard Technical Specifications Combustion Engineering Plants," NUREG-1433, "Standard Technical Specifications General Electric Plants BWR/4," and NUREG-1434, "Standard Technical Specifications General Electric Plants, BWR/6" (ADAMS Accession Nos. ML12100A177, ML12100A222, ML12102A165, ML12104A192 and ML12104A195, respectively).

The proposed changes would revise STS Sections 1.3, "Completion Times," and 3.0, "LCO [limiting condition for operation] Applicability" and "SR [surveillance requirement] Applicability," and the STS Bases for Section 3.0, "LCO Applicability" and "SR Applicability." The proposed changes would also clarify and expand the use and application of the STS usage rules. The STS change will be made available to licensees through the consolidated line item improvement process.

2.0 REGULATORY EVALUATION

2.1 Description of Subject Standard Technical Specifications Sections

Limiting conditions for operation (LCOs) specify minimum requirements for ensuring safe operation of the unit. The actions associated with an LCO state conditions that typically describe the ways in which the requirements of the LCO can fail to be met. Specified with each stated condition are required action(s) and completion time(s).

STS Section 1.3, "Completion Times," currently describes completion times as follow:

The completion time is the amount of time allowed for completing a Required Action. It is referenced to the time of discovery of a situation (e.g., inoperable equipment or variable not within limits) that requires entering an ACTIONS Condition unless otherwise specified, providing the unit is in a MODE or specified condition stated in the Applicability of the LCO. Required Actions must be completed prior to the expiration of the specified Completion Time. An ACTIONS Condition remains in effect and the Required

Enclosure

Actions apply until the Condition no longer exists or the unit is not within the LCO Applicability.

If situations are discovered that require entry into more than one Condition at a time within a single LCO (multiple Conditions), the Required Actions for each Condition must be performed within the associated Completion Time. When in multiple Conditions, separate Completion Times are tracked for each Condition starting from the time of discovery of the situation that required entry into the Condition.

Once a Condition has been entered, subsequent divisions, subsystems, components, or variables expressed in the Condition, discovered to be inoperable or not within limits, will not result in separate entry into the Condition, unless specifically stated. The Required Actions of the Condition continue to apply to each additional failure, with Completion Times based on initial entry into the Condition.

LCO 3.0.1 through LCO 3.0.9 establish the general requirements applicable to all specifications and apply at all times, unless otherwise stated. Similarly, SR 3.0.1 through SR 3.0.4 establish the general requirements for surveillances that are applicable to all specifications and apply at all times, unless otherwise stated.

2.2 Description of STS Changes

The proposed change will revise the STS Sections 1.3, "Completion Times," and 3.0, "LCO Applicability" and "SR Applicability," and the STS Bases for Section 3.0, "LCO Applicability" and "SR Applicability." The proposed changes are described in more detail below.

2.2.1 Proposed Changes to "Time of Discovery"

STS Section 1.3, "Description," currently states, in part, the following (with emphasis added on "time of"):

The Completion Time is the amount of time allowed for completing a Required Action. It is referenced to the *time of* discovery of a situation (e.g., inoperable equipment or variable not within limits) that requires entering an ACTIONS Condition unless otherwise specified, providing the unit is in a MODE or specified condition stated in the Applicability of the LCO.

STS Section 1.3, "Description," also currently states, in part, the following (with emphasis added on "time of"):

If situations are discovered that require entry into more than one Condition at a time within a single LCO (multiple Conditions), the

Required Actions for each Condition must be performed within the associated Completion Time. When in multiple Conditions, separate Completion Times are tracked for each Condition starting from the *time of* discovery of the situation that required entry into the Condition.

The proposed STS Section 1.3 would delete “time of” from the previous statements and read as follow:

The Completion Time is the amount of time allowed for completing a Required Action. It is referenced to the discovery of a situation (e.g., inoperable equipment or variable not within limits) that requires entering an ACTIONS Condition unless otherwise specified, providing the unit is in a MODE or specified condition stated in the Applicability of the LCO.

[...]

If situations are discovered that require entry into more than one Condition at a time within a single LCO (multiple Conditions), the Required Actions for each Condition must be performed within the associated Completion Time. When in multiple Conditions, separate Completion Times are tracked for each Condition starting from the discovery of the situation that required entry into the Condition.

