Commonwealth Edison Company
1400 Opus Place
Downers Grove, IL 60515-5701

ComEd

RS-00-88

September 1, 2000

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

Dresden Nuclear Power Station, Units 2 and 3
Facility Operating License Nos. DPR-19 and DPR-25
NRC Docket Nos. 50-237 and 50-249

LaSalle County Station, Units 1 and 2
Facility Operating License Nos. NPF-11 and NPF-18
NRC Docket Nos. 50-373 and 50-374

Quad Cities Nuclear Power Station, Units 1 and 2
Facility Operating License Nos. DPR-29 and DPR-30
NRC Docket Nos. 50-254 and 50-265

Subject: Revision B to Request for Technical Specifications Changes for Dresden Nuclear Power Station, Units 2 and 3, LaSalle County Station, Units 1 and 2, and Quad Cities Nuclear Power Station, Units 1 and 2, to Implement Improved Standard Technical Specifications

Reference:

1) Letter from R. M. Krich (Commonwealth Edison Company) to U.S. NRC, "Request for Technical Specifications Changes for Dresden Nuclear Power Station, Units 2 and 3, LaSalle County Station, Units 1 and 2, and Quad Cities Nuclear Power Station, Units 1 and 2, to Implement Improved Standard Technical Specifications," dated March 3, 2000.

2) Letter from R. M. Krich (Commonwealth Edison Company) to U.S. NRC, "Revision A to Request for Technical Specifications Changes for Dresden Nuclear Power Station, Units 2 and 3, LaSalle County Station, Units 1 and 2, and Quad Cities Nuclear Power Station, Units 1 and 2, to Implement Improved Standard Technical Specifications," dated June 5, 2000.

3) Letter from R. M. Krich (Commonwealth Edison Company) to U.S. NRC, "Response to Request for Additional Information," dated July 18, 2000.

4) Letter from R. M. Krich (Commonwealth Edison Company) to U.S. NRC, "Response to Request for Additional Information," dated July 31, 2000.

In the Reference 1 letter, in accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," we proposed to amend Appendix A, Technical Specifications (TS) of Facility Operating License Nos. DPR-19, DPR-25, NPF-11, NPF-18, DPR-29 and DPR-30 for Dresden Nuclear Power Station, Units 2 and 3, LaSalle County Station, Units 1 and 2,

A001

and Quad Cities Nuclear Power Station, Units 1 and 2, respectively. The proposed changes revise the Dresden Nuclear Power Station, Units 2 and 3, LaSalle County Station, Units 1 and 2, and Quad Cities Nuclear Power Station, Units 1 and 2, current Technical Specifications (CTS) to a format and content consistent with NUREG-1433, Revision 1, "Standard Technical Specifications for General Electric Plants, BWR 4," and NUREG-1434, Revision 1, "Standard Technical Specifications for General Electric Plants, BWR 6," as applicable.

The Reference 1 letter identified that the supporting calculations for Allowable Values needed for the proposed Improved Technical Specifications (ITS) Section 3.3, "Instrumentation," had not been completed. The first group of these calculations was to be completed and any resulting changes to the proposed ITS Allowable Values and Surveillance Frequencies submitted by June 5, 2000. The Reference 2 letter provided the resulting changes to the associated ITS Allowable Values and Surveillance Frequencies from the first group of calculations. The Reference 1 letter also identified that the remaining group of calculations would be completed and any resulting changes to the ITS Allowable Values and Surveillance Frequencies would be submitted by September 15, 2000. This revision to the Reference 1 letter provides the resulting changes to the associated ITS Allowable Values. Corresponding revisions to the proposed Dresden Nuclear Power Station, Units 2 and 3, LaSalle County Station, Units 1 and 2, and Quad Cities Nuclear Power Station, Units 1 and 2, Surveillance Frequencies are also provided. In addition, changes committed to in Reference 3 and 4 letters are also provided in this revision, as well as minor corrections to various sections of the Enclosures of the Reference 1 letter. The affected pages of the Reference 1 letter have been revised to reflect these changes and are attached to this letter.

The proposed changes have been reviewed and approved by the respective Plant Operations Review Committees and the Nuclear Safety Review Board in accordance with the Quality Assurance Program.

ComEd is notifying the State of Illinois of these license amendment requests by transmitting a copy of this letter, including attachments and enclosures, to the designated State Official.

Should you have any questions concerning this submittal, please contact Mr. J. V. Sipek at (630) 663-3741.

Respectfully,

R. M. Krich
Vice President - Regulatory Services

Attachments: Affidavit
Attachment 1 - Revision B to Dresden Improved Technical Specifications Document
Attachment 2 - Revision B to LaSalle Improved Technical Specifications Document
Attachment 3 - Revision B to Quad Cities Improved Technical Specifications Document

cc: Regional Administrator - NRC Region III
NRC Senior Resident Inspector - Dresden Nuclear Power Station w/o Attachments 2 and 3
NRC Senior Resident Inspector - LaSalle County Station w/o Attachments 1 and 3
NRC Senior Resident Inspector - Quad Cities Nuclear Power Station w/o Attachments 1 and 2
Office of Nuclear Facility Safety - Illinois Department of Nuclear Safety

bcc: NRC Project Manager, NRR - Dresden Nuclear Power Station, Units 2 and 3
w/o Attachments 2 and 3
NRC Project Manager, NRR - LaSalle County Station
w/o Attachments 1 and 3
NRC Project Manager, NRR - Quad Cities Nuclear Power Station
Site Vice President - Dresden Nuclear Power Station
w/o Attachments
Site Vice President - LaSalle County Station
w/o Attachments
Site Vice President - Quad Cities Nuclear Power Station
w/o Attachments
Vice President - Regulatory Services
w/o Attachments
Nicholas Reynolds - Winston and Strawn
w/o Attachments
Director, Licensing and Compliance - Dresden and Quad Cities Nuclear Power Stations
w/o Attachments
Director, Licensing and Compliance - LaSalle County Station
w/o Attachments
Regulatory Assurance Manager - Dresden Nuclear Power Station
w/o Attachments
Regulatory Assurance Manager - LaSalle County Station
w/o Attachments
Regulatory Assurance Manager - Quad Cities Nuclear Power Station
w/o Attachments
ComEd Document Control Desk - Licensing (Hard Copy)
ComEd Document Control Desk - Licensing (Electronic Copy)

STATE OF ILLINOIS	)	
COUNTY OF DUPAGE	)	
IN THE MATTER OF	)	
COMMONWEALTH EDISON (COMED) COMPANY	)	Docket Nos.
DRESDEN NUCLEAR POWER STATION - UNITS 2 and 3	)	50- 237and 50-249
LASALLE COUNTY STATION - UNITS 1 and 2	)	50- 373 and 50-374
QUAD CITIES NUCLEAR POWER STATION - UNITS 1 and 2	)	50- 254 and 50-265

SUBJECT: **Revision B to Request for Amendment to Technical Specifications for Dresden Nuclear Power Station, Units 2 and 3, LaSalle County Station, Units 1 and 2, and Quad Cities Nuclear Power Station, Units 1 and 2, to Implement Improved Standard Technical Specifications**

AFFIDAVIT

I affirm that the content of this transmittal is true and correct to the best of my knowledge, information and belief.

R. M. Krich
Vice President - Regulatory Services

Subscribed and sworn to before me, a Notary Public in and for the State above named, this 1st day of September, 2000.

Notary Public

" OFFICIAL SEAL "
Joseph V. Sipek
Notary Public, State of Illinois
My Commission Expires 11/24/2001

ATTACHMENT 1

Revision B to Dresden Nuclear Power Station, Units 2 and 3
Proposed Improved Technical Specifications Submittal
dated March 3, 2000

Revision B to Dresden Nuclear Power Station
Improved Technical Specifications Summary of Changes

This attachment provides a brief summary of the changes in Revision B of the proposed Improved Technical Specifications (ITS) submittal for Dresden Nuclear Power Station, Units 2 and 3. The original Technical Specifications amendment request (i.e., Revision 0) was submitted to the NRC by letter dated March 3, 2000, as revised (i.e., Revision A) by letter dated June 5, 2000.

In the submittal of March 3, 2000, it was identified that the supporting calculations for Allowable Values needed for ITS Section 3.3, "Instrumentation," had not been completed. Commonwealth Edison (ComEd) Company committed to submit any changes to the ITS Allowable Values and Surveillance Frequencies resulting from the second group of calculations by September 15, 2000. Changes resulting from the second group of calculations are provided in this revision to the ITS submittal (i.e., Revision B).

In addition, changes committed to in the ComEd Request For Additional Information (RAI) responses for Sections 3.5 and 3.6 are also provided in this Revision B submittal (except for the change committed to in the ComEd response to RAI 3.6.1.7-6), as well as minor corrections to various sections of the March 3, 2000 submittal.

Section 3.1

1. A typographical error was noted in the Surveillance Requirements section of the ITS 3.1.3 Bases, in that an additional line space was used. This has been corrected. This change affects ITS 3.1.3 Bases page B 3.1.3-8.

Section 3.3

1. Changes to the Allowable Values from the second group of calculations have been made. These changes are the result of the ComEd Setpoint Methodology (i.e., Nuclear Engineering Standard NES-EIC-20.04, "Analysis of Instrument Channel Setpoint Error and Instrument Loop Accuracy," submitted to the NRC by ComEd letter dated March 24, 2000), and also includes assuming a 30 month calibration interval (except for the degraded voltage Functions, which assume a 22.5 month calibration interval) in the determination of the magnitude of drift used in the applicable setpoint calculations. The Allowable Values for the following ITS Instrumentation Functions were confirmed to be valid or were revised. The validated values or revised values are identified by the removal of the square brackets from the values. In addition, the Channel Functional Test and Channel Calibration Frequencies for the degraded voltage Functions were changed to 18 months and the Channel Calibrations for all other affected Functions were either changed or confirmed to be 24 months.

    ITS Table 3.3.1.1-1, Functions 5 and 8;
    ITS LCO 3.3.4.1, SR 3.3.4.1.4;
    ITS Table 3.3.5.1-1, Functions 1.e, 2.e, 2.i, 2.j, 2.k, 3.d, 3.e, 4.c, 4.f, 5.c, and 5.f;
    ITS LCO 3.3.5.2, SR 3.3.5.2.2 and SR 3.5.2.2.3;
    ITS 3.3.6.1-1, Functions 1.c and 3.b;
    ITS Table 3.3.6.3-1, Function 1.b;
    ITS Table 3.3.8.1-1, Functions 1, 2.a, and 2.b; and
    ITS LCO 3.3.8.2, SR 3.3.8.2.2.

   These changes affect ITS 3.3.1.1, pages 3.3.1.1-9 and 3.3.1.1-10, ITS 3.3.4.1, page 3.3.4.1-3, ITS 3.3.5.1, pages 3.3.5.1-9, 3.3.5.1-10, 3.3.5.1-11, 3.3.5.1-12, and 3.3.5.1-13, ITS 3.3.5.2, page 3.3.5.2-2, ITS 3.3.6.1, pages 3.3.6.1-5 and 3.3.6.1-6, ITS 3.3.6.3, page 3.3.6.3-3, ITS 3.3.8.1, pages 3.3.8.1-2 and 3.3.8.1-3, ITS 3.3.8.2, page 3.3.8.2-3, ITS 3.3.5.2 Bases pages B 3.3.5.2-5 and B 3.3.5.2-6, ITS 3.3.8.1 Bases page B 3.3.8.1-7, the CTS markup for ITS 3.3.1.1, pages 16 of 17 and 17 of 17, the CTS markup for ITS 3.3.4.1, page 3 of 5, the Discussion of Changes for ITS 3.3.4.1, DOC LE.1 (page 5), the CTS markup for ITS 3.3.5.1, pages 4 of 17, 5 of 17, and 15 of 17, the Discussion of Changes for ITS 3.3.5.1, DOC M.1 (page 4), DOC M.3 (page 5), and DOC LE.1 (pages 9 and 10), the CTS markup for ITS 3.3.5.2, pages 1 of 5, 2 of 5, and 5 of 5, the Discussion of Changes for ITS 3.3.5.2, DOC M.1 (page 2), DOC LD.1 (page 2), and DOC LE.1 (page 4), the CTS markup for ITS 3.3.6.1, pages 4 of 12, 5 of 12, 8 of 12, 10 of 12, and 11 of 12, the Discussion of Changes for ITS 3.3.6.1, DOC M.1 (page 4), DOC M.3 (page 4), and DOC LE.1 (pages 7, 8, and 9), the Discussion of Changes for ITS 3.3.6.3, DOC LE.1 (page 4), the CTS markup for ITS 3.3.8.1, pages 1 of 6, 2 of 6, and 5 of 6, the Discussion of Changes for ITS 3.3.8.1, DOC M.2 (page 2), DOC LD.1 (page 3), and DOC LE.1 (pages 4 and 5), the CTS markup for ITS 3.3.8.2, page 1 of 1, the Discussion of Changes for ITS 3.3.8.2, DOC LE.1 (pages 4 and 5), the ISTS markup for ITS 3.3.1.1, pages 3.3-8 and 3.3-9, the ISTS markup for ITS 3.3.4.1, page 3.3-35, the ISTS markup for ITS 3.3.5.1, insert page 3.3-42, pages 3.3-43 and 3.3-44, insert page 3.3-44, and pages 3.3-45, 3.3-46, and 3.3-47, the ISTS markup for ITS 3.3.5.2, page 3.3-50, the Justification for Deviations to ITS 3.3.5.2, JFD 1 (page 1), the ISTS markup for ITS 3.3.6.1, page 3.3-57 and insert page 3.3-58, the ISTS markup for ITS 3.3.6.3, page 3.3-70, the ISTS markup for ITS 3.3.8.1, pages 3.3-76 and 3.3-77, the Justification for Deviations to ITS 3.3.8.1, JFD 3 (page 1), the ISTS markup for ITS 3.3.8.2, page 3.3-80, the ISTS 3.3.5.1 Bases markup page B 3.3-150, the ISTS 3.3.8.1 Bases markup pages B 3.3-225 and B 3.3-226, and the Generic No Significant Hazards Consideration for ITS Section 3.3, NSHC LE.x (page 9).

2. A typographical error was noted in the Reference sections of the ITS 3.3.1.1 Bases and ITS 3.3.2.1 Bases, in that incorrect document numbers were used. This has been corrected. This change affects ITS 3.3.1.1 Bases page B 3.3.1.1-35, ITS 3.3.2.1 Bases page B 3.3.2.1-13, the ISTS Bases markup for ITS 3.3.1.1, page 3.3-33, and the ISTS Bases markup for ITS 3.3.2.1, page B 3.3-55.

3. The Discussion of Changes were modified to more clearly discuss the actual changes. These changes affect the Discussion of Changes for ITS 3.3.1.1, DOC L.2 (page 13) and DOC L.10 (page 17).

4. Typographical errors were noted in the Discussion of Changes for ITS 3.3.1.1 (the word "only" was inadvertently used and an incorrect SR number was used). These have been corrected. These changes affect the Discussion of Changes for ITS 3.3.1.1, DOC L.3 (page 14) and DOC L.8 (page 17).

5. A markup error was noted in ITS 3.3.1.1. This has been corrected. This change affects the ISTS 3.3.1.1 markup page 3.3-7.

6. A typographical error was noted in a Discussion of Change in that an incorrect CTS number was used. This error has been corrected. This change affects the Discussion of Changes for ITS 3.3.1.2, DOC L.8 (page 6).

7. Typographical errors were noted in the Discussion of Changes for ITS 3.3.2.1 (an incorrect value was used, brackets were not removed, and an incorrect inequality sign was used). These errors have been corrected. These changes affect the Discussion of Changes for ITS 3.3.2.1, DOC M.5 (page 3), DOC L.2 (page 6), and DOC L.4 (page 7).

8. A typographical error was noted in a Discussion of Change in that an incorrect CTS number was used. This error has been corrected. This change affects the Discussion of Changes for ITS 3.3.2.2, DOC L.1 (page 7).

9. Typographical errors were noted in the Discussion of Changes for ITS 3.3.4.1 (an incorrect CTS number was used and the word "breaker(s)" was inadvertently used). These have been corrected. These changes affect the Discussion of Changes for ITS 3.3.4.1, DOC LA.1 (page 3) and DOC L.1 (page 7).

10. A typographical error was noted in the background section of the ITS 3.3.5.1 Bases, in that brackets were inadvertently left in. This has been corrected. This change affects the ITS 3.3.5.1 Bases page B 3.3.5.1-5 and the ISTS Bases markup insert page B 3.3-103.

11. Typographical errors were noted in a Discussion of Change for ITS 3.3.5.1, in that incorrect CTS Table numbers were used. This has been corrected. This change affects the Discussion of Changes for ITS 3.3.5.1, DOC A.6 (page 2).

12. A typographical error was noted in a Discussion of Change for ITS 3.3.5.1, in that a Discussion of Change was inadvertently included. This change affects the Discussion of Changes for ITS 3.3.5.1, DOC M.7 (page 5).

13. A new Allowable Value is provided for ITS Table 3.3.6.1-1 Function 1.e, based on a recent setpoint calculation.. This change affects ITS 3.3.6.1, page 3.3.6.1-5 and Bases page B 3.3.6.1-11, the ISTS markup page 3.3-57, and the ISTS Bases markup page B 3.3-161.

14. Typographical errors were noted in the Discussion of Changes for ITS 3.3.6.1 (an incorrect Function name was used and an incorrect ITS Required Action was referenced). These have been corrected. These changes affect the Discussion of Changes for ITS 3.3.6.1, DOC M.1 (page 4) and DOC L.2 (page 13).

15. A markup error was noted in ITS 3.3.6.2. This has been corrected. This change affects the CTS markup for ITS 3.3.6.2, page 6 of 10.

16. A typographical error was noted in the Discussion of Changes for ITS 3.3.6.2, in that the Logic System Functional Test was incorrectly described. This has been corrected. This change affects the Discussion of Change for ITS 3.3.6.2, DOC LA.4 (page 4).

17. A typographical error was noted in the Discussion of Changes for ITS 3.3.6.3, in that an incorrect Function name was used. This has been corrected. This change affects the Discussion of Changes for ITS 3.3.6.3, DOC LE.1 (page 3).

18. A Discussion of Change was modified to more clearly discuss the actual change. This change affects the Discussion of Changes for ITS 3.3.8.2, DOC L.4 (page 8).

<u>Section 3.4</u>

1. Typographical errors were noted (the word "be" was inadvertently left out and an extra space was included). These errors have been corrected. This change affects the Discussion of Changes for ITS 3.4.1, DOC LA.2 (page 4).

2. The location of the relocated specification has been changed from the UFSAR to the TRM. This change affects the Discussion of Changes for ITS 3.4.5, DOC R.1 (page 2).

<u>Section 3.5</u>

1. The change committed to in the ComEd response to RAI 3.5.3-1 has been made. This change affects the CTS markup for ITS 3.5.3, page 1 of 1, and the Discussion of Changes for ITS 3.5.3, DOC M.2 (page 1).

2. A typographical error was noted in the Discussion of Changes for ITS 3.5.2, in that an incorrect value in brackets was used. This has been corrected. This change affects the Discussion of Changes for ITS 3.5.2, DOC L.5 (page 7).

<u>Section 3.6</u>

1. The change committed to in the ComEd response to RAI 3.6.1.2-1 has been made. This change affects the CTS markup for ITS 3.6.1.2, page 2 of 2, the Discussion of Changes for ITS 3.6.1.2, DOC A.7 (page 2) and DOC M.2 (page 3).

2. The change committed to in the ComEd response to RAI 3.6.1.3-7 has been made. This change affects ITS 3.6.1.3 Bases page B 3.6.1.3-11 and ISTS Bases markup page B 3.6-26.

3. The changes committed to in the ComEd responses to RAIs 3.6.1.3-9 and 3.6.1.3-11 have been made. These changes affect ITS 3.6.1.3, pages 3.6.1.3-2, 3.6.1.3-4, and 3.6.1.3-5, and Bases pages B 3.6.1.3-5, B 3.6.1.3-6, B 3.6.1.3-7, and B 3.6.1.3-9, the ISTS markup pages 3.6-8 and 3.6-10, the Justification for Deviations to ITS 3.6.1.3, JFD 3 (page 1) and JFD 11 (page 2), the ISTS Bases markup pages B 3.6-18, B 3.6-19, B 3.6-20, B 3.6-21, B 3.6-22, and insert page B 3.6-22, and Justification for Deviations to ITS Bases 3.6.1.3, JFD 11 (page 1).

4. The changes committed to in the ComEd responses to RAIs 3.6.1.7-1, 3.6.1.7-2, and 3.6.1.7-4 have been made. These changes affect the CTS markup for ITS 3.6.1.7, page 1 of 2, the Discussion of Changes for ITS 3.6.1.7, DOC A.2 (page 1), DOC A.3 (page 1), DOC L.1 (pages 3 and 4), and DOC L.4 (page 5), and the No Significant Hazards Consideration for ITS 3.6.1.7, NSHC L.1 (page 1) and NSHC L.4 (page 4).

5. The change committed to in the ComEd response to RAI 3.6.1.7-5 has been made. This change affects the Justification for Deviations to ITS Bases 3.6.1.7, JFD 4 (page 1).

6. The change committed to in the ComEd response to RAI 3.6.2.2-1 has been made. This change affects ITS 3.6.2.2 Bases page B 3.6.2.2-2 and the ISTS Bases markup page B 3.6-65.

7. The change committed to in the ComEd response to RAI 3.6.4.2-2 has been made. This change affects the CTS markup for ITS 3.6.4.2, page 3 of 3, the Discussion of Changes for ITS 3.6.4.2, DOC L.2 (page 4), and the No Significant Hazards Consideration for ITS 3.6.4.2, NSHC L.2 (page 2).

8. The change committed to in the ComEd response to RAI 3.6.4.2-4 has been made. This change affects the ISTS 3.6.4.2 Bases markup page B 3.6-104.

9. The change committed to in the ComEd response to RAI 3.6.4.3-1 has been made. This change affects the Discussion of Changes for ITS 3.6.4.3, DOC LA.2 (page 2).

10. An error in the Applicable Safety Analyses section of the ITS 3.6.1.3 Bases was noted (the control rod drop accident was inadvertently referenced. This has been corrected. This change affects ITS 3.6.1.3 Bases pages B 3.6.1.3-2, B 3.6.1.3-3, B 3.6.1.3-7, and B 3.6.1.3-15, and the ISTS Bases markup pages B 3.6-15, B 3.6-21, and B 3.6-32.

11. Typographical errors were noted in the Discussion of Changes for ITS 3.6.1.3 (incorrect CTS reference numbers were used). These have been corrected. These changes affect the Discussion of Changes for ITS 3.6.1.3, DOC A.6 (page 2), DOC L.2 (page 8), and DOC L.4 (page 8).

12. A markup error was noted in ITS 3.6.2.2. This has been corrected. This change affects the CTS markup for ITS 3.6.2.2, page 2 of 4, and the Discussion of Changes for ITS 3.6.2.2, DOC A.2 (page 1).

13. A typographical error was noted in the Discussion of Changes for ITS 3.6.2.2, in that an incorrect CTS reference number was used. This has been corrected. This change affects the Discussion of Changes for ITS 3.6.2.2, DOC LA.1 (page 1).

14. A typographical error was noted in the Discussion of Changes for ITS 3.6.3.1, in that an incorrect CTS reference number was used. This has been corrected. This change affects the Discussion of Changes for ITS 3.6.3.1, DOC A.3 (page 1).

Section 3.7

1. A markup error was noted in ITS 3.7.1. This has been corrected. This change affects the CTS markup for ITS 3.7.1, page 1 of 3, and the Discussion of Changes of ITS 3.7.1, DOC LA.1 (page 1).

2. A typographical error was noted in the Discussion of Changes for ITS 3.7.1, in that an incorrect ITS reference number was used. This has been corrected. This change affects the Discussion of Changes for ITS 3.7.1, DOC L.1 (page 2).

3. A markup error was noted in ITS 3.7.4. This has been corrected. This change affects the CTS markup for ITS 3.7.4, page 1 of 3, and the Discussion of Changes for ITS 3.7.4, DOC LA.1 (page 1).

4. A markup error was noted in ITS 3.7.5. This has been corrected. This change affects the CTS markup for ITS 3.7.5, page 1 of 3, and the Discussion of Changes for ITS 3.7.5, DOC LA.1 (page 1).

5. A typographical error was noted in the Discussion of Changes for ITS 3.7.8, in that a greater than or equal to sign was inadvertently left out. This has been corrected. This change affects the Discussion of Changes for ITS 3.7.8, DOC M.1 (page 1).

Section 3.8

1. A Discussion of Change has been clarified to reflect the correct requirement (bulk fuel storage tank level instead of fuel oil day tank level). This affects the Discussion of Changes for ITS 3.8.1, DOC A.2 (page 1).

2. A typographical error was noted in that an incorrect ITS reference number was used in a Discussion of Change. This has been corrected. This change affects the Discussion of Changes for ITS 3.8.1, DOC L.11 (page 16).

3. A typographical error was noted in the Discussion of Changes for ITS 3.8.2, in that an incorrect CTS reference number was used. This has been corrected. This change affects the Discussion of Changes for ITS 3.8.2, DOC L.2 (page 4).

