November 30, 2009

TSTF-09-24
PROJ0753

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

SUBJECT: Recommended Changes to be Incorporated in Revision 4 of the Standard Technical Specifications, NUREG-1430 through 1434

As discussed at the November 4 TSTF / NRC public meeting, the NRC is preparing to create Revision 4 of the Standard Technical Specifications (STS). The STS are published as NUREG-1430, NUREG-1431, NUREG-1432, NUREG-1433, and NUREG-1434.

The attachment lists the TSTF Travelers that the TSTF recommends be incorporated into Revision 4. Eighteen of the Travelers have been previously reviewed and approved by the NRC. An additional ten Travelers are currently under NRC consideration and are expected to be approved before the end of the first calendar quarter of 2010. There are four "T" Travelers that the NRC has not reviewed, but that the TSTF recommends be incorporated in Revision 4 as administrative corrections. Copies of these four Travelers are enclosed.

The TSTF looks forward to working with the NRC in this important endeavor.

Should you have any questions, please do not hesitate to contact us.

Kenneth J. Schrader (PWROG/W)

John Messina (BWROG)

Thomas W. Raidy (PWROG/CE)

Wendy E. Croft (PWROG/B&W)

Attachment
Enclosures

cc: Robert Elliott, Technical Specifications Branch, NRC
Michelle Honcharik, Special Projects Branch, NRC

11921 Rockville Pike, Suite 100, Rockville, MD 20852
Phone: 301-984-4400, Fax: 301-984-7600
Administration by EXCEL Services Corporation

PWROG
PWR Owners Group

BWR
OWNERS' GROUP

TSTF Travelers Recommended to be Incorporated into Revision 4 of the Improved Standard Technical Specifications

Approved Travelers

1. TSTF-412-A, Rev. 3, "Provide Actions for One Steam Supply to Turbine Driven AFW/EFW Pump Inoperable."

2. TSTF-425-A, Rev. 3, "Relocate Surveillance Frequencies to Licensee Control - RITSTF Initiative 5b."

3. TSTF-427-A, Rev. 2, "Allowance for Non Technical Specification Barrier Degradation on Supported System OPERABILITY."

4. TSTF-448-A, Rev. 3, "Control Room Habitability."

5. TSTF-454-A, Rev. 1, "Extend PCIV Completion Times (NEDC-33046) ."

6. TSTF-471-A, Rev. 1, "Eliminate use of term CORE ALTERATIONS in ACTIONS and Notes."

7. TSTF-475-A, Rev. 1, "Control Rod Notch Testing Frequency and SRM Insert Control Rod Action."

8. TSTF-476-A, Rev. 1, "Improved BPWS Control Rod Insertion Process (NEDO-33091)."

9. TSTF-477-A, Rev. 3, "Add Action for Two Inoperable Control Room AC Subsystems."

10. TSTF-478-A, Rev. 2, "BWR Technical Specification Changes that Implement the Revised Rule for Combustible Gas Control."

11. TSTF-484-A, Rev. 0, "Use of TS 3.10.1 for Scram Time Testing Activities."

12. TSTF-486-A, Rev. 2, ."Revise MTC Surveillance for Startup Test Activity Reduction (STAR) Program (WCAP-16011)."

13. TSTF-487-A, Rev. 1, "Relocate DNB Parameters to the COLR."

14. TSTF-490-A, Rev. 0, "Deletion of E Bar Definition and Revision to RCS Specific Activity Tech Spec"

    Note: The TSTF acknowledges that there are currently questions on TSTF-490 which may affect its incorporation in Revision 4.

15. TSTF-491-A, Rev. 2, "Removal of Main Steam and Main Feedwater Valve Isolation Times From Technical Specifications."

16. TSTF-497-A, Rev. 0, "Limit Inservice Testing Program SR 3.0.2 Application to Frequencies of 2 Years or Less."

17. TSTF-498-A, Rev. 1, "Risk-Informed Containment Isolation Valve Completion Times (BAW-2461)."

18. TSTF-511-A, Rev. 0, "Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR Part 26."

Travelers Anticipated to be Approved by the First Quarter of 2010

1. TSTF-422, Rev. 2, "Change in Technical Specifications End States (CE NPSD-1186)."

2. TSTF-423, Rev. 1, "Technical Specifications End States, NEDC-32988-A."

3. TSTF-431, Rev. 3, "Change in Technical Specifications End States (BAW-2441)."

4. TSTF-446, Rev. 3, "Risk Informed Evaluation of Extensions to Containment Isolation Valve Completion Times (WCAP-15791)."

5. TSTF-493, Rev. 4, "Clarify Application of Setpoint Methodology for LSSS Functions."

   Note: The TSTF and NRC are working to determine the appropriate method to incorporate TSTF-493 into the ISTS.

6. TSTF-500, Rev. 2, "DC Electrical Rewrite - Update to TSTF-360."

7. TSTF-501, Rev. 1, "Relocate Stored Fuel Oil and Lube Oil Volume Values to Licensee Control."

8. TSTF-508, Rev. 1, "Revise Control Room Habitability Actions to Address Lessons Learned from TSTF-448 Implementation."

9. TSTF-513, Rev. 2, "Revise PWR Operability Requirements and Actions for RCS Leakage Instrumentation."

10. TSTF-514, Rev. 1, "Revise BWR Operability Requirements and Actions for RCS Leakage Instrumentation."

Travelers Correcting Errors to be Incorporated as Administrative Actions

1. TSTF-494-T, Rev. 0, "Correct Bases Discussion of Figure B3.0-1."

2. TSTF-516-T, Rev. 0, "Remove Incorrect Sentence in ATWS-RPT Bases."

3. TSTF-518-T, Rev. 0, "Correct Specification 3.1.5, Control Rod Scram Accumulators, Applicability Bases."

4. TSTF-519-T, Rev. 0, "Increase Standardization in Condition and Required Action Notes."

Technical Specification Task Force
Improved Standard Technical Specifications Change Traveler

Correct Bases Discussion of Figure B3.0-1

NUREGs Affected: ☑ 1430 ☑ 1431 ☑ 1432 ☑ 1433 ☑ 1434

Note: This "T" Traveler has been reviewed and approved by the Technical Specification Task Force and is made available as a template for plant-specific license amendments. This Traveler has not been reviewed and approved by the Nuclear Regulatory Commission. Any plant submitting a license amendment request to adopt this change should inform the industry contact listed below and copy the Technical Specification Task Force on their submittal letter.

Classification 2) Bases Only Change — Recommended for CLIIP?: No

Correction or Improvement: Correction — NRC Fee Status:

Benefit: Improves Bases

Industry Contact: John Messina, (330) 384-5878, jmessina@firstenergycorp.com

1.0 Description

This Traveler revises the Examples that discuss Figure B 3.0-1 in the Bases of LCO 3.0.6 to more accurately describe a loss of safety function and to be internally consistent.

2.0 Proposed Change

The Bases of LCO 3.0.6 are revised. Example B 3.0.6-1 and Example B 3.0.6-2 are changed to be more clear and be internally consistent.

3.0 Background

Figure B 3.0-1 and the accompanying discussion, including Examples B 3.0.6-1, B 3.0.6-2, and B 3.0.6-3, were added by TSTF-71, Revision 2 and approved by the NRC on 10/27/1998. The purpose of the figure and the examples is to clarify the discussions of a loss of safety function and cross train checks.

Examples B 3.0.6-1, B 3.0.6-2, and B 3.0.6-3 are not consistent.

Example B 3.0.6-1 describes a situation in which there is a loss of safety function for one system (System 5) but it does not mention the loss of safety function in systems supported by System 5 (Systems 10 and 11). However, Example B 3.0.6-3 presents a similar situation and describes all of the affected systems.

Example B 3.0.6-2 describes a situation in which there is a loss of safety function for a supported system (System 11) and goes on to discuss an OPERABLE supporting system (System 5). This is inconsistent with Examples B 3.0.6-1 and B 3.0.6-3 which do not discuss OPERABLE supporting systems.

These inconsistencies are confusing and should be corrected in order for the Bases to be a useful tool in understanding the Technical Specifications.

4.0 Technical Analysis

Example B 3.0.6-1 is changed from:

If System 2 of Train A is inoperable and System 5 of Train B is inoperable, a loss of safety function exists in supported System 5.

to

If System 2 of Train A is inoperable and System 5 of Train B is inoperable, a loss of safety function exists in Systems 5, 10, and 11.

Examining Figure B 3.0-1, it is clear that if there is a loss of safety function in System 5, there is also a loss of safety function in the systems supported by System 5, Systems 10 and 11. This relationship is explicitly listed in Example B 3.0.6-3 and to not do so here is inconsistent and confusing as it leads the reader to believe that Systems 10 and 11 do not have a loss of safety function.

Example B 3.0.6-2 is changed from:

If System 2 of Train A is inoperable, and System 11 of Train B is inoperable, a loss of safety function exists in System 11 which is in turn supported by System 5.

to

If System 2 of Train A is inoperable, and System 11 of Train B is inoperable, a loss of safety function exists in System 11.

The phrase "which in turn is supported by System 5" is confusing. System 5 is not inoperable and does not lead to the loss of safety function. Examples B 3.0.6-1 and B 3.0.6-3 do not discuss OPERABLE support systems. This phrase is adds no value and leads the reader to believe there is some special relationship with System 5 which does not exist.

5.0 Regulatory Analysis

This section is not required for a Bases-only change.