The adequacy of this change is discussed in Section 3.1.1.1.

2.2.2 Proposed Addition to “Time of Discovery”

The TSTF proposed to add the following paragraph to Section 1.3 of the STS under Description:

Unless otherwise specified, the Completion Time begins when a senior licensed operator on the operating shift crew with responsibility for plant operations makes the determination that an LCO is not met and an ACTIONS Condition is entered. The "otherwise specified" exceptions are varied, such as a Required Action Note or Surveillance Requirement Note that provides an alternative time to perform specific tasks, such as testing, without starting the Completion Time. While utilizing the Note, should a Condition be applicable for any reason not addressed by the Note, the Completion Time begins. Should the time allowance in the Note be exceeded, the Completion Time begins at that point. The exceptions may also be incorporated into the Completion Time. For example, LCO 3.8.1, "AC Sources - Operating," Required Action B.2, requires declaring required feature(s) supported by an inoperable diesel generator, inoperable when the redundant

required feature(s) are inoperable. The Completion Time states, "4 hours from discovery of Condition B concurrent with inoperability of redundant required feature(s)." In this case the Completion Time does not begin until the conditions in the Completion Time are satisfied.

The proposed change augments the NRC staff's expectation that a senior licensed operator on the operating shift crew with responsibility for plant operations makes the determination that an LCO is not met and a Condition is entered.

The adequacy of this change is discussed in Section 3.1.1.2.

2.2.3 Proposed Addition of "Unless Otherwise Specified"

STS Section 1.3, "Description," currently states the following (with emphasis added on "unless otherwise specified"):

The Completion Time is the amount of time allowed for completing a Required Action. It is referenced to the time of discovery of a situation (e.g., inoperable equipment or variable not within limits) that requires entering an ACTIONS Condition unless otherwise specified, providing the unit is in a MODE or specified condition stated in the Applicability of the LCO.

The TSTF proposed to add the following sentence right after the above statement to STS Section 1.3, which contains the phrase "unless otherwise specified:"

Unless otherwise specified, the Completion Time begins when a senior licensed operator on the operating shift crew with responsibility for plant operations makes the determination that an LCO is not met and an ACTIONS Condition is entered.

In addition, the TSTF proposed adding the phrase "unless otherwise specified" to the following two statements:

When in multiple Conditions, separate Completion Times are tracked for each Condition starting from the discovery of the situation that required entry into the Condition, unless otherwise specified.

and

The Required Actions of the Condition continue to apply to each additional failure, with Completion Times based on initial entry into the Condition, unless otherwise specified.

The adequacy of this change is discussed in Section 3.1.1.3.

2.2.4 Proposed Changes to LCO 3.0.4

STS LCO 3.0.4 currently states:

When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall only be made:

- a. When the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time;
- b. After performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate; exceptions to this Specification are stated in the individual Specifications, or
- c. When an allowance is stated in the individual value, parameter, or other Specification.

The TSTF proposed to clarify the b. statement above by placing the statement regarding exceptions in parenthesis and replacing the ending comma with a semicolon. The proposed STS LCO 3.0.4 would state the following:

When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall only be made:

- a. When the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time;
- b. After performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate (exceptions to this Specification are stated in the individual Specifications); or
- c. When an allowance is stated in the individual value, parameter, or other Specification.

The adequacy of this change is discussed in Section 3.1.2.

2.2.5 Proposed Changes to STS SR 3.0.3

STS SR 3.0.3 currently states the following:

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 TSTF-proposed STS LCO SR 3.0.3 states the following (the additional sentence is underlined):

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. The delay period is only applicable when there is a reasonable expectation the surveillance will be met when performed. 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 adequacy of this change is discussed in Section 3.1.3.

2.3 Regulatory Requirements, Licensing Information, Guidance Documents

Per Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36(b), each license authorizing operation of a utilization facility will include technical specifications. The technical specifications will be derived from the analyses and evaluations included in the safety analysis report, and amendments thereto, submitted pursuant to 10 CFR 50.34 (describing the technical information to be included in applications for an operating license). The Commission may include such additional technical specifications as the Commission finds appropriate.