4. The Bases description of the fuel oil testing program has been changed to be consistent with more current standards and for consistency with the Quad Cities and LaSalle ITS. This change affects ITS 3.8.3 Bases pages B 3.8.3-4, B 3.8.3-5, and B 3.8.3-6, and the ISTS Bases markup pages B 3.8-46, B 3.8-47, and B 3.8-49.

5. A typographical error was noted in the Discussion of Changes for ITS 3.8.4, in that the CTS reference numbers were not properly arranged. This has been corrected. This change affects the Discussion of Changes for ITS 3.8.4, DOC A.2 (page 1).

6. A Discussion of Change has been clarified to better reflect the proposed change. This affects the Discussion of Changes for ITS 3.8.5, DOC M.1 (page 1).

7. Typographical errors were noted in the Discussion of Changes for ITS 3.8.6 (incorrect CTS reference numbers were used). These have been corrected. These changes affect the Discussion of Changes for ITS 3.8.6, DOC A.6 (page 2) and DOC M.1 (page 2).

8. Markup errors were noted in ITS 3.8.7 and ITS 3.8.8. These have been corrected. These changes affects the CTS markup for ITS 3.8.7, pages 1 of 2 and 2 of 2, and the CTS markup for ITS 3.8.8, pages 1 of 2 and 2 of 2.

9. A typographical error was noted in the Discussion of Changes for ITS 3.8.7, in that an unused DOC was included. This has been corrected. This change affects the Discussion of Changes for ITS 3.8.7, DOC A.3 (deleted from page 1).

Section 3.10

1. A typographical error was noted in the Discussion of Changes for CTS 3/4.12.C, in that an incorrect letter date was used. This has been corrected. This change affects the Discussion of Changes for CTS 3/4.12.C, DOC A.1 (page 1).

Chapter 4.0

1. A typographical error was noted in the Discussion of Changes for ITS Chapter 4.0, in that an incorrect UFSAR Section number was used. This has been corrected. This change affects the Discussion of Changes for ITS Chapter 4.0, DOC LA.3 (page 2).

Chapter 5.0

1. A typographical error was noted in ITS Section 5.5, in that a word was not properly capitalized. This has been corrected. This changes affects ITS 5.5 page 5.5-7.

2. A Discussion of Change has been clarified to reflect the correct ASTM standard. In addition, some additional changes were made to better describe the change. This affects the Discussion of Changes for ITS 5.5, DOC L.1 (page 11).

Dresden ITS Rev. B Submittal

DISCARD AND INSERTION INSTRUCTIONS

VOLUME 2	
SECTIONS 3.1 AND 3.2	
DISCARD	**INSERT**
ITS Bases page B 3.1.3-8	ITS Bases page B 3.1.3-8

VOLUME 3	
SECTION 3.3	
DISCARD	**INSERT**
ITS page 3.3.1.1-9	ITS page 3.3.1.1-9
ITS page 3.3.1.1-10	ITS page 3.3.1.1-10
ITS page 3.3.4.1-3	ITS page 3.3.4.1-3
ITS Page 3.3.5.1-9	ITS Page 3.3.5.1-9
ITS Page 3.3.5.1-10	ITS Page 3.3.5.1-10
ITS Page 3.3.5.1-11	ITS Page 3.3.5.1-11
ITS Page 3.3.5.1-12	ITS Page 3.3.5.1-12
ITS Page 3.3.5.1-13	ITS Page 3.3.5.1-13
ITS Page 3.3.5.2-2	ITS Page 3.3.5.2-2
ITS Page 3.3.6.1-5	ITS Page 3.3.6.1-5
ITS Page 3.3.6.1-6	ITS Page 3.3.6.1-6
ITS Page 3.3.6.3-3	ITS Page 3.3.6.3-3
ITS Page 3.3.8.1-2	ITS Page 3.3.8.1-2
ITS Page 3.3.8.1-3	ITS Page 3.3.8.1-3
ITS Page 3.3.8.2-3	ITS Page 3.3.8.2-3
ITS Bases Page B 3.3.1.1-35	ITS Bases Page B 3.3.1.1-35
ITS Bases Page B 3.3.2.1-13	ITS Bases Page B 3.3.2.1-13
ITS Bases Page B 3.3.5.1-5	ITS Bases Page B 3.3.5.1-5
ITS Bases Page B 3.3.5.2-5	ITS Bases Page B 3.3.5.2-5
ITS Bases Page B 3.3.5.2-6	ITS Bases Page B 3.3.5.2-6
ITS Bases Page B 3.3.6.1-11	ITS Bases Page B 3.3.6.1-11
ITS Bases Page B 3.3.8.1-7	ITS Bases Page B 3.3.8.1-7
CTS Markup for Specification 3.3.1.1 page 16 of 17	CTS Markup for Specification 3.3.1.1 page 16 of 17
CTS Markup for Specification 3.3.1.1 page 17 of 17	CTS Markup for Specification 3.3.1.1 page 17 of 17
Discussion of Changes for ITS 3.3.1.1 pages 13 and 14	Discussion of Changes for ITS 3.3.1.1 pages 13 and 14
Discussion of Changes for ITS 3.3.1.1 page 17	Discussion of Changes for ITS 3.3.1.1 page 17
Discussion of Changes for ITS 3.3.1.2 page 6	Discussion of Changes for ITS 3.3.1.2 page 6
Discussion of Changes for ITS 3.3.2.1 page 3	Discussion of Changes for ITS 3.3.2.1 page 3

VOLUME 3	
SECTION 3.3	
DISCARD	**INSERT**
Discussion of Changes for ITS 3.3.2.1 pages 6 and 7	Discussion of Changes for ITS 3.3.2.1 pages 6 and 7
Discussion of Changes for ITS 3.3.2.2 page 7	Discussion of Changes for ITS 3.3.2.2 page 7
CTS Markup for Specification 3.3.4.1 page 3 of 5	CTS Markup for Specification 3.3.4.1 page 3 of 5
Discussion of Changes for ITS 3.3.4.1 page 3	Discussion of Changes for ITS 3.3.4.1 page 3
Discussion of Changes for ITS 3.3.4.1 page 5	Discussion of Changes for ITS 3.3.4.1 page 5
Discussion of Changes for ITS 3.3.4.1 page 7	Discussion of Changes for ITS 3.3.4.1 page 7
CTS Markup for Specification 3.3.5.1 page 4 of 17	CTS Markup for Specification 3.3.5.1 page 4 of 17
CTS Markup for Specification 3.3.5.1 page 5 of 17	CTS Markup for Specification 3.3.5.1 page 5 of 17
CTS Markup for Specification 3.3.5.1 page 15 of 17	CTS Markup for Specification 3.3.5.1 page 15 of 17
Discussion of Changes for ITS 3.3.5.1 page 2	Discussion of Changes for ITS 3.3.5.1 page 2
Discussion of Changes for ITS 3.3.5.1 pages 4 and 5	Discussion of Changes for ITS 3.3.5.1 pages 4 and 5
Discussion of Changes for ITS 3.3.5.1 pages 9 and 10	Discussion of Changes for ITS 3.3.5.1 pages 9 and 10
CTS Markup for Specification 3.3.5.2 page 1 of 5	CTS Markup for Specification 3.3.5.2 page 1 of 5
CTS Markup for Specification 3.3.5.2 page 2 of 5	CTS Markup for Specification 3.3.5.2 page 2 of 5
CTS Markup for Specification 3.3.5.2 page 5 of 5	CTS Markup for Specification 3.3.5.2 page 5 of 5
Discussion of Changes for ITS 3.3.5.2 pages 2, 3, 4, and 5	Discussion of Changes for ITS 3.3.5.2 pages 2, 3, 4, 5, and 6
CTS Markup for Specification 3.3.6.1 page 4 of 12	CTS Markup for Specification 3.3.6.1 page 4 of 12
CTS Markup for Specification 3.3.6.1 page 5 of 12	CTS Markup for Specification 3.3.6.1 page 5 of 12

VOLUME 3	
SECTION 3.3	
DISCARD	**INSERT**
CTS Markup for Specification 3.3.6.1 page 8 of 12	CTS Markup for Specification 3.3.6.1 page 8 of 12
CTS Markup for Specification 3.3.6.1 page 10 of 12	CTS Markup for Specification 3.3.6.1 page 10 of 12
CTS Markup for Specification 3.3.6.1 page 11 of 12	CTS Markup for Specification 3.3.6.1 page 11 of 12
Discussion of Changes for ITS 3.3.6.1 page 4	Discussion of Changes for ITS 3.3.6.1 page 4
Discussion of Changes for ITS 3.3.6.1 pages 7, 8, 9, and 10	Discussion of Changes for ITS 3.3.6.1 pages 7, 8, 9, and 10
Discussion of Changes for ITS 3.3.6.1 page 13	Discussion of Changes for ITS 3.3.6.1 page 13
CTS Markup for Specification 3.3.6.2 page 6 of 10	CTS Markup for Specification 3.3.6.2 page 6 of 10
Discussion of Changes for ITS 3.3.6.2 page 4	Discussion of Changes for ITS 3.3.6.2 page 4
Discussion of Changes for ITS 3.3.6.3 pages 3 and 4	Discussion of Changes for ITS 3.3.6.3 pages 3 and 4
CTS Markup for Specification 3.3.8.1 page 1 of 6	CTS Markup for Specification 3.3.8.1 page 1 of 6
CTS Markup for Specification 3.3.8.1 page 2 of 6	CTS Markup for Specification 3.3.8.1 page 2 of 6
CTS Markup for Specification 3.3.8.1 page 5 of 6	CTS Markup for Specification 3.3.8.1 page 5 of 6
Discussion of Changes for ITS 3.3.8.1 pages 2, 3, 4, and 5	Discussion of Changes for ITS 3.3.8.1 pages 2, 3, 4, and 5
CTS Markup for Specification 3.3.8.2 page 1 of 1	CTS Markup for Specification 3.3.8.2 page 1 of 1
Discussion of Changes for ITS 3.3.8.2 pages 4 and 5	Discussion of Changes for ITS 3.3.8.2 pages 4 and 5
Discussion of Changes for ITS 3.3.8.2 page 8	Discussion of Changes for ITS 3.3.8.2 page 8

VOLUME 4	
SECTION 3.3	
DISCARD	**INSERT**
ISTS markup page 3.3-7	ISTS markup page 3.3-7
ISTS markup page 3.3-8	ISTS markup page 3.3-8
ISTS markup page 3.3-9	ISTS markup page 3.3-9
ISTS markup page 3.3-35	ISTS markup page 3.3-35
ISTS markup Insert Page 3.3-42	ISTS markup Insert Page 3.3-42
ISTS markup page 3.3-43	ISTS markup page 3.3-43
ISTS markup page 3.3-44	ISTS markup page 3.3-44
ISTS markup Insert Page 3.3-44	ISTS markup Insert Page 3.3-44
ISTS markup page 3.3-45	ISTS markup page 3.3-45
ISTS markup page 3.3-46	ISTS markup page 3.3-46
ISTS markup page 3.3-47	ISTS markup page 3.3-47
ISTS markup page 3.3-50	ISTS markup page 3.3-50
Justification for Deviations to ITS 3.3.5.2 page 1	Justification for Deviations to ITS 3.3.5.2 page 1
ISTS markup page 3.3-57	ISTS markup page 3.3-57
ISTS markup Insert Page 3.3-58	ISTS markup Insert Page 3.3-58
ISTS markup page 3.3-70	ISTS markup page 3.3-70
ISTS markup page 3.3-76	ISTS markup page 3.3-76
ISTS markup page 3.3-77	ISTS markup page 3.3-77
Justification for Deviations to ITS 3.3.8.1 page 1	Justification for Deviations to ITS 3.3.8.1 page 1
ISTS markup page 3.3-80	ISTS markup page 3.3-80
ISTS Bases markup page B 3.3-33	ISTS Bases markup page B 3.3-33
ISTS Bases markup page B 3.3-55	ISTS Bases markup page B 3.3-55
ISTS Bases markup Insert Page B 3.3-103	ISTS Bases markup Insert Page B 3.3-103
ISTS Bases markup page B 3.3-150	ISTS Bases markup page B 3.3-150
ISTS Bases markup page B 3.3-161	ISTS Bases markup page B 3.3-161
ISTS Bases markup page B 3.3-225	ISTS Bases markup page B 3.3-225
ISTS Bases markup page B 3.3-226	ISTS Bases markup page B 3.3-226
Generic No Significant Hazards Consideration, page 9	Generic No Significant Hazards Consideration, page 9

VOLUME 5	
SECTIONS 3.4 and 3.5	
DISCARD	**INSERT**
Discussion of Changes for ITS 3.4.1 page 4	Discussion of Changes for ITS 3.4.1 page 4
Discussion of Changes for ITS 3.4.5 page 2	Discussion of Changes for ITS 3.4.5 page 2
Discussion of Changes for ITS 3.5.2 page 7	Discussion of Changes for ITS 3.5.2 page 7
CTS Markup for Specification 3.5.3 page 1 of 1	CTS Markup for Specification 3.5.3 page 1 of 1
Discussion of Changes for ITS 3.5.3 pages 1 and 2	Discussion of Changes for ITS 3.5.3 pages 1 and 2

VOLUME 6	
SECTION 3.6	
DISCARD	INSERT
ITS Page 3.6.1.3-2	ITS Page 3.6.1.3-2
ITS Page 3.6.1.3-4	ITS Page 3.6.1.3-4
ITS Page 3.6.1.3-5	ITS Page 3.6.1.3-5
ITS Bases Page B 3.6.1.3-2	ITS Bases Page B 3.6.1.3-2
ITS Bases Page B 3.6.1.3-3	ITS Bases Page B 3.6.1.3-3
ITS Bases Page B 3.6.1.3-5	ITS Bases Page B 3.6.1.3-5
ITS Bases Page B 3.6.1.3-6	ITS Bases Page B 3.6.1.3-6
ITS Bases Page B 3.6.1.3-7	ITS Bases Page B 3.6.1.3-7
ITS Bases Page B 3.6.1.3-8	ITS Bases Page B 3.6.1.3-8
ITS Bases Page B 3.6.1.3-9	ITS Bases Page B 3.6.1.3-9
ITS Bases Page B 3.6.1.3-11	ITS Bases Page B 3.6.1.3-11
ITS Bases Page B 3.6.1.3-15	ITS Bases Page B 3.6.1.3-15
ITS Bases Page B 3.6.2.2-2	ITS Bases Page B 3.6.2.2-2
CTS Markup for Specification 3.6.1.2 page 2 of 2	CTS Markup for Specification 3.6.1.2 page 2 of 2
Discussion of Changes for ITS 3.6.1.2 pages 2, 3, and 4	Discussion of Changes for ITS 3.6.1.2 pages 2, 3, and 4
Discussion of Changes for ITS 3.6.1.3 page 2	Discussion of Changes for ITS 3.6.1.3 page 2
Discussion of Changes for ITS 3.6.1.3 page 8	Discussion of Changes for ITS 3.6.1.3 page 8
CTS Markup for Specification 3.6.1.7 page 1 of 2	CTS Markup for Specification 3.6.1.7 page 1 of 2
Discussion of Changes for ITS 3.6.1.7 page 1	Discussion of Changes for ITS 3.6.1.7 page 1
Discussion of Changes for ITS 3.6.1.7 pages 3 and 4	Discussion of Changes for ITS 3.6.1.7 pages 3, 4, and 5
CTS Markup for Specification 3.6.2.2 page 2 of 4	CTS Markup for Specification 3.6.2.2 page 2 of 4
Discussion of Changes for ITS 3.6.2.2 page 1	Discussion of Changes for ITS 3.6.2.2 page 1
Discussion of Changes for ITS 3.6.3.1 page 1	Discussion of Changes for ITS 3.6.3.1 page 1
CTS Markup for Specification 3.6.4.2 page 3 of 3	CTS Markup for Specification 3.6.4.2 page 3 of 3
Discussion of Changes for ITS 3.6.4.2 pages 4 and 5	Discussion of Changes for ITS 3.6.4.2 pages 4 and 5
Discussion of Changes for ITS 3.6.4.3 page 2	Discussion of Changes for ITS 3.6.4.3 page 2

VOLUME 7	
SECTION 3.6	
DISCARD	**INSERT**
ISTS markup page 3.6-8	ISTS markup page 3.6-8
ISTS markup page 3.6-10	ISTS markup page 3.6-10
Justification for Deviations to ITS 3.6.1.3 pages 1 and 2	Justification for Deviations to ITS 3.6.1.3 pages 1 and 2
ISTS Bases markup page B 3.6-15	ISTS Bases markup page B 3.6-15
ISTS Bases markup page B 3.6-18	ISTS Bases markup page B 3.6-18
ISTS Bases markup page B 3.6-19	ISTS Bases markup page B 3.6-19
ISTS Bases markup page B 3.6-20	ISTS Bases markup page B 3.6-20
ISTS Bases markup page B 3.6-21	ISTS Bases markup page B 3.6-21
ISTS Bases markup page B 3.6-22	ISTS Bases markup page B 3.6-22 and insert page B 3.6-22
ISTS Bases markup page B 3.6-26	ISTS Bases markup page B 3.6-26
ISTS Bases markup page B 3.6-32	ISTS Bases markup page B 3.6-32
Justification for Deviations to ITS Bases 3.6.1.3 page 1	Justification for Deviations to ITS Bases 3.6.1.3 page 1
Justification for Deviations to ITS Bases 3.6.1.7 page 1	Justification for Deviations to ITS Bases 3.6.1.7 page 1
ISTS Bases markup page B 3.6-65	ISTS Bases markup page B 3.6-65
ISTS Bases markup page B 3.6-104	ISTS Bases markup page B 3.6-104
No Significant Hazards Consideration for ITS 3.6.1.7 page 1	No Significant Hazards Consideration for ITS 3.6.1.7 pages 1 and 4
None	No Significant Hazards Consideration for ITS 3.6.1.7 page 4
No Significant Hazards Consideration for ITS 3.6.4.2 page 2	No Significant Hazards Consideration for ITS 3.6.4.2 page 2

VOLUME 8	
SECTION 3.7	
DISCARD	**INSERT**
CTS Markup for Specification 3.7.1 page 1 of 3	CTS Markup for Specification 3.7.1 page 1 of 3
Discussion of Changes for ITS 3.7.1 pages 1, 2, and 3	Discussion of Changes for ITS 3.7.1 pages 1, 2, and 3
CTS Markup for Specification 3.7.4 page 1 of 3	CTS Markup for Specification 3.7.4 page 1 of 3
Discussion of Changes for ITS 3.7.4 page 1	Discussion of Changes for ITS 3.7.4 page 1
CTS Markup for Specification 3.7.5 page 1 of 3	CTS Markup for Specification 3.7.5 page 1 of 3
Discussion of Changes for ITS 3.7.5 page 1	Discussion of Changes for ITS 3.7.5 page 1
Discussion of Changes for ITS 3.7.8 page 1	Discussion of Changes for ITS 3.7.8 page 1

VOLUME 9	
SECTION 3.8	
DISCARD	**INSERT**
ITS Bases page B 3.8.3-4	ITS Bases page B 3.8.3-4
ITS Bases page B 3.8.3-5	ITS Bases page B 3.8.3-5
ITS Bases page B 3.8.3-6	ITS Bases page B 3.8.3-6
Discussion of Changes for ITS 3.8.1 page 1	Discussion of Changes for ITS 3.8.1 page 1
Discussion of Changes for ITS 3.8.1 page 16	Discussion of Changes for ITS 3.8.1 page 16
Discussion of Changes for ITS 3.8.2 page 4	Discussion of Changes for ITS 3.8.2 page 4
Discussion of Changes for ITS 3.8.4 page 1	Discussion of Changes for ITS 3.8.4 page 1
Discussion of Changes for ITS 3.8.5 page 1	Discussion of Changes for ITS 3.8.5 page 1
Discussion of Changes for ITS 3.8.6 page 2	Discussion of Changes for ITS 3.8.6 page 2
CTS Markup for Specification 3.8.7 page 1 of 2	CTS Markup for Specification 3.8.7 page 1 of 2
CTS Markup for Specification 3.8.7 page 2 of 2	CTS Markup for Specification 3.8.7 page 2 of 2
Discussion of Changes for ITS 3.8.7 pages 1, 2 and 3	Discussion of Changes for ITS 3.8.7 pages 1, 2 and 3
CTS Markup for Specification 3.8.8 page 1 of 2	CTS Markup for Specification 3.8.8 page 1 of 2
CTS Markup for Specification 3.8.8 page 2 of 2	CTS Markup for Specification 3.8.8 page 2 of 2
ISTS Bases markup page B 3.8-46	ISTS Bases markup page B 3.8-46
ISTS Bases markup page B 3.8-47	ISTS Bases markup page B 3.8-47
ISTS Bases markup page B 3.8-49	ISTS Bases markup page B 3.8-49

VOLUME 10	
SECTIONS 3.9 AND 3.10	
DISCARD	**INSERT**
Discussion of Changes for CTS 3/4.12.C page 1	Discussion of Changes for CTS 3/4.12.C page 1

VOLUME 11	
CHAPTERS 4.0 AND 5.0	
DISCARD	**INSERT**
Discussion of Changes for ITS Chapter 4.0 page 2	Discussion of Changes for ITS Chapter 4.0 page 2
ITS Page 5.5-7	ITS Page 5.5-7
Discussion of Changes for ITS 5.5 page 11	Discussion of Changes for ITS 5.5 page 11

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.1.3.2 and SR 3.1.3.3

Control rod insertion capability is demonstrated by inserting each partially or fully withdrawn control rod at least one notch and observing that the control rod moves. The control rod may then be returned to its original position. This ensures the control rod is not stuck and is free to insert on a scram signal. These Surveillances are not required when THERMAL POWER is less than or equal to the actual LPSP of the RWM, since the notch insertions may not be compatible with the requirements of the analyzed rod position sequence (LCO 3.1.6) and the RWM (LCO 3.3.2.1). The 7 day Frequency of SR 3.1.3.2 is based on operating experience related to the changes in CRD performance and the ease of performing notch testing for fully withdrawn control rods. Partially withdrawn control rods are tested at a 31 day Frequency, based on the potential power reduction required to allow the control rod movement and considering the large testing sample of SR 3.1.3.2. Furthermore, the 31 day Frequency takes into account operating experience related to changes in CRD performance. At any time, if a control rod is immovable, a determination of that control rod's trippability (OPERABILITY) must be made and appropriate action taken.

These SRs are modified by Notes that allow 7 days and 31 days respectively, after withdrawal of the control rod and increasing power to above the LPSP, to perform the Surveillance. This acknowledges that the control rod must be first withdrawn and THERMAL POWER must be increased to above the LPSP before performance of the Surveillance, and therefore, the Notes avoid potential conflicts with SR 3.0.3 and SR 3.0.4.

SR 3.1.3.4

Verifying that the scram time for each control rod to 90% insertion is ≤ 7 seconds provides reasonable assurance that the control rod will insert when required during a DBA or transient, thereby completing its shutdown function. This SR is performed in conjunction with the control rod scram time testing of SR 3.1.4.1, SR 3.1.4.2, SR 3.1.4.3, and

(continued)

Table 3.3.1.1-1 (page 2 of 3)
Reactor Protection System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION D.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
2. Average Power Range Monitors (continued)					
c. Fixed Neutron Flux – High	1	2	F	SR 3.3.1.1.1 SR 3.3.1.1.2 SR 3.3.1.1.5 SR 3.3.1.1.9 SR 3.3.1.1.11 SR 3.3.1.1.15 SR 3.3.1.1.18 SR 3.3.1.1.19	≤ 122% RTP
d. Inop	1,2	2	G	SR 3.3.1.1.5 SR 3.3.1.1.9 SR 3.3.1.1.11 SR 3.3.1.1.18	NA
3. Reactor Vessel Steam Dome Pressure – High	1,2	2	G	SR 3.3.1.1.5 SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.18 SR 3.3.1.1.19	≤ 1054 psig
4. Reactor Vessel Water Level – Low	1,2	2	G	SR 3.3.1.1.1 SR 3.3.1.1.5 SR 3.3.1.1.11 SR 3.3.1.1.12 SR 3.3.1.1.17 SR 3.3.1.1.18 SR 3.3.1.1.19	≥ 10.24 inches
5. Main Steam Isolation Valve – Closure	1, 2(c)	8	F	SR 3.3.1.1.5 SR 3.3.1.1.11 SR 3.3.1.1.17 SR 3.3.1.1.18 SR 3.3.1.1.19	≤ 9.5% closed
6. Drywell Pressure – High	1,2	2	G	SR 3.3.1.1.5 SR 3.3.1.1.11 SR 3.3.1.1.13 SR 3.3.1.1.18 SR 3.3.1.1.19	≤ 1.94 psig

(continued)

(c) With reactor pressure ≥ 600 psig.