6.0 Environmental Consideration

This section is not required for a Bases-only change.

7.0 References

None.

Revision History

OG Revision 0 **Revision Status: Active**

OG Revision 0 Revision Status: Active

Revision Proposed by: TSICC

Revision Description:
Original Issue

Owners Group Review Information

Date Originated by OG: 26-Oct-05

Owners Group Comments
(No Comments)

Owners Group Resolution: Date:

TSTF Review Information

TSTF Received Date: 04-May-06 Date Distributed for Review 04-May-06

OG Review Completed: ☑ BWOG ☑ WOG ☑ CEOG ☑ BWROG

TSTF Comments:

Revised example 1 to delete the word "supported."

TSTF Resolution: Approved for Use Date: 18-May-06

Affected Technical Specifications

LCO 3.0.6 Bases LCO Applicability

BASES

LCO 3.0.6 (continued)

However, there are instances where a support system's Required Action may either direct a supported system to be declared inoperable or direct entry into Conditions and Required Actions for the supported system. This may occur immediately or after some specified delay to perform some other Required Action. Regardless of whether it is immediate or after some delay, when a support system's Required Action directs a supported system to be declared inoperable or directs entry into Conditions and Required Actions for a supported system, the applicable Conditions and Required Actions shall be entered in accordance with LCO 3.0.2.

Specification 5.5.15, "Safety Function Determination Program (SFDP)," ensures loss of safety function is detected and appropriate actions are taken. Upon entry into LCO 3.0.6, an evaluation shall be made to determine if loss of safety function exists. Additionally, other limitations, remedial actions, or compensatory actions may be identified as a result of the support system inoperability and corresponding exception to entering supported system Conditions and Required Actions. The SFDP implements the requirements of LCO 3.0.6.

Cross train checks to identify a loss of safety function for those support systems that support multiple and redundant safety systems are required. The cross train check verifies that the supported systems of the remaining OPERABLE support systems are OPERABLE, thereby ensuring safety function is retained. [A loss of safety function may exist when a support system is inoperable, and:

a. A required system redundant to system(s) supported by the inoperable support system is also inoperable (EXAMPLE B 3.0.6-1),

b. A required system redundant to system(s) in turn supported by the inoperable supported system is also inoperable (EXAMPLE B 3.0.6-2), or

c. A required system redundant to support system(s) for the supported systems (a) and (b) above is also inoperable (EXAMPLE B 3.0.6-3).

EXAMPLE B 3.0.6-1

If System 2 of Train A is inoperable and System 5 of Train B is inoperable, a loss of safety function exists in ~~supported~~ Systems 5, 10, and 11.

BASES

LCO 3.0.6 (continued)

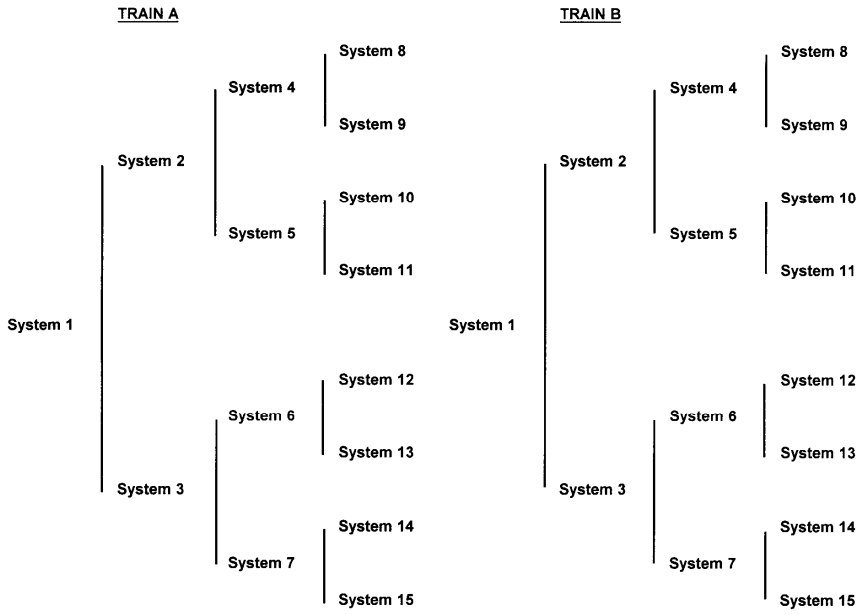
EXAMPLE B 3.0.6-2

If System 2 of Train A is inoperable, and System 11 of Train B is inoperable, a loss of safety function exists in System 11 ~~which is in turn supported by System 5~~.

EXAMPLE B 3.0.6-3

If System 2 of Train A is inoperable, and System 1 of Train B is inoperable, a loss of safety function exists in Systems 2, 4, 5, 8, 9, 10 and 11.]

If this evaluation determines that a loss of safety function exists, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.



[Figure B 3.0-1
Configuration of Trains and Systems]

BASES

LCO 3.0.6 (continued)

However, there are instances where a support system's Required Action may either direct a supported system to be declared inoperable or direct entry into Conditions and Required Actions for the supported system. This may occur immediately or after some specified delay to perform some other Required Action. Regardless of whether it is immediate or after some delay, when a support system's Required Action directs a supported system to be declared inoperable or directs entry into Conditions and Required Actions for a supported system, the applicable Conditions and Required Actions shall be entered in accordance with LCO 3.0.2.

Specification 5.5.15, "Safety Function Determination Program (SFDP)," ensures loss of safety function is detected and appropriate actions are taken. Upon entry into LCO 3.0.6, an evaluation shall be made to determine if loss of safety function exists. Additionally, other limitations, remedial actions, or compensatory actions may be identified as a result of the support system inoperability and corresponding exception to entering supported system Conditions and Required Actions. The SFDP implements the requirements of LCO 3.0.6.

Cross train checks to identify a loss of safety function for those support systems that support multiple and redundant safety systems are required. The cross train check verifies that the supported systems of the redundant OPERABLE support system are OPERABLE, thereby ensuring safety function is retained. [A loss of safety function may exist when a support system is inoperable, and:

a. A required system redundant to system(s) supported by the inoperable support system is also inoperable (EXAMPLE B 3.0.6-1),

b. A required system redundant to system(s) in turn supported by the inoperable supported system is also inoperable (EXAMPLE B 3.0.6-2), or

c. A required system redundant to support system(s) for the supported systems (a) and (b) above is also inoperable (EXAMPLE B 3.0.6-3).

EXAMPLE B 3.0.6-1

If System 2 of Train A is inoperable and System 5 of Train B is inoperable, a loss of safety function exists in ~~supported~~ Systems 5, 10, and 11.

BASES

LCO 3.0.6 (continued)

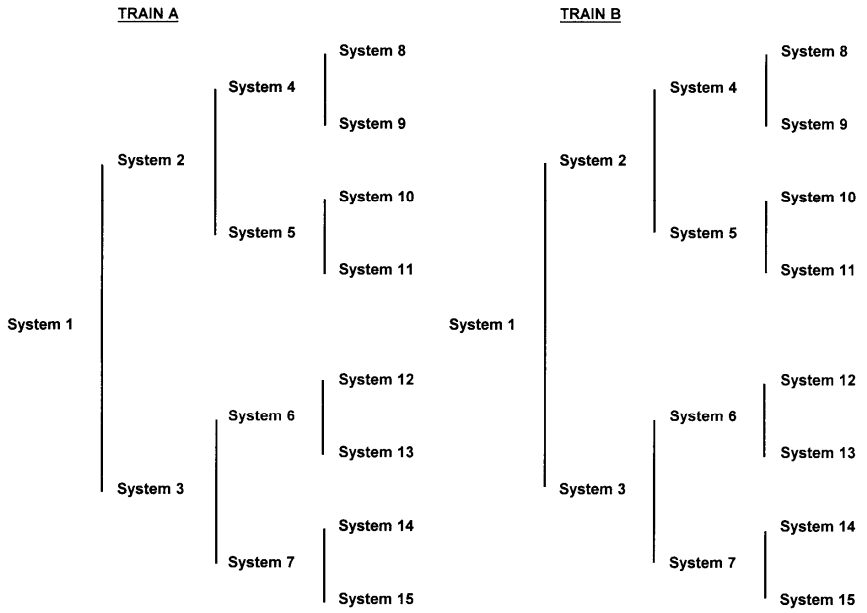
EXAMPLE B 3.0.6-2

If System 2 of Train A is inoperable, and System 11 of Train B is inoperable, a loss of safety function exists in System 11 ~~which is in turn supported by System 5~~.

EXAMPLE B 3.0.6-3

If System 2 of Train A is inoperable, and System 1 of Train B is inoperable, a loss of safety function exists in Systems 2, 4, 5, 8, 9, 10 and 11.]

If this evaluation determines that a loss of safety function exists, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.



[Figure B 3.0-1
Configuration of Trains and Systems]

This loss of safety function does not require the assumption of additional single failures or loss of offsite power. Since operations is being restricted in accordance with the ACTIONS of the support system, any resulting temporary loss of redundancy or single failure protection is taken

BASES

LCO 3.0.6 (continued)

some other Required Action. Regardless of whether it is immediate or after some delay, when a support system's Required Action directs a supported system to be declared inoperable or directs entry into Conditions and Required Actions for a supported system, the applicable Conditions and Required Actions shall be entered in accordance with LCO 3.0.2.