The NRC staff's guidance for review of the technical specifications is in Chapter 16, "Technical Specifications," of NUREG-0800, "Standard Review Plan [(SRP)]," Revision 3, dated March 2010 (ADAMS Accession No. ML100351425). As described therein, as part of the regulatory standardization effort, the NRC staff has prepared STS (NUREG-1430 to NUREG-1434) for each of the light-water reactor nuclear steam supply systems (NSSSs) and associated balance-of-plant equipment systems. Accordingly, the NRC staff's review includes consideration of whether the proposed technical specifications are consistent with the applicable reference technical specification (i.e., the current STS), as modified by NRC-approved TSTF Travelers such as TSTF-529, Revision 4. Special attention is given to technical specification provisions that depart from the reference technical specifications and NRC-approved TSTF Travelers to determine whether proposed differences are justified by uniqueness in plant design or other considerations so that 10 CFR 50.36 is met.

3.0 TECHNICAL EVALUATION

During the review of TSTF-529, Revision 4, the NRC staff considered generally the guidance on acceptance criteria of the SRP sections described in Section 2.3 of this safety evaluation, and, in particular, the acceptance criteria in Chapter 16, "Technical Specifications," of NUREG-0800, Revision 3. Additionally, the NRC staff evaluated the proposed changes to the STS against what is required to be in the technical specifications under 10 CFR 50.36(c).

3.1 Requested Changes

3.1.1 Proposed Changes to Section 1.3, "Completion Times"

3.1.1.1 Proposed Changes to "Time of Discovery"

The only mention of the term "time of discovery" in relation to completion times is in STS Section 1.3 (quoted in Section 2.2.1 of this SE). Throughout the STS, the term "discovery" is used to describe the point in time that it is recognized that the requirements of an LCO are not met. For example, STS LCO 3.0.2 states in part, "Upon discovery of a failure to meet an LCO, the Required Actions of the associated Conditions shall be met, except as provided in LCO 3.0.5 and LCO 3.0.6." In addition, the Bases to LCO 3.0.2, state, in part, "LCO 3.0.2 establishes that upon discovery of a failure to meet an LCO, the associated ACTIONS shall be met."

The proposed STS Section 1.3 would delete "time of" from the previous statements. The NRC staff finds the proposed change acceptable because it makes Section 1.3 consistent with the

language used throughout the rest of the STS. This provides clarity to the term "discovery," and therefore provides a clear and objective application of the technical specification required actions and associated completion times. The change is editorial since it does not change the requirements currently in the technical specifications. Therefore, the NRC Staff finds the proposed change acceptable.

3.1.1.2 Proposed Addition to "Time of Discovery"

The TSTF also proposed to add the following paragraph to Section 1.3 of the STS under Description:

Unless otherwise specified, the Completion Time begins when a senior licensed operator on the operating shift crew with responsibility for plant operations makes the determination that an LCO is not met and an ACTIONS Condition is entered. The "otherwise specified" exceptions are varied, such as a Required Action Note or Surveillance Requirement Note that provides an alternative time to perform specific tasks, such as testing, without starting the Completion Time. While utilizing the Note, should a Condition be applicable for any reason not addressed by the Note, the Completion Time begins. Should the time allowance in the Note be exceeded, the Completion Time begins at that point. The exceptions may also be incorporated into the Completion Time. For example, LCO 3.8.1, "AC Sources - Operating," Required Action B.2, requires declaring required feature(s) supported by an inoperable diesel generator, inoperable when the redundant required feature(s) are inoperable. The Completion Time states, "4 hours from discovery of Condition B concurrent with inoperability of redundant required feature(s)." In this case the Completion Time does not begin until the conditions in the Completion Time are satisfied.

The operating shift crew is responsible for overall control of facility operation. As part of that responsibility, the operating shift crew must be aware of the status of the plant and condition of structures, systems and components (SSCs). This includes status of degraded or nonconforming conditions that may affect plant operation. Therefore, the proposed change simply augments the NRC staff's expectation that a senior licensed operator on the operating shift crew with responsibility for plant operations makes the determination that an LCO is not met and a Condition is entered. The phrase "and an ACTIONS Condition is entered" in the above proposed insertion, is necessary to accommodate circumstances in which LCO 3.0.6 allows an LCO to not be met without entry into the Conditions. In those circumstances, a Completion Time does not begin. In addition, an example is added to the proposed insertion in order to explain the concept presented.