Table 3.3.1.1-1 (page 3 of 3)
Reactor Protection System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION D.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
7. Scram Discharge Volume Water Level – High					
a. Thermal Switch (Unit 2) Float Switch (Unit 3)	1,2	2	G	SR 3.3.1.1.5 SR 3.3.1.1.11 SR 3.3.1.1.17 SR 3.3.1.1.18	≤ 37.9 gallons (Unit 2) ≤ 39.1 gallons (Unit 3)
	5(a)	2	H	SR 3.3.1.1.5 SR 3.3.1.1.11 SR 3.3.1.1.17 SR 3.3.1.1.18	≤ 37.9 gallons (Unit 2) ≤ 39.1 gallons (Unit 3)
b. Differential Pressure Switch	1,2	2	G	SR 3.3.1.1.5 SR 3.3.1.1.11 SR 3.3.1.1.17 SR 3.3.1.1.18	≤ 37.9 gallons (Unit 2) ≤ 39.1 gallons (Unit 3)
	5(a)	2	H	SR 3.3.1.1.5 SR 3.3.1.1.11 SR 3.3.1.1.17 SR 3.3.1.1.18	≤ 37.9 gallons (Unit 2) ≤ 39.1 gallons (Unit 3)
8. Turbine Stop Valve – Closure	≥ 45% RTP	4	E	SR 3.3.1.1.5 SR 3.3.1.1.11 SR 3.3.1.1.14 SR 3.3.1.1.17 SR 3.3.1.1.18 SR 3.3.1.1.19	≤ 9.5% closed
9. Turbine Control Valve Fast Closure, Trip Oil Pressure – Low	≥ 45% RTP	2	E	SR 3.3.1.1.5 SR 3.3.1.1.11 SR 3.3.1.1.14 SR 3.3.1.1.17 SR 3.3.1.1.18 SR 3.3.1.1.19	≥ 466 psig
10. Turbine Condenser Vacuum – Low	1, 2(c)	2	F	SR 3.3.1.1.5 SR 3.3.1.1.8 SR 3.3.1.1.10 SR 3.3.1.1.18 SR 3.3.1.1.19	≥ 21.15 inches Hg vacuum
11. Reactor Mode Switch – Shutdown Position	1,2	1	G	SR 3.3.1.1.16 SR 3.3.1.1.18	NA
	5(a)	1	H	SR 3.3.1.1.16 SR 3.3.1.1.18	NA
12. Manual Scram	1,2	1	G	SR 3.3.1.1.8 SR 3.3.1.1.18	NA
	5(a)	1	H	SR 3.3.1.1.8 SR 3.3.1.1.18	NA

(a) With any control rod withdrawn from a core cell containing one or more fuel assemblies.

(c) With reactor pressure ≥ 600 psig.

SURVEILLANCE REQUIREMENTS

------------------------------------NOTE------------------------------------
When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 6 hours provided the associated Function maintains ATWS-RPT trip capability.

SURVEILLANCE		FREQUENCY
SR 3.3.4.1.1	Perform CHANNEL CHECK.	12 hours
SR 3.3.4.1.2	Calibrate the trip units.	92 days
SR 3.3.4.1.3	Perform CHANNEL FUNCTIONAL TEST.	92 days
SR 3.3.4.1.4	Perform CHANNEL CALIBRATION. The Allowable Values shall be: a. Reactor Vessel Water Level — Low Low $\geq$ -54.15 inches with time delay set to $\geq$ 8.3 seconds and $\leq$ 9.7 seconds; and b. Reactor Vessel Steam Dome Pressure — High: $\leq$ 1231 psig.	24 months
SR 3.3.4.1.5	Perform LOGIC SYSTEM FUNCTIONAL TEST including breaker actuation.	24 months

Table 3.3.5.1-1 (page 1 of 5)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Core Spray System					
a. Reactor Vessel Water Level – Low Low	1,2,3, 4(a), 5(a)	4(b)	B	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ -54.15 inches
b. Drywell Pressure – High	1,2,3	4(b)	B	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≤ 1.81 psig
c. Reactor Steam Dome Pressure – Low (Permissive)	1,2,3	2	C	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 308.5 psig and ≤ 341.7 psig
	4(a), 5(a)	2	B	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 308.5 psig and ≤ 341.7 psig
d. Core Spray Pump Discharge Flow – Low (Bypass)	1,2,3, 4(a), 5(a)	1 per pump	E	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 802 gpm and ≤ 992 gpm
e. Core Spray Pump Start-Time Delay Relay	1, 2, 3 4(a), 5(a)	1 per pump	C	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 13.8 seconds
2. Low Pressure Coolant Injection (LPCI) System					
a. Reactor Vessel Water Level – Low Low	1,2,3, 4(a), 5(a)	4	B	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ -54.15 inches
b. Drywell Pressure – High	1,2,3	4	B	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≤ 1.81 psig
c. Reactor Steam Dome Pressure – Low (Permissive)	1,2,3	2	C	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 308.5 psig and ≤ 341.7 psig
	4(a), 5(a)	2	B	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 308.5 psig and ≤ 341.7 psig

(continued)

(a) When associated ECCS subsystem(s) are required to be OPERABLE per LCO 3.5.2, "ECCS – Shutdown."

(b) Also required to initiate the associated diesel generator (DG).

Table 3.3.5.1-1 (page 2 of 5)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
2. LPCI System (continued)					
d. Reactor Steam Dome Pressure – Low (Break Detection)	1,2,3	4	B	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 802 psig and ≤ 895 psig
e. Low Pressure Coolant Injection Pump Start – Time Delay Relay Pumps B and D	1,2,3, 4(a), 5(a)	1 per pump	C	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 8.8 seconds
f. Low Pressure Coolant Injection Pump Discharge Flow – Low (Bypass)	1,2,3, 4(a), 5(a)	1 per loop	E	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 1107 gpm
g. Recirculation Pump Differential Pressure–High (Break Detection)	1, 2, 3	4 per pump	C	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 5.9 psid
h. Recirculation Riser Differential Pressure–High (Break Detection)	1, 2, 3	4	C	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 2.0 psid
i. Recirculation Pump Differential Pressure Time Delay - Relay (Break Detection)	1, 2, 3	2	C	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 0.53 seconds
j. Reactor Steam Dome Pressure Time Delay - Relay (Break Detection)	1, 2, 3	2	B	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 2.12 seconds
k. Recirculation Riser Differential Pressure Time Delay - Relay (Break Detection)	1, 2, 3	2	C	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 0.53 seconds

(continued)

(a) When associated ECCS subsystem(s) are required to be OPERABLE per LCO 3.5.2.

Table 3.3.5.1-1 (page 3 of 5)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
3. High Pressure Coolant Injection (HPCI) System					
a. Reactor Vessel Water Level — Low Low	1, 2(c), 3(c)	4	B	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ -54.15 inches
b. Drywell Pressure — High	1, 2(c), 3(c)	4	B	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≤ 1.81 psig
c. Reactor Vessel Water Level — High	1, 2(c), 3(c)	2	C	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 46.2 inches
d. Contaminated Condensate Storage Tank (CCST) Level — Low	1, 2(c), 3(c)	2 per CCST	D	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 11.1158 ft for CCST 2/3 A and ≥ 7.5637 ft for CCST 2/3 B
e. Suppression Pool Water Level — High	1, 2(c), 3(c)	2	D	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 15 ft 5.625 inches
f. High Pressure Coolant Injection Pump Discharge Flow — Low (Bypass)	1, 2(c), 3(c)	1	E	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 616 gpm
g. Manual Initiation	1, 2(c), 3(c)	1	C	SR 3.3.5.1.6	NA

(continued)

(c) With reactor steam dome pressure > 150 psig.

Table 3.3.5.1-1 (page 4 of 5)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
4. Automatic Depressurization System (ADS) Trip System A					
a. Reactor Vessel Water Level — Low Low	1, $2^{(c)}$, $3^{(c)}$	2	F	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ -54.15 inches
b. Drywell Pressure — High	1, $2^{(c)}$, $3^{(c)}$	2	F	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≤ 1.81 psig
c. Automatic Depressurization System Initiation Timer	1, $2^{(c)}$, $3^{(c)}$	1	G	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 113 seconds
d. Core Spray Pump Discharge Pressure — High	1, $2^{(c)}$, $3^{(c)}$	2	G	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 101.5 psig and ≤ 148.5 psig
e. Low Pressure Coolant Injection Pump Discharge Pressure — High	1, $2^{(c)}$, $3^{(c)}$	4	G	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 101.5 psig and ≤ 148.5 psig
f. Automatic Depressurization System Low Low Water Level Actuation Timer	1, $2^{(c)}$, $3^{(c)}$	1	G	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 580 seconds

(continued)

(c) With reactor steam dome pressure > 150 psig.

Table 3.3.5.1-1 (page 5 of 5)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
5. ADS Trip System B					
a. Reactor Vessel Water Level — Low Low	1, $2^{(c)}$, $3^{(c)}$	2	F	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ -54.15 inches
b. Drywell Pressure — High	1, $2^{(c)}$, $3^{(c)}$	2	F	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≤ 1.81 psig
c. Automatic Depressurization System Initiation Timer	1, $2^{(c)}$, $3^{(c)}$	1	G	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 113 seconds
d. Core Spray Pump Discharge Pressure — High	1, $2^{(c)}$, $3^{(c)}$	2	G	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 101.5 psig and ≤ 148.5 psig
e. Low Pressure Coolant Injection Pump Discharge Pressure — High	1, $2^{(c)}$, $3^{(c)}$	4	G	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 101.5 psig and ≤ 148.5 psig
f. Automatic Depressurization System Low Low Water Level Actuation Timer	1, $2^{(c)}$, $3^{(c)}$	1	G	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 580 seconds

(c) With reactor steam dome pressure > 150 psig.

SURVEILLANCE REQUIREMENTS

-----------------------------------NOTE-----------------------------------
When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 6 hours provided the Reactor Vessel Pressure—High Function maintains IC initiation capability.

SURVEILLANCE		FREQUENCY
SR 3.3.5.2.1	Perform CHANNEL FUNCTIONAL TEST.	31 days
SR 3.3.5.2.2	------------------NOTE------------------ Not required for the time delay portion of the channel. -------------------------------------- Perform CHANNEL CALIBRATION. The Allowable Value shall be ≤ 1064 psig.	92 days
SR 3.3.5.2.3	Perform CHANNEL CALIBRATION for the time delay portion of the channel. The Allowable Value shall be ≤ 17 seconds.	24 months
SR 3.3.5.2.4	Perform LOGIC SYSTEM FUNCTIONAL TEST.	24 months

Table 3.3.6.1-1 (page 1 of 3)
Primary Containment Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Main Steam Line Isolation					
a. Reactor Vessel Water Level − Low Low	1,2,3	2	D	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ -56.77 inches
b. Main Steam Line Pressure − Low	1	2	E	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≥ 831 psig
c. Main Steam Line Pressure − Timer	1	2	E	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 0.280 seconds (Unit 2) ≤ 0.236 seconds (Unit 3)
d. Main Steam Line Flow − High	1,2,3	2 per MSL	D	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 160.5 psid (Unit 2) ≤ 117.1 psid (Unit 3)
e. Main Steam Line Tunnel Temperature − High	1,2,3	2 per trip string	D	SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 200°F
2. Primary Containment Isolation					
a. Reactor Vessel Water Level − Low	1,2,3	2	G	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ 10.24 inches
b. Drywell Pressure − High	1,2,3	2	G	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 1.81 psig
c. Drywell Radiation − High	1,2,3	1	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 77 R/hr

(continued)

Table 3.3.6.1-1 (page 2 of 3)
Primary Containment Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
3. High Pressure Coolant Injection (HPCI) System Isolation					
a. HPCI Steam Line Flow — High	1,2,3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 290.16% of rated steam flow (Unit 2) ≤ 288.23% of rated steam flow (Unit 3)
b. HPCI Steam Line Flow — Timer	1,2,3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ 3.2 seconds and ≤ 8.8 seconds
c. HPCI Steam Supply Line Pressure — Low	1,2,3	2	F	SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ 104 psig
d. HPCI Turbine Area Temperature — High	1,2,3	4(a)	F	SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 189°F
4. Isolation Condenser System Isolation					
a. Steam Flow — High	1,2,3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 290.76% of rated steam flow
b. Return Flow — High	1,2,3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 30.2 inches water (Unit 2) ≤ 13.7 inches water (Unit 3)

(continued)

(a) All four channels must be associated with a single trip string.

Table 3.3.6.3-1 (page 1 of 1)
Relief Valve Instrumentation

FUNCTION	REQUIRED CHANNELS PER FUNCTION	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Low Set Relief Valves			
a. Reactor Vessel Pressure Setpoint	1 per valve	SR 3.3.6.3.1 SR 3.3.6.3.3	≤ 1110.5 psig
b. Reactuation Time Delay	2 per valve	SR 3.3.6.3.2 SR 3.3.6.3.3	≥ 8.5 seconds and ≤ 11.4 seconds
2. Relief Valves			
a. Reactor Vessel Pressure Setpoint	1 per valve	SR 3.3.6.3.1 SR 3.3.6.3.3	≤ 1133.5 psig

SURVEILLANCE REQUIREMENTS

---------------------------------NOTES---------------------------------

1. Refer to Table 3.3.8.1-1 to determine which SRs apply for each LOP Function.

2. When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 2 hours provided the associated Function maintains LOP initiation capability.

SURVEILLANCE		FREQUENCY
SR 3.3.8.1.1	Perform CHANNEL FUNCTIONAL TEST.	18 months
SR 3.3.8.1.2	Perform CHANNEL CALIBRATION.	18 months
SR 3.3.8.1.3	Perform CHANNEL FUNCTIONAL TEST.	24 months
SR 3.3.8.1.4	Perform CHANNEL CALIBRATION.	24 months
SR 3.3.8.1.5	Perform LOGIC SYSTEM FUNCTIONAL TEST.	24 months

B

Table 3.3.8.1-1 (page 1 of 1)
Loss of Power Instrumentation

FUNCTION	REQUIRED CHANNELS PER BUS	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. 4160 V Essential Service System Bus Undervoltage (Loss of Voltage)	2	SR 3.3.8.1.3 SR 3.3.8.1.4 SR 3.3.8.1.5	≥ 2796.85 V and ≤ 3063.20 V
2. 4160 V Essential Service System Bus Undervoltage (Degraded Voltage)			
a. Bus Undervoltage/Time Delay	2	SR 3.3.8.1.1 SR 3.3.8.1.2 SR 3.3.8.1.5	≥ 3861 V and ≤ 3911 V with time delay ≥ 5.7 seconds and ≤ 8.3 seconds
b. Time Delay (No LOCA)	2	SR 3.3.8.1.1 SR 3.3.8.1.2 SR 3.3.8.1.5	≥ 279 seconds and ≤ 321 seconds

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.3.8.2.1	------------------NOTE------------------ Only required to be performed prior to entering MODE 2 from MODE 3 or 4, when in MODE 4 for ≥ 24 hours. -- Perform CHANNEL FUNCTIONAL TEST.	184 days
SR 3.3.8.2.2	Perform CHANNEL CALIBRATION. The Allowable Values shall be: a. Overvoltage ≤ 128.6 V, with time delay set to ≤ 3.9 seconds. b. Undervoltage ≥ 106.3 V, with time delay set to ≤ 3.9 seconds. c. Underfrequency ≥ 55.7 Hz, with time delay set to ≤ 3.9 seconds.	24 months
SR 3.3.8.2.3	Perform a system functional test.	24 months

BASES (continued)

REFERENCES

1. UFSAR, Section 7.2.
2. UFSAR, Section 5.2.2.2.3.
3. UFSAR, Section 6.2.1.3.2.
4. UFSAR, Chapter 15.
5. UFSAR, Section 15.4.1.
6. NEDO-23842, "Continuous Control Rod Withdrawal in the Startup Range," April 18, 1978.
7. UFSAR, Section 15.4.10.
8. UFSAR, Section 15.6.5.
9. UFSAR, Section 15.2.5.
10. P. Check (NRC) letter to G. Lainas (NRC), "BWR Scram Discharge System Safety Evaluation," December 1, 1980.
11. UFSAR, Section 15.2.3.
12. UFSAR, Section 15.2.2.
13. NEDC-30851-P-A , "Technical Specification Improvement Analyses for BWR Reactor Protection System," March 1988.
14. Technical Requirements Manual.

BASES

REFERENCES (continued)

7. Letter to T.A. Pickens (BWROG) from G.C. Lainas (NRC), "Amendment 17 to General Electric Licensing Topical Report NEDE-24011-P-A," BWROG-8644, August 15, 1986.

8. NFSR-0091, Benchmark of CASMO/MICROBURN BWR Nuclear Design Methods, Commonwealth Edison Topical Report, (as specified in Technical Specification 5.6.5).

9. NRC SER, "Acceptance of Referencing of Licensing Topical Report NEDE-24011-P-A," "General Electric Standard Application for Reactor Fuel, Revision 8, Amendment 17," December 27, 1987.

10. "Modifications to the Requirements for Control Rod Drop Accident Mitigating Systems," BWR Owners' Group, July 1986.

11. GENE-770-06-1-A, "Addendum to Bases for Changes to Surveillance Test Intervals and Allowed Out-of-Service Times for Selected Instrumentation Technical Specifications," December 1992.

12. NEDC-30851-P-A, Supplement 1, "Technical Specification Improvement Analysis for BWR Control Rod Block Instrumentation," October 1988.

BASES

BACKGROUND

Low Pressure Coolant Injection System (continued)

higher than loop B, the logic will provide a signal to close the B recirculation loop discharge valve, open the LPCI injection valve to the B recirculation loop and close the LPCI injection valve to the A recirculation loop. This is the "default" choice in the LPCI Loop Select Logic. If recirculation loop A pressure indicates higher than loop B pressure, approximately 2 psig, the recirculation discharge valve in loop A is closed, the LPCI injection valve to loop A is signaled to open and the LPCI injection valve to loop B is signaled to close. The four dp switches which provide input to this portion of the logic detect the pressure difference between the corresponding risers to the jet pumps in each recirculation loop. The four dp switches are connected to relays whose contacts are connected to two trip systems. The contacts in each trip system are arranged in a one-out-of-two taken twice logic. There are two redundant trip systems in the LPCI Loop Select Logic. The complete logic in each trip system must actuate for operation of the LPCI Loop Select Logic.

High Pressure Coolant Injection System

The HPCI System may be initiated by either automatic or manual means. Automatic initiation occurs for conditions of Reactor Vessel Water Level — Low Low or Drywell Pressure — High. The Reactor Vessel Water Level — Low Low variable is monitored by four redundant differential pressure transmitters, which are, in turn, connected to four trip units and the Drywell Pressure — High variable is monitored by four redundant pressure switches. The output of each trip unit and switch is connected to relays whose contacts are arranged in a one-out-of-two taken twice logic for each Function. The logic can also be initiated by use of a Manual Initiation push button.

The HPCI pump discharge flow is monitored by a flow switch. When the pump is running and discharge flow is low enough so that pump overheating may occur, the minimum flow return line valve is opened.

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.3.5.2.1 (continued)

Any setpoint adjustment shall be consistent with the assumptions of the current plant specific setpoint methodology.

The Frequency of 31 days is based on plant operating experience with regard to channel OPERABILITY and drift that demonstrates that failure of more than one channel in any 31 day interval is rare.

SR 3.3.5.2.2 and SR 3.3.5.2.3

A CHANNEL CALIBRATION is a complete check of the instrument loop and the sensor. This test verifies the channel responds to the measured parameter within the necessary range and accuracy. CHANNEL CALIBRATION leaves the channel adjusted to account for instrument drifts between successive calibrations consistent with the plant specific setpoint methodology. A Note to SR 3.3.5.2.2 states that this SR is not required for the time delay portion of these channels. This allowance is consistent with the plant specific setpoint methodology. This portion of the channels must be calibrated in accordance with SR 3.3.5.2.3.

The Frequency of SR 3.3.5.2.2 is based upon the assumption of a 92 day calibration interval in the determination of the magnitude of equipment drift in the setpoint analysis.

The Frequency of SR 3.3.5.2.3 is based upon the assumption of a 24 month calibration interval in the determination of the magnitude of equipment drift in the setpoint analysis.

SR 3.3.5.2.4

The LOGIC SYSTEM FUNCTIONAL TEST demonstrates the OPERABILITY of the required initiation logic for a specific channel. The system functional testing performed in LCO 3.5.3 overlaps this Surveillance to provide complete testing of the safety function.

The 24 month Frequency is based on the need to perform this Surveillance under the conditions that apply during a plant outage and the potential for an unplanned transient if the

(continued)

BASES

SURVEILLANCE REQUIREMENTS	SR 3.3.5.2.4 (continued) Surveillance were performed with the reactor at power. Operating experience has shown that these components usually pass the Surveillance when performed at the 24 month Frequency.
REFERENCES	1. GENE-770-06-2-A, "Addendum to Bases for Changes to Surveillance Test Intervals and Allowed Out-of-Service Times for Selected Instrumentation Technical Specifications," December 1992.

BASES

APPLICABLE SAFETY ANALYSES, LCO, and APPLICABILITY

1.e. Main Steam Line Tunnel Temperature – High (continued)

Main steam line tunnel temperature signals are initiated from temperature switches located in the four areas being monitored. Even though physically separated from each other, any temperature switch in any of the four areas is able to detect a leak. Therefore, sixteen channels of Main Steam Line Tunnel Temperature – High Function are available, but only eight channels (two channels in each of the four trip strings) are required to be OPERABLE to ensure that no single instrument failure can preclude the isolation function.

The Main Steam Line Tunnel Temperature – High Allowable Value is chosen to detect a leak of less than 1% rated steam flow. 1B

These Functions isolate the Group 1 valves.

Primary Containment Isolation

2.a. Reactor Vessel Water Level – Low

Low RPV water level indicates that the capability to cool the fuel may be threatened. The valves whose penetrations communicate with the primary containment are isolated to limit the release of fission products. The isolation of the primary containment on low RPV water level supports actions to ensure that offsite dose limits of 10 CFR 100 are not exceeded. The Reactor Vessel Water Level – Low Function associated with isolation is implicitly assumed in the UFSAR analysis as these leakage paths are assumed to be isolated post LOCA.

Reactor Vessel Water Level – Low signals are initiated from differential pressure transmitters that sense the difference between the pressure due to a constant column of water (reference leg) and the pressure due to the actual water level (variable leg) in the vessel. Four channels of Reactor Vessel Water Level – Low Function are available and are required to be OPERABLE to ensure that no single instrument failure can preclude the isolation function.

(continued)

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.3.8.1.1 and SR 3.3.8.1.3

A CHANNEL FUNCTIONAL TEST is performed on each required channel to ensure that the channel will perform the intended function. Any setpoint adjustment shall be consistent with the assumptions of the current plant specific setpoint methodology.

The Frequencies of 18 months and 24 months are based on operating experience with regard to channel OPERABILITY and drift, which demonstrates that failure of more than one channel of a given Function in any 18 month or 24 month interval, as applicable, is a rare event.

SR 3.3.8.1.2 and SR 3.3.8.1.4

A CHANNEL CALIBRATION is a complete check of the instrument loop and the sensor. This test verifies the channel responds to the measured parameter within the necessary range and accuracy. CHANNEL CALIBRATION leaves the channel adjusted to account for instrument drifts between successive calibrations consistent with the plant specific setpoint methodology.

The Frequency is based upon the assumption of an 18 month or 24 month calibration interval, as applicable, in the determination of the magnitude of equipment drift in the setpoint analysis.

SR 3.3.8.1.5

The LOGIC SYSTEM FUNCTIONAL TEST demonstrates the OPERABILITY of the required actuation logic for a specific channel. The system functional testing performed in LCO 3.8.1 and LCO 3.8.2 overlaps this Surveillance to provide complete testing of the assumed safety functions.

The 24 month Frequency is based on the need to perform this Surveillance under the conditions that apply during a plant outage and the potential for an unplanned transient if the Surveillance were performed with the reactor at power. Operating experience has shown these components usually pass the Surveillance when performed at the 24 month Frequency.