Specification 5.5.15, "Safety Function Determination Program (SFDP)," ensures loss of safety function is detected and appropriate actions are taken. Upon entry into LCO 3.0.6, an evaluation shall be made to determine if loss of safety function exists. Additionally, other limitations, remedial actions, or compensatory actions may be identified as a result of the support system inoperability and corresponding exception to entering supported system Conditions and Required Actions. The SFDP implements the requirements of LCO 3.0.6.

Cross train checks to identify a loss of safety function for those support systems that support multiple and redundant safety systems are required. The cross train check verifies that the supported systems of the redundant OPERABLE support system are OPERABLE, thereby ensuring safety function is retained. [A loss of safety function may exist when a support system is inoperable, and:

a. A required system redundant to system(s) supported by the inoperable support system is also inoperable (EXAMPLE B 3.0.6-1),

b. A required system redundant to system(s) in turn supported by the inoperable supported system is also inoperable (EXAMPLE B 3.0.6-2), or

c. A required system redundant to support system(s) for the supported systems (a) and (b) above is also inoperable (EXAMPLE B 3.0.6-3).

EXAMPLE B 3.0.6-1

If System 2 of Train A is inoperable and System 5 of Train B is inoperable, a loss of safety function exists in ~~supported~~ Systems 5, 10, and 11.

EXAMPLE B 3.0.6-2

If System 2 of Train A is inoperable, and System 11 of Train B is inoperable, a loss of safety function exists in System 11 ~~which is in turn supported by System 5~~.

BASES

LCO 3.0.6 (continued)

Specification 5.5.12, "Safety Function Determination Program (SFDP)," ensures loss of safety function is detected and appropriate actions are taken. Upon entry into LCO 3.0.6, an evaluation shall be made to determine if loss of safety function exists. Additionally, other limitations, remedial actions, or compensatory actions may be identified as a result of the support system inoperability and corresponding exception to entering supported system Conditions and Required Actions. The SFDP implements the requirements of LCO 3.0.6.

Cross division checks to identify a loss of safety function for those support systems that support safety systems are required. The cross division check verifies that the supported systems of the redundant OPERABLE support system are OPERABLE, thereby ensuring safety function is retained. [A loss of safety function may exist when a support system is inoperable, and:

a. A required system redundant to system(s) supported by the inoperable support system is also inoperable (EXAMPLE B 3.0.6-1),

b. A required system redundant to system(s) in turn supported by the inoperable supported system is also inoperable (EXAMPLE B 3.0.6-2), or

c. A required system redundant to support system(s) for the supported systems (a) and (b) above is also inoperable (EXAMPLE B 3.0.6-3).

EXAMPLE B 3.0.6-1

If System 2 of Train A is inoperable and System 5 of Train B is inoperable, a loss of safety function exists in ~~supported~~ Systems 5, 10, and 11.

EXAMPLE B 3.0.6-2

If System 2 of Train A is inoperable, and System 11 of Train B is inoperable, a loss of safety function exists in System 11 ~~which is in turn supported by System 5~~.

EXAMPLE B 3.0.6-3

If System 2 of Train A is inoperable, and System 1 of Train B is inoperable, a loss of safety function exists in Systems 2, 4, 5, 8, 9, 10 and 11.]

BASES

LCO 3.0.6 (continued)

Specification 5.5.12, "Safety Function Determination Program (SFDP)," ensures loss of safety function is detected and appropriate actions are taken. Upon entry into LCO 3.0.6, an evaluation shall be made to determine if loss of safety function exists. Additionally, other limitations, remedial actions, or compensatory actions may be identified as a result of the support system inoperability and corresponding exception to entering supported system Conditions and Required Actions. The SFDP implements the requirements of LCO 3.0.6.

Cross division checks to identify a loss of safety function for those support systems that support safety systems are required. The cross division check verifies that the supported systems of the redundant OPERABLE support system are OPERABLE, thereby ensuring safety function is retained. [A loss of safety function may exist when a support system is inoperable, and:

a. A required system redundant to system(s) supported by the inoperable support system is also inoperable (EXAMPLE B 3.0.6-1),

b. A required system redundant to system(s) in turn supported by the inoperable supported system is also inoperable (EXAMPLE B 3.0.6-2), or

c. A required system redundant to support system(s) for the supported systems (a) and (b) above is also inoperable (EXAMPLE B 3.0.6-3).

EXAMPLE B 3.0.6-1

If System 2 of Train A is inoperable and System 5 of Train B is inoperable, a loss of safety function exists in ~~supported~~ Systems 5, 10, and 11.

EXAMPLE B 3.0.6-2

If System 2 of Train A is inoperable, and System 11 of Train B is inoperable, a loss of safety function exists in System 11 ~~which is in turn supported by System 5~~.

EXAMPLE B 3.0.6-3

If System 2 of Train A is inoperable, and System 1 of Train B is inoperable, a loss of safety function exists in Systems 2, 4, 5, 8, 9, 10 and 11.]

Technical Specification Task Force
Improved Standard Technical Specifications Change Traveler

Remove Incorrect Sentence in ATWS-RPT Bases

NUREGs Affected: ☐ 1430 ☐ 1431 ☐ 1432 ☑ 1433 ☑ 1434

Note: This "T" Traveler has been reviewed and approved by the Technical Specification Task Force and is made available as a template for plant-specific license amendments. This Traveler has not been reviewed and approved by the Nuclear Regulatory Commission. Any plant submitting a license amendment request to adopt this change should inform the industry contact listed below and copy the Technical Specification Task Force on their submittal letter.

Classification 2) Bases Only Change | Recommended for CLIIP?: No

Correction or Improvement: Correction | NRC Fee Status:

Benefit: Improves Bases

Industry Contact: John Messina, (330) 384-5878, jmessina@firstenergycorp.com

1.0 - Description

The Bases for Specification 3.3.4.2, "ATWS-RPT Instrumentation," states that ATWS-RPT is not assumed in the safety analysis. It has been determined that it is common practice for the domestic BWR fuel vendors to model the ATWS-RPT function in their plant transient models, for plants that have the function installed. Therefore, this sentence is not accurate.

The proposed change revises the Specification 3.3.4.2 Bases to remove the incorrect statement.

2.0 - Proposed Change

The proposed change eliminates the first sentence in the Specification 3.3.4.2, "ATWS-RPT Instrumentation," the "Applicable Safety Analysis, LCO, and Applicability" section of the Bases, which states, "The ATWS-RPT is not assumed in the safety analysis."

3.0 - Background

Some plants BASES state that the ATWS-RPT is credited in the ASME overpressurization safety analysis. Other plants (Duane Arnold, Monticello, Brunswick, and Cooper for example) have modified the standard ITS wording. Duane Arnold's TS BASES states "The ATWS-RPT is not assumed to function during or after a design basis accident." Monticello's TS BASES reads "The ATWS-RPT is not assumed to mitigate any accident or transient in the original design or licensing basis in the safety analysis." The Brunswick TS BASES now states "The ATWS-RPT is not assumed to mitigate any accident or transient in the safety analysis." Similarly, the Cooper TS BASES states "The ATWS-RPT is not assumed in the safety analysis to mitigate any accident or transient." However, these statements may not adequately correct the standard Bases. A clearer change is to eliminate the sentence entirely.

4.0 - Technical Analysis

In the case of the Load Rejection event, the ATWS-RPT trip does not occur until after the minimum Critical Power Ratio (CPR) has occurred. Therefore the trip does not have any effect on the delta CPR severity of the transient event. For the ASME overpressure MSIV Isolation event, the ATWS-RPT does have an effect on the peak pressure for the event, however it is not a large effect (typically less than 10 psi) and it can actually either increase or decrease the peak pressure, depending on the plant. For some plants, the reduction in core flow from the ATWS-RPT can come too late in the event to affect the power, but the reduction in flow can cause an increase in the steam rate, leading to higher calculated dome pressures than would be calculated without the trip. Thus, it does not appear that the ATWS-RPT necessarily acts to mitigate the transient events, nor does it appear that the function plays an important role in determining the results of the reload licensing transient being analyzed. Therefore, the trip function could be removed from the vendor's transient analysis models with little or no consequences to the customer. However, given that the system exists and has an effect on the analysis results, the appropriate course of action is to retain the ATWS-RPT in the safety analysis and remove the incorrect sentence in the Bases.

An example 10 CFR 50.59 screen for removing the sentence is attached.

5.0 - Regulatory Analysis

No regulatory analysis is requried for a Bases-only Traveler.

6.0 - Environmental Consideration

No environmental consideration is requried for a Bases-only Traveler.

7.0 - References

None

Revision History

OG Revision 0 Revision Status: Active

Revision Proposed by: BWROG

Revision Description:
Original Issue

OG Revision 0 **Revision Status: Active**

Owners Group Review Information

Date Originated by OG: 09-Dec-08

Owners Group Comments
(No Comments)

Owners Group Resolution: Approved Date: 09-Dec-08

TSTF Review Information

TSTF Received Date: 20-Jan-09 Date Distributed for Review 20-Jan-09

OG Review Completed: ☑ BWOG ☑ WOG ☑ CEOG ☑ BWROG

TSTF Comments:
(No Comments)

TSTF Resolution: Approved for Use Date: 11-Feb-09

Affected Technical Specifications

S/A 3.3.4.2 Bases ATWS-RPT Instrumentation

50.59 SCREEN

50.59 Screen No. _____ - _____ Rev. No. _____ Page 1 of 3

I Activity/Document Number: BWROG-113 **and Revision Number:** 0

Title:

Revise TS Bases B 3.3.4.2, "ATWS-RPT Instrumentation," to remove statement indicating that ATWS-RPT is not assumed in the safety analysis.