The NRC staff finds the proposed change acceptable since it clarifies senior reactor operators' responsibilities and the allowances of LCO 3.0.6, and therefore, provides a clear and objective application of the STS Required Actions and associated Completion Times.

3.1.1.3 Proposed Addition of "Unless Otherwise Specified"

The phrase, "unless otherwise specified," in STS Section 1.3, refers to those instances in which technical specification LCOs define the start of the Completion Time as different from "discovery." For example, STS, Revision 4, Specification 3.8.1, "AC Sources - Operating," Required Action B.2, calls for declaring required feature(s) supported by an inoperable diesel generator inoperable when the redundant required feature(s) are inoperable. The Completion Time states, "4 hours from discovery of Condition B concurrent with inoperability of redundant required feature(s)." In this case, the Completion Time does not begin until the conditions in the Completion Time are satisfied.

As discussed in Section 2.2.3 of this SE, the TSTF proposed to add the following sentence to STS Section 1.3, which contains the phrase "unless otherwise specified:"

Unless otherwise specified, the Completion Time begins when a senior licensed operator on the operating shift crew with responsibility for plant operations makes the determination that an LCO is not met and an ACTIONS Condition is entered.

In addition, the TSTF proposed adding the phrase "unless otherwise specified" to the following two statements:

When in multiple Conditions, separate Completion Times are tracked for each Condition starting from the discovery of the situation that required entry into the Condition, unless otherwise specified.

and

The Required Actions of the Condition continue to apply to each additional failure, with Completion Times based on initial entry into the Condition, unless otherwise specified.

The addition of the phrase "unless otherwise specified" acknowledges that there are instances, as indicated in the individual technical specifications, when the completion time does not start at discovery. These exceptions are varied, such as when a Required Action Note or Surveillance Requirement Note provides an alternative time to perform specific tasks, such as testing, without starting the Completion Time. While utilizing the Note, should a Condition be applicable for any reason not addressed by the Note, the Completion Time begins. Should the time allowance in the Note be exceeded, the Completion Time begins at that point.

The NRC staff finds the proposed change acceptable since it clarifies that there are exceptions and therefore provides a clear and objective application of the STS Required Actions and associated Completion Times.

3.1.2 Proposed Changes to LCO 3.0.4

As stated in Section 2.2.4 of this SE, the current STS LCO 3.0.4 contains three options, (a, b, and c). Paragraph a ends with a semicolon and paragraph b ends with ", or".

The LCO 3.0.4.b, "After performance of a risk assessment ... stated in the individual Specifications, or," could lead to operator misinterpretation. Operators could misapply this statement by believing the "or" applies to the phrase regarding exceptions and that LCO 3.0.4.a, b, and c apply concurrently.

The TSTF is proposing to clarify this sentence by placing the statement regarding exceptions in parenthesis and replacing the ending comma with a semicolon. The proposed STS LCO 3.0.4 would state the following: "After performance of a risk assessment ... if appropriate (exceptions to this specification are stated in the individual specifications); or."

The NRC staff finds that the change is editorial since it does not change the requirements currently in the technical specifications. The NRC staff finds the proposed change acceptable since it removes potential for misapplication of LCO 3.0.4 allowances, and therefore, provides a clear and objective application of the STS Required Actions.

3.1.3 Proposed Changes to SR 3.0.3

The NRC has typically interpreted SR 3.0.3, which is quoted in Section 2.2.5 of this SE, as inapplicable to SRs that have never been previously performed. This is because the allowance provided by SR 3.0.3 is based on the fact that the SR was satisfactorily met in the past and the most probable result of performing the SR is the verification of conformance with the requirements. Therefore, there is reasonable expectation the SR will be met when performed.

However, the NRC staff recognizes that there are instances in which an SR may not have been performed in the past, but there is still a reasonable expectation the SR will be met when performed. For example, an SR requires testing of a relay contact. A licensee finds the relay contact has never been tested as required in accordance with a particular SR. That licensee, however, finds there is a reasonable expectation the SR will be met when performed because the subject relay contact has been tested by another SR or historical operation of the subject relay contact has been successful.