(continued)

LSSS 2.2

3.3.1.1-1

TABLE 2.2.A-1

REACTOR PROTECTION SYSTEM INSTRUMENTATION SETPOINTS

	Functional Unit	Trip Setpoint / Allowable Value (A.10)	
1.	1. Intermediate Range Monitor:		
1.a	a. Neutron Flux - High	≤120/125 divisions of full scale (LF.1)	A
1.b	b. Inoperative	NA	
2.	2. Average Power Range Monitor:		
2.a	a. Setdown Neutron Flux - High	≤15% of RATED THERMAL POWER (LF.1)	A
2.b	b. Flow Biased Neutron Flux - High		
	1) Dual Recirculation Loop Operation		
	a) Flow Biased	≤0.58W[a] + 62%, with a maximum of (LA.4) (LF.1)	A
	b) High Flow Maximum	≤120% of RATED THERMAL POWER (LF.1)	A
2.b	2) Single Recirculation Loop Operation		
	a) Flow Biased	≤0.58W[a] + 58.5%, with a maximum of (LA.4) (LF.1)	A
	b) High Flow Maximum	≤116.5% of RATED THERMAL POWER (LF.1)	A
2.c	c. Fixed Neutron Flux - High	≤120% of RATED THERMAL POWER (LF.1)	A
2.d	d. Inoperative	NA	
3.	3. Reactor Vessel Steam Dome Pressure - High	≤1060 psig (LF.1)	A
4.	4. Reactor Vessel Water Level - Low	≥144 inches above top of active fuel[b] (A.15) (LA.5) (LF.1)	A
5.	5. Main Steam Line Isolation Valve - Closure	≤10% closed (LF.1)	B
	6. Deleted		

LA.4

a W shall be the recirculation loop flow expressed as a percentage of the recirculation loop flow which produces a rated core flow of 98 million lbs/hr.

b The top of active fuel is defined to be 360 inches above vessel zero. (LA.5) (A.15)

A

LSSS 2.2

3.3.1.1-1
TABLE 2.2.A-1 (Continued)

REACTOR PROTECTION SYSTEM INSTRUMENTATION SETPOINTS A.10

Functional Unit	Trip Setpoint / Allowable Value	
6. 7. Drywell Pressure - High	≤2 psig	LF.1
7. 8. Scram Discharge Volume Water Level - High	≤40.4 gallons (Unit 2) ≤41 gallons (Unit 3)	LF.1 LF.1
8. 9. Turbine Stop Valve - Closure	≤10% closed	LF.1
10. Turbine EHC Control Oil Pressure - Low	≥900 psig	A.8
9. 11. Turbine Control Valve Fast Closure	≥460 psig EHC fluid pressure	LF.1
10. 12. Turbine Condenser Vacuum - Low	≥21 inches Hg vacuum	LF.1
11. 13. Reactor Mode Switch Shutdown Position	NA	
12. 14. Manual Scram	NA	

A
B
A
A

TECHNICAL CHANGES - LESS RESTRICTIVE

LF.1 (cont'd) Use of the previously discussed methodologies for determining Allowable Values, instrument setpoints, and analyzing channel/instrument performance ensure that the design basis and associated safety limits will not be exceeded during plant operation. These evaluations, determinations, and analyses now form a portion of the plants design bases.

"Specific"

L.1 CTS Table 4.1.A-1 Note (a) excludes neutron detectors from the CHANNEL CALIBRATION of the IRM and APRM instrumentation channels. This allowance has been incorporated as a Note in proposed ITS SR 3.3.1.1.15 (for APRMs) and proposed ITS SR 3.3.1.1.17 (for IRMs). This is allowed since the neutron detectors are passive devices, with minimal drift, because of the difficulty of simulating a meaningful signal, and since neutron detector sensitivity is compensated for by performing the 7 day calorimetic calibration (SR 3.3.1.1.2) and the LPRM calibration in SR 3.3.1.1.9. This allowance is also required for RPS RESPONSE TIME TESTING due to the difficulties of simulating a meaningful signal. This allowance is also acceptable because the principles of detector operation virtually ensure an instantaneous response time. Therefore, a Note (NOTE 1) has been added to CTS 4.1.A.3 (the RPS RESPONSE TIME test) as shown in proposed ITS SR 3.3.1.1.19. This change is consistent with BWR ISTS, NUREG-1433, Rev. 1.

L.2 During normal operation in MODES 3 and 4, all control rods are fully inserted and the Reactor Mode Switch Shutdown position control rod withdrawal block (ITS 3.3.2.1) does not allow any control rod to be withdrawn. Under these conditions, the RPS function is not required by design to be OPERABLE; |B therefore the IRM, APRM, Reactor Mode Switch Shutdown Position, and Manual Scram requirements for MODES 3 and 4 (CTS Tables 3.1.A-1 and 4.1.A-1 Functional Units 1, 2.a (MODE 3 only), 2.d (MODE 3 only) 13, and 14) have been deleted. The Actions associated with these Functions for MODES 3 and 4 are also deleted (CTS Table 3.1.A-1 Actions 12, 17, and 18). Special Operations LCO 3.10.2 and LCO 3.10.3 will allow a single control rod to be withdrawn in MODES 3 or 4 by allowing the Reactor Mode Switch to be in the Refuel position. Therefore, the IRM, Reactor Mode Switch Position, and Manual Scram MODES 3 and 4 RPS requirements have been included in LCO 3.10.2 and LCO 3.10.3. The APRM requirements have not been included in ITS 3.10.2 and 3.10.3 since only one rod is allowed to be withdrawn and therefore the neutron flux levels are low.

TECHNICAL CHANGES - LESS RESTRICTIVE (continued)

L.3 CTS Tables 3.1.A-1 and 4.1.A-1 require Functional Units 1.a, 1.b, 13, and 14 (IRM Neutron Flux—High, IRM Inoperative, Reactor Mode Switch—Shutdown Position, and Manual Scram) to be OPERABLE in MODE 5. ITS 3.3.1.1 requires these Functions to be OPERABLE in MODE 5 when a control rod is withdrawn from a core cell containing one or more fuel assemblies (ITS Table 3.3.1.1-1 Note (a)). Control rods withdrawn from or inserted into a core cell containing no fuel assemblies have a negligible impact on the reactivity of the core and therefore are not required to be OPERABLE with the capability to scram. Provided all rods otherwise remain inserted, the RPS Functions serve no purpose and are not required. In this condition the required SHUTDOWN MARGIN (ITS 3.1.1) and the required one-rod-out interlock (ITS 3.9.2) ensure no event requiring RPS will occur. This change is also similar to the allowance provided in CTS Table 3.1.A-1 Note (i) and CTS Table 4.1.A-1 Note (j) for Functional Units 8.a and 8.b (Refer to Discussion of Change L.4 below for further discussion). In addition, CTS Table 3.1.A-1 Actions 13 and 19, as they apply to Functional Units 1.a, 1.b, 13, and 14, have also been modified in ITS 3.3.1.1 ACTION H to be consistent with the new Applicability. Currently, Core Alterations are required to be suspended and all insertable control rods must be inserted. Since all control rods are required to be fully inserted during fuel movement (enforced by ITS 3.9.1), the proposed Applicability cannot be entered while moving fuel. Thus, the only possible Core Alteration is control rod withdrawal, which is adequately addressed in ITS 3.3.1.1 ACTION H. When control rods are withdrawn in MODE 5 in accordance with Special Operations LCOs (ITS Section 3.10), the requirements of ITS 3.10 LCOs provide sufficient controls to ensure the possibility of an inadvertent criticality is precluded. Furthermore, CTS Table 3.1.A-1 Action 19 also requires the reactor mode switch to be locked in Shutdown. This Action has also been deleted since the proposed Applicability only requires the control rods to be inserted (i.e., once the control rods are inserted, the RPS Functions are no longer required to be OPERABLE, thus there is no need to place the reactor mode switch in Shutdown). This is consistent with the BWR ISTS, NUREG-1433, Rev. 1.

L.4 The Applicability of CTS Table 3.1.A-1 Functional Units 8.a and 8.b, including Notes (b) and (i), and Table 4.1.A-1 Functional Units 8.a and 8.b, including Notes (j) and (k), has been modified to only require ITS Table 3.3.1.1-1 RPS Functions 7.a and 7.b to be OPERABLE in MODE 5 with any control rod withdrawn from a core cell containing one or more fuel assemblies. In addition, ITS 3.3.1.1 ACTION H for MODE 5 only requires action to be initiated to fully insert control rods in core cells containing one or more fuel assemblies. Control rods withdrawn from or inserted into a core cell containing no fuel assemblies

TECHNICAL CHANGES - LESS RESTRICTIVE

L.8 (cont'd) Surveillances performed during the cycle will help to ensure the channel remains OPERABLE. The remainder of the APRM Flow Biased Neutron Flux—High Function channels will be calibrated in accordance with proposed SR 3.3.1.1.15 at a 184 day Frequency. Note 3 has been added to this Surveillance (SR 3.3.1.1.15) which excludes the flow portion of the channels for Function 2.b.

L.9 The time to reach < 45% RTP has been extended from 2 hours (CTS Table 3.1.A-1 Action 16) to 4 hours (ITS 3.3.1.1 Required Action E.1). This extension provides the necessary time to decrease power in a controlled and orderly manner that is within the capabilities of the unit, assuming the minimum required equipment is OPERABLE. This extra time is an acceptable exchange in risk; the risk of an event during the additional period for the unit to be < 45% RTP, versus the potential risk of a unit upset that could challenge safety systems resulting from a rapid power reduction. This time is consistent with the time provided in the BWR ISTS, NUREG-1433, Rev. 1.

L.10 CTS 4.1.A.3 requires the demonstration of the response time for "each" RPS functional unit in Table 3.1.A-1. The response time for some of the RPS Functions (i.e., Manual Scram, Reactor Mode Switch, IRMs, APRM Neutron Flux Setdown, APRM inop, and Scram Discharge Volume Water Level) are not assumed in any accident analysis, and therefore the proposed RPS RESPONSE TIME test (ITS SR 3.3.1.1.19) is only associated with those Functions that are credited in the accident analysis where an explicit RPS RESPONSE TIME is assumed. This change is acceptable since the OPERABILITY of the remaining channels will still be confirmed during the LOGIC SYSTEM FUNCTIONAL TEST, CHANNEL FUNCTIONAL TEST or the CHANNEL CALIBRATION surveillances, as applicable. This change is consistent with BWR ISTS, NUREG-1433, Revision 1.

L.11 The requirement in CTS Table 4.1.A-1 Footnote (d) to post a notification on the reactor control panel if any required APRM must be adjusted to be within 2% of RATED THERMAL POWER has been deleted. The Dresden 2 and 3 Operating Licenses limit the operation of each unit to 2527 megawatts thermal, which is 100% RATED THERMAL POWER (RTP). In addition, the posting of the adjustment in the control room is not necessary to be described in the Technical Specifications. This requirement is essentially an "operator aid" to remind the operators that an adjustment must be made. This requirement is not necessary in the Technical Specifications to ensure power is maintained within the limit allowed by the Operating License. Operators are required by 10 CFR 55 to comply with the Operating License. Therefore, this requirement has been deleted from Technical Specifications.

TECHNICAL CHANGES - LESS RESTRICTIVE (continued)

L.5 The CTS 3.10.B Action to immediately "...insert all insertable control rods" is revised to "initiate action to insert all insertable control rods...." During MODE 5, it may not be possible to immediately insert all insertable control rods. In this situation, the CTS do not provide direction as to the action to take if control rods cannot be inserted immediately. As a result, the ITS provide a Required Action (ITS 3.3.1.2 Required Action E.2) to immediately initiate action and continue attempts to insert all insertable control rods. This change ensures that actions are taken to insert all insertable control rods in a timely manner while continuing to provide direction if attempts fail to immediately insert all insertable control rods. This change is considered to be acceptable since ITS 3.3.1.2 Required Action E.1 ensures the probability of occurrence of postulated events involving changes in reactivity in MODE 5 is minimized by suspension of CORE ALTERATIONS.

L.6 The CTS 3.10.B Action requires fully inserting all insertable control rods if one or more required SRMs are inoperable in MODE 5. In this condition, ITS 3.3.1.2 only requires inserting all insertable control rods in core cells containing one or more fuel assemblies (ITS 3.3.1.2 Required Action E.2). Control rods withdrawn from or inserted into a core cell containing no fuel assemblies have a negligible impact on the reactivity of the core and therefore are not required to be inserted to maintain the reactor subcritical.

L.7 A new Note has been added to CTS 3.10.B (ITS Table 3.3.1.2-1 Note b) that allows only one SRM to be OPERABLE under certain conditions. In MODE 5, during a spiral offload or reload, an SRM outside the fueled region will no longer be required to be OPERABLE, since it is not capable of monitoring normal changes in neutron flux in the fueled region of the core. However, the SRM detector in the fueled region must be OPERABLE, as required by proposed SR 3.3.1.2.2.a and Note 2 to SR 3.3.1.2.2 (see Discussion of Change M.3). The SRM count rate will be required during fuel loading when the SRM is in the fueled region and four bundles are around this SRM (as currently required by CTS 4.10.B.3 and modified by Discussion of Change L.4 and included in proposed SR 3.3.1.2.4).

L.8 CTS 4.2.G.1 and CTS 4.10.B.3 require the SRM count rate to be at least 3 cps. ITS SR 3.3.1.2.4 requires the verification that the SRM count rate is at least 3 cps or at least 0.7 cps with a signal to noise ratio ≥ 20:1. The optional count rate of at least 0.7 cps with a signal to noise ratio ≥ 20:1 is acceptable since the SRMs could still monitor neutron counts with the same confidence as in the current value. The high signal to noise ratio is required so that the SRM can distinguish between actual counts and noise at the lower count rates. 8

TECHNICAL CHANGES - MORE RESTRICTIVE

M.3 (cont'd) determined Operable (by performing a CHANNEL FUNCTIONAL TEST) within 1 hour after withdrawal of any control rod when RTP is ≤ 10%, not just when the withdrawal is for the purpose of making the reactor critical. This change is necessary to ensure the safety analysis assumptions concerning control rod worth are maintained by ensuring the RWM is Operable during any potential change in control rod worth. This is an additional restriction on plant operation.

M.4 With the RWM inoperable, the CTS 3.3.L Action allows control rod movement to continue provided a second licensed operator or other qualified member of the technical staff verifies control rod movement is in compliance with the prescribed control rod sequence. In ITS 3.3.2.1, with the RWM inoperable during a reactor startup, continued movement of control rods will only be allowed if ≥ 12 control rods are withdrawn (ITS 3.3.2.1 Required Action C.2.1.1) or if a startup with RWM inoperable has not been performed in the last calendar year (ITS 3.3.2.1 Required Action C.2.1.2). These new requirements are being added to ensure the RWM is reliable. These changes are additional restrictions on plant operation.

M.5 A new RWM Surveillance has been added (proposed SR 3.3.2.1.6) to verify the automatic enabling point of the RWM. This SR ensures that the RWM is not inadvertently bypassed with power level ≤ 10% RTP. This is an additional restriction on plant operation to ensure proper operation of the RWM. |B

M.6 A new RWM Surveillance has been added (proposed SR 3.3.2.1.9) to verify the bypassing and position of control rods required to be bypassed in RWM by a second licensed operator or other qualified member of the technical staff. This is required prior to and during the movement of control rods bypassed in RWM. This is an additional restriction on plant operation to ensure proper operation of the RWM.

TECHNICAL CHANGES - LESS RESTRICTIVE

"Generic"

LA.1 CTS Table 3.2.E-1 Note (a) states that the RBM shall be automatically bypassed when a peripheral control rod is selected. This system design detail is proposed to be relocated to the UFSAR. This design detail is not necessary to be included in the Technical Specifications to ensure the OPERABILITY of the RBM instrumentation since OPERABILITY requirements are adequately addressed in ITS 3.3.2.1. In addition, when a peripheral control rod is selected, RBM is

TECHNICAL CHANGES - LESS RESTRICTIVE (continued)

L.2 CTS 4.3.L.2 requires a RWM CHANNEL FUNCTIONAL TEST to be performed within 8 hours prior to withdrawal of control rods for the purpose of making the reactor critical and CTS 4.3.L.3 requires a RWM CHANNEL FUNCTIONAL TEST to be performed prior to reducing thermal power to < 20% RTP. Proposed SRs 3.3.2.1.2 and 3.3.2.1.3 are similar to CTS 4.3.L.2 and 4.3.L.3, except a test Frequency is specified (92 days). This change effectively extends the CHANNEL FUNCTIONAL TEST to 92 days, i.e., the CHANNEL FUNCTIONAL TEST is not required to be performed if a startup or shutdown occurs within 92 days of a previous startup or shutdown. The RWM is a reliable system, as shown by both a review of maintenance history and by successful completion of previous startup surveillances. As a result, the effect on safety due to the extended Surveillance is small. Also, the increased testing prior to each startup and shutdown increases the wear on the instruments, thereby reducing overall reliability. Therefore, an additional Surveillance other than the quarterly Surveillance is not needed to assure the instruments will perform their associated safety function. In addition, other similar rod block functions have a 92 day CHANNEL FUNCTIONAL TEST. Notes are also being added to CTS 4.3.L.2 and 3. The Note to proposed SR 3.3.2.1.2 exempts the CHANNEL FUNCTIONAL TEST requirement of the RWM until 1 hour after any control rod is withdrawn at ≤ 10% RTP in MODE 2. The Note to proposed SR 3.3.2.1.3 exempts the CHANNEL FUNCTIONAL TEST requirement of the RWM until 1 hour after THERMAL POWER is ≤ 10% RTP in MODE 1. These changes are acceptable since the only way the required Surveillances can be performed prior to entry in the specified condition is by utilizing jumpers or lifted leads. Use of these devices is not recommended since minor errors in their use may significantly increase the probability of a reactor transient or event which is a precursor to a previously analyzed accident. Therefore, time is allowed to conduct the Surveillances after entering the specified condition.

L.3 CTS 3.3.M Action 1.a, which requires verification that the reactor is not operating on a LIMITING CONTROL ROD PATTERN when one RBM channel is inoperable, and Surveillance Requirement 4.3.M.2, which requires a CHANNEL FUNCTIONAL TEST prior to control rod withdrawal when the reactor is operating on a LIMITING CONTROL ROD PATTERN, have been deleted. The definition of LIMITING CONTROL ROD PATTERN is also being deleted. Since a LIMITING CONTROL ROD PATTERN is operation on a power distribution limit (such as APLHGR or MCPR), the condition is extremely unlikely. The status of power distribution limits does not affect the Operability of the RBM and therefore, no additional requirements on the RBM System are required (e.g., that it be tripped within one hour with a channel

TECHNICAL CHANGES - LESS RESTRICTIVE

L.3 (cont'd) inoperable while on a LIMITING CONTROL ROD PATTERN). Adequate requirements on power distribution limits are specified in the LCOs in Section 3.2. Furthermore, due to the improbability of operating exactly on a thermal limit, the CTS Action and Surveillance Requirement would almost never be required. In addition, since the Surveillance Requirement is not specific as to when "prior to," and could be satisfied by the initial Surveillance that detected the LIMITING CONTROL ROD PATTERN has been achieved, its deletion is not safety significant.

L.4 CTS 3/4.3.L Applicability requires OPERABILITY of the RWM in OPERATIONAL MODE(s) 1 and 2 when THERMAL POWER is less than or equal to 20% of RATED THERMAL POWER. It is proposed to reduce the Applicability for RWM OPERABILITY (proposed ITS Table 3.3.2.1-1 footnote (b)) from ≤ 20% RTP to ≤ 10% RTP. This change will also result in a corresponding reduction in the power level identified in CTS 4.3.L.3 (ITS SR 3.3.2.1.3) for demonstrating the RWM OPERABLE (see Discussion of Change L.2 above). In addition, the power level identified in proposed ITS SRs 3.3.2.1.2 and 3.3.2.1.6 has been selected consistent with the proposed RWM Applicability of ≤ 10% RTP (see Discussion of Changes M.3, M.5, and L.2 above). The RWM serves to enforce pre-stored control rod withdrawal sequences to minimize the control rod worths during reactor startups. The lower control rod worths result in lower fuel enthalpy values, which mitigate the consequences of a Control Rod Drop Accident (CRDA). The RWM also generates rod blocks if a deviation from a programmed sequence is detected. This change essentially reduces the power level at which the RWM must be OPERABLE to ensure that the initial conditions of the CRDA are not violated. The NRC has approved the use of a ≤ 10% RTP Applicability for the RWM subject to the existence of analyses which "demonstrate that no significant rod drop accident (RDA) can occur above 10 percent power." Siemens Power Corporation (SPC) has performed CRDA analyses for the SPC fuel in the Dresden 2 and 3 reactors in support of reducing the RWM Applicability to ≤ 10% RTP. The analyses results show that the consequences of a CRDA above 10% RTP are mitigated by factors which reduce available rod worths and enhance the effective actions of the feedback mechanisms. The SPC CRDA analysis methodology was explicitly reviewed and approved by the NRC and, based on this methodology, SPC has concluded that the predicted consequences for the CRDA above zero power conditions would be reduced. As a result, SPC further concluded that the ≤ 10% RTP Applicability for the RWM is adequate for reactors containing SPC fuel and that the RWM is not needed above 10% RTP. Since the SPC analyses demonstrate that the consequences for a

TECHNICAL CHANGES - LESS RESTRICTIVE

LF.1 (cont'd) Additionally, each applicable channel/instrument has been evaluated and analyzed to support a fuel cycle extension to a 24 month interval. These evaluations and analyses have been performed utilizing the guidance provided in EPRI TR-103335, "Guidelines for Instrument Calibration Extension/Reduction Programs, Revision 1. The EPRI guidance was used to demonstrate that the data collected by the operating plant (from surveillance testing) has remained acceptable and reasonable with regard to the manufacturers design specifications.

Use of the previously discussed methodologies for determining Allowable Values, instrument setpoints, and analyzing channel/instrument performance ensure that the design basis and associated safety limits will not be exceeded during plant operation. These evaluations, determinations, and analyses now form a portion of the plants design bases.

"Specific"

L.1 The CTS 3.2.J Applicability requires the Feedwater Pump Trip Instrumentation to be OPERABLE in MODE 1. This Instrumentation indirectly supports maintaining MCPR above the Safety Limit; however, MCPR is not a concern below 25% RTP due to the large inherent margin that ensures the MCPR Safety Limit is not exceeded, even if a limiting transient occurs. Therefore, the ITS 3.3.2.2 Applicability has been modified to require the instrumentation to be OPERABLE when THERMAL POWER is ≥ 25% RTP, and the current shutdown action specified in Table 3.2.J-1 Action 90.b has been changed to only require power to be reduced to < 25% RTP (ITS 3.3.2.2 Required Action C.2). In addition, the time to achieve this power level has been reduced from 8 hours to 4 hours, which is consistent with the time provided to exit the Applicability in CTS 3.11.C, MCPR, and BWR ISTS, NUREG-1433, Rev. 1, and is within the ability of the plant to achieve this condition in a safe manner. 8

L.2 CTS Table 3.2.J-1 Action 90.b requires reduction in Thermal Power if the Feedwater Pump Trip Instrumentation is not restored to Operable status. The instrumentation indirectly supports maintaining MCPR above limits during a feedwater controller failure, maximum demand event. This is accomplished by tripping the main turbine, with the main turbine trip resulting in a subsequent reactor scram. When the instrumentation is inoperable solely due to an inoperable feedwater pump breaker, the unit can continue to operate with the feedwater pump removed from service (Dresden 2 and 3 has three 50% capacity

A

A

TABLE 3.2.C-1

ATWS - RPT INSTRUMENTATION

A.4 Allowable Values

A.5

LA.2

Functional Unit		Trip Setpoint(a)	Minimum CHANNEL(s) per TRIP SYSTEM(a)
LCO 3.3.4.1.a 1. Reactor Vessel Water Level - Low Low	SR 3.3.4.1.4.a	≥84 inches(b)	LCO 3.3.4.1 2
LCO 3.3.4.1.b 2. Reactor Vessel Pressure - High	SR 3.3.4.1.4.b	≤1250 psig	2

Steam Dome

LF.1

Note to Surveillance Requirements

A.1

Insert CTS 3.2.C-1 Note a — A.3

a A CHANNEL may be placed in an inoperable status for up to 2 hours for required surveillance without placing the TRIP SYSTEM in the tripped condition provided at least one OPERABLE CHANNEL in the same TRIP SYSTEM is monitoring that parameter.

b Includes a time delay of 8 ≤ t ≤ 10 seconds. — LF.1

SR 3.3.4.1.4.a

A.5

c Reactor vessel water level settings are expressed in inches above the top of active fuel (which is 360 inches above vessel zero).

LA.2

B

A

ITS 3.3.4.1

TECHNICAL CHANGES - MORE RESTRICTIVE

M.2 (cont'd) trip breaker is inoperable. In addition, the LOGIC SYSTEM FUNCTIONAL TEST in CTS 4.2.C.2 (proposed ITS SR 3.3.4.1.5) has been revised to include breaker actuation. This added requirement will ensure the complete testing of the assumed function. These changes are more restrictive on plant operation and necessary to ensure that ATWS-RPT Functions are adequately maintained.

TECHNICAL CHANGES - LESS RESTRICTIVE

"Generic"

LA.1 The details in CTS 3.2.C Action 2 footnote (a), relating to placing channels in trip, are proposed to be relocated to the Bases. The ACTIONS of ITS 3.3.4.1 ensure inoperable channels are placed in trip or the unit is placed in a non-applicable MODE or condition, as appropriate. In addition, the Bases for Required Actions A.1 and A.2 indicate that the channels are not required to be placed in the trip condition, and directs entry into the appropriate Condition. As a result, these relocated details are not necessary for ensuring the appropriate actions are taken in the event of inoperable ATWS-RPT Instrumentation channels. As such, these relocated details are not required to be in the ITS to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS.

LA.2 The detail in CTS Table 3.2.C-1 Note (c) related to the reference setting of the reactor vessel water level instrumentation is proposed to be relocated to the UFSAR. The reference value for the Allowable Value specified in ITS SR 3.3.4.1.4.a has been changed to the value associated with "instrument zero," as discussed in Discussion of Change A.5. This detail is not necessary to ensure the OPERABILITY of the ATWS-RPT instrumentation. The requirements of ITS 3.3.4.1 and the Surveillances are adequate to ensure the ATWS-RPT reactor vessel water level instrumentation is maintained OPERABLE. Therefore, this relocated detail is not required to be in the ITS to provide adequate protection of public health and safety. Changes to the UFSAR will be controlled by the provisions of 10 CFR 50.59.