Brief Description of activity (what is being changed and why):

It has been determined that it is common practice for the domestic BWR fuel vendors to model the ATWS-RPT function in their plant transient models, for plants that have the function installed. Therefore, the statement is inaccurate.

☐ Continued

II Applicability Determination:

Other applicable process identified during the *applicability determination:*

None

☐ Continued

III Document Review:

1. List the documents (UFSAR, Technical Specifications, and other documents) reviewed where relevant information was found, including section numbers.

UFSAR 7.7.1.2, Recirc Flow Control System, UFSAR 15.2.2, Generator Load Rejection, UFSAR 15.2.3, Turbine Generator Trip, UFSAR 5.2.2, Overpressurization Protection.
TS 3.3.4.2 and TS Bases B 3.3.4.2, ATWS-RPT Instrumentation. COLR Cycle 13, Rev. 1.

☐ Continued

2. List UFSAR section that will be changed and list the LCR.

None

☐ Continued

3. List relevant 50.59 screen number if previously reviewed and approved. (See Section 5.2.3 of MLS Appendix C for additional guidance.)

None

☐ Continued

IV Identify relevant UFSAR design functions: (See Section 5.2.4 of MLS Appendix C for additional guidance.)

To lessen the effect of an ATWS event, the recirculation pumps are tripped adding negative reactivity from the increase in steam voiding in the core area as core flow decreases. Also credited in Load Rejection Event & Overpressure Protection analyses

☐ Continued

50.59 SCREEN

50.59 Screen No. _____ - _____ Rev. No. _____ Page 2 of 3

V 50.59 Screening Questions (Check correct response.) (See Section 5.2.5 of the 50.59 Resource Manual, MLS Appendix C [RM] for additional guidance.)

☐ Yes ☒ No 1. Does the proposed activity involve a change to an SSC that adversely affects a UFSAR described *design function?* (See Section 5.2.5.1 of the RM.)

☐ Yes ☒ No 2. Does the proposed activity involve a change to a procedure that adversely affects how UFSAR described SSC design functions are performed or controlled? (See Section 5.2.5.2 of the RM.)

☐ Yes ☒ No 3. Does the proposed activity involve revising or replacing a UFSAR described evaluation methodology that is used in establishing the *design bases* or used in the *safety analyses*? (See Section 5.2.5.3 of the RM.)

☐ Yes ☒ No 4. Does the proposed activity involve a *test or experiment not described in the UFSAR,* where an SSC is used or controlled in a manner that is outside the reference bounds of the design for that SSC or is inconsistent with the analyses or descriptions in the UFSAR? (See Section 5.2.5.4 of the RM.)

☐ Yes ☒ No 5. Does the proposed activity require a change to the Technical Specifications? (See Section 5.2.5.5 of the RM.)

VI 50.59 Screening Results (See Section 5.2.6 of MLS Appendix C.)

If all questions are answered NO, **then** implement the activity per the applicable plant procedure for the type of activity without obtaining a License Amendment.
If screen question 5 is answered YES, **then** request and receive a License Amendment prior to implementation of the activity.
If screen question 5 is answered NO and question 1, 2, 3, or 4 is answered YES, **then** a 50.59 Evaluation shall be performed.
If a 50.59 Evaluation is required, enter the 50.59 Evaluation No. for this activity: N/A

VII 50.59 Screening Conclusion (See Section 5.2.7 of MLS Appendix C.)

If the conclusion of the screening questions is that a 50.59 evaluation is not required, provide an overall justification for that determination in the Comments Section below.

VIII Screen Approval

Screen Preparer: _____ _____ _____
Print Sign Date

Screen Reviewer: _____ _____ _____
Print Sign Date

Screen Reviewer shall forward the completed Screen to the Engineering First Team.

Comments

The ATWS-RPT System initiates an RPT, adding negative reactivity, following events in which a scram does not (but should) occur, to lessen the effects of an ATWS event. Tripping the recirculation pumps adds negative reactivity from the increase in steam voiding in the core area as core flow decreases. When Reactor Vessel Water Level - Low Low, Level 2 or Reactor Steam Dome Pressure - High setpoint is reached, the recirculation pump drive motor breakers trip.

☒ Continued

50.59 SCREEN

Continuation Page

50.59 Screen No. _____ - _____ Rev. No. _____ Page 3 of 3

Since the recirculation pump trip occurs based on reactor water level or reactor pressure parameters, the trip was assumed to occur in the analyses of the Load Rejection Transient and ASME Overpressure Protection. The Core Operating Limits Report (COLR) for the current cycle and the UFSAR indicate that ATWS-RPT is assumed in these analyses.

In the case of the Load Rejection event, the ATWS-RPT trip does not occur until after the minimum CPR has occurred. Therefore the trip does not have any effect on the delta CPR severity of the transient event.

For the ASME Overpressure MSIV Isolation event, the ATWS-RPT does have an affect on the peak pressure for the event, however it is not a large effect (typically less than 10 psi) and it can actually either increase or decrease the peak pressure, depending on the plant. For some plants, the reduction in core flow from the ATWS-RPT can come too late in the event to affect the power, but the reduction in flow can cause an increase in the steam rate, leading to higher calculated dome pressures than would be calculated without the trip. Thus, it does not appear that the ATWS-RPT necessairly acts to mitigate the transient events, nor does it appear that the function plays an important role in determining the results of the reload licensing transient being analyzed. Therefore, the trip function could be removed from the vendor's transient analysis models with little or no consequences to the customer. However, given that the system exists and has an effect on the analysis results, the appropriate course of action is to retain the ATWS-RPT in the safety analysis and remove the incorrect sentenece in the Bases.

There is no change to the SSC that affects UFSAR design functions. The UFSAR described function of RPT to mitigate an ATWS condition is not altered. The UFSAR already assumes the recirculation pump trip in the other described transient analyses. There is also no procedure change that affects UFSAR functions. The ATWS-RPT is originally designed for ATWS conditions but is credited in other transient analyses since it reflects actual plant design. The TS Bases has an incorrect statement indicating that ATWS-RPT was not assumed in the transient analyses. The UFSAR properly describes crediting the trip in transient analyses. Therefore, the discrepent statement in the TS Bases is being removed.

Although the effect of crediting the trip is insignificant on taransient analyses, the statement in the TS Bases is removed to more accurately reflect the analyses by the fuel vendor.

No change is required to the Technical Specifications. Removing the TS Bases statement does not alter the UFSAR described evaluation for analyzing transients associated with Load Rejection and RPV Overpressurization Protection.

B 3.3 INSTRUMENTATION

B 3.3.4.2 Anticipated Transient Without Scram Recirculation Pump Trip (ATWS-RPT) Instrumentation

BASES

BACKGROUND

The ATWS-RPT System initiates an RPT, adding negative reactivity, following events in which a scram does not (but should) occur, to lessen the effects of an ATWS event. Tripping the recirculation pumps adds negative reactivity from the increase in steam voiding in the core area as core flow decreases. When Reactor Vessel Water Level - Low Low, Level 2 or Reactor Steam Dome Pressure - High setpoint is reached, the recirculation pump drive motor breakers trip.

The ATWS-RPT System (Ref. 1) includes sensors, relays, bypass capability circuit breakers, and switches that are necessary to cause initiation of an RPT. The channels include electronic equipment (e.g., trip units) that compares measured input signals with pre-established setpoints. When the setpoint is exceeded, the channel output relay actuates, which then outputs an ATWS-RPT signal to the trip logic.

The ATWS-RPT consists of two independent trip systems, with two channels of Reactor Steam Dome Pressure - High and two channels of Reactor Vessel Water Level - Low Low, Level 2 in each trip system. Each ATWS-RPT trip system is a two-out-of-two logic for each Function. Thus, either two Reactor Water Level - Low Low, Level 2 or two Reactor Pressure - High signals are needed to trip a trip system. The outputs of the channels in a trip system are combined in a logic so that either trip system will trip both recirculation pumps (by tripping the respective drive motor breakers).

There is one drive motor breaker provided for each of the two recirculation pumps for a total of two breakers. The output of each trip system is provided to both recirculation pump breakers.

APPLICABLE SAFETY ANALYSES, LCO, and APPLICABILITY

~~The ATWS-RPT is not assumed in the safety analysis.~~ The ATWS-RPT initiates an RPT to aid in preserving the integrity of the fuel cladding following events in which a scram does not, but should, occur. ATWS-RPT instrumentation satisfies Criterion 4 of 10 CFR 50.36(c)(2)(ii).

The OPERABILITY of the ATWS-RPT is dependent on the OPERABILITY of the individual instrumentation channel Functions. Each Function must have a required number of OPERABLE channels in each trip system, with their setpoints within the specified Allowable Value of SR 3.3.4.2.4. The actual setpoint is calibrated consistent with applicable setpoint methodology assumptions. Channel OPERABILITY also

B 3.3 INSTRUMENTATION

B 3.3.4.2 Anticipated Transient Without Scram Recirculation Pump Trip (ATWS-RPT) Instrumentation

BASES

BACKGROUND

The ATWS-RPT System initiates a recirculation pump trip, adding negative reactivity, following events in which a scram does not (but should) occur, to lessen the effects of an ATWS event. Tripping the recirculation pumps adds negative reactivity from the increase in steam voiding in the core area as core flow decreases. When Reactor Vessel Water Level - Low Low, Level 2 or Reactor Steam Dome Pressure - High setpoint is reached, the recirculation pump motor breakers trip.