The delay period allowed by STS SR 3.0.3 offers adequate time to complete SRs that have been missed. In addition, this delay period permits the completion of an SR before complying with required actions or other remedial measures that might preclude completion of the SR. The NRC staff finds the application of the delay period provided by STS SR 3.0.3 acceptable for use on SRs that have never been performed so as long as licensees can provide an adequate determination of reasonable expectation the SR will be met when performed.

The TSTF-proposed STS LCO SR 3.0.3 states the following (the new sentence reflecting the inclusion of SRs that have never been performed is underlined):

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. The delay period is only applicable when there is a reasonable expectation the surveillance will be met when performed. 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.

When making a determination of reasonable expectation that the SR will be met when performed, licensees should consider many factors. These factors include, but are not limited to, things such as the period of time since the SR was last performed, or whether the SR, or a portion thereof, has ever been performed, and many other indications, tests, or activities that might support the expectation that the SR will be met when performed. It is not sufficient to infer the behavior of the associated equipment from the performance of similar equipment. The rigor of determining whether there is a reasonable expectation an SR will be met when performed should increase based on the length of time since the last performance of the SR. If the SR has been performed recently, a review of the SR history and equipment performance may be sufficient to support a reasonable expectation that the SR will be met when performed. For SRs that have not been performed for a long period or that have never been performed, a rigorous evaluation based on objective evidence should provide a high degree of confidence that the equipment is capable of performing its specified safety function(s). The evaluation should be documented in sufficient detail to allow a knowledgeable individual to understand the basis for the determination.

The proposed change, which expands the scope of SR 3.0.3 to SRs that have never been performed, is acceptable because it requires there to be an adequate determination of a reasonable expectation the SR will be met when performed. In addition, the proposed change augments plant safety since it could prevent unnecessary shutdowns by providing adequate time to complete SRs that have never been performed but are likely to achieve satisfactory results.

4.0 CONCLUSION

As described in Section 2.3 of this SE, the regulations contained in 10 CFR 50.36 require that technical specifications include items in specified categories, including LCOs and SRs. The proposed changes modify the LCOs, conditions, required actions, completion times, and SRs applicable to their usage and application. The technical specifications continue to specify the LCOs and specify the remedial measures to be taken if one of these requirements is not satisfied. The technical specifications continue to specify the appropriate SRs to ensure the necessary quality of affected structures, systems and components are maintained. Therefore, the NRC staff finds that the changes to the LCOs and SRs proposed in TSTF-529 meet 10 CFR 50.36(c)(2) and 50.36(c)(3), respectively.

Attachment: Basis for Accepting the Proposed Changes to the Standard Technical Specifications Bases

Principal Contributor: C. Tilton, NRR/DSS

Date: April 21, 2016

ATTACHMENT

BASIS FOR ACCEPTING THE PROPOSED CHANGES TO THE STANDARD TECHNICAL SPECIFICATIONS BASES

This attachment documents the U.S. Nuclear Regulatory Commission (NRC) staff's basis for accepting the proposed changes to the Standard Technical Specifications (STS) Bases provided in Technical Specifications Task Force (TSTF) STS Change Traveler TSTF-529, Revision 4, "Clarify Use and Application Rules" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16062A271), dated February 29, 2016.

In addition to the changes described in the safety evaluation of TSTF-529, Revision 4, changes to the STS Bases for the following sections are proposed: limiting condition for operation (LCO) 3.0.2, LCO 3.0.3, LCO 3.0.4, LCO 3.0.5, surveillance requirement (SR) 3.0.2 and SR 3.0.3. The proposed changes and their acceptability are discussed in the sections below.

A.1 Proposed Changes to the Bases for LCO 3.0.2

As discussed in Section 3.1.1.3 of the TSTF-529, Revision 4, safety evaluation, the phrase "unless otherwise specified" was added to Section 1.3, "Completion Times," of the STS. In a complementary change, the TSTF proposed to revise the Bases for LCO 3.0.2 to eliminate a minor discrepancy between the technical specification (Section 1.3) and the Bases. Section 1.3 states that a completion time is referenced to the time of discovery of a situation that requires entering an actions condition unless otherwise specified. LCO 3.0.2 makes a similar statement but without the qualifier, "unless otherwise specified." Therefore, the LCO 3.0.2 Bases are adequately revised to add the phrase "unless otherwise specified" to the following statement:

The Completion Time of each Required Action for an ACTIONS Condition is applicable from the point in time that an ACTIONS Condition is entered, unless otherwise specified.