LD.1 The Frequency for performing the LOGIC SYSTEM FUNCTIONAL TEST of CTS 4.2.C.2 (proposed SR 3.3.4.1.5) has been extended from 18 months to 24 months. This SR ensures that ATWS-RPT System will function as designed to ensure proper response during an analyzed event. The proposed change will allow this Surveillance to extend the Surveillance Frequency from the current 18 month Surveillance Frequency (i.e., a maximum of 22.5 months accounting for the allowable grace period specified in CTS 4.0.B and proposed SR 3.0.2) to a

TECHNICAL CHANGES - LESS RESTRICTIVE

LE.1 (cont'd) a 24 month Surveillance Frequency (i.e., a maximum of 30 months accounting for the allowable grace period specified in CTS 4.0.B and proposed SR 3.0.2). This proposed change was evaluated in accordance with the guidance provided in NRC Generic Letter No. 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," dated April 2, 1991. The CHANNEL CALIBRATION Surveillance is performed to ensure that a previously evaluated setpoint actuation takes place to provide the required safety function. Extending the SR Frequency is acceptable because the ATWS-RPT initiation logic is designed to be single failure proof, and therefore, is highly reliable. Furthermore, the impacted ATWS-RPT instrumentation has been evaluated based on make, manufacturer and model number to determine that the instrumentation's actual drift falls within the design allowance in the associated setpoint calculation. The following paragraphs, listed by CTS Functional Unit, identify by make, manufacturer and model number the drift evaluations performed:

Functional Unit 1, Reactor Vessel Water Level - Low Low

This function is performed by Rosemount 1151DP4PAN and 1151DB4PAN Transmitters, General Electric 184C5988G131 Master Trip Units, Rosemount 710DU Slave Trip Units and Agastat ETR14D3BC750 Time Delay Relays. The General Electric and Rosemount Trip Units are functionally checked and setpoint verified more frequently, and if necessary, recalibrated. These more frequent testing requirements remain unchanged. Therefore, an increase in the surveillance interval to accommodate a 24 month fuel cycle does not affect the Trip Units with respect to drift. The Rosemount Transmitters' and the Agastat Time Delay Relays' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Functional Unit 2, Reactor Vessel Pressure - High

This function is performed by Rosemount 1151P9E22 Transmitters and Rosemount 710DU Master Trip Units. The Rosemount Master Trip Units are functionally checked and setpoint verified more frequently, and if necessary, recalibrated. These more frequent testing requirements remain unchanged. Therefore, an increase in the surveillance interval to accommodate a 24 month fuel cycle does not affect the Rosemount Master Trip Units with respect to drift. The Rosemount Transmitters' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

TECHNICAL CHANGES - LESS RESTRICTIVE

LF.1 (cont'd) Additionally, each applicable channel/instrument has been evaluated and analyzed to support a fuel cycle extension to a 24 month interval. These evaluations and analyses have been performed utilizing the guidance provided in EPRI TR-103335, "Guidelines for Instrument Calibration Extension/Reduction Programs, Revision 1. The EPRI guidance was used to demonstrate that the data collected by the operating plant (from surveillance testing) has remained acceptable and reasonable with regard to the manufacturers design specifications.

Use of the previously discussed methodologies for determining Allowable Values, instrument setpoints, and analyzing channel/instrument performance ensure that the design basis and associated safety limits will not be exceeded during plant operation. These evaluations, determinations, and analyses now form a portion of the plants design bases.

"Specific"

L.1 CTS 3.2.C Actions 2, 4, 5 and 6 require the unit to be placed in Startup (Mode 2) within 6 hours if the ATWS-RPT instrumentation is not restored within the allowed out-of-service times. The purpose of the ATWS-RPT instrumentation is to trip the recirculation pumps. Therefore, an additional Required Action is proposed, ITS 3.3.4.1 Required Action D.1, to allow removal of the associated recirculation pump from service in lieu of being in MODE 2 within 6 hours. B Since this action accomplishes the functional purpose of the ATWS-RPT instrumentation and enables continued operation in a previously approved condition, this change does not have a significant effect on safe operation.

L.2 CTS 3.2.C Action 3 requires the associated Trip System to be declared inoperable when two reactor vessel water level channels or two reactor vessel pressure channels in the same Trip System are inoperable in one or two trip systems. Declaring the Trip System inoperable would require restoration of the inoperable channels, as required by CTS 3.2.C Action 5 or 6. Placing the inoperable channels in trip is not allowed as an option. ITS 3.3.4.1 Required Action A.1 provides an option to place all inoperable channels in the tripped condition. This conservatively compensates for the inoperable status, restores the single failure capability and provides the required initiation capability of the instrumentation. Therefore, providing this option does not impact safety. However, if this action would result in system actuation, then declaring the system inoperable is the preferred action.

2/13A Condensate Storage Tank ≥ 10.8' 2 1,2,3 35
2/13B Condensate Storage Tank ≥ 7.3' 2 1,2,3 35
A.15 LF.1 B

DRESDEN - UNITS 2 & 3

INSTRUMENTATION

Table 3.3.5.1-1 TABLE 3.2.B-1 (Continued)

ECCS ACTUATION INSTRUMENTATION

Function Functional Unit	Allowable Value Trip Setpoint[a]	Minimum CHANNEL(s) per Trip Function[a]	Applicable OPERATIONAL MODE(s)	ACTION	
3 **3. HIGH PRESSURE COOLANT INJECTION (HPCI) SYSTEM[d]**					
3.a a. Reactor Vessel Water Level - Low Low	≥84 inches	4	1, 2, 3	35	37B
3.b b. Drywell Pressure - High[f]	≤2 psig	4	1, 2, 3	35	37B
3.d c. Condensate Storage Tank Level - Low[b]	≥10,000 gal	2	1, 2, 3	35	
3.e d. Suppression Chamber Water Level - High[b]	≤15' 5" above bottom of chamber	2	1, 2, 3	35	D
3.c e. Reactor Vessel Water Level - High (Trip)	≤194 inches	1 2	1, 2, 3	31	C
3.f f. HPCI Pump Discharge Flow - Low (Bypass)	≥600 gpm	1	1, 2, 3	33	E
3.g g. Manual Initiation	NA	1(system)	1, 2, 3	34	C
4 **4. AUTOMATIC DEPRESSURIZATION SYSTEM - TRIP SYSTEM 'A'[d]**					
4.a a. Reactor Vessel Water Level - Low Low	≥84 inches	2	1, 2, 3	30	38 F
4.b b. Drywell Pressure - High[f]	≤2 psig	2	1, 2, 3	30	38 F
4.c c. Initiation Timer	≤120 sec	1	1, 2, 3	31	G
4.f d. Low Low Level Timer	≤10 min	1	1, 2, 3	31	G
4.d e. CS Pump Discharge Pressure - High (Permissive)	≥100 psig & ≤150 psig	2/pump	1, 2, 3	31	G
4.e f. LPCI Pump Discharge Pressure - High (Permissive)	≥100 psig & ≤150 psig	2/pump	1, 2, 3	31	G

Handwritten and boxed notes on the page: A.2, LA.1, A4, LF.1, A.6, LA.2, A.15, M.8, A.7, A.8, A.1, A, B; "Note 2 to Surveillance Requirements"; "Table 3.3.5.1 Note (c)" (written beside the Trip Setpoint heading and beside section 4).

ECCS Actuation 3/4.2.B

ITS 3.3.5.1

Page 4 of 17

Table 3.3.5.1-1

TABLE 3.2.B-1 (Continued)

ECCS ACTUATION INSTRUMENTATION

Functional Unit (Function)		Trip Setpoint[b] (A.2 Allowable Value)	Minimum CHANNEL(s) per Trip Function[a]	Applicable OPERATIONAL MODE(s)	ACTION
5.	**AUTOMATIC DEPRESSURIZATION SYSTEM - TRIP SYSTEM 'B'[d]**				
5.a a.	Reactor Vessel Water Level - Low Low	≥84 inches	2	1, 2, 3	30 F
5.b b.	Drywell Pressure - High[f] A.6	≤2 psig	2	1, 2, 3	30 F
5.c c.	Initiation Timer	≤120 sec	1	1, 2, 3	31 G
5.f d.	Low Low Level Timer	≤10 min	1	1, 2, 3	31 G
5.d e.	CS Pump Discharge Pressure - High (Permissive)	≥100 psig & ≤150 psig	1/pump (2)	1, 2, 3	31 G
5.e f.	LPCI Pump Discharge Pressure - High (Permissive)	≥100 psig & ≤150 psig	1/pump (2)	1, 2, 3	31 G
6.	**LOSS OF POWER**				
a.	4.16 kv Emergency Bus Undervoltage (Loss of Voltage)	2930 ± 146 volts decreasing voltage	2/bus	1, 2, 3, 4[e], 5[e]	36
b.	4.16 kv Emergency Bus Undervoltage (Degraded Voltage)	≥ 3784 volts (Unit 2)[g][i] ≥ 3832 volts (Unit 3)[g][i]	2/bus	1, 2, 3, 4[e], 5[e]	36

A.2 Allowable Value; LA.1; A.4; Table 3.3.5.1-1 Note (c); Note 2 to Surveillance Requirements; LF.1; A.8 (38); A.8 (2); A; B; A.1; A.9 moved to ITS 3.3.8.1

Page 5 of 17

ITS 3.3.5.1

ECCS ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

M.1 — add Core Spray Pump Start-Time Delay Relay (Function 1.e)

Function / Functional Unit	SR 3.3.5.1.1 CHANNEL CHECK	SR 3.3.5.1.2 CHANNEL FUNCTIONAL TEST	SR 3.3.5.1.3 / SR 3.3.5.1.4 / SR 3.3.5.1.5 CHANNEL CALIBRATION	Applicable OPERATIONAL MODE(s)
1 **1. CORE SPRAY (CS) SYSTEM**				Table 3.3.5.1-1 Note (a)
1.a a. Reactor Vessel Water Level - Low Low	S-1	M Q-2 (A.8)	E(a) -3, 24 months (LE.1)	1, 2, 3, 4(b), 5(b)
1.b b. Drywell Pressure - High(d) (A.6)	NA	M Q-2	Q-4	1, 2, 3
1.c c. Reactor Vessel Pressure - Low (Permissive)	NA	M Q-2	Q-4	1, 2, 3, 4(b), 5(b)
1.d d. CS Pump Discharge Flow - Low (Bypass)	NA	Q-2	E(a) -3, 24 months	1, 2, 3, 4(b), 5(b)
2 **2. LOW PRESSURE COOLANT INJECTION (LPCI) SUBSYSTEM**				Table 3.3.5.1-1 Note (a)
2.a a. Reactor Vessel Water Level - Low Low	S-1	M Q-2 (A.8)	E(a) -3 (LE.1)	1, 2, 3, 4(b), 5(b)
2.b b. Drywell Pressure - High(d) (A.6)	NA	M Q-2	Q-4	1, 2, 3
2.c c. Reactor Vessel Pressure - Low (Permissive)	NA	M Q-2	Q-4	1, 2, 3, 4(b), 5(b)
2.f d. LPCI Pump Discharge Flow - Low (Bypass)	NA	Q-2	E(a) -3, 24 months (LE.1)	1, 2, 3, 4(b), 5(b)
add Functions 2.d, 2.e, 2.g, 2.h, 2.i, 2.j and 2.k (M.1)				
3 **3. HIGH PRESSURE COOLANT INJECTION (HPCI) SYSTEM(c)**				
3.a a. Reactor Vessel Water Level - Low Low	S-1	M Q-2 (A.8)	E -3 (e)	1, 2, 3
3.b b. Drywell Pressure - High(d) (A.6)	NA	M Q-2	Q-4	1, 2, 3
3.d c. Condensate Storage Tank Level - Low	NA	M Q	NA E, 24 months (A.15)	1, 2, 3
3.e d. Suppression Chamber Water Level - High (A.14)	NA	M Q-2	NA (LE.1)	1, 2, 3
3.c e. Reactor Vessel Water Level - High (Trip)	S NA-1	M Q-2	E -3 (e)	1, 2, 3
3.f f. HPCI Pump Discharge Flow - Low (Bypass)	NA	Q-2	Q-4	1, 2, 3
3.g g. Manual Initiation	NA	E (A.11) SR 3.3.5.1.6, 24 months (LD.1)	NA, 24 months (LE.1)	1, 2, 3

add SR 3.3.5.1.5 (M.3)

A.1

ADMINISTRATIVE (continued)

A.4 The Trip Setpoint for Functional Units 1.a, 2.a, 3.a, 4.a, and 5.a, Reactor Vessel Water Level - Low Low, and Functional Unit 3.e, Reactor Vessel Water Level-High (Trip), in Table 3.2.B-1 is referenced to the top of active fuel. The reference value for the associated Allowable Values specified in ITS Table 3.3.5.1-1 is to "instrument zero." This change has been made for human factors considerations. The indications in the control room can be directly associated with the value in the ITS. Any changes to the Trip Setpoints are addressed in Discussion of Changes A.2 and LF.1, therefore this change is considered administrative. 4

A.5 Not used.

A.6 CTS Table 3.2.B-1 Note (f) and CTS Table 4.2.B-1 Note (d) state that the Drywell Pressure—High Function (Functional Units 1.b, 2.b, 3.b, 4.b, and 5.b) is not required to be OPERABLE when PRIMARY CONTAINMENT INTEGRITY is not required in MODE 2 (i.e., when Special Test Exception 3/4.12.A is being used). These notes are deleted from CTS Table 3.2.B-1 and 4.2.B-1 since the only applicable condition in which these notes would be needed has been deleted (see Discussion of Changes for CTS: 3/4.12.A, in ITS Section 3.10). Therefore, Note (f) of CTS Table 3.2.B-1 and Note (d) of CTS Table 4.2.B-1 are no longer applicable and the change is considered administrative. 6 8

A.7 The detail in CTS Table 3.2.B-1 Functional Unit 3.g, HPCI Manual Initiation, that there is one channel "per system" has been deleted since there is only one HPCI System per unit. Since the Specifications apply equally to Units 2 and 3, this Note is not necessary. Since its removal is editorial, this change is administrative.

A.8 These changes to CTS 3/4.2.B are provided in the Dresden ITS consistent with the Technical Specifications Change Request submitted to the NRC for approval per ComEd letter JMHLTR 00-0002, dated January 11, 2000. The changes identified are consistent with the allowances in NEDC-30936P-A, Part 1 and Part 2, "Technical Specification Improvement Methodology With Demonstration for BWR ECCS Actuation Instrumentation," December 1988. As such, these changes are considered to be administrative.

A.9 The technical content of the requirements of CTS Table 3.2.B-1 Functional Units 6.a and 6.b and Table 4.2.B-1 Functional Units 5.a and 5.b, including associated Notes and Actions, are being moved to ITS 3.3.8.1, "Loss of Power Instrumentation," in accordance with the format of the BWR ISTS, NUREG-1433, Rev. 1. Any technical changes to these requirements are addressed in the Discussion of Changes for ITS: 3.3.8.1, in this Section.

A.14 CTS Table 4.2.B-1 Functional Unit 3.e, HPCI Reactor Vessel Water Level — High (Trip), identifies the CHANNEL CHECK as NA. Proposed ITS Table 3.3.5.1-1 Function 3.c, will include a CHANNEL CHECK in accordance with SR 3.3.5.1.1, at a Frequency of 12 hours. This requirement is being added consistent with the requirements currently identified for CTS Functional Units 1.a, 2.a, 3.a, and 4.a, since each of these Functional Units are associated with the same level instrumentation. Although this change identifies an additional requirement and may be considered more restrictive, since it is consistent with the current plant procedures, it is considered administrative.

A.15 These changes to CTS 3/4.2.B are provided in the Dresden 2 and 3 ITS consistent with the Technical Specification Change Request submitted to the NRC for approval per ComEd letter PSLTR #00-0056, dated February 21, 2000. As such, these changes are considered administrative.

TECHNICAL CHANGES - MORE RESTRICTIVE

M.1 Eight additional Functions have been added to help ensure the automatic actuation function of the ECCS subsystems to ensure the design basis events can be satisfied. These Functions are included in ITS Table 3.3.5.1-1 as follows:

- Function 1.e, Core Spray Pump Start - Time Delay Relay,
- Function 2.d, Reactor Steam Dome Pressure - Low (Break Detection),
- Function 2.e, LPCI Pump Start - Time Delay Relay for Pumps B and D,
- Function 2.g, Recirculation Pump Differential Pressure-High (Break Detection),
- Function 2.h, Recirculation Riser Differential Pressure-High (Break Detection),
- Function 2.i, Recirculation Pump Differential Pressure Time Delay-Relay (Break Detection),
- Function 2.j, Reactor Steam Dome Pressure Time Delay-Relay (Break Detection), and
- Function 2.k, Recirculation Riser Differential Pressure Time Delay-Relay (Break Detection)

The proposed Allowable Values for these Functions were determined consistent with the setpoint methodology described in Discussion of Change LF.1 below. Appropriate ACTIONS and Surveillances (SR 3.3.5.1.2, SR 3.3.5.1.5 and SR 3.3.5.1.6, as applicable) have also been added. This is an additional restriction on plant operation necessary to help ensure the ECCS Instrumentation are maintained Operable. B

TECHNICAL CHANGES - MORE RESTRICTIVE (continued)

M.2 A maximum Allowable Value has been added for the CS Pump Discharge Flow—Low (Bypass) Function (CTS Table 3.2.B-1 Functional Unit 1.d; ITS Table 3.3.5.1-1 Function 1.d) to ensure the valves will close to provide assumed ECCS flow to the core. The new Allowable Value is based upon the most recent setpoint calculations. This is an additional restriction on plant operation.

M.3 CTS Table 4.2.B-1 requires a CHANNEL FUNCTIONAL TEST (CFT) of Functional Unit 3.d, Suppression Chamber Water Level - High every 92 days. The Table does not currently require a CHANNEL CALIBRATION. The channels associated with this Function include a level switch that must trip at the specified setpoint (Allowable Value, see Discussion of Change A.2). Therefore, the proposed test for OPERABILITY is a CHANNEL CALIBRATION (SR 3.3.5.1.5) at a Frequency of 24 months consistent with drift analysis assumptions in the plant setpoint methodology. B

M.4 Not used.

M.5 Not used.

M.6 Not used.

M.7 Not used. A

M.8 CTS Table 3.2.B-1 Functional Unit 3.e (ITS Table 3.3.5.1-1 Function 3.c), HPCI - Reactor Vessel Water Level - High, only requires one channel of this Function to be Operable. The purpose of this Function is to close the HPCI turbine stop valve and pump discharge valve (i.e., trip the HPCI turbine) to prevent overflow into the main steam lines. This Function is monitored by two differential pressure transmitters. The output signals from these transmitters are arranged in a two-out-of-two logic for this Function. In order for the HPCI System to trip on high reactor vessel water level, both signals are required. Therefore, ITS Table 3.3.5.1-1 for Function 3.c will require two OPERABLE channels of the Reactor Vessel Water Level - High Function. This change represents an additional restriction on plant operation necessary to ensure the OPERABILITY of the HPCI - Reactor Vessel Water Level - High Function.

TECHNICAL CHANGES - LESS RESTRICTIVE

LE.1 (cont'd)

Functional Unit 3.a: HPCI Reactor Vessel Water Level—Low Low

This function is performed by Rosemount 1153DB4 Transmitters and General Electric 184G5988 Master Trip Units and Rosemount 710DU Slave Trip Units. The General Electric and Rosemount Trip Units are functionally checked and setpoint verified more frequently, and if necessary, recalibrated. These more frequent testing requirements remain unchanged. Therefore, an increase in the surveillance interval to accommodate a 24 month fuel cycle does not affect the Trip Units with respect to drift. The Rosemount transmitters' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Functional Unit 3.c: Condensate Storage Tank Level — Low

This function is performed by an SOR 12N6-B4-U8-C1A-TTNQ switch. These switches have recently been installed in the plant. Since these are new instruments it was not possible to perform a drift analysis using historical data. The calibration frequency is being extended based on an extrapolation of vendor drift to support a 24 month fuel cycle surveillance interval. Plant setpoints or Allowable Values have been adjusted as necessary to support the fuel cycle calibration requirements.

Functional Unit 3.e: HPCI Reactor Vessel Water Level—High

This function is performed by Rosemount 1153DB4PAN Transmitters and General Electric 184G5988 Master Trip Units and Rosemount 710DU Slave Trip Units. The General Electric and Rosemount Trip Units are functionally checked and setpoint verified more frequently, and if necessary, recalibrated. These more frequent testing requirements remain unchanged. Therefore, an increase in the surveillance interval to accommodate a 24 month fuel cycle does not affect the Trip Units with respect to drift. The Rosemount transmitters' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

TECHNICAL CHANGES - LESS RESTRICTIVE

LE.1 (cont'd) **Functional Unit 4.a**: Reactor Vessel Water Level—Low Low

This function is performed by Rosemount 1153DB4PAN Transmitters and General Electric 184G5988 Master Trip Units and Rosemount 710DU Slave Trip Units. The General Electric and Rosemount Trip Units are functionally checked and setpoint verified more frequently, and if necessary, recalibrated. These more frequent testing requirements remain unchanged. Therefore, an increase in the surveillance interval to accommodate a 24-month fuel cycle does not affect the Trip Units with respect to drift. The Rosemount transmitters' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Functional Unit 4.c: ADS Initiation Timer

This function is performed by Agastat ETR 14D3G-004 and ETR 14D3G-003 series relays. A sufficient quantity of As Found and As Left calibration data was not available to perform a rigorous drift analysis for the time delay relays. The vendor's drift allowance was determined per NES-EIC-20.04, Rev. 2, "Analysis of Instrument Channel Setpoint Error and Instrument Loop Accuracy" and used to calculate a 30 month drift. The calculated 30 month drift was used in the development of the plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Functional Unit 4.d: ADS Low Low Level Timer

This function is performed by Agastat 14D3N003 series relays. The Agastat relays' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Based on the design of the instrumentation and the drift evaluations, it is concluded that the impact, if any, on system availability is minimal as a result of the change in the surveillance test interval.

A review of the surveillance test history was performed to validate the above conclusion. This review of the surveillance test history demonstrates that there are no failures that would invalidate the conclusion that the impact, if any, on

3.2 - LIMITING CONDITIONS FOR OPERATION

D. Isolation Condenser Actuation

LCO 3.3.5.2 The isolation condenser actuation instrumentation CHANNEL(s) shown in Table 3.2.D-1 shall be OPERABLE with their trip setpoints set consistent with the values shown in the ~~Trip Setpoint~~ Allowable Value column. A.2

APPLICABILITY:

OPERATIONAL MODE(s) 1, 2 and 3 with the reactor steam dome pressure >150 psig.

ACTION: add proposed ACTIONS Note A.4

ACTION A 1. With an isolation condenser actuation instrumentation CHANNEL trip setpoint less conservative than the value shown in the ~~Trip Setpoint~~ Allowable Value column of Table 3.2.D-1, declare the CHANNEL inoperable until the CHANNEL is restored to OPERABLE status with its trip setpoint adjusted consistent with the ~~Trip Setpoint~~ Allowable Value value. A.2

ACTION A 2. With one or more isolation condenser system actuation instrumentation CHANNEL(s) inoperable, take the ACTION required by Table 3.2.D-1.

4.2 - SURVEILLANCE REQUIREMENTS

D. Isolation Condenser Actuation

SR 3.3.5.2.1, SR 3.3.5.2.2, SR 3.3.5.2.3 | B

1. Each isolation condenser actuation instrumentation CHANNEL shall be demonstrated OPERABLE by the performance of the ~~CHANNEL CHECK,~~ A.3 CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.2.D-1.

SR 3.3.5.2.4 2. LOGIC SYSTEM FUNCTIONAL TEST(s) of all CHANNEL(s) shall be performed at least once per ~~18~~ 24 months. LD.1 | B

A.1

TABLE 3.2.D-1

ISOLATION CONDENSER ACTUATION INSTRUMENTATION

A.2 — Allowable Value → Trip Setpoint (SR 3.3.5.2.2, SR 3.3.5.2.3)

LF.1

M.1 — time delay ≤ 17 seconds

A.5 — Function → Minimum CHANNEL(s) per TRIP SYSTEM

Note to Surveillance Requirements

Functional Unit	Trip Setpoint	Minimum CHANNEL(s) per TRIP SYSTEM[a]	ACTION
LCO 3.3.5.2 Reactor Vessel Pressure - High	≤1070 psig	2 4 (LCO 3.3.5.2)	40 A & B

B

A

B

ACTION

Insert CTS 3.2.D Action — A.6

ACTION 40 - With the number of OPERABLE CHANNEL(s) less than required by the Minimum CHANNEL(s) per TRIP SYSTEM requirement:

a. With one CHANNEL inoperable, place the inoperable CHANNEL in the tripped condition within one hour or declare the isolation condenser system inoperable.

b. With more than one CHANNEL inoperable, declare the isolation condenser system inoperable.

Insert CTS 3.2.D Note — A.6

a A CHANNEL may be placed in an inoperable status for up to 2 hours for required surveillance without placing the TRIP SYSTEM in the tripped condition provided at least one OPERABLE CHANNEL in the same TRIP SYSTEM is monitoring that parameter.