The ATWS-RPT System (Ref. 1) includes sensors, relays, bypass capability, circuit breakers, and switches that are necessary to cause initiation of a recirculation pump trip. The channels include electronic equipment (e.g., trip units) that compares measured input signals with pre-established setpoints. When the setpoint is exceeded, the channel output relay actuates, which then outputs an ATWS-RPT signal to the trip logic.

The ATWS-RPT consists of two independent trip systems, with two channels of Reactor Steam Dome Pressure - High and two channels of Reactor Vessel Water Level - Low Low, Level 2, in each trip system. Each ATWS-RPT trip system is a two-out-of-two logic for each Function. Thus, either two Reactor Water Level - Low Low, Level 2 or two Reactor Pressure - High signals are needed to trip a trip system. The outputs of the channels in a trip system are combined in a logic so that either trip system will trip both recirculation pumps (by tripping the respective fast speed and low frequency motor generator (LFMG) motor breakers).

There is one fast speed motor breaker and one LFMG breaker provided for each of the two recirculation pumps for a total of four breakers. The output of each trip system is provided to all four breakers.

APPLICABLE SAFETY ANALYSES, LCO, and APPLICABILITY

~~The ATWS-RPT is not assumed in the safety analysis.~~ The ATWS-RPT initiates an RPT to aid in preserving the integrity of the fuel cladding following events in which scram does not, but should, occur. ATWS-RPT instrumentation satisfies Criterion 4 of 10 CFR 50.36(c)(2)(ii).

The OPERABILITY of the ATWS-RPT is dependent on the OPERABILITY of the individual instrumentation channel Functions. Each Function must have a required number of OPERABLE channels in each trip system, with their setpoints within the specified Allowable Value of SR 3.3.4.2.4. The actual setpoint is calibrated consistent with applicable setpoint methodology assumptions. Channel OPERABILITY also

Technical Specification Task Force
Improved Standard Technical Specifications Change Traveler

Correct Specification 3.1.5, Control Rod Scram Accumulators, Applicability Bases

NUREGs Affected: ☐ 1430 ☐ 1431 ☐ 1432 ☑ 1433 ☑ 1434

Note: This "T" Traveler has been reviewed and approved by the Technical Specification Task Force and is made available as a template for plant-specific license amendments. This Traveler has not been reviewed and approved by the Nuclear Regulatory Commission. Any plant submitting a license amendment request to adopt this change should inform the industry contact listed below and copy the Technical Specification Task Force on their submittal letter.

Classification 2) Bases Only Change Recommended for CLIIP?: No

Correction or Improvement: Correction NRC Fee Status:

Benefit: Improves Bases

Industry Contact: John Messina, (330) 384-5878, jmessina@firstenergycorp.com

1.0 Description

The Applicability Bases of Specification 3.1.5, "Control Rod Scram Accumulators," is revised to correct an inaccurate statement. Specifically, the Bases state, "In MODES 3 and 4, control rods are only allowed to be withdrawn since the reactor mode switch is in shutdown and a control rod block is applied." Instead of stating "control rods are only allowed to be withdrawn" it should state "control rods are not allowed to be withdrawn."

2.0 Proposed Change

The change proposes to revise the Bases of Specification 3.1.5, Applicability section, to revise an incorrect statement.

3.0 Background

In Revision 0 of NUREG-1433 and NUREG-1434 (the BWR/4 and BWR/5 Standard Technical Specifications, respectively), the Specification 3.1.5 Applicability Bases were correct. The Bases stated, "In MODES 1 and 2, the scram function is required for mitigation of DBAs and transients, and therefore the scram accumulators must be OPERABLE to support the scram function. *In MODES 3 and 4, control rods are only allowed to be withdrawn under Special Operations LCO 3.10.3, 'Single Control Rod Withdrawal-Hot Shutdown,' and LCO 3.10.4, 'Single Control Rod Withdrawal-Cold Shutdown,' which provide adequate requirements for control rod scram accumulator OPERABILITY during these conditions.* Requirements for scram accumulators in MODE 5 are contained in LCO 3.9.5, 'Control Rod OPERABILITY-Refueling'." (emphasis added)

Starting in Revision 1 of the NUREGs, the Applicability Bases state, "In MODES 1 and 2, the scram function is required for mitigation of DBAs and transients, and therefore the scram accumulators must be OPERABLE to support the scram function. *In MODES 3 and 4, control rods are only allowed to be withdrawn since the reactor mode switch is in shutdown and a control rod block is applied. This provides adequate requirements for control rod scram accumulator OPERABILITY during these conditions.* Requirements for scram accumulators in MODE 5 are contained in LCO 3.9.5, 'Control Rod OPERABILITY - Refueling'." (emphasis added).

Note that in Specification 3.1.3, "Control Rod OPERABILITY," Specification 3.1.4, "Control Rod Scram Times," Specification 3.1.7, "SLC System," and Specification 3.1.8, "SDV Vent and Drain Valves," the Applicability Bases correctly state, "In MODES 3 and 4, control rods are not able to be withdrawn since the reactor mode switch is in shutdown and a control rod block is applied."

A search of the Revision 0 Travelers did not discover the basis for this change and the conclusion is that substitution of "only" instead of "not" was an administrative error.

4.0 Technical Analysis

In MODES 3 and 4, with the reactor mode switch in the shutdown position, a control rod block (LCO 3.3.2.1, "Control Rod Block Instrumentation,") ensures all control rods are inserted. Furthermore, in MODES 3 and 4, the reactor mode switch is in the shutdown position (See Specification Table 1.1-1, "MODES"). The control rod blocks from the Reactor Mode Switch - Shutdown Position Function ensure that all control rods remain inserted.

Therefore, the statement in the Specification 3.1.5 Applicability Bases, which states that in Modes 3 and 4, control rods are only allowed to be withdrawn since the reactor mode switch is in shutdown and a control rod block is applied, is obviously false. The correct statement, which appears in multiple similar specifications, is that in Modes 3 and 4, control rods are not (vice "only") allowed to be withdrawn since the reactor mode switch is in shutdown and a control rod block is applied.

This change is a correction to the Bases with no technical change or implications to the Specifications.

5.0 Regulatory Analysis

5.1 No Significant Hazards Consideration

A No Significant Hazards Consideration Determination is not required for a Bases change.

6.0 Environmental Consideration

An Environmental Consideration is not required for a Bases change.

7.0 References

None

Revision History

OG Revision 0 Revision Status: Active

Revision Proposed by: GE

Revision Description:
Original Issue

Owners Group Review Information

Date Originated by OG: 08-May-09

Owners Group Comments
(No Comments)

Owners Group Resolution: Approved Date: 22-May-09

TSTF Review Information

TSTF Received Date: 26-May-09 Date Distributed for Review 26-May-09

OG Review Completed: ☑ BWOG ☑ WOG ☑ CEOG ☑ BWROG

TSTF Comments:
(No Comments)

TSTF Resolution: Approved for Use Date: 18-Jun-09

Affected Technical Specifications

Appl. 3.1.5 Bases Control Rod Scram Accumulators

BASES

APPLICABILITY

In MODES 1 and 2, the scram function is required for mitigation of DBAs and transients, and therefore the scram accumulators must be OPERABLE to support the scram function. In MODES 3 and 4, control rods are not ~~only~~ allowed to be withdrawn since the reactor mode switch is in shutdown and a control rod block is applied. This provides adequate requirements for control rod scram accumulator OPERABILITY during these conditions. Requirements for scram accumulators in MODE 5 are contained in LCO 3.9.5, "Control Rod OPERABILITY - Refueling."

ACTIONS

The ACTIONS table is modified by a Note indicating that a separate Condition entry is allowed for each control rod scram accumulator. This is acceptable since the Required Actions for each Condition provide appropriate compensatory actions for each affected accumulator. Complying with the Required Actions may allow for continued operation and subsequent affected accumulators governed by subsequent Condition entry and application of associated Required Actions.

A.1 and A.2

With one control rod scram accumulator inoperable and the reactor steam dome pressure ≥ 900 psig, the control rod may be declared "slow," since the control rod will still scram at the reactor operating pressure but may not satisfy the required scram times in Table 3.1.4-1. Required Action A.1 is modified by a Note indicating that declaring the control rod "slow" only applies if the associated control scram time was within the limits of Table 3.1.4-1 during the last scram time test. Otherwise, the control rod would already be considered "slow" and the further degradation of scram performance with an inoperable accumulator could result in excessive scram times. In this event, the associated control rod is declared inoperable (Required Action A.2) and LCO 3.1.3 is entered. This would result in requiring the affected control rod to be fully inserted and disarmed, thereby satisfying its intended function, in accordance with ACTIONS of LCO 3.1.3.

The allowed Completion Time of 8 hours is reasonable, based on the large number of control rods available to provide the scram function and the ability of the affected control rod to scram only with reactor pressure at high reactor pressures.