These changes ensure consistency between existing STS sections, as discussed above and are therefore acceptable.

A.2 Proposed Changes to the Bases for LCO 3.0.3

A.2.1 "Reach" Changed to "Enter"

The TSTF proposed to revise STS Bases for LCO 3.0.3 to provide consistent terminology throughout the STS. STS Bases for LCO 3.0.3 uses the term "reaching" when describing a transition to a lower mode. The term "entering" is more accurate and is the commonly used term in the STS for mode transitions. In seven locations in the LCO 3.0.3 Bases, the term "reaching" a mode is replaced with the term "entering" a mode. The change is editorial in nature and clarifies what the NRC staff meant by the term "reaching." Therefore, the change is acceptable.

A.2.2 Addition of "LCO No Longer Applicable"

The TSTF proposed to correct STS Bases for LCO 3.0.3. Specifically, it proposed to add language to state that a unit shutdown may be terminated and LCO 3.0.3 exited if the LCO is no longer applicable.

STS Bases for LCO 3.0.3 currently state the following:

A unit shutdown required in accordance with LCO 3.0.3 may be terminated and LCO 3.0.3 exited if any of the following occurs:

- a. The LCO is now met,
- b. A Condition exists for which the Required Actions have now been performed, or
- c. ACTIONS exist that do not have expired Completion Times. These Completion Times are applicable from the point in time that the Condition is initially entered and not from the time LCO 3.0.3 is exited.

STS LCO 3.0.2 currently states: "If the LCO is met or is no longer applicable prior to expiration of the specified Completion Time(s), completion of the Required Action(s) is not required unless otherwise stated." However, the list in the LCO 3.0.3 Bases does not acknowledge that a unit shutdown may be terminated and LCO 3.0.3 exited if the LCO is no longer applicable (i.e., the LCO that was not met which led to entry into LCO 3.0.3).

The proposed change in TSTF-529, Revision 4, adds to the list a new paragraph b that states, "The LCO is no longer applicable," and the subsequent list items are renumbered.

The NRC staff finds this change acceptable since it adds clarity and consistency to the application of the STS by explicitly including in the STS Bases for LCO 3.0.3 that a unit shutdown may be terminated and LCO 3.0.3 exited if the LCO is no longer applicable.

A.3 Proposed Changes to the Bases for LCO 3.0.4

A.3.1 Addition of "Either"

The TSTF proposed a revision to STS Bases for LCO 3.0.4.a by inserting the word "either" in its introductory paragraph as follows: "in accordance with either LCO 3.0.4.a, LCO 3.0.4.b, or LCO 3.0.4.c." The NRC staff finds this change acceptable because it clarifies the intent of the allowance provided by LCO 3.0.4 as discussed in Section 3.1.2 of the TSTF-529, Revision 4, safety evaluation.

A.3.2 Clarification of Intent of LCO 3.0.4.a

The TSTF also proposed the following change to the STS Bases for LCO 3.0.4.a (changes are indicated by underlined text):

LCO 3.0.4.a allows entry into a MODE or other specified condition in the Applicability with the LCO not met when the associated ACTIONS to be entered following entry into the MODE or other specified condition in the Applicability will permit continued operation within the MODE or other specified condition for an unlimited period of time. Compliance with ACTIONS that permit continued operation of the unit for an unlimited period of time in a MODE or other specified condition provides an acceptable level of safety for continued operation. This is without regard to the status of the unit before or after the MODE change. Therefore, in such cases, entry into a MODE or other specified condition in the Applicability may be made and the Required Actions followed after entry into the Applicability.

The NRC staff finds this change acceptable because it is needed to provide clarification that required actions must be followed after entry into the modes and other specified conditions in the applicability if not performed prior to entry.