ITS 3.3.5.2

A.1

TABLE 4.2.D-1

ISOLATION CONDENSER ACTUATION INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

Functional Unit	CHANNEL CHECK (A.3)	SR 3.3.5.2.1 CHANNEL FUNCTIONAL TEST	SR 3.3.5.2.2, SR 3.3.5.2.3 CHANNEL CALIBRATION
Reactor Vessel Pressure - High	NA	M	Q (2); 24 months for time delay (3) (LE.1)

B

LCO 3.3.5.2

ADMINISTRATIVE

A.4 (cont'd) for each....") provides direction consistent with the intent of the existing Actions for an inoperable IC instrumentation channel. It is intended that each inoperable channel is allowed a certain time to complete the Required Actions. Since this change only provides more explicit direction of the current interpretation of the existing specifications, this change is considered administrative.

A.5 The ITS LCO 3.3.5.2 is on a per Function basis rather than the per Trip System basis in CTS Table 3.2.D-1. Thus, the number of required channels for CTS Table 3.2.D-1 Functional Unit Reactor Vessel Pressure—High, is changed to "4," since there are two trip systems for the Functional Unit, with two channels per trip system.

A.6 These changes to CTS 3/4.2.D are provided in the Dresden ITS consistent with the Technical Specifications Change Request submitted to the NRC for approval per ComEd letter JMHLTR 00-0002 dated January 11, 2000. The changes identified are consistent with the allowances in GENE-770-06-1-A, "Bases for Changes to Surveillance Test Intervals and Allowed Out-of-Service Times For Selected Instrumentation Technical Specifications," December 1992, which has been approved by the NRC. As such, this change is considered administrative.

TECHNICAL CHANGES - MORE RESTRICTIVE

M.1 CTS Table 3.2.D-1, Reactor Vessel Pressure—High Trip Setpoint (≤ 1070 psig) (changed to Allowable Value as previously described in Discussion of Change A.2) is being revised to identify the time delay associated with this Function. The time delay (≤ 17 seconds) defines the period of sustained pressure that is required before the IC System will initiate. The proposed Allowable Value was determined consistent with the methodology described in Discussion of Change LF.1 below. Although currently addressed in plant procedures, explicit identification of the time delay requirement in Technical Specifications imposes an additional requirement on plant operation. Therefore, this change is considered more restrictive. B

TECHNICAL CHANGES - LESS RESTRICTIVE

"Generic"

LD.1 The Frequency for performing the LOGIC SYSTEM FUNCTIONAL TEST (LSFT) of CTS 4.2.D.2 has been extended from 18 months to 24 months in proposed SR 3.3.5.2.4. This SR ensures that IC logic will function as designed to ensure proper response during an analyzed event. The proposed change will B

TECHNICAL CHANGES - LESS RESTRICTIVE

LD.1 (cont'd) allow this Surveillance to extend the Surveillance Frequency from the current 18 month Surveillance Frequency (i.e., a maximum of 22.5 months accounting for the allowable grace period specified in CTS 4.0.B and proposed SR 3.0.2) to a 24 month Surveillance Frequency (i.e., a maximum of 30 months accounting for the allowable grace period specified in CTS 4.0.B and proposed SR 3.0.2). This proposed change was evaluated in accordance with the guidance provided in NRC Generic Letter No. 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," dated April 2, 1991. Reviews of historical maintenance and surveillance data have shown that this test normally passes the Surveillance at the current Frequency. An evaluation has been performed using this data, and it has been determined that the effect on safety due to the extended Surveillance Frequency will be minimal. The system function testing performed in ITS 3.5.3 overlaps this surveillance to provide complete testing of the safety function. The IC system is tested on a more frequent basis during the operating cycle in accordance with proposed SR 3.3.5.2.1. This testing of the IC system ensures that a significant portion of the IC circuitry is operating properly and will detect significant failures of this circuitry. IC system actuating logic is designed to be single failure proof and therefore, is highly reliable. Furthermore, as stated in the NRC Safety Evaluation Report (dated August 2, 1993) relating to extension of the Peach Bottom Atomic Power Station, Unit Numbers 2 and 3 surveillance intervals from 18 to 24 months:

> "Industry reliability studies for boiling water reactors (BWRs), prepared by the BWR Owners Group (NEDC-30936P) show that the overall safety systems' reliabilities are not dominated by the reliabilities of the logic system, but by that of the mechanical components, (e.g., pumps and valves), which are consequently tested on a more frequent basis. Since the probability of a relay or contact failure is small relative to the probability of mechanical component failure, increasing the logic system functional test interval represents no significant change in the overall safety system unavailability."

Based on the above discussion, the impact, if any, of this change on system availability is minimal. The review of historical surveillance data also demonstrated that there are no failures that would invalidate this conclusion. In addition, the proposed 24 month Surveillance Frequency, if performed at the maximum interval allowed by proposed SR 3.0.2 (30 months) does not invalidate any assumptions in the plant licensing basis.

TECHNICAL CHANGES - LESS RESTRICTIVE (continued)

LE.1 The Frequency for performing CHANNEL CALIBRATION of CTS Table 4.2.D-1 for the Reactor Vessel Pressure time delay has been extended from 92 days to 24 months in proposed SR 3.3.5.2.3. The proposed change will allow this Surveillance to extend its Surveillance Frequency from the current 92 days to a 24 month Surveillance Frequency (i.e., a maximum of 30 months accounting for the allowable grace period specified in CTS 4.0.B and proposed SR 3.0.2). A Note has been added to the 92 day Surveillance Frequency (Q) in CTS Table 4.2.D-1 (ITS 3.3.5.2.2) which states that this SR is not required for the time delay portion of these channels. This allowance is consistent with the plant specific setpoint methodology. This portion of the channels must be calibrated in accordance with SR 3.3.5.2.3.

This proposed change was evaluated in accordance with the guidance provided in NRC Generic Letter No. 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," dated April 2, 1991. Extending the SR Frequency is acceptable because the IC System Instrumentation is designed to be single failure proof and therefore is highly reliable. This function is performed by General Electric CR 28208424AA41 time delay relays. A sufficient quantity of As Found and As Left calibration data was not available to perform a rigorous drift analysis for the time delay relays. The vendors drift allowance was determined per NES-EIC-20.04, Rev. 2, "Analysis of Instrument Channel Setpoint Error and Instrument Loop Accuracy," and used to calculate a 30 month drift. The calculated 30 month drift was used in the development of the plant setpoint and the Technical Specification Allowable Value. The results of this analysis will support a 24 month surveillance. B

Based on the design of the instrumentation and the drift evaluations, it is concluded that the impact, if any, on system availability is minimal as a result of the change in the surveillance test interval.

A review of the surveillance test history was performed to validate the above conclusion. This review of the surveillance test history demonstrates that there are no failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month surveillance frequency. In addition, the proposed 24-month Surveillance Frequencies, if performed at the maximum interval allowed by proposed SR 3.0.2 (30 months) do not invalidate any assumptions in the plant licensing basis.

LF.1 This change revises the Current Technical Specifications (CTS) Trip Setpoints for the Improved Technical Specifications (ITS) Allowable Values. ITS Section 3.3 reflects Allowable Values consistent with the philosophy of BWR ISTS, NUREG-1433, Rev. 1. These Allowable Values have been established

TECHNICAL CHANGES - LESS RESTRICTIVE

LF.1 (cont'd) consistent with the methods described in ComEd's Instrument Setpoint Methodology (Nuclear Engineering Standard NES-EIC-20.04, "Analysis of Instrument Channel Setpoint Error and Instrument Loop Accuracy"). For most cases, the Allowable Value determinations were calculated using plant specific operating and surveillance trend data or an allowance as provided for by the Instrument Setpoint Methodology. For all other cases, vendor documented performance specifications for drift were used. The Allowable Value verification used actual plant operating and surveillance trend information to ensure the validity of the developed Allowable Value. All changes to safety analysis limits applied in the methodologies were evaluated and confirmed as ensuring safety analysis licensing acceptance limits are maintained. All design limits applied in the methodologies were confirmed as ensuring that applicable design requirements of the associated systems and equipment are maintained. The methodologies used have been compared with the guidance of ANSI/ISA S67.04-Part I-1994 and ANSI/ISA RP67.04-Part II-1994. Plant calibration procedures will ensure that the assumptions regarding calibration accuracy, measurement and test equipment accuracy, and setting tolerance are maintained. Setpoints for each design or safety analysis limit have been established by accounting for the applicable instrument accuracy, calibration and drift uncertainties, environmental effects, power supply fluctuations, as well as uncertainties related to process and primary element measurement accuracy using the Instrument Setpoint Methodology. The Allowable Values have been established from each design or safety analysis limit by combining the errors associated with channel/instrument calibration (e.g., device accuracy, setting tolerance, and drift) with the calculated Nominal Trip Setpoint also using the Instrument Setpoint Methodology.

Additionally, each applicable channel/instrument has been evaluated and analyzed to support a fuel cycle extension to a 24 month interval. These evaluations and analyses have been performed utilizing the guidance provided in EPRI TR-103335, "Guidelines for Instrument Calibration Extension/Reduction Programs, Revision 1. The EPRI guidance was used to demonstrate that the data collected by the operating plant (from surveillance testing) has remained acceptable and reasonable with regard to the manufacturers design specifications. Use of the previously discussed methodologies for determining Allowable Values, instrument setpoints, and analyzing channel/instrument performance ensure that the design basis and associated safety limits will not be exceeded during plant operation. These evaluations, determinations, and analyses now form a portion of the plants design bases.

TECHNICAL CHANGES - LESS RESTRICTIVE (continued)

"Specific"

None

RELOCATED SPECIFICATIONS

None

Table 3.3.6.1-1

TABLE 3.2.A-1

ISOLATION ACTUATION INSTRUMENTATION

A.6 Allowable Value → Trip Setpoint[a] A.11; LA.2; Note 2 to Surveillance Requirements

Function / Functional Unit	Trip Setpoint[a]	Minimum CHANNEL(s) per TRIP SYSTEM[a]	Applicable OPERATIONAL MODE(s)	ACTION
2. **1. PRIMARY CONTAINMENT ISOLATION**				
2.a a. Reactor Vessel Water Level - Low	≥ 144 inches (LF.1)	2	1, 2, 3	20 G
2.b b. Drywell Pressure - High[d] (A.4)	≤ 2 psig	2	1, 2, 3	20 G
2.c c. Drywell Radiation - High	≤ 100 R/hr	1	1, 2, 3	23 F
2. SECONDARY CONTAINMENT ISOLATION (A.5 Moved to ITS 3.3.6.2)				
a. Reactor Vessel Water Level - Low[c]	≥ 144 inches	2	1, 2, 3 & *	24
b. Drywell Pressure - High[c,d]	≤ 2 psig	2	1, 2, 3	24
c. Reactor Building Ventilation Exhaust Radiation - High[c]	≤ 10 mR/hr	2	1, 2, 3 & * *	24
d. Refueling Floor Radiation - High[c]	≤ 100 mR/hr	2	1, 2, 3 & * *	24
1. **3. MAIN STEAM LINE (MSL) ISOLATION**				
1.a a. Reactor Vessel Water Level - Low Low	≥ 84 inches (LF.1)	2	1, 2, 3	21 D
b. Deleted				
1.b, 1.c c. MSL Pressure - Low	≥ 825 psig	2	1	22 E
1.d d. MSL Flow - High	≤ 120% of rated	2/line	1, 2, 3	21 D
1.e e. MSL Tunnel Temperature - High	≤ 200°F	2 of 4 in each of 2 sets (2 per trip string, A.10)	1, 2, 3	21 D

add proposed Allowable Value for Function 1.c (M.1)

A.1

A

A

B

Table 3.3.6.1-1

TABLE 3.2.A-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION

Function / Functional Unit		Trip Setpoint[a] / Allowable Value	Minimum CHANNEL(s) per TRIP SYSTEM[a]	Applicable OPERATIONAL MODE(s)	ACTION
5	4. REACTOR WATER CLEANUP SYSTEM ISOLATION				
5.a	a. Standby Liquid Control System Initiation[e]	NA	NA 1	1, 2, 3	23 H
5.b	b. Reactor Vessel Water Level - Low	≥ 144 inches	2	1, 2, 3	23 F
4	5. ISOLATION CONDENSER ISOLATION				
4.a	a. Steam Flow - High	≤ 300% of rated steam flow	1	1, 2, 3	23 F
4.b	b. Return Flow - High	≤ 32 (Unit 2)/ ≤ 14.8 (Unit 3) inches water diff.	1	1, 2, 3	23 F
3	6. HIGH PRESSURE COOLANT INJECTION ISOLATION				
3.a, 3.b	a. Steam Flow - High	≤ 300% of rated steam flow[h]	1	1, 2, 3	23 F
3.c	b. Steam Supply Line ~~Reactor Vessel~~ Pressure - Low	≥ 100 psig	2	1, 2, 3	23 F
3.d	c. Area Temperature - High	≤ 200°F	4[i]	1, 2, 3	23 F

Note 2 to Surveillance Requirements

A.6 LA.2 A.11 LA.3 LF.1 M.2 L.2 LF.1

A A A A.1 B B

A.1

INSTRUMENTATION

Table 3.3.6.1-1

TABLE 3.2.A-1 (Continued)

Isolation Actuation 3/4.2.A

ISOLATION ACTUATION INSTRUMENTATION

Moved to ITS 3.3.6.2 A.5

TABLE NOTATION

* During CORE ALTERATIONS or operations with a potential for draining the reactor vessel.

** When handling irradiated fuel in the secondary containment.

A.3 Insert CTS Table 3.2.A-1 Note

(a) A CHANNEL may be placed in an inoperable status for up to 2 hours for required surveillance without placing the CHANNEL in the tripped condition provided the Functional Unit maintains isolation actuation capability.

(b) Deleted

(c) Isolates the reactor building ventilation system and actuates the standby gas treatment system. A.5 Moved to ITS 3.3.6.2

(d) This function is not required to be OPERABLE when PRIMARY CONTAINMENT INTEGRITY is not required. A.4

(e) Only one TRIP SYSTEM. A.9

(f) Closes only reactor water cleanup system isolation valves. LA.3

(g) Deleted

Allowable Value Function 3b

(h) Includes a time delay of 3 ≤ t ≤ 9 seconds. LF.1

A.11

(i) Reactor vessel water level settings are expressed in inches above the top of active fuel (which is 360 inches above vessel zero). LA.2

Note (a) to Table 3.3.6.1-1

(j) All four switches in either of 2 groups for each trip system.

B A

Table 3.3.6.1-1

TABLE 4.2.A-1

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

Function Functional Unit	SR 3.3.6.1.1 CHANNEL CHECK	SR 3.3.6.1.2 CHANNEL FUNCTIONAL TEST	SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5 CHANNEL CALIBRATION	Applicable OPERATIONAL MODE(s)
2 **1. PRIMARY CONTAINMENT ISOLATION**		A.3 Q	24 months LE.1	
2.a a. Reactor Vessel Water Level - Low	S-1	M-2	E[a]-3 -5	1, 2, 3
2.b b. Drywell Pressure - High[d] A.4	NA	M-2	Q-4	1, 2, 3
2.c c. Drywell Radiation - High	S-1	M-2	E-5	1, 2, 3
2. SECONDARY CONTAINMENT ISOLATION				
a. Reactor Vessel Water Level - Low[c]	S	M	E[a]	1, 2, 3 & *
b. Drywell Pressure - High[b,d]	NA	M	Q	1, 2, 3
c. Reactor Building Ventilation Exhaust Radiation - High[c]	S	M	Q	1, 2, 3 & **
d. Refueling Floor Radiation - High[c]	S	M	Q	1, 2, 3 & **
1 **3. MAIN STEAM LINE (MSL) ISOLATION**		A.3 Q	24 months LE.1	
1.a a. Reactor Vessel Water Level - Low Low	S	M-2	E[a]-3 -5	1, 2, 3
~~b. Deleted~~				
1.b, 1.c c. MSL Pressure - Low	NA	M-2	Q-4 M.4	1
1.d d. MSL Flow - High	S	M-2	E Q-4	1, 2, 3
1.e e. MSL Tunnel Temperature - High	NA	E 24 months LD.1 A.8	E-5	1, 2, 3

A.5 Moved to ITS 3.3.6.2

A.1

-5 24 months for Function 1.c LE.1

B

B

ITS 3.3.6.1

Table 3.3.6.1-1

TABLE 4.2.A-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

Functional Unit	SR 3.3.6.1.1 CHANNEL CHECK	SR 3.3.6.1.2 CHANNEL FUNCTIONAL TEST	SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5 CHANNEL CALIBRATION	Applicable OPERATIONAL MODE(s)
5 4. REACTOR WATER CLEANUP SYSTEM ISOLATION				
5.a a. Standby Liquid Control System Initiation	NA	SR3.3.6.1.6 (E) 24 months LD.1 A.8	5 NA	1, 2, (3) L.2
5.b b. Reactor Vessel Water Level - Low	S-1	A.3 (Q) (M)-2	(E)(a)-3 24 months LE.1	1, 2, 3
4 5. ISOLATION CONDENSER				
4.a a. Steam Flow - High	NA	(M)-2	Q-4	1, 2, 3
4.b b. Return Flow - High	NA	(M)-2	Q-4	1, 2, 3
3 6. HIGH PRESSURE COOLANT INJECTION ISOLATION				
3.a, 3.b a. Steam Flow - High (Steam Supply Line)	NA	(M)-2	5 (E)(a)-3	1, 2, 3
3.c b. ~~Reactor Vessel~~ Pressure - Low	NA	(M)-2	(E)(a)-3 5	1, 2, 3
3.d c. Area Temperature - High	NA	(E) A.8 24 months LD.1	(E)-5 24 months LE.1	1, 2, 3
7. SHUTDOWN COOLING ISOLATION				
6.b a. Reactor Vessel Water Level - Low	S-1	(M)-2	(E)(a)-3 5	3, 4, 5
6.a b. Recirculation Line Water Temperature - High (Cut-in Permissive)	NA	(M)-2	(E)-5	1, 2, 3

A.1

(B)

(B)

ADMINISTRATIVE

A.11 (cont'd) associated Allowable Values specified in ITS Table 3.3.6.1-1 is to "instrument zero." This change has been made for human factors considerations. The indications in the control room can be directly associated with the value in the ITS. Any changes to the Trip Setpoints are addressed in Discussion of Changes A.6 and LF.1, therefore this change is considered administrative.

TECHNICAL CHANGES - MORE RESTRICTIVE

M.1 An Allowable Value for a Function has been added, ITS Table 3.3.6.1-1 Function 1.c. This Function is the Main Steam Line Low Pressure—Timer (or Time Delay). This Function is required to ensure the OPERABILITY of the current and proposed MSL Pressure—Low Function (CTS Table 3.2.A-1 Function 3.c and ITS Table 3.3.6.1-1 Function 1.b). This Function provides a time delay for the MSL Pressure—Low Function to ensure an inadvertent main steam line isolation does not occur during transients which result in reactor steam dome pressure pertubations. However, the delay is limited to ensure proper operation during pressure regulator failure event. The proposed Allowable Value was determined consistent with the methodology described in Discussion of Change LF.1 below. This change is an additional restriction on plant operation necessary to ensure the design basis accident analysis assumptions are satisfied.

M.2 The minimum required channels for the Standby Liquid Control System Initiation Function in CTS Table 3.2.A-1 (Functional Unit 4.a) is NA. For the same Function in the ITS (ITS Table 3.3.6.1-1 Function 5.a) the required channels per trip system is specified to be 1. The switch provides trip signal inputs to one trip system in any position other than "OFF." For this Specification, the SLC initiation switch is considered to provide 1 channel input into the trip system. Since the requirement is more explicit, this change is considered more restrictive on plant operations.

M.3 Not used.

TECHNICAL CHANGES - LESS RESTRICTIVE (continued)

LD.1 (cont'd) Based on the inherent system and component reliability and the testing performed during the operating cycle, the impact, if any, from this change on system availability is minimal. The review of historical surveillance data also demonstrated that there are no failures that would invalidate this conclusion. In addition, the proposed 24 month Surveillance Frequencies, if performed at the maximum interval allowed by proposed SR 3.0.2 (30 months) do not invalidate any assumptions in the plant licensing basis.

LE.1 The Frequency for performing the CHANNEL CALIBRATION Surveillance of current Surveillance 4.2.A and Table 4.2.A-1 (proposed SR 3.3.6.1.5) has been extended from 92 days (for the Main Steam Line Pressure - Timer) and 18 months (for all other Functional Units listed below) to 24 months. The proposed change will allow this Surveillance to extend the Surveillance Frequency to a 24 month Surveillance Frequency (i.e., a maximum of 30 months accounting for the allowable grace period specified in CTS 4.0.B and proposed SR 3.0.2). The subject SR ensures that the Isolation instruments will function as designed during an analyzed event. Extending the SR Frequency is acceptable because the Primary Containment Isolation System along with the Isolation initiation logic is designed to be single failure proof and, therefore, is highly reliable. Furthermore, the impacted Isolation instrumentation has been evaluated based on make, manufacturer and model number to determine that the instrumentation's actual drift falls within the design allowance in the associated setpoint calculation. The following paragraphs, listed by CTS Functional Unit number, identify by make, manufacturer and model number the drift evaluations performed:

Functional Unit 1.a: Reactor Vessel Water Level - Low

This function is performed by Rosemount 1153DB4PAN Transmitters and 710DU Master and Slave Trip Units. The Rosemount Trip Units are functionally checked and setpoint verified more frequently, and if necessary, recalibrated. These more frequent testing requirements remain unchanged. Therefore, an increase in the surveillance interval to accommodate a 24 month fuel cycle does not affect the Rosemount Trip Units with respect to drift. The Rosemount Transmitters' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

TECHNICAL CHANGES - LESS RESTRICTIVE

LE.1 (cont'd)

Functional Unit 1.c: Drywell Radiation—High

This function is performed by a General Atomic RD-23 Radiation Detector, General Atomic RP-2C Radiation Monitor, Moore Industries MVT Isolators, and Bailey Model 50-73211 and Yokogawa UR100 4152 recorders. These instruments were evaluated utilizing a qualitative analysis (i.e., engineering judgment). The results of the analysis support a 24 month fuel cycle surveillance interval extension.

Functional Unit 3.a: Reactor Vessel Water Level - Low Low

This function is performed by Rosemount 1153DB4PAN Transmitters and 710DU Master and Slave Trip Units. The Rosemount Trip Units are functionally checked and setpoint verified more frequently, and if necessary, recalibrated. These more frequent testing requirements remain unchanged. Therefore, an increase in the surveillance interval to accommodate a 24 month fuel cycle does not affect the Rosemount Trip Units with respect to drift. The Rosemount Transmitters' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Functional Unit 3.c: Main Steam Line Pressure -Timer

This function is performed by Amerace EDSCXX0225SAAXAA Time Delay Relays. A sufficient quantity of As Found and As Left calibration data was not available to perform a rigorous drift analysis for the time delay relays. The vendor's drift allowance was determined per NES-EIC-20.04, Rev. 2, "Analysis of Instrument Channel Setpoint Error and Instrument Loop Accuracy" and used to calculate a 30 month drift. The calculated 30 month drift was used in the development of the plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval

Functional Unit 3.e: Main Steam Line Tunnel Temperature - High

This function is performed by United Electric Controls F-100 Type 7BS temperature switches. The United Electric Controls instruments' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

TECHNICAL CHANGES - LESS RESTRICTIVE

LE.1 (cont'd)

Functional Unit 4.b: Reactor Vessel Water Level - Low

This function is performed by Rosemount 1153DB4PAN Transmitters and 710DU Master Trip and Slave Units. The Rosemount Trip Units are functionally checked and setpoint verified more frequently, and if necessary, recalibrated. These more frequent testing requirements remain unchanged. Therefore, an increase in the surveillance interval to accommodate a 24 month fuel cycle does not affect the Rosemount Trip Units with respect to drift. The Rosemount Transmitters' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Functional Unit 6.a: HPCI Steam Line Flow - High

This function is performed by Rosemount 1153DB5PA Transmitters and 710DU Master Trip Units. The Rosemount Trip Units are functionally checked and setpoint verified more frequently, and if necessary, recalibrated. These more frequent testing requirements remain unchanged. Therefore, an increase in the surveillance interval to accommodate a 24 month fuel cycle does not affect the Rosemount Trip Units with respect to drift. The Rosemount Transmitters' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Functional Unit 6: HPCI Steam Line Flow - Timer

This function is performed by Agastat ETR14D3BC750 relays. The Agastat relays' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis will support a 24 month surveillance interval.