BASES

APPLICABILITY

In MODES 1 and 2, the scram function is required for mitigation of DBAs and transients and, therefore, the scram accumulators must be OPERABLE to support the scram function. In MODES 3 and 4, control rods are not ~~only~~ allowed to be withdrawn since the reactor mode switch is in shutdown and a control rod block is applied. This provides adequate requirements for control rod scram accumulator OPERABILITY under these conditions. Requirements for scram accumulators in MODE 5 are contained in LCO 3.9.5, "Control Rod OPERABILITY - Refueling."

ACTIONS

The ACTIONS table is modified by a Note indicating that a separate Condition entry is allowed for each control rod. This is acceptable since the Required Actions for each Condition provide appropriate compensatory action for each affected control rod. Complying with the Required Actions may allow for continued operation and subsequent affected control rods governed by subsequent Condition entry and application of associated Required Actions.

A.1 and A.2

With one control rod scram accumulator inoperable and the reactor steam dome pressure ≥ 900 psig, the control rod may be declared "slow," since the control rod will still scram at the reactor operating pressure but may not satisfy the required scram times in Table 3.1.4-1. Required Action A.1 is modified by a Note, which clarifies that declaring the control rod "slow" is only applicable if the associated control scram time was within the limits of Table 3.1.4-1 during the last scram time test. Otherwise, the control rod would already be considered "slow" and the further degradation of scram performance with an inoperable accumulator could result in excessive scram times. In this event, the associated control rod is declared inoperable (Required Action A.2) and LCO 3.1.3 entered. This would result in requiring the affected control rod to be fully inserted and disarmed, thereby satisfying its intended function in accordance with ACTIONS of LCO 3.1.3.

The allowed Completion Time of 8 hours is considered reasonable, based on the large number of control rods available to provide the scram function and the ability of the affected control rod to scram only with reactor pressure at high reactor pressures.

Technical Specification Task Force
Improved Standard Technical Specifications Change Traveler

Increase Standardization in Condition and Required Action Notes

NUREGs Affected: ☑ 1430 ☑ 1431 ☑ 1432 ☑ 1433 ☑ 1434

Classification 4) NUREG Only Change Recommended for CLIIP?: No

Correction or Improvement: Improvement NRC Fee Status:

Benefit: Increase Consistency with Standard or Writer's

Industry Contact: Ken Schrader, (805) 545-4328, kjse@pge.com

1.0 Description

The Writer's Guide for Improved Standard Technical Specifications (Reference 1) describes the placement of Notes in the Technical Specification Actions Table in Sections 2.1.4, "Note Format," and 4.1.6, "Chapter 3 Actions Content." The guidance on Note placement describes the vast majority of the hundreds of instances in which a Note is required.

Two circumstances have been discovered in which the Writer's Guide did not provide guidance and, as a result, the placement of Notes in the Improved Standard Technical Specifications (ISTS) has been inconsistent:

1. Notes in the Condition Column of the Actions Table typically appear to the right of the Condition designator, but in ten cases appears above the Condition designator.

2. Notes that apply to all Required Actions of a Condition are placed above the first Required Action and are the full width of the column. Notes that apply to a single Required Action are placed to the right of the designator of the Required Action. The Writer's Guide does not provide guidance on Note placement when there is a single Required Action in the Condition. In most cases, the Note appears to the right of the designator of these Required Action, but in eight cases it appears above the Required Action designator.

In order to provide consistency throughout the ISTS, changes are made to those few locations so that all Condition Notes appear to the right of the Condition designator and all Notes applicable to a single Required Action appear to the right of the Required Action designator. The Writer's Guide has been revised to include this guidance.

2.0 Proposed Change

The following Specifications are affected:

In all ISTS NUREGs:
- LCO 3.8.6, "Battery Parameters," Condition C
- LCO 3.8.8, "Distribution Systems - Operating," Required Action A.1

In NUREG-1431, Westinghouse Plants:
- LCO 3.2.1A, "FQ(Z) (CAOC-Fxy Methodology," Condition A
- LCO 3.2.1B, "FQ(Z) (RAOC-W(Z) Methodology)," Conditions A and B
- LCO 3.2.1C, "FQ(Z) (CAOC-W(Z) Methodology)," Conditions A and B
- LCO 3.3.1, "RTS Instrumentation," Required Action H.1
- LCO 3.4.11, "Pressurizer PORVs," Required Action F.1

In NUREG-1434, BWR/6 Plants:
- LCO 3.4.7, "RCS Leakage Detection Instrumentation," Required Action C.1

The change to the Note location does not affect the Bases of these Specifications.

3.0 Background

The industry and the NRC have worked to ensure that the ISTS provides a usable document for plant operators that minimizes the opportunity for misinterpretation. Consistent presentation is an important aspect of operator usability. When inconsistencies have been discovered, they should be corrected.

4.0 Technical Analysis

The proposed changes do not affect the application of the ISTS and are made to improve the internal consistency of the ISTS NUREGs. As a result, the changes are considered editorial corrections and not technical changes.

It is not anticipated that any plant will propose a license amendment to make the proposed changes. However, once these changes are incorporated into the ISTS NUREGs, the revised NUREG pages will be used as the basis of future technical changes which will be adopted by plants. In this manner, these inconsistencies will be eliminated in plant-specific Technical Specifications.

The change to the Required Action Note placement avoids a potential error-prone situation. If a Condition has a single Required Action and a Note located above the Required Action, that Note would apply to any Required Actions added to the Condition in the future. By placing the Note to the right of the Required Action designator, it requires a conscious decision by the licensee to apply the existing Note to new Required Actions.

5.0 Regulatory Analysis

5.1 No Significant Hazards Consideration

The TSTF has evaluated whether or not a significant hazards consideration is involved with the proposed generic change by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

   Response: No.

   The proposed change alters the format and location of notes that modify Conditions and Required Actions in the ACTIONS table of several Specifications in order to provide consistency in placement and format of such Notes throughout the Technical Specifications. The format and location of the notes does not alter their intent or application. As a result of this change, no initiators to any accidents previously evaluated are affected. As a result of this change, no mitigation systems or assumptions are affected. Therefore, it is concluded that the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

   Response: No.

   The proposed change alters the format and location of notes that modify Conditions and Required Actions in the ACTIONS table of several Specifications in order to provide consistency in placement and format of such Notes throughout the Technical Specifications. The format and location of the notes does not alter their intent or application. The change does not involve a physical alteration of the plant (i.e., no new or different type of equipment will be installed) or a change in the methods governing normal plant operation. The change does not alter assumptions made in the safety analysis but ensures that the instruments behave as assumed in the accident analysis. The proposed change has not effect on the safety analysis assumptions. Therefore, Therefore, it is concluded that the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

   Response: No.

   The proposed change alters the format and location of notes that modify Conditions and Required Actions in the ACTIONS table of several Specifications in order to provide consistency in placement and format of such Notes throughout the Technical Specifications. The format and location of the notes does not alter their intent or application. The change will have no effect on plant operation and merely increases the consistency in presentation in the Technical Specifications. Therefore, it is concluded that the proposed change does not involve a significant

reduction in a margin of safety.

Based on the above, the TSTF concludes that the proposed change presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

5.2 Applicable Regulatory Requirements / Criteria

10 CFR 50.36 requires plants to have Technical Specifications. The proposed change alters the format and location of notes that modify Conditions and Required Actions in the ACTIONS table of several Specifications in order to provide consistency in placement and format of such Notes throughout the Technical Specifications. The format and location of the notes does not alter their intent or application. The proposed change clarifies the Technical Specification requirements to ensure that the requirements are consistently applied. In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the approval of the proposed change will not be inimical to the common defense and security or to the health and safety of the public.

6.0 Environmental Consideration

The proposed change is confined to (i) changes to surety, insurance, and/or indemnity requirements, or (ii) changes to recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the proposed change meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(10). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed change.

7.0 References

1. TSTF-GG-05-01, "Writers Guide for Plant-Specific Improved Technical Specifications," June 2005.

Revision History

OG Revision 0 **Revision Status: Active**

Revision Proposed by: Comanche Peak

Revision Description:
Original Issue

Owners Group Review Information

Date Originated by OG: 17-Sep-09

Owners Group Comments
(No Comments)

Owners Group Resolution: Approved Date: 01-Nov-09

OG Revision 0 **Revision Status: Active**

TSTF Review Information

TSTF Received Date: 16-Oct-09 Date Distributed for Review 16-Oct-09

OG Review Completed: ☐ BWOG ☐ WOG ☐ CEOG ☐ BWROG

TSTF Comments:
(No Comments)

TSTF Resolution: Date:

Affected Technical Specifications

Action 3.8.6.C	Battery Parameters	
Action 3.8.9.A	Distribution Systems - Operating	
Action 3.2.1A.A	FQ(Z) (CAOC-Fxy Methodology	NUREG(s)- 1431 Only
Action 3.2.1C.A	FQ(Z) (CAOC-W(Z) Methodology)	NUREG(s)- 1431 Only
Action 3.2.1B.A	FQ(Z) (RAOC-W(Z) Methodology)	NUREG(s)- 1431 Only
Action 3.2.1C.B	FQ(Z) (CAOC-W(Z) Methodology)	NUREG(s)- 1431 Only
Action 3.2.1B.B	FQ(Z) (RAOC-W(Z) Methodology)	NUREG(s)- 1431 Only
Action 3.3.1.H	RTS Instrumentation	NUREG(s)- 1431 Only
Action 3.4.11.F	Pressurizer PORVs	NUREG(s)- 1431 Only
Action 3.4.7.C	RCS Leakage Detection Instrumentation	NUREG(s)- 1434 Only