A.3.3 Example Added

The TSTF proposed to add the following example to STS Bases for LCO 3.0.4:

For example, LCO 3.0.4.a may be used when the Required Action to be entered states that an inoperable instrument channel must be placed in the trip condition within the Completion Time. Transition into a MODE or other specified condition in the Applicability may be made in accordance with LCO 3.0.4 and the channel is subsequently placed in the tripped condition within the Completion Time, which begins when the Applicability is entered. If the instrument channel cannot be placed in the tripped condition and the subsequent default ACTION ("Required Action and associated Completion Time not met") allows the OPERABLE train to be placed in operation, use of LCO 3.0.4.a is acceptable because the subsequent ACTIONS to be entered following entry into the MODE include ACTIONS (place the OPERABLE train in operation) that permit safe plant operation for an unlimited period of time in the MODE or other specified condition to be entered.

The NRC staff finds this change acceptable because it clarifies the intent of LCO 3.0.4.

A.3.4 Removal of Misleading STS Reference

STS Bases for LCO 3.0.4.c currently state:

The risk assessments performed to justify the use of LCO 3.0.4.b usually only consider systems and components. For this reason, LCO 3.0.4.c is typically applied to Specifications which describe values and parameters (e.g., [Containment Air Temperature, Containment Pressure, MCPR, Moderator Temperature Coefficient]), and may be applied to other Specifications based on NRC plant specific approval.

Although the list of specifications to which LCO 3.0.4.c is typically applied is in brackets (i.e., plant-specific), the parenthetical phrase is misleading. In the STS, LCO 3.0.4.c is only applied to one specification, "RCS Specific Activity." This specification is not listed in the Bases and the listed specifications in the STS do not allow application of LCO 3.0.4.c. For consistency within the STS, the TSTF proposed to replace the bracketed list of Specifications with "(e.g., RCS Specific Activity)." This removes information which is potentially misleading, providing greater clarity. Therefore, the NRC staff finds this change acceptable.

A.4 Proposed Changes to the Bases for LCO 3.0.5

The TSTF proposed a revision to STS Bases for LCO 3.0.5 Bases to clarify that LCO 3.0.5 should not be used if there are other alternatives to demonstrate that an LCO is met and maintain compliance with Actions.

In addition, in a related change, an incorrect example in the LCO 3.0.5 Bases is replaced. A new example is added to the STS Bases for LCO 3.0.5. The other existing examples in the LCO 3.0.5 Bases regarding instrument channels are revised and retained.

The added statements to STS Bases LCO 3.0.5 are as follow:

LCO 3.0.5 should not be used in lieu of other practicable alternatives that comply with Required Actions and that do not require changing the MODE or other specified conditions in the Applicability in order to demonstrate equipment is OPERABLE. LCO 3.0.5 is not intended to be used repeatedly.

An example of demonstrating equipment is OPERABLE with the Required Actions not met is opening a manual valve that was closed to comply with Required Actions to isolate a flowpath with excessive Reactor Coolant System (RCS) Pressure Isolation Valve (PIV) leakage in order to perform testing to demonstrate that RCS PIV leakage is now within limit.

[...]

Examples of demonstrating equipment OPERABILITY include instances in which it is necessary to take an inoperable channel or trip system out of a tripped condition that was directed by a Required Action, if there is no Required Action Note for this purpose. An example of verifying OPERABILITY of equipment removed from service is taking a tripped channel out of the tripped condition to permit the logic to function and indicate the appropriate response during performance of required testing on the inoperable channel.

[...]

The administrative controls in LCO 3.0.5 apply in all cases to systems or components in Chapter 3 of the Technical Specifications, as long as the testing could not be conducted while complying with the Required Actions. This includes the realignment or repositioning of redundant or alternate equipment or trains previously manipulated to comply with ACTIONS, as well as equipment removed from service or declared inoperable to comply with ACTIONS.

The NRC staff finds the proposed change to be acceptable because it is consistent with the intent of LCO 3.0.5 and provides additional guidance to licensees to avoid misinterpretation by removing the incorrect example in the TS Bases for LCO 3.0.5 and by clarifying that LCO 3.0.5 should not be used in lieu of other practicable alternatives that comply with Required Actions and that do not require changing the mode or other specified conditions in the Applicability in order to demonstrate equipment is operable.

A.5 Proposed Changes to the Bases for SR 3.0.2 and SR 3.0.3 to Address "Operational Convenience"

The term "operational convenience" appears four times in the STS Bases: LCO 3.0.2, LCO 3.0.3, SR 3.0.2, and SR 3.0.3. It does not appear in the Specifications. The TSTF proposed to delete the term "operational convenience" from STS Bases for SR 3.0.2 and SR 3.0.3. The term remains in the Bases for LCO 3.0.2 and LCO 3.0.3.

