

## ENCLOSURE 2

NRC Concern with RITSTF Initiative, "Preferred End States," and  
LCO 3.0.4.a - HANDOUT  
Meeting Summary of September 30, 2008 Meeting  
with NRC/TSTF

## Background

LCO 3.0.4 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.

This Specification shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.”

The Bases for LCO 3.0.4, and in particular 3.0.4.a, state:

“LCO 3.0.4 establishes limitations on changes in MODES or other specified conditions in the Applicability when an LCO is not met. It allows placing the unit in a MODE or other specified condition stated in that Applicability (e.g., the Applicability desired to be entered) when unit conditions are such that the requirements of the LCO would not be met, in accordance with LCO 3.0.4.a, LCO 3.0.4.b, or LCO 3.0.4.c.

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 permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time. Compliance with Required 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 in accordance with the provisions of the Required Actions.”

RITSTF Initiative 1, "Technical Specification Required Actions Preferred End States," modifies the Required Actions of certain Specifications to no longer require exiting the Applicability of the Specification. For example, a Specification that is Applicable in MODES 1, 2, 3, and 4 would typically require placing the plant in Mode 5 if the LCO is not met and the Required Actions and associated Completion Times are not met. RITSTF Initiative 1 modifies selected

Specifications to allow remaining in the Applicability (Mode 4 for PWRs and Mode 3 for BWRs) when the LCO is not met and the Required Actions and associated Completion Times are not met. This is justified by a risk assessment which demonstrates that remaining in the Applicability for a limited period of time to effect repairs is a lower risk condition than exiting the Applicability due to the availability of diverse methods of decay heat removal.

The following Travelers implement RITSTF Initiative 1:

1. TSTF-422-A, Rev. 0, "Change in Technical Specifications End States (CE NPSD-1186)", which applies to Combustion Engineering plants, was approved on July 5, 2005.
2. TSTF-423-A, Rev. 0, "Technical Specifications End States, NEDC-32988-A," which applies to BWR plants, was approved by the NRC on March 23, 2006 and has been incorporated into the Technical Specifications of two plants (LaSalle on 9/27/07 and Peach Bottom on 7/12/07).
3. TSTF-431, Rev. 2, "Change in Technical Specifications End States (BAW-2441)", which applies to Babcock and Wilcox plants, has not been approved. The Notice for Comment was issued on November 21, 2007.

#### Problem Statement

At the September 11, 2008 TSTF/NRC meeting, the NRC expressed a concern with an interaction between RITSTF Initiative 1 and LCO 3.0.4.a, as illustrated by the following scenario:

1. Assume a System A which is required to be Operable by a Specification which is Applicable in Modes 1, 2, 3, and 4. The Specification for System A has been modified by RITSTF Initiative 1 and the default Condition to be followed when the Required Actions and associated Completion Times are not met is to go to, and be permitted to remain in, Mode 4.
2. The plant is in Mode 5 and desires to enter Mode 4 without System A being Operable.
3. Since LCO 3.0.4.a states that the Applicability may be entered 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," the plant invokes LCO 3.0.4.a and enters Mode 4.

It is important to note that if the plant had not incorporated RITSTF Initiative 1 (i.e., the Required Action end state would be Mode 5), in most cases the plant would have been able to invoke LCO 3.0.4.b and enter Mode 4. LCO 3.0.4.b requires a risk assessment to determine the acceptability of entering the Applicability. The Staff was not concerned with a plant startup following LCO 3.0.4.b since the required risk assessment would ensure that the startup would not endanger public health and safety.

Response

This issue was addressed in the TSTF-422 (CE) Implementation Guidance (WCAP-16364), which was reviewed by the Staff and referenced in the TSTF-422 Safety Evaluation. The following discussion is consistent with and expands on the information provided in WCAP-16364.

This situation is acceptable because a risk assessment of the same type required by LCO 3.0.4.b must be performed prior to entering the Applicability under the Maintenance Rule, even when LCO 3.0.4.a is used. This will ensure that the startup would not endanger public health and safety.

The Bases for LCO 3.0.4.b discusses a risk assessment utilizing the program in place to implement the Maintenance Rule:

“The risk assessment may use quantitative, qualitative, or blended approaches, and the risk assessment will be conducted using the plant program, procedures, and criteria in place to implement 10 CFR 50.65(a)(4), which requires that risk impacts of maintenance activities to be assessed and managed. The risk assessment, for the purposes of LCO 3.0.4.b, must take into account all inoperable Technical Specification equipment regardless of whether the equipment is included in the normal 10 CFR 50.65(a)(4) risk assessment scope. The risk assessments will be conducted using the procedures and guidance endorsed by Regulatory Guide 1.182, "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants." Regulatory Guide 1.182 endorses the guidance in Section 11 of NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." These documents address general guidance for conduct of the risk assessment, quantitative and qualitative guidelines for establishing risk management actions, and example risk management actions.”

The NRC's model applications for TSTF-423 and TSTF-422 contain a commitment to "follow the guidance established in Section 11 of NUMARC 93-01, 'Industry Guidance for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants,' Nuclear Management and Resource Council, Revision 3, July 2000."

The Maintenance Rule requires an assessment of plant risk when changing plant conditions and required equipment is inoperable. As a result, a Mode transition with inoperable equipment requires a Maintenance Rule risk assessment. This Maintenance Rule risk assessment must be performed even when changing Modes utilizing LCO 3.0.4.a. As described above, the Maintenance Rule assessment and the assessment required when using LCO 3.0.4.b are performed under the same program. Therefore, the Maintenance Rule risk assessment performed when changing Modes under the allowances of LCO 3.0.4.a is the same type of assessment performed when changing Modes under the allowances of LCO 3.0.4.b.

The performance of a risk assessment when utilizing the preferred end state was a condition in the NRC Safety Evaluation of the Topical Report supporting TSTF-423 (NEDC-32988). The NRC did not limit this requirement to going down in Mode (e.g., to Mode 3 from Mode 2). This

## NRC Concern with RITSTF Initiative, "Preferred End States," and LCO 3.0.4.a

requirement was discussed in Table 2 of TSTF-423, which states that the risk assessment is required by the Maintenance Rule and no additional commitment or Technical Specification requirement is needed to ensure its performance. The Staff accepted this justification and did not require a Technical Specification requirement to perform a risk assessment when utilizing the preferred end state.

In summary, adoption of RITSTF Initiative 1 allows the use of LCO 3.0.4.a in situations which would otherwise require use of LCO 3.0.4.b. The risk assessment required to be performed by the Maintenance Rule when changing Modes with inoperable equipment utilizing LCO 3.0.4.a is the same as the risk assessment required to be performed when changing Modes utilizing LCO 3.0.4.b. Therefore, both before and after adoption of RITSTF Initiative 1, a risk assessment will be used to ensure that public health and safety is not threatened when entering the Applicability of a Specification.