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
~~----------NOTE----------~~ ~~Required Action C.2 shall be completed if electrolyte level was below the top of plates.~~ ~~----------~~	----------NOTE---------- Required Actions C.1 and C.2 are only applicable if electrolyte level was below the top of plates. ----------	
C. ----------NOTE---------- Required Action C.2 shall be completed if electrolyte level was below the top of plates. ---------- One [or two] batter[y][ies on one train] with one or more cells electrolyte level less than minimum established design limits.	C.1 Restore electrolyte level to above top of plates. AND C.2 Verify no evidence of leakage. AND C.3 Restore electrolyte level to greater than or equal to minimum established design limits.	8 hours 12 hours 31 days
D. One [or two] batter[y][ies on one train] with pilot cell electrolyte temperature less than minimum established design limits.	D.1 Restore battery pilot cell temperature to greater than or equal to minimum established design limits.	12 hours
E. One or more batteries in redundant trains with battery parameters not within limits.	E.1 Restore battery parameters for batteries in one train to within limits.	2 hours

3.8 ELECTRICAL POWER SYSTEMS

3.8.9 Distribution Systems - Operating

LCO 3.8.9 Train A and Train B AC, DC, and AC vital bus electrical power distribution subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more AC electrical power distribution subsystems inoperable.	~~----------NOTE---------- Enter applicable Conditions and Required Actions of LCO 3.8.4, "DC Sources - Operating," for DC trains made inoperable by inoperable power distribution subsystems. ----------~~ A.1 ----------NOTE---------- Enter applicable Conditions and Required Actions of LCO 3.8.4, "DC Sources - Operating," for DC trains made inoperable by inoperable power distribution subsystems. ---------- Restore AC electrical power distribution subsystem(s) to OPERABLE status.	8 hours
B. One or more AC vital buses inoperable.	B.1 Restore AC vital bus subsystem(s) to OPERABLE status.	2 hours
C. One or more DC electrical power distribution subsystems inoperable.	C.1 Restore DC electrical power distribution subsystem(s) to OPERABLE status.	2 hours

3.2 POWER DISTRIBUTION LIMITS

3.2.1A Heat Flux Hot Channel Factor ($F_Q(Z)$) (CAOC-F_{xy} Methodology)

LCO 3.2.1A $F_Q(Z)$ shall be within the limits specified in the COLR.

APPLICABILITY: MODE 1.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
~~----------NOTE----------~~ ~~Required Action A.4 shall be completed whenever this Condition is entered.~~ ~~----------~~ A. ----------NOTE---------- Required Action A.4 shall be completed whenever this Condition is entered. ---------- $F_Q(Z)$ not within limit.	A.1 Reduce THERMAL POWER ≥ 1% RTP for each 1% $F_Q(Z)$ exceeds limit. AND A.2 Reduce Power Range Neutron Flux - High trip setpoints ≥ 1% for each 1% $F_Q(Z)$ exceeds limit. AND A.3 Reduce Overpower ΔT trip setpoints ≥ 1% for each 1% $F_Q(Z)$ exceeds limit. AND A.4 Perform SR 3.2.1.1 and SR 3.2.1.2.	15 minutes after each $F_Q(Z)$ determination 72 hours after each $F_Q(Z)$ determination 72 hours after each $F_Q(Z)$ determination Prior to increasing THERMAL POWER above the limit of Required Action A.1
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 2.	6 hours

3.2 POWER DISTRIBUTION LIMITS

3.2.1B Heat Flux Hot Channel Factor ($F_Q(Z)$ (RAOC-W(Z) Methodology)

LCO 3.2.1B $F_Q(Z)$, as approximated by $F_Q^C(Z)$ and $F_Q^W(Z)$, shall be within the limits specified in the COLR.

APPLICABILITY: MODE 1.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
~~----------NOTE----------~~ ~~Required Action A.4 shall be completed whenever this Condition is entered.~~ ~~---~~ A. ----------NOTE---------- Required Action A.4 shall be completed whenever this Condition is entered. --- $F_Q^C(Z)$ not within limit.	A.1 Reduce THERMAL POWER ≥ 1% RTP for each 1% $F_Q^C(Z)$ exceeds limit. AND A.2 Reduce Power Range Neutron Flux - High trip setpoints ≥ 1% for each 1% $F_Q^C(Z)$ exceeds limit. AND A.3 Reduce Overpower ΔT trip setpoints ≥ 1% for each 1% $F_Q^C(Z)$ exceeds limit. AND A.4 Perform SR 3.2.1.1 and SR 3.2.1.2.	15 minutes after each $F_Q^C(Z)$ determination 72 hours after each $F_Q^C(Z)$ determination 72 hours after each $F_Q^C(Z)$ determination Prior to increasing THERMAL POWER above the limit of Required Action A.1

ACTIONS (continued)

CONDITION	REQUIRED ACTION		COMPLETION TIME
~~----------NOTE----------~~ ~~Required Action B.4 shall be completed whenever this Condition is entered.~~ ~~----------~~	B.1	Reduce AFD limits ≥ 1% for each 1% $F_Q^W(Z)$ exceeds limit.	4 hours
	AND		
B. ----------NOTE---------- Required Action B.4 shall be completed whenever this Condition is entered. ---------- $F_Q^W(Z)$ not within limits.	B.2	Reduce Power Range Neutron Flux - High trip setpoints ≥ 1% for each 1% that the maximum allowable power of the AFD limits is reduced.	72 hours
	AND		
	B.3	Reduce Overpower ΔT trip setpoints ≥ 1% for each 1% that the maximum allowable power of the AFD limits is reduced.	72 hours
	AND		
	B.4	Perform SR 3.2.1.1 and SR 3.2.1.2.	Prior to increasing THERMAL POWER above the maximum allowable power of the AFD limits
C. Required Action and associated Completion Time not met.	C.1	Be in MODE 2.	6 hours

3.2 POWER DISTRIBUTION LIMITS

3.2.1C Heat Flux Hot Channel Factor ($F_Q(Z)$ (CAOC-W(Z) Methodology)

LCO 3.2.1C $F_Q(Z)$, as approximated by $F_Q^C(Z)$ and $F_Q^W(Z)$, shall be within the limits specified in the COLR.

APPLICABILITY: MODE 1.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
~~----------NOTE---------- Required Action A.4 shall be completed whenever this Condition is entered. ----------~~	A.1 Reduce THERMAL POWER ≥ 1% RTP for each 1% $F_Q^C(Z)$ exceeds limit.	15 minutes after each $F_Q^C(Z)$ determination
	AND	
A. ----------NOTE---------- Required Action A.4 shall be completed whenever this Condition is entered. ---------- $F_Q^C(Z)$ not within limit.	A.2 Reduce Power Range Neutron Flux - High trip setpoints ≥ 1% for each 1% $F_Q^C(Z)$ exceeds limit.	72 hours after each $F_Q^C(Z)$ determination
	AND	
	A.3 Reduce Overpower ΔT trip setpoints ≥ 1% for each 1% $F_Q^C(Z)$ exceeds limit.	72 hours after each $F_Q^C(Z)$ determination
	AND	
	A.4 Perform SR 3.2.1.1 and SR 3.2.1.2.	Prior to increasing THERMAL POWER above the limit of Required Action A.1

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
~~----------NOTE----------~~ ~~Required Action B.4 shall be completed whenever this Condition is entered.~~ ~~----------~~ B. ----------NOTE---------- Required Action B.4 shall be completed whenever this Condition is entered. ---------- $F_Q^W(Z)$ not within limits.	B.1 Reduce THERMAL POWER ≥ 1% RTP for each 1% $F_Q^W(Z)$ exceeds limit. AND B.2 Reduce Power Range Neutron Flux - High trip setpoints ≥ 1% for each 1% $F_Q^W(Z)$ exceeds limit. AND B.3 Reduce Overpower ΔT trip setpoints ≥ 1% for each 1% $F_Q^W(Z)$ exceeds limit. AND B.4 Perform SR 3.2.1.1 and SR 3.2.1.2.	4 hours 72 hours 72 hours Prior to increasing THERMAL POWER above the limit of Required Action B.1
C. Required Action and associated Completion Time not met.	C.1 Be in MODE 2.	6 hours

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
	F.2 Increase THERMAL POWER to > P-10.	24 hours
G. Two Intermediate Range Neutron Flux channels inoperable.	G.1 ----------NOTE---------- Limited plant cooldown or boron dilution is allowed provided the change is accounted for in the calculated SDM. ---------- Suspend operations involving positive reactivity additions.	Immediately
	AND	
	G.2 Reduce THERMAL POWER to < P-6.	2 hours
H. One Source Range Neutron Flux channel inoperable.	~~----------NOTE---------- Limited plant cooldown or boron dilution is allowed provided the change is accounted for in the calculated SDM. ----------~~	
	H.1 ----------NOTE---------- Limited plant cooldown or boron dilution is allowed provided the change is accounted for in the calculated SDM. ---------- Suspend operations involving positive reactivity additions.	Immediately

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
F. Two [or three] block valves inoperable.	~~----------NOTE----------~~ ~~Required Action F.1 does not apply when block valve is inoperable solely as a result of complying with Required Actions B.2 or E.2.~~ ~~----------~~ F.1 ----------NOTE---------- Required Action F.1 does not apply when block valve is inoperable solely as a result of complying with Required Actions B.2 or E.2. ---------- Restore one block valve to OPERABLE status [if three block valves are inoperable]. [	 2 hours]
G. Required Action and associated Completion Time of Condition F not met.	G.1 Be in MODE 3. AND G.2 Be in MODE 4.	6 hours 12 hours