The intent of the phrase "operational convenience" is to ensure licensees apply good planning strategies that avoid repetitive voluntary removal of system(s) or component(s) from service in lieu of other alternatives that would not result in redundant systems or components being inoperable. For example, an option to avoid operational convenience would be making only one train of a system inoperable at a time to maintain safety function instead of taking both trains out for planned maintenance to shorten maintenance time.

The NRC staff finds the proposed change is acceptable because it does not alter the intent of the allowances provided in SR 3.0.2 and SR 3.0.3. The intent of the allowances provided by SR 3.0.2 and SR 3.0.3 is to ensure licensees perform required SRs and validate equipment's capability of performing its intended safety functions. The allowances of SR 3.0.2 and SR 3.0.3

are not to permit repetitive voluntary removal of a system(s) or component(s) from service in lieu of other alternatives that would not result in redundant systems or components being inoperable. The term "repeatedly" is added for consistency with SR 3.0.2 and to avoid the STS Bases being in apparent conflict with the allowance in SR 3.0.3.

A.6 Proposed Changes to the Bases for SR 3.0.3

A.6.1 Never Performed Surveillance Requirements

The TSTF proposed to revise STS Bases for SR 3.0.3 to allow application of SR 3.0.3 when an SR has not been previously performed and to clarify the application of SR 3.0.3.

As discussed in Section 3.1.3 of the TSTF-529, Revision 4, safety evaluation, the TSTF proposed to expand the scope of the allowance provided by SR 3.0.3 to surveillances that have never been performed. The following changes proposed by the TSTF to STS Bases for SR 3.0.3 are needed for consistency with the revised SR 3.0.3:

SR 3.0.3 is only applicable if there is a reasonable expectation the associated equipment is OPERABLE or that variables are within limits, and it is expected that the Surveillance will be met when performed. Many factors should be considered, such as the period of time since the Surveillance was last performed, or whether the Surveillance, or a portion thereof, has ever been performed, and any other indications, tests, or activities that might support the expectation that the Surveillance will be met when performed. An example of the use of SR 3.0.3 would be a relay contact that was not tested as required in accordance with a particular SR, but previous successful performances of the SR included the relay contact; the adjacent, physically connected relay contacts were tested during the SR performance; the subject relay contact has been tested by another SR; or historical operation of the subject relay contact has been successful. It is not sufficient to infer the behavior of the associated equipment from the performance of similar equipment. The rigor of determining whether there is a reasonable expectation a Surveillance will be met when performed should increase based on the length of time since the last performance of the Surveillance. If the Surveillance has been performed recently, a review of the Surveillance history and equipment performance may be sufficient to support a reasonable expectation that the Surveillance will be met when performed.

For Surveillances that have not been performed for a long period or that have never been performed, a rigorous evaluation based on objective evidence should provide a high degree of confidence that the equipment is OPERABLE. The evaluation should be documented in sufficient detail to allow a knowledgeable individual to understand the basis for the determination.

The NRC staff finds the proposed change acceptable as it is consistent with the proposed change to SR 3.0.3. The proposed change to SR 3.0.3, which expands the scope of SR 3.0.3 to SRs that have never been performed, is acceptable because it requires there to be an adequate determination of a reasonable expectation the SR will be met when performed. In addition, the proposed change augments plant safety since it could prevent unnecessary shutdowns by providing adequate time to complete SRs that have never been performed but are likely to achieve satisfactory results.

A.6.2 "Completing" Replaced with "Performing"

The STS Bases for SR 3.0.3 use the term "completing" with respect to an SR four times. Specification SR 3.0.3 uses the term "performing" a Surveillance. The term "performed" is defined in the "Description" Section of STS 1.4, "Use and Application, Frequency," as specifically determining the ability to meet the acceptance criteria. While the terms (complete and perform) have the same meaning in this context, the TSTF proposed to substitute the terms "complete" or "completion" with "perform" or "performance" in the STS Bases to improve consistency between the Specifications and the Bases.

The NRC staff finds these proposed changes adequate since they provide greater clarity by maintaining consistency within the STS.