Functional Unit 6.b: Reactor Vessel Pressure - Low

This function is performed by Rosemount 1153GB7PA Transmitters and 710DU Master Trip Units. The Rosemount Trip Units are functionally checked and setpoint verified more frequently, and if necessary, recalibrated. These more frequent testing requirements remain unchanged. Therefore, an increase in the surveillance interval to accommodate a 24 month fuel cycle does not affect the Rosemount Trip Units with respect to drift. The Rosemount Transmitters' drift

TECHNICAL CHANGES - LESS RESTRICTIVE

LE.1 (cont'd) was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Functional Unit 6.c: HPCI Area Temperature - High

This function is performed by United Electric Controls F100 Type 7BS temperature switches. The United Electric Controls instruments' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Functional Unit 7.a: Reactor Vessel Water Level - Low

This function is performed by Rosemount 1153DB7PA Transmitters and 710DU Master and Slave Trip Units. The Rosemount Trip Units are functionally checked and setpoint verified more frequently, and if necessary, recalibrated. These more frequent testing requirements remain unchanged. Therefore, an increase in the surveillance interval to accommodate a 24 month fuel cycle does not affect the Rosemount Trip Units with respect to drift. The Rosemount Transmitters' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Functional Unit 7.b: Recirculation Line Water Temperature—High (Cut-In Permissive)

This function is performed by General Electric GE/MAC Type 550 MV/I Transmitters, General Electric GE/MAC Type 560 Alarm Units, Weston Model 2436 Digital Panel Meters, and General Electric GE/MAC Type 531 and Yokogawa UR100 4152 recorders. The General Electric Alarm Units are functionally checked and setpoint verified more frequently, and if necessary, recalibrated. These more frequent testing requirements remain unchanged. Therefore, an increase in the surveillance interval to accommodate a 24 month fuel cycle does not affect the General Electric Alarm Units with respect to drift. The General Electric Transmitters' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

TECHNICAL CHANGES - LESS RESTRICTIVE (continued)

L.2 The Applicability of the Standby Liquid Control (SLC) System Initiation Function has been modified from MODES 1, 2 and 3 to MODES 1 and 2, only. The reduction in the Applicability is acceptable since with the unit in MODE 3 the reactor will be shutdown with all control rods inserted. Therefore, the additional shutdown requirements of the SLC System will not be necessary to mitigate an ATWS event. The proposed Applicability is consistent with the Applicability of ITS 3.1.7 for the SLC System. In addition, CTS Table 3.2.A-1 ACTION 23 (Close the affected system isolation valves within one hour and declare the affected system inoperable) for this Function has been changed to either close the penetration or declare the system inoperable (ITS 3.3.6.1 Required Action H.1 and H.2, respectively). The purpose of the SLC System Initiation Function of the RWCU System (ITS Table 3.3.6.1-1 Function 5.a) is to ensure the SLC System functions properly and the injected boron is not removed from the Reactor Coolant System. With the RWCU System isolated, the SLC System remains capable of performing its function. With the RWCU System not isolated, and the SLC System Initiation Function inoperable, the SLC System cannot perform its function. With the SLC System declared inoperable, the Actions of CTS 3.4.A (ITS 3.1.7), which have been previously approved by the NRC, would apply. Therefore, this change is considered acceptable since the Required Actions in ITS 3.1.7 provide adequate compensatory action for other conditions where the SLC System is inoperable (SLC tank sodium pentaborate concentration not within limits). This change is consistent with BWR ISTS, NUREG-1433, Rev. 1.

L.3 The CTS 3.2.A-1 ACTION 23 requirement, associated with the Reactor Vessel Water Level—Low Function (CTS 3.2.A-1 Functional Unit 7.a), to close the affected system isolation valves within one hour and declare the affected system inoperable has been modified to immediately initiate action to restore the channel to OPERABLE status or initiate action to isolate the Shutdown Cooling System (ITS 3.3.6.1 Required Action I.1 and I.2, respectively). The current actions are overly restrictive and may not always be the safest action. Isolating the Shutdown Cooling System suction pathway will place the system in a state in which it can not be used. Therefore, the ability of the plant to remove decay heat would be reduced. As a result, the proposed Actions are designed to require the most prudent action. The actions will be required to be initiated immediately and continue until the channels are restored or the Shutdown Cooling System is isolated. When the Shutdown Cooling System is isolated it must be declared inoperable and further actions will be required to provide alternate decay heat removal methods as required by ITS 3.4.7 during MODE 3, ITS 3.4.8 during MODE 4, and ITS 3.9.8 and 3.9.9 during MODE 5 operations. If Required Action I.1 is chosen prudent action must be taken to restore the channels, however the system can remain in operation to support the decay heat removal requirements.

TABLE 3.2.A-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION

L.1

TABLE NOTATION

Note (a) to Table 3.3.6.2-1 * During CORE ALTERATIONS or operations with a potential for draining the reactor vessel.

Note (b) to Table 3.3.6.2-1 ** When handling irradiated fuel in the secondary containment. (add CORE ALTERATIONS) M.1

(INSERT CTS Table 3.2.A-1 Note (a)) A.3

(a) A CHANNEL may be placed in an inoperable status for up to 2 hours for required surveillance without placing the CHANNEL in the tripped condition provided the Functional Unit maintains isolation actuation capability.

(b) Deleted

(c) Isolates the reactor building ventilation system and actuates the standby gas treatment system. LA.3

(d) This function is not required to be OPERABLE when PRIMARY CONTAINMENT INTEGRITY is not required. A.5

(e) Only one TRIP SYSTEM.

(f) Closes only reactor water cleanup system isolation valves.

(g) Deleted

(h) Includes a time delay of $3 \leq t \leq 9$ seconds.

See ITS 3.3.6.1

A.7

(i) Reactor vessel water level settings are expressed in inches above the top of active fuel (which is 360 inches above vessel zero). LA.2

(j) All four switches in either of 2 groups for each trip system. See ITS 3.3.6.1

B

TECHNICAL CHANGES - LESS RESTRICTIVE (continued)

LA.3 System design and operational details of current Table 3.2.A-1 and 4.2.A-1 Note (c) are proposed to be relocated to the Bases. Details relating to system design and operation (e.g., specific valves and systems affected) are unnecessary in the LCO. These details are not necessary to ensure the OPERABILITY of the secondary containment isolation instrumentation. The requirements of ITS 3.3.6.2 and the associated Surveillance Requirements are adequate to ensure the secondary containment isolation instruments are maintained OPERABLE. Therefore, the relocated details are not required to be in the ITS to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS.

LA.4 The details in CTS 4.7.P.4.b.2) relating to methods for performing the LOGIC SYSTEM FUNCTIONAL TEST (use of simulated signals) are proposed to be relocated to the Bases. These details are not necessary to ensure the OPERABILITY of the secondary containment isolation instrumentation. The requirements of ITS 3.3.6.2 and the associated Surveillance Requirements are adequate to ensure the secondary containment isolation instruments are maintained OPERABLE. Therefore, the relocated details are not required to be in the ITS to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS. B

LD.1 The Frequency for performing the LOGIC SYSTEM FUNCTIONAL TEST of CTS 4.2.A.2 and CTS 4.7.P.4.b (proposed SR 3.3.6.2.6) has been extended from 18 months to 24 months. These SRs ensure that Secondary Containment Isolation Instrumentation and Standby Gas Treatment (SGT) actuation logic will function as designed to ensure proper response during an analyzed event. The proposed change will allow these Surveillances to extend their Surveillance Frequency from the current 18 month Surveillance Frequency (i.e., a maximum of 22.5 months accounting for the allowable grace period specified in CTS 4.0.B and proposed SR 3.0.2) to a 24 month Surveillance Frequency (i.e., a maximum of 30 months accounting for the allowable grace period specified in CTS 4.0.B and proposed SR 3.0.2). This proposed change was evaluated in accordance with the guidance provided in NRC Generic Letter No. 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," dated April 2, 1991. Reviews of historical maintenance and surveillance data have shown that these tests normally pass their Surveillances at the current Frequency. An evaluation has been performed using this data, and it has been determined that the effect on safety due to the extended Surveillance Frequency will be minimal. The SCIVs and SGT System including the automatic actuating

TECHNICAL CHANGES - LESS RESTRICTIVE

LD.1 (cont'd) analyzed events. The proposed change will allow these Surveillances to extend their Surveillance Frequency from the current 18 month Surveillance frequency (i.e., a maximum of 22.5 months accounting for the allowable grace period specified in CTS 4.0.B and proposed SR 3.0.2) to a 24-month Surveillance Frequency (i.e., a maximum of 30 months accounting for the allowable grace period specified in CTS 4.0.B and proposed SR 3.0.2). This proposed change was evaluated in accordance with the guidance provided in NRC Generic Letter No. 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," dated April 2, 1991. Reviews of historical maintenance and surveillance data have shown that these tests normally pass their surveillances at the current frequency. An evaluation has been performed using this data and it has been determined that the effect on safety due to the extended Surveillance Frequency will be minimal. Furthermore, as stated in the NRC Safety Evaluation Report (dated August 2, 1993) relating to extension of the Peach Bottom Atomic Power Station, Unit Numbers 2 and 3 surveillance intervals from 18 to 24 months:

> "Industry reliability studies for boiling water reactors (BWRs), prepared by the BWR Owners Group (NEDC-30936P) show that the overall safety systems' reliabilities are not dominated by the reliabilities of the logic system, but by that of the mechanical components, (e.g., pumps and valves), which are consequently tested on a more frequent basis. Since the probability of a relay or contact failure is small relative to the probability of mechanical component failure, increasing the logic system functional test interval represents no significant change in the overall safety system unavailability."

Based on the inherent system and component reliability, the impact, if any, from this change on system availability is minimal. The review of historical surveillance data also demonstrated that there are no failures that would invalidate this conclusion. In addition, the proposed 24 month Surveillance Frequencies, if performed at the maximum interval allowed by proposed SR 3.0.2 (30 months) do not invalidate any assumptions in the plant licensing basis.

LE.1 The Frequency for performing the CHANNEL CALIBRATION Surveillance of CTS 4.6.F.1.b (ITS SR 3.3.6.3.2) has been extended from 18 months to 24 months. This Surveillance ensures that the Low Set Relief Valve Reactuation Time Delay Function will function as designed to ensure proper response during analyzed events. The proposed change will allow this Surveillance to extend the

TECHNICAL CHANGES - LESS RESTRICTIVE

LE.1 (cont'd) Surveillance Frequency from the current 18 month Surveillance Frequency (i.e., a maximum of 22.5 months accounting for the allowable grace period specified in CTS 4.0.B and proposed SR 3.0.2) to a 24 month Surveillance Frequency (i.e., a maximum of 30 months accounting for the allowable grace period specified in CTS 4.0.B and proposed SR 3.0.2). This proposed change was evaluated in accordance with the guidance provided in NRC Generic Letter No. 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," dated April 2, 1991.

Extending the SR Frequency is acceptable because the Low Set Relief Valve Reactuation Time Delay is designed to be single failure proof and therefore is highly reliable. Furthermore, the Relief Valve Instrumentation has been evaluated based on make, manufacturer and model number to determine that the instrumentation's actual drift falls within the design allowance in the associated setpoint calculation. The following paragraphs, listed by CTS Function name, identify by make, manufacturer and model number the drift evaluations performed:

Low Set Relief Valve Reactuation Time Delay:

This is performed by Agastat Model 7022PC002 time delay relays. The Agastat relays' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Based on the design of the instrumentation, number of redundant relief valves, and the drift evaluations, it is concluded that the impact, if any, from this change on system availability is minimal as a result of the change in the surveillance test interval. A review of historical surveillance data was performed to validate the above conclusion. This review of surveillance test history demonstrates that there are no failures that would invalidate this conclusion. In addition, the proposed 24 month Surveillance Frequency, if performed at the maximum interval allowed by proposed SR 3.0.2 (30 months) does not invalidate any assumptions in the plant licensing basis.

3.2 - LIMITING CONDITIONS FOR OPERATION

B. Emergency Core Cooling Systems (ECCS) Actuation — Loss of Power (LOP) Instrumentation — A.2

LCO 3.3.8.1 The ECCS actuation (LOP) instrumentation CHANNEL(s) shown in Table 3.2.B-1 shall be OPERABLE with their trip setpoints set consistent with the values shown in the Trip Setpoint (Allowable Value — A.3) column.

APPLICABILITY:

As shown in Table 3.2.B-1.

ACTION: — add Proposed ACTIONS Note — A.4

ACTION A

1. With an ECCS actuation (LOP — A.2) instrumentation CHANNEL trip setpoint less conservative than the value shown in the Trip Setpoint (Allowable Value — A.3) column of Table 3.2.B-1, declare the CHANNEL inoperable until the CHANNEL is restored to OPERABLE status with its trip setpoint adjusted consistent with the Trip Setpoint value.

2. With one or more ECCS actuation (LOP — A.2) instrumentation CHANNEL(s) inoperable, take the ACTION required by Table 3.2.B-1.

3. With either ADS TRIP SYSTEM inoperable, restore the inoperable TRIP SYSTEM to OPERABLE status within: — See ITS 3.3.5.1

   a. 7 days provided that both the HPCI and IC are OPERABLE, or

   b. 72 hours.

   With the above provisions of this ACTION not met, be in at least HOT

4.2 - SURVEILLANCE REQUIREMENTS

B. ECCS Actuation — LOP Instrumentation — A.2

Note 1 to Surveillance Requirements

1. Each ECCS actuation (LOP) instrumentation CHANNEL shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, (See ITS 3.3.5.1) CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations for the OPERATIONAL MODE(s) and at the frequencies shown in Table 4.2.B-1.

SR 3.3.8.1.5

2. LOGIC SYSTEM FUNCTIONAL TEST(s) of all CHANNEL(s) shall be performed at least once per ~~18~~ 24 months. — LD.1 — B

Table 3.3.8.1-1

A.2 — LOP

TABLE 3.2.B-1 (Continued)

ECCS ACTUATION INSTRUMENTATION

Note 2 to Surveillance Requirements

A.3 — Allowable Value

FUNCTION Functional Unit	Allowable Value Trip Setpoint[h]	Minimum CHANNEL(s) per Trip Function[a]	Applicable OPERATIONAL MODE(s)	ACTION
5. AUTOMATIC DEPRESSURIZATION SYSTEM - TRIP SYSTEM 'B'[d]				
a. Reactor Vessel Water Level - Low Low	≥84 inches	2	1, 2, 3	30
b. Drywell Pressure - High[f]	≤2 psig	2	1, 2, 3	30
c. Initiation Timer	≤120 sec	1	1, 2, 3	31
d. Low Low Level Timer	≤10 min	1	1, 2, 3	31
e. CS Pump Discharge Pressure - High (Permissive)	≥100 psig & ≤150 psig	1/pump	1, 2, 3	31
f. LPCI Pump Discharge Pressure - High (Permissive)	≥100 psig & ≤150 psig	1/pump	1, 2, 3	31
6. LOSS OF POWER				
1. a. 4.16 kv Emergency Bus Undervoltage (Loss of Voltage)	2930 ± 146 volts decreasing voltage	2/bus	1, 2, 3, 4[e], 5[e]	36
2. b. 4.16 kv Emergency Bus Undervoltage (Degraded Voltage)	≥ 3784 volts (Unit 2)(g)(i) ≥ 3832 volts (Unit 3)(g)(i)	2/bus	1, 2, 3, 4[e], 5[e]	36

See ITS 3.3.5.1

A.1 LF.1 LA.1 LF.1 LF.1 LF.1 M.1

ACTIONS A and B

2.a) 2.b) 2.a)

add proposed maximum degraded voltage Allowable Value M.2

LOP Instrumentation — ECCS Actuation 3/4.2.B — A2

B

ITS 3.3.8.1

Table 3.3.8.1-1

A.2 — LOP

TABLE 4.2.B-1 (Continued)

~~ECCS ACTUATION~~ INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

FUNCTION Functional Unit	CHANNEL CHECK	SR 3.3.8.1.1, SR 3.3.8.1.3 CHANNEL FUNCTIONAL TEST	SR 3.3.8.1.2, SR 3.3.8.1.4 CHANNEL CALIBRATION	Applicable OPERATIONAL MODE(s)
4. AUTOMATIC DEPRESSURIZATION SYSTEM[a]				
a. Reactor Vessel Water Level - Low Low	S	M	E[f]	1, 2, 3
b. Drywell Pressure - High[d]	NA	M	Q	1, 2, 3
c. Initiation Timer	NA	E	E	1, 2, 3
d. Low Low Level Timer	NA	E	E	1, 2, 3
e. CS Pump Discharge Pressure - High (Permissive)	NA	M	Q	1, 2, 3
f. LPCI Pump Discharge Pressure - High (Permissive)	NA	M	Q	1, 2, 3
5. LOSS OF POWER				
1. a. 4.16 kv Emergency Bus Undervoltage (Loss of Voltage)	NA	E - 3 (24 months)	E - 4 (24 months)	1, 2, 3, 4[c], 5[c]
2.a, 2.b b. 4.16 kv Emergency Bus Undervoltage (Degraded Voltage)	NA	E - 1	E - 2	1, 2, 3, 4[c], 5[c]

See ITS 3.3.5.1 (Channel Check; Function 4)

A.1 LD.1 LE.1 M.1 A.2

B

INSTRUMENTATION

ECCS Actuation 3/4.2.B

LOP Instrumentation

ADMINISTRATIVE

A.4 (cont'd) inoperable channel is allowed a certain time to complete the Required Actions. Since this change only provides more explicit direction of the current interpretation of the existing specifications, this change is considered administrative.

A.5 CTS Table 3.2.B-1 ACTION 36 requires the DG to be declared inoperable and to take the ACTION required by Specification 3.9.A or 3.9.B, as appropriate, when the inoperable LOP instrumentation channel is not tripped within 1 hour. The format of the ITS does not include providing "cross references." ITS 3.8.1 and ITS 3.8.2 adequately prescribe the Required Actions for an inoperable DG without such references. Therefore, the existing reference in CTS Table 3.2.B-1 ACTION 36 to "take the ACTION required by Specification 3.9.A or 3.9.B" serves no functional purpose, and its removal is purely an administrative difference in presentation.

TECHNICAL CHANGES - MORE RESTRICTIVE

M.1 CTS Tables 3.2.B-1 and 4.2.B-1 require the LOP instruments to be OPERABLE during MODES 4 and 5 only when the associated DG is required to be OPERABLE (as stated in footnote (e) to Table 3.2.B-1 and footnote (c) to Table 4.2.B-1). The Applicability is being changed to be when the associated DG is required to be OPERABLE by LCO 3.8.2, "AC Sources — Shutdown," which in ITS 3.3.8.1 requires the LOP instrumentation to be OPERABLE not only during MODES 4 and 5, but also during movement of irradiated fuel assemblies in the secondary containment (which could be when the unit is defueled). This will ensure the DGs can be properly actuated at all times when they are required to be OPERABLE and is an additional restriction on plant operation.

M.2 A new Allowable Value has been added for the LOP Function. The maximum Allowable Value has been added for CTS Table 3.2.B-1 Degraded Voltage Function (ITS Table 3.3.8.1-1 Function 2.a) to prevent inadvertent power supply transfer. The new maximum Allowable Value represents an additional restriction on plant operation. 6

TECHNICAL CHANGES - LESS RESTRICTIVE

"Generic"

LA.1 The detail in CTS Table 3.2.B-1 Functional Unit 6.a relating to the methods (on decreasing voltage) for determining the 4160 V ESS Bus Undervoltage (Loss of Voltage) Setpoint is proposed to be relocated to the Bases. This detail is not

TECHNICAL CHANGES - LESS RESTRICTIVE

LA.1 (cont'd) necessary to ensure the OPERABILITY of the loss of power instrumentation. The requirements of ITS 3.3.8.1 and proposed SR 3.3.8.1.2 are adequate to ensure the loss of power instruments are maintained OPERABLE. Therefore, the relocated detail is not required to be in the ITS to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS.

LD.1 The Frequency for performing the LOGIC SYSTEM FUNCTIONAL TEST of CTS 4.2.B.2 and the CHANNEL FUNCTIONAL TEST of CTS Table 4.2.B-1 for Functional Unit 5.a, 4.16 kV Emergency Bus Undervoltage (Loss of Voltage) have been extended from 18 months to 24 months in proposed SR 3.3.8.1.3 and SR 3.3.8.1.5. These SRs ensure that LOP Instrumentation logic will function as designed to ensure proper response during an analyzed event. The proposed change will allow these Surveillances to extend their Surveillance Frequency from the current 18 month Surveillance Frequency (i.e., a maximum of 22.5 months accounting for the allowable grace period specified in CTS 4.0.B and proposed SR 3.0.2) to a 24 month Surveillance Frequency (i.e., a maximum of 30 months accounting for the allowable grace period specified in CTS 4.0.B and proposed SR 3.0.2). This proposed change was evaluated in accordance with the guidance provided in NRC Generic Letter No. 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," dated April 2, 1991. Reviews of historical maintenance and surveillance data have shown that these tests normally pass their Surveillances at the current Frequency. An evaluation has been performed using this data, and it has been determined that the effect on safety due to the extended Surveillance Frequency will be minimal. The LOP instrumentation including the actuating logic is designed to be single failure proof and therefore, is highly reliable. Furthermore, as stated in the NRC Safety Evaluation Report (dated August 2, 1993) relating to extension of the Peach Bottom Atomic Power Station, Unit Numbers 2 and 3 surveillance intervals from 18 to 24 months: B

> "Industry reliability studies for boiling water reactors (BWRs), prepared by the BWR Owners Group (NEDC-30936P) show that the overall safety systems' reliabilities are not dominated by the reliabilities of the logic system, but by that of the mechanical components, (e.g., pumps and valves), which are consequently tested on a more frequent basis. Since the probability of a relay or contact failure is small relative to the probability of mechanical component failure, increasing the logic system functional test interval represents no significant change in the overall safety system unavailability."

TECHNICAL CHANGES - LESS RESTRICTIVE

LD.1 (cont'd) Based on the inherent system and component reliability, the impact, if any, on system availability is minimal as a result of the change in the surveillance test interval. The review of historical surveillance data also demonstrated that there are no failures that would invalidate this conclusion. In addition, the proposed 24 month Surveillance Frequencies, if performed at the maximum interval allowed by proposed SR 3.0.2 (30 months) do not invalidate any assumptions in the plant licensing basis.

LE.1 The Frequency for performing the CHANNEL CALIBRATION of CTS 4.2.B.1 (Functional Unit 5.a) has been extended from 18 months to 24 months in proposed SR 3.3.8.1.4. This SR ensures that LOP Instrumentation associated with the 4.16 kV Emergency Bus Undervoltage - Loss of Voltage channels will function as designed to ensure proper response during an analyzed event. The proposed change will allow these Surveillances to extend their Surveillance Frequency from the current 18 month Surveillance Frequency (i.e., a maximum of 22.5 months accounting for the allowable grace period specified in CTS 4.0.B and proposed SR 3.0.2) to a 24 month Surveillance Frequency (i.e., a maximum of 30 months accounting for the allowable grace period specified in CTS 4.0.B and proposed SR 3.0.2). This proposed change was evaluated in accordance with the guidance provided in NRC Generic Letter No. 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," dated April 2, 1991.

Extending the SR Frequency is acceptable because the electrical power sources are designed to be single failure proof and therefore are highly reliable. Major deviations in the circuitry will be discovered during the cycle since the CHANNEL FUNCTIONAL TEST of both the loss of voltage instrumentation and the time delay relays are performed more frequently. Furthermore, the impacted LOP instrumentation has been evaluated based on make, manufacturer and model number to determine that the instrumentation's actual drift falls within the design allowance in the associated setpoint calculation.

This function is performed by General Electric 12IAV69A1A relays. The GE relays' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

TECHNICAL CHANGES - LESS RESTRICTIVE

LE.1
(cont'd)

B

Based on the design of the instrumentation and the drift evaluations, it is concluded that the impact, if any, on system availability is minimal as a result of the change in the surveillance test interval.

A review of the surveillance test history was performed to validate the above conclusion. This review of the surveillance test history, demonstrates that there are no failures that would invalidate the conclusion that the impact, if any on system availability is minimal from a change to a 24-month surveillance frequency. In addition, the proposed 24-month Surveillance Frequencies, if performed at the maximum interval allowed by proposed SR 3.0.2 (30 months) do not invalidate any assumptions in the plant licensing basis.

LF.1 This change revises the Current Technical Specifications (CTS) Trip Setpoints for the Improved Technical Specifications (ITS) Allowable Values. ITS Section 3.3 reflects Allowable Values consistent with the philosophy of BWR ISTS, NUREG-1433, Rev. 1. These Allowable Values have been established consistent with the methods described in ComEd's Instrument Setpoint Methodology (Nuclear Engineering Standard NES-EIC-20.04, "Analysis of

A.1

ELECTRICAL POWER SYSTEMS — RPS Electric Power Monitoring 3/4.9.G

3.9 - LIMITING CONDITIONS FOR OPERATION

G. RPS Electric Power Monitoring

LCO 3.3.8.2 Two Reactor Protection System (RPS) electric power monitoring assemblies CHANNEL(s) for each inservice RPS Motor Generator (MG) set or alternate power supply shall be OPERABLE.