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
~~----------NOTE----------~~ ~~Required Action C.2 shall be completed if electrolyte level was below the top of plates.~~ ~~----------~~	----------NOTE---------- Required Actions C.1 and C.2 are only applicable if electrolyte level was below the top of plates. ----------	
C. ----------NOTE---------- Required Action C.2 shall be completed if electrolyte level was below the top of plates. ---------- One [or two] batter[y][ies on one train] with one or more cells electrolyte level less than minimum established design limits.	C.1 Restore electrolyte level to above top of plates. AND C.2 Verify no evidence of leakage. AND C.3 Restore electrolyte level to greater than or equal to minimum established design limits.	8 hours 12 hours 31 days
D. One [or two] batter[y][ies on one train] with pilot cell electrolyte temperature less than minimum established design limits.	D.1 Restore battery pilot cell temperature to greater than or equal to minimum established design limits.	12 hours
E. One or more batteries in redundant trains with battery parameters not within limits.	E.1 Restore battery parameters for batteries in one train to within limits.	2 hours

3.8 ELECTRICAL POWER SYSTEMS

3.8.9 Distribution Systems - Operating

LCO 3.8.9 Train A and Train B AC, DC, and AC vital bus electrical power distribution subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more AC electrical power distribution subsystems inoperable.	~~----------NOTE---------- Enter applicable Conditions and Required Actions of LCO 3.8.4, "DC Sources - Operating," for DC trains made inoperable by inoperable power distribution subsystems. ----------~~ A.1 ----------NOTE---------- Enter applicable Conditions and Required Actions of LCO 3.8.4, "DC Sources - Operating," for DC trains made inoperable by inoperable power distribution subsystems. ---------- Restore AC electrical power distribution subsystem(s) to OPERABLE status.	8 hours
B. One or more AC vital buses inoperable.	B.1 Restore AC vital bus subsystem(s) to OPERABLE status.	2 hours
C. One or more DC electrical power distribution subsystems inoperable.	C.1 Restore DC electrical power distribution subsystem(s) to OPERABLE status.	2 hours

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
~~----------NOTE----------~~ ~~Required Action C.2 shall be completed if electrolyte level was below the top of plates.~~ ~~----------~~	----------NOTE---------- Required Actions C.1 and C.2 are only applicable if electrolyte level was below the top of plates. ----------	
C. ----------NOTE---------- Required Action C.2 shall be completed if electrolyte level was below the top of plates. ---------- One [or two] batter[y][ies on one train] with one or more cells electrolyte level less than minimum established design limits.	C.1 Restore electrolyte level to above top of plates. AND C.2 Verify no evidence of leakage. AND C.3 Restore electrolyte level to greater than or equal to minimum established design limits.	8 hours 12 hours 31 days
D. One [or two] batter[y][ies on one train] with pilot cell electrolyte temperature less than minimum established design limits.	D.1 Restore battery pilot cell temperature to greater than or equal to minimum established design limits.	12 hours
E. One or more batteries in redundant trains with battery parameters not within limits.	E.1 Restore battery parameters for batteries in one train to within limits.	2 hours

3.8 ELECTRICAL POWER SYSTEMS

3.8.9 Distribution Systems - Operating

LCO 3.8.9 Train A and Train B AC, DC, and AC vital bus electrical power distribution subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more AC electrical power distribution subsystems inoperable.	~~----------NOTE---------- Enter applicable Conditions and Required Actions of LCO 3.8.4, "DC Sources - Operating," for DC trains made inoperable by inoperable power distribution subsystems. ----------~~ A.1 ----------NOTE---------- Enter applicable Conditions and Required Actions of LCO 3.8.4, "DC Sources - Operating," for DC trains made inoperable by inoperable power distribution subsystems. ---------- Restore AC electrical power distribution subsystem(s) to OPERABLE status.	8 hours
B. One or more AC vital buses inoperable.	B.1 Restore AC vital bus subsystem(s) to OPERABLE status.	2 hours
C. One or more DC electrical power distribution subsystems inoperable.	C.1 Restore DC electrical power distribution subsystem(s) to OPERABLE status.	2 hours

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
~~----------NOTE----------~~ ~~Required Action C.2 shall be completed if electrolyte level was below the top of plates.~~ ~~----------~~	----------NOTE---------- Required Actions C.1 and C.2 are only applicable if electrolyte level was below the top of plates. ----------	
C. ----------NOTE---------- Required Action C.2 shall be completed if electrolyte level was below the top of plates. ---------- One [or two] batter[y][ies on one division] with one or more cells electrolyte level less than minimum established design limits.	C.1 Restore electrolyte level to above top of plates. AND C.2 Verify no evidence of leakage. AND C.3 Restore electrolyte level to greater than or equal to minimum established design limits.	8 hours 12 hours 31 days
D. One [or two] batter[y][ies on one division] with pilot cell electrolyte temperature less than minimum established design limits.	D.1 Restore battery pilot cell temperature to greater than or equal to minimum established design limits.	12 hours
E. One or more batteries in redundant divisions with battery parameters not within limits.	E.1 Restore battery parameters for batteries in one division to within limits.	2 hours

3.8 ELECTRICAL POWER SYSTEMS

3.8.9 Distribution Systems - Operating

LCO 3.8.9 [Division 1] and [Division 2] AC, DC, [and AC vital bus] electrical power distribution subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more AC electrical power distribution subsystems inoperable.	~~----------NOTE---------- Enter applicable Conditions and Required Actions of LCO 3.8.4, "DC Sources - Operating," for DC divisions made inoperable by inoperable power distribution subsystems. ----------~~ A.1 ----------NOTE---------- Enter applicable Conditions and Required Actions of LCO 3.8.4, "DC Sources - Operating," for DC trains made inoperable by inoperable power distribution subsystems. ---------- Restore AC electrical power distribution subsystem(s) to OPERABLE status.	8 hours
B. [One or more AC vital buses inoperable.	B.1 Restore AC vital bus distribution subsystem(s) to OPERABLE status.	2 hours]
C. One or more [station service] DC electrical power distribution subsystems inoperable.	C.1 Restore DC electrical power distribution subsystem(s) to OPERABLE status.	2 hours

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. [Drywell air cooler condensate flow rate monitoring system inoperable.	~~----------NOTE---------- Not applicable when the required drywell atmospheric monitoring system is inoperable. ----------~~ C.1 ----------NOTE---------- Not applicable when the required drywell atmospheric monitoring system is inoperable. ---------- Perform SR 3.4.7.1.	Once per 8 hours]
D. [Required drywell atmospheric monitoring system inoperable. AND Drywell air cooler condensate flow rate monitoring system inoperable.	D.1 Restore required drywell atmospheric monitoring system to OPERABLE status. OR D.2 Restore drywell air cooler condensate flow rate monitoring system to OPERABLE status.	30 days 30 days]
E. Required Action and associated Completion Time of Condition A, B, [C, or D] not met.	E.1 Be in MODE 3. AND E.2 Be in MODE 4.	12 hours 36 hours
F. All required leakage detection systems inoperable.	F.1 Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
~~----------NOTE----------~~ ~~Required Action C.2 shall be completed if electrolyte level was below the top of plates.~~ ~~----------~~	----------NOTE---------- Required Actions C.1 and C.2 are only applicable if electrolyte level was below the top of plates. ----------	
C. ----------NOTE---------- Required Action C.2 shall be completed if electrolyte level was below the top of plates. ---------- One [or two] batter[y][ies on one division] with one or more cells electrolyte level less than minimum established design limits.	C.1 Restore electrolyte level to above top of plates. AND C.2 Verify no evidence of leakage. AND C.3 Restore electrolyte level to greater than or equal to minimum established design limits.	8 hours 12 hours 31 days
D. One [or two] batter[y][ies on one division] with pilot cell electrolyte temperature less than minimum established design limits.	D.1 Restore battery pilot cell temperature to greater than or equal to minimum established design limits.	12 hours
E. One or more batteries in redundant divisions with battery parameters not within limits.	E.1 Restore battery parameters for batteries in one division to within limits.	2 hours

3.8 ELECTRICAL POWER SYSTEMS

3.8.9 Distribution Systems - Operating

LCO 3.8.9 [Division 1], [Division 2], and [Division 3] AC, DC, [and AC vital bus] electrical power distribution subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more [Division 1 and 2] AC electrical power distribution subsystems inoperable.	~~----------NOTE---------- Enter applicable Conditions and Required Actions of LCO 3.8.4, "DC Sources - Operating," for DC divisions made inoperable by inoperable power distribution subsystems. ----------~~ A.1 ----------NOTE---------- Enter applicable Conditions and Required Actions of LCO 3.8.4, "DC Sources - Operating," for DC trains made inoperable by inoperable power distribution subsystems. ---------- Restore [Division 1 and 2] AC electrical power distribution subsystem(s) to OPERABLE status.	8 hours
B. [One or more [Division 1 and 2] AC vital buses inoperable.	B.1 Restore [Division 1 and 2] AC vital bus distribution subsystem(s) to OPERABLE status.	2 hours]
C. One or more [Division 1 and 2] DC electrical	C.1 Restore [Division 1 and 2] DC electrical power	2 hours