

are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specification * * * By convention, the LCOs are contained in Sections 3.1 through 3.10 of the TS. TS Section 3.0, on "LCO and SR Applicability," provides details or ground rules for complying with the LCOs. LCO 3.0.4 and SR 3.0.4 address requirements for LCO compliance when transitioning between modes of operation.

Technical specifications have taken advantage of risk technology as experience and capability have increased. Since the mid-1980's, the NRC has been reviewing and granting improvements to technical specifications that are based, at least in part, on probabilistic risk assessment (PRA) insights. In its final policy statement on technical specification improvements of July 22, 1993, the Commission stated that it expects that licensees will utilize any plant specific PRA or risk survey in preparing their technical specification-related submittals. In evaluating these submittals, the staff applies the guidance in RG 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," dated July 1998 and in RG 1.177, "An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications," dated August 1998. The staff has appropriately adapted this guidance to assess the acceptability of upward mode changes with equipment inoperable. This review had the following objectives:

- To ensure that the plant risk does not increase unacceptably during the actual implementation of the proposed change (e.g., when the plant enters a higher mode while an LCO is not met). This risk increase is referred to as "temporary."

- To compare and assess the risk impact of the proposed change to the acceptance guidelines of the Commission's Safety Goal Policy Statement, as documented in RG 1.174. The risk impact, which is measured by the average yearly risk increase associated with the change, aims at minimizing the "cumulative" risk associated with the proposed change so that the plant's average baseline risk is maintained within a minimal range.

- To assess the licensee's ability to identify risk-significant configurations resulting from maintenance or other

operational activities and take appropriate compensatory measures to avoid such configurations.

The staff reviewed the reliance on 10 CFR 50.65(a)(4) for the non-higher-risk systems and components, and related guidance to assess and manage the risk of upward mode changes. The Commission has found that compliance with the industry guidance for implementation of 10 CFR 50.65(a)(4), as endorsed by RG 1.182 and mandated by LCO 3.0.4, SR 3.0.4 and SR 3.0.3, satisfies the configuration risk management objectives of RG 1.177 for technical specification surveillance interval and completion time extensions. Reliance on 10 CFR 50.65(a)(4) processes that are consistent with the provisions of the NRC-endorsed industry guidance was also found adequate for managing risk of missed surveillances as described in the **Federal Register** on September 28, 2001 (66 FR 49714).

The staff review also had the objective of ensuring that existing inspection programs have the necessary controls in place to allow NRC staff to oversee the implementation of the proposed change, reliance on 10 CFR 50.65(a)(4) processes or programs, and the ability to adequately assess the licensee's performance associated with risk assessments. The review encompassed inspection procedures (i.e., NRC Inspection Procedure 62709 (12/28/00), "Configuration Risk Assessment and Risk Management Process," and NRC Inspection Procedure 71111.13 (1/17/02), "Maintenance Risk Assessments and Emergent Work Control"), the significance determination process (SDP) (i.e., draft "Maintenance Risk Assessment and Risk Management Significance Determination Process"), enforcement guidance (i.e., draft Enforcement Manual Section 8.1.11, "Actions Involving the Maintenance Rule"), and the associated reactor oversight process.

2.1 Proposed Change to LCO 3.0.4 and SR 3.0.4

Currently LCO 3.0.4 does not allow entrance into a higher mode (or other specified condition) in the applicability when an LCO is not met, except when the associated actions to be entered permit continued operation in that mode or condition indefinitely or a specific exception is granted. Similarly, when an LCO's surveillances have not been met within their specified frequency, entry into a higher mode (or other specified condition) is not allowed

by SR 3.0.4. The current STS³ LCO 3.0.4 reads:

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

Exceptions to this Specification are stated in the individual Specifications. These exceptions allow entry into MODES or other specified conditions in the Applicability when the associated ACTIONS to be entered allow unit operation in the MODE or other specified condition in the Applicability only for a limited period of time.

LCO 3.0.4 is only applicable for entry into a MODE or other specified conditions in the Applicability in [MODES 1, 2, 3, and 4 {for PWRs}][MODES 1, 2, and 3 {for BWRs}]."

The revised LCO 3.0.4 will read:

"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 that MODE or other specified condition in the Applicability for an unlimited period of time, or

(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 or parameter 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 current STS⁴ SR 3.0.4 reads:

"Entry into a MODE or other specified condition in the Applicability of an LCO shall not be made unless the LCO's Surveillances have been met within their specified frequency. This provision shall not prevent entry into 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.

SR 3.0.4 is only applicable for entry into a MODE or other specified conditions in the Applicability in [MODES 1, 2, 3, and 4 {for PWRs}][MODES 1, 2, and 3 {for BWRs}]."

The revised SR 3.0.4 will conform to the changes to LCO 3.0.4 and read:

³ Plant specific wording for current equivalent LCO 3.0.4 is similar to current STS LCO 3.0.4 wording.

⁴ Plant specific wording for current equivalent SR 3.0.4 is similar to current STS SR 3.0.4 wording.