APPLICABILITY:

OPERATIONAL MODE(s) 1, 2, 3, 4[a] and 5[a]. (L.1) (L.3)

ACTION:

ACTION A 1. With one RPS electric power monitoring assembly CHANNEL for an inservice RPS MG set or alternate power supply inoperable, restore the inoperable power monitoring CHANNEL to OPERABLE status within 72 hours or remove the associated RPS MG set or alternate power supply from service. (A.2)

ACTION B 2. With both RPS electric power monitoring assemblies CHANNEL(s) for an inservice RPS MG set or alternate power supply inoperable, restore at least one electric power monitoring CHANNEL to OPERABLE status within 30 minutes 1 hour or remove the associated RPS MG set or alternate power supply from service. (A.2) (L.2)

← add proposed ACTION C (A.3)

← add proposed ACTION D (L.4)

4.9 - SURVEILLANCE REQUIREMENTS

G. RPS Electric Power Monitoring

The specified RPS electric power monitoring assemblies CHANNEL(s) shall be determined OPERABLE:

SR 3.3.8.2.1 1. By performance of a CHANNEL FUNCTIONAL TEST[b] each time the plant is in COLD SHUTDOWN for a period of more than 24 hours, unless performed in the previous 6 months.

SR 3.3.8.2.2, SR 3.3.8.2.3 2. At least once per 18 24 months by demonstrating the OPERABILITY of overvoltage, undervoltage, and underfrequency protective instrumentation by performance of a CHANNEL CALIBRATION including simulated automatic actuation of the protective relays, tripping logic, and output circuit breakers, and verifying the following setpoints: Allowable Values (LD.1) (LE.1) (A.4)

SR 3.3.8.2.2 (CHANNEL CALIBRATION); SR 3.3.8.2.3 (simulated automatic actuation)

a. Overvoltage ≤ 129.6 volts AC with time delay set to ≤ 3.9 seconds (LF.1) (M.2)

SR 3.3.8.2.2 b. Undervoltage ≥ 105.3 volts AC with time delay set to ≤ 3.9 seconds (LF.1) (M.2)

c. Underfrequency ≥ 55.4 Hz with time delay set to ≤ 3.9 seconds (LF.1) (M.2)

(B)

---

a With any control rod withdrawn from a core cell containing one or more fuel assemblies. (L.3)

b Only required to be performed prior to entering MODE 2 or 3 from MODE 3 or 4. (L.1)

TECHNICAL CHANGES - LESS RESTRICTIVE (continued)

LE.1 The Frequency for performing the CHANNEL CALIBRATION requirement of CTS 4.9.G.2 has been extended from 18 months to 24 months in proposed SR 3.3.8.2.2. The subject SR ensures that the RPS electric power monitoring assemblies will trip at the specified Allowable Values. The proposed change will allow these Surveillances to extend their Surveillance Frequency from the current 18 month Surveillance Frequency (i.e., a maximum of 22.5 months accounting for the allowable grace period specified in CTS 4.0.B and proposed SR 3.0.2) to a 24 month Surveillance Frequency (i.e., a maximum of 30 months accounting for the allowable grace period specified in CTS 4.0.B and proposed SR 3.0.2). This proposed change was evaluated in accordance with the guidance provided in NRC Generic Letter No. 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," dated April 2, 1991. Extending the SR Frequency is acceptable because the RPS electric power monitoring assemblies are designed to be highly reliable. Furthermore, the impacted RPS electric power monitoring instrumentation has been evaluated based on make, manufacturer and model number as compared to similar operating equipment with similar operating characteristics to determine the instrumentation's projected drift values. The following paragraphs, listed by CTS function number, identify by make, manufacturer and model number and drift evaluations performed:

1. Overvoltage

   This function is performed by GE Electrical Protection Assembly (EPA) Model No. 914E175G001-G004 with Logic Card 147D8652G001-G004 or GE EPA Model No. 914E175G001 with Logic Card 148C6118G002. The EPAs' and associated Logic Cards' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

2. Undervoltage

   This function is performed by GE EPA Model No. 914E175G001-G004 with Logic Card 147D8652G001-G004 or GE EPA Model No. 914E175G001 with Logic Card 148C6118G002. The EPAs' and associated Logic Cards' drift was determined by quantitative analysis. The drift value determined was used in the development of,

TECHNICAL CHANGES - LESS RESTRICTIVE

LE.1 (cont'd) confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

3. Underfrequency

This function is performed by GE EPA Model No. 914E175G001-G004 with Logic Card 147D8652G001-G004 or GE EPA Model No. 914E175G001 with Logic Card 148C6118G002. The EPAs' and associated Logic Cards' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Based on the design of the instrumentation and the drift evaluations, it is concluded that the impact, if any, on system availability is minimal as a result of the change in the surveillance test interval.

A review of the surveillance test history was performed to validate the above conclusion. This review of the surveillance test history, demonstrates that there are no failures that would invalidate the conclusion that the impact, if any on system availability is minimal from a change to a 24-month surveillance frequency. In addition, the proposed 24-month Surveillance Frequencies, if performed at the maximum interval allowed by proposed SR 3.0.2 (30 months) do not invalidate any assumptions in the plant licensing basis.

LF.1 This change revises the Current Technical Specifications (CTS) Trip Setpoints for the Improved Technical Specifications (ITS) Allowable Values. ITS Section 3.3 reflects Allowable Values consistent with the philosophy of BWR ISTS, NUREG-1433, Rev. 1. These Allowable Values have been established consistent with the methods described in ComEd's Instrument Setpoint Methodology (Nuclear Engineering Standard NES-EIC-20.04, "Analysis of Instrument Channel Setpoint Error and Instrument Loop Accuracy"). For most cases, the Allowable Value determinations were calculated using plant specific operating and surveillance trend data or an allowance as provided for by the Instrument Setpoint Methodology. For all other cases, vendor documented performance specifications for drift were used. The Allowable Value verification used actual plant operating and surveillance trend information to

TECHNICAL CHANGES - LESS RESTRICTIVE

L.3 (cont'd) remain inserted, the RPS Functions serve no purpose and are not required. In this condition, the required SHUTDOWN MARGIN (ITS 3.1.1) and the required one-rod-out interlock (ITS 3.9.2) ensure no event requiring RPS will occur. Thus, the RPS Functions are only required to be OPERABLE in MODE 5 when control rods are withdrawn from core cells containing fuel assemblies. Since the RPS electric power monitoring assemblies support OPERABILITY of the RPS Functions, the proposed change revises the Applicability of CTS 3.9.G (ITS 3.3.8.2) such that the RPS electric power monitoring assemblies are required to be OPERABLE when the RPS Functions (ITS 3.3.1.1) are required to be OPERABLE. This change is considered acceptable based on adequate assurance that the RPS will be OPERABLE when required and the negligible effect on core reactivity.

L.4 CTS 3.9.G does not provide any actions if the RPS electric power monitoring assemblies are not restored or the associated RPS MG set or alternate power supply is not removed from service (which de-energizes the associated RPS bus) as required by CTS 3.9.G Actions 1 and 2. Thus, CTS 3.0.C is required to be entered. However, since CTS 3.0.C is not applicable in MODE 5, 10 CFR 50.36(c)(2) requires that the licensee notify the NRC if required by 10 CFR 50.72, and a Licensee Event Report (LER) be submitted to the NRC as required by 10 CFR 50.73. In lieu of these two requirements, a new ACTION D is provided if CTS 3.9.G Actions 1 and 2 (ITS 3.3.8.2 Required Actions of Condition A or B) are not met in MODE 5 with any control rod withdrawn from a core cell containing one or more fuel assemblies. ITS 3.3.8.2 ACTION D requires action to be initiated to fully insert all insertable control rods in core cells containing one or more fuel assemblies. This action places the reactor in the least reactive condition and ensures the safety function of the RPS instrumentation is already met. B

RELOCATED SPECIFICATIONS

None

all changes are [1] unless otherwise indicated

<CTS>

[16] TSTF-264 changes not adopted

<T3.1.A-1>
<T4.1.A-1>
<T2.2.A-1>
<DOC L.8>

Table 3.3.1.1-1 (page 1 of 3)
Reactor Protection System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION D.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Intermediate Range Monitors					
a. Neutron Flux — High	2	[illegible]	G	SR 3.3.1.1.1 SR 3.3.1.1.4 SR 3.3.1.1.6 SR 3.3.1.1.7 SR 3.3.1.1.13 SR 3.3.1.1.16 (add SR 3.3.1.1.5)	≤ 121/125 divisions of full scale
	5(a)	[illegible]	H	SR 3.3.1.1.4 SR 3.3.1.1.12 SR 3.3.1.1.13 SR 3.3.1.1.15	≤ 121/125 divisions of full scale
b. Inop	2	[illegible]	G	SR 3.3.1.1.4 SR 3.3.1.1.15	NA
	5(a)	[illegible]	H	SR 3.3.1.1.5 SR 3.3.2.2.15	NA
2. Average Power Range Monitors					
a. Neutron Flux — High, Setdown	2	[illegible]	G	SR 3.3.1.1.1 SR 3.3.1.1.4 SR 3.3.1.1.7 SR 3.3.1.1.8 SR 3.3.1.1.11 SR 3.3.1.1.15	≤ 17.1% RTP
b. Flow Biased Simulated Thermal Power — High (Neutron Flux)	1	[illegible]	F	SR 3.3.1.1.1 SR 3.3.1.1.2 SR 3.3.1.1.3 SR 3.3.1.1.8 SR 3.3.1.1.9 SR 3.3.1.1.11 ~~SR 3.3.1.1.14~~ SR 3.3.1.1.15 SR 3.3.1.1.17 (add SR 3.3.1.1.17)	≤ 0.58 W + 63.5% RTP and ≤ 122 RTP (b)

(continued)

(a) With any control rod withdrawn from a core cell containing one or more fuel assemblies.

(b) 0.58 W + 59.2 [illegible] RTP when reset for single loop operation per LCO 3.4.1, "Recirculation Loops Operating." (and ≤ 118.5%)

all changes are [1] unless otherwise identified

<CTS>

<T3.1.A-1>
<T4.1.A-1>
<T2.2.A-1>

Table 3.3.1.1-1 (page 2 of 3)
Reactor Protection System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION D.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
2. Average Power Range Monitors (continued)					
c. Fixed Neutron Flux — High	1	[2]	F	SR 3.3.1.1.1 SR 3.3.1.1.2 SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible] add SR 3.3.1.1.5	≤ [120]% RTP (122)
d. Downscale	1	[2]	F	SR 3.3.1.1.8 SR 3.3.1.1.9 SR 3.3.1.1.15	≥ [3]% RTP
e. (d) Inop	1,2	[2]	G	SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible]	NA
3. Reactor Vessel Steam Dome Pressure — High	1,2	[2]	G	SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible] add SR 3.3.1.1.8 add SR 3.3.1.1.13	≤ [1054] psig
4. Reactor Vessel Water Level — Low, Level 3	1,2 ,2(c)	[2]	G	SR 3.3.1.1.1 SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible]	≥ [10] inches (10.24)
5. Main Steam Isolation Valve — Closure	1	[8]	F	SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible]	≤ [10]% closed (9.5)
6. Drywell Pressure — High	1,2	[2]	G	SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible] SR 3.3.1.1.[illegible] add SR 3.3.1.1.13 add SR 3.3.1.1.19	≤ [1.92] psig (1.94)

(continued)

(c) With reactor pressure ≥ 600 psig.

all changes are [1] unless otherwise identified

<CTS>

<T3.1.A-1>
<T4.1.A-1>
<T2.2.A-1>
<DOC M.1>
<DOC M.3>

Table 3.3.1.1-1 (page 3 of 3)
Reactor Protection System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION D.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
7. Scram Discharge Volume Water Level — High					
a. Resistance Temperature Detector (Thermal Switch (Unit 2) / Float Switch (Unit 3))	1,2	[2]	G	SR 3.3.1.1.1 SR 3.3.1.1.8 SR 3.3.1.1.10 SR 3.3.1.1.12 SR 3.3.1.1.15 (add SR 3.3.1.1.5)	≤ [57.15] gallons (≤ 37.9 gallons (Unit 2); ≤ 39.1 gallons (Unit 3))
	5(a)	[2]	H	SR 3.3.1.1.1 SR 3.3.1.1.8 SR 3.3.1.1.10 SR 3.3.1.1.12 SR 3.3.1.1.15	≤ [57.15] gallons
b. Float Switch (Differential Pressure)	1,2	[2]	G	SR 3.3.1.1.8 SR 3.3.1.1.12 SR 3.3.1.1.15	≤ [57.15] gallons
	5(a)	[2]	H	SR 3.3.1.1.8 SR 3.3.1.1.12 SR 3.3.1.1.15	≤ [57.15] gallons
8. Turbine Stop Valve — Closure	≥ [30]% (45) RTP	[4]	E	SR 3.3.1.1.8 SR 3.3.1.1.10 SR 3.3.1.1.12 SR 3.3.1.1.13 SR 3.3.1.1.15 SR 3.3.1.1.17	≤ [10]% (9.5) closed
9. Turbine Control Valve Fast Closure, Trip Oil Pressure — Low	≥ [30]% (45) RTP	[2]	E	SR 3.3.1.1.8 SR 3.3.1.1.10 SR 3.3.1.1.12 SR 3.3.1.1.13 SR 3.3.1.1.15 SR 3.3.1.1.17	≥ [600] (466) psig
10. (11) Reactor Mode Switch — Shutdown Position	1,2	[1]	G	SR 3.3.1.1.14 SR 3.3.1.1.15	NA
	5(a)	[1]	H	SR 3.3.1.1.14 SR 3.3.1.1.15	NA
11. (12) Manual Scram	1,2	[1]	G	SR 3.3.1.1.5 SR 3.3.1.1.15	NA
	5(a)	[1]	H	SR 3.3.1.1.5 SR 3.3.1.1.15	NA
10. Turbine Condenser Vacuum-Low	1,2(c)	2	F	SR 3.3.1.1.5 SR 3.3.1.1.8 SR 3.3.1.1.10 SR 3.3.1.1.18 SR 3.3.1.1.19	≥ 21.15 inches Hg vacuum

(a) With any control rod withdrawn from a core cell containing one or more fuel assemblies.

(c) With reactor pressure ≥ 600 psig

<CTS>

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<4.2.C.1> <T4.2.C-1> 5 — 1 ① ③ 5 SR 3.3.4.2.2 Perform CHANNEL FUNCTIONAL TEST.	[92] days 3
<4.2.C.1> <T4.2.C-1> <T4.2.C-1 Footnote (a)> 1 ① ② 5 SR 3.3.4.2.3 Calibrate the trip units.	[92] days
<4.2.C.1> <T3.2.C-1> <T3.2.C-1 Footnote (b)> <T4.2.C-1> <T4.2.C-1 Footnote (a)> 1 ① SR 3.3.4.2.4 Perform CHANNEL CALIBRATION. The Allowable Values shall be: a. Reactor Vessel Water Level—Low Low ① [Level 2]: ≥ [-47] -54.15 3 inches [; and] with time delay set to ≥8.3 seconds and ≤9.7 seconds; and 4 b. Reactor Vessel 2 Steam Dome Pressure—High: ≤ [1095] 1231 3 psig.	[18] 24 months
<4.2.C.2> 1 ① SR 3.3.4.2.5 Perform LOGIC SYSTEM FUNCTIONAL TEST including breaker actuation.	[18] 24 months 3

A A B

1

<CTS>

<DOC M.1>

INSERT FUNCTION 1.e

e.	Core Spray Pump Start-Time Delay Relay	1, 2, 3 4[a], 5[a]	1 per pump	C	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 13.8 seconds

<CTS>

<T3.2.B.1>
<T4.2.B.1>
<DOC M.1>

Table 3.3.5.1-1 (page 2 of 6)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
2. LPCI System (continued)					
b. Drywell Pressure — High	1,2,3	4	B	SR 3.3.5.1.1 SR 3.3.5.1.2 [SR 3.3.5.1.3] SR 3.3.5.1.5 SR 3.3.5.1.6 SR 3.3.5.1.7	≤ [1.92] psig
c. Reactor Steam Dome Pressure — Low (Injection Permissive)	1,2,3	4	C	SR 3.3.5.1.1 SR 3.3.5.1.2 [SR 3.3.5.1.3] SR 3.3.5.1.5 SR 3.3.5.1.6 SR 3.3.5.1.7	≥ [390] psig and ≤ [500] psig
	4(a), 5(a)	4	B	SR 3.3.5.1.1 SR 3.3.5.1.2 [SR 3.3.5.1.3] SR 3.3.5.1.5 SR 3.3.5.1.6 SR 3.3.5.1.7	≥ [390] psig and ≤ [500] psig
d. Reactor Steam Dome Pressure — Low (Recirculation Discharge Valve Permissive)	1(c), 2(c), 3(c)	4	B	SR 3.3.5.1.1 SR 3.3.5.1.2 [SR 3.3.5.1.3] SR 3.3.5.1.5 SR 3.3.5.1.6	≥ [335] psig
e. Reactor Vessel Shroud Level — Level 0	1,2,3	[2]	B	SR 3.3.5.1.1 SR 3.3.5.1.2 [SR 3.3.5.1.3] SR 3.3.5.1.5 SR 3.3.5.1.6	≥ [-202] inches
f. Low Pressure Coolant Injection Pump Start — Time Delay Relay Pumps A,B,D	1,2,3, 4(a), 5(a)	[4] [1 per pump]	C	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 9 seconds and ≤ 11 seconds
Pump C					≤ 1 second

(continued)

(a) When associated subsystem(s) are required to be OPERABLE.

(b) Also required to initiate the associated [DG and isolate the associated PSW T/B isolation valves].

(c) With associated recirculation pump discharge valve open.

Handwritten markups: 3, 5, 6, 4, 7, 10, A, B; 1.81; 308.5; 341.7; 802; and ≤ 898 psig; 8.8; SR 3.3.5.1.4; Break Detection; 1,2,3; ECCS; per LCO 3.5.2; and; Pump E; e

<CTS> Insert Functions 2.g, 2.h, 2.i, 2.j and 2.k [1]

<T3.2.B-1>
<T4.2.B-1>
<DOC M.1>

Table 3.3.5.1-1 (page 3 of 6)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
2. LPCI System (continued)					
g. Low Pressure Coolant Injection Pump Discharge Flow — Low (Bypass)	1,2,3, 4(a), 5(a)	[4] [1 per pump]	E	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ [ ] gpm and ≤ [ ] gpm
h. Manual Initiation	1,2,3, 4(a), 5(a)	[2] [1 per subsystem]	C	SR 3.3.5.1.6	NA
3. High Pressure Coolant Injection (HPCI) System					
a. Reactor Vessel Water Level — Low Low, Level 2	1, 2(d), 3(d)	[4]	B	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.5 SR 3.3.5.1.6 SR 3.3.5.1.7	≥ [-47] inches
b. Drywell Pressure — High	1, 2(d), 3(d)	[4]	B	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.4 SR 3.3.5.1.6 SR 3.3.5.1.7	≤ [1.92] psig
c. Reactor Vessel Water Level — High, Level 8	1, 2(d), 3(d)	[2]	C	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.5 SR 3.3.5.1.6 SR 3.3.5.1.7	≤ [56.5] inches
d. Condensate Storage Tank Level — Low	1, 2(d), 3(d)	[2]	D	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ [0] inches
e. Suppression Pool Water Level — High	1, 2(d), 3(d)	[2]	D	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.5 SR 3.3.5.1.6	≤ [154] inches

Handwritten markups: SR 3.3.5.1.3 [6]; 1107 [3]; 1 per loop [3]; [2]; [3]; -54.15 [3]; 1.81 [3]; SR 3.3.5.1.4 [6]; 46.2 [3]; Contaminated [5]; 2 per CCST [3]; (CCST) [5]; ≥ 1.1158 ft for CCST 2/3 A and ≥ 1.5637 ft for CCST 2/3 B [3]; 15 ft 5.625 inches [3]; A; B; ECCS [7]; per LCO 3.5.2 [7]

(continued)

(a) When the associated subsystem(s) are required to be OPERABLE.

(d) With reactor steam dome pressure > [150] psig. [3]

<CTS>

<DOC M.1>

1

INSERT Functions 2.g, 2.h, 2.i, 2.j, and 2.k

g. Recirculation Pump Differential Pressure—High (Break Detection)	1, 2, 3	4 per pump	C	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 5.9 psid	A
h. Recirculation Riser Differential Pressure—High (Break Detection)	1, 2, 3	4	C	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 2.0 psid	A
i. Recirculation Pump Differential Pressure Time Delay - Relay (Break Detection)	1, 2, 3	2	C	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 0.53 seconds	B
j. Reactor Steam Dome Pressure Time Delay - Relay (Break Detection)	1, 2, 3	2	B	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 2.12 seconds	B
k. Recirculation Riser Differential Pressure Time Delay - Relay (Break Detection)	1, 2, 3	2	C	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 0.53 seconds	B

<CTS>

<T3.2.B-1>
<T4.2.B-1>

Table 3.3.5.1-1 (page 4 of 6)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
3. HPCI System (continued)					
f. High Pressure Coolant Injection Pump Discharge Flow - Low (Bypass)	1, 2(d), 3(d)	[1]	E	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ [ ] gpm and ≤ [ ] gpm
g. Manual Initiation	1, 2(d), 3(d)	[1]	C	SR 3.3.5.1.6	NA
4. Automatic Depressurization System (ADS) Trip System A					
a. Reactor Vessel Water Level - Low Low Low, Level 1	1, 2(d), 3(d)	[2]	F	SR 3.3.5.1.1 SR 3.3.5.1.2 [SR 3.3.5.1.3] SR 3.3.5.1.5 SR 3.3.5.1.6	≥ [-113] inches
b. Drywell Pressure - High	1, 2(d), 3(d)	[2]	F	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.5 SR 3.3.5.1.6	≤ [1.92] psig
c. Automatic Depressurization System Initiation Timer	1, 2(d), 3(d)	[1]	G	[SR 3.3.5.1.5] SR 3.3.5.1.6	≤ [120] seconds
d. Reactor Vessel Water Level - Low, Level 3 (Confirmatory)	1, 2(d), 3(d)	[1]	F	SR 3.3.5.1.1 SR 3.3.5.1.2 [SR 3.3.5.1.3] SR 3.3.5.1.5 SR 3.3.5.1.6	≥ [10] inches
e. Core Spray Pump Discharge Pressure - High	1, 2(d), 3(d)	[2]	G	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ [137] psig and ≤ [7] psig

(continued)

(d) With reactor steam dome pressure > [150] psig.

Handwritten markups: 3; 6; SR 3.3.5.1.4; 616; 3; A; 5; C; -54.15; 1.81; 113; B; 9; d; 101.5; 148.5; 5

<CTS>

<T3.2.B-1>
<T4.2.B-1>

Table 3.3.5.1-1 (page 5 of 6)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
4. ADS Trip System A (continued)					
f. Low Pressure Coolant Injection Pump Discharge Pressure — High	1, 2(f), 3(f)	[4]	G	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ [112] psig and ≤ [?] psig
g. Automatic Depressurization System Low Water Level Actuation Timer	1, 2(f), 3(f)	[2]	G	[SR 3.3.5.1.5] SR 3.3.5.1.6	≤ [13] minutes
h. Manual Initiation	1, 2(d), 3(d)	[2]	G	SR 3.3.5.1.6	NA
5. ADS Trip System B					
a. Reactor Vessel Water Level — Low Low Low, Level 1	1, 2(f), 3(f)	[2]	F	SR 3.3.5.1.1 SR 3.3.5.1.2 [SR 3.3.5.1.3] SR 3.3.5.1.5 SR 3.3.5.1.6	≥ [-113] inches
b. Drywell Pressure — High	1, 2(f), 3(f)	[2]	F	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≤ [1.92] psig
c. Automatic Depressurization System Initiation Timer	1, 2(f), 3(f)	[1]	G	[SR 3.3.5.1.5] SR 3.3.5.1.6	≤ [120] seconds
d. Reactor Vessel Water Level — Low, Level 3 (Confirmatory)	1, 2(d), 3(d)	[1]	F	SR 3.3.5.1.1 SR 3.3.5.1.2 [SR 3.3.5.1.3] SR 3.3.5.1.5 SR 3.3.5.1.6	≥ [10] inches
e. Core Spray Pump Discharge Pressure — High	1, 2(f), 3(f)	[2]	G	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ [137] psig and ≤ [?] psig

Handwritten markups: 4.f → e; 4.g → f; 5.e → d; footnote (f) → (c); channels changed to 5, 1, 1, 1, 1, 1; allowable values changed to ≥ 101.5 psig and ≤ 148.5 psig; 580 seconds; -54.15 inches; 1.81 psig; 113 seconds; 4.h and 5.d deleted; "Low" added before Water Level; SR 3.3.5.1.1 and SR 3.3.5.1.5 deleted; change notes 1, 2, 3, 5, 6, 9, A, B.

(continued)

(f) With reactor steam dome pressure > [150] psig.

<CTS>

<T3.2.B-1>
<T4.2.B-1>

Table 3.3.5.1-1 (page 6 of 6)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
5. ADS Trip System B (continued)					
g. Low Pressure Coolant Injection Pump Discharge Pressure — High	1, 2(d), 3(d)	[4]	G	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ [112] psig and ≤ [ ] psig
h. Automatic Depressurization System Low Water Level Actuation Timer	1, 2(d), 3(d)	[2]	G	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ [13] minutes
h. Manual Initiation	1, 2(d), 3(d)	[2]	G	SR 3.3.5.1.6	NA

(d) With reactor steam dome pressure > [150] psig.

3 6 101.5 148.5 A A 9 e f Low 5 c SR 3.3.5.1.1 1 ≤ 580 seconds B 2

allchannels are [1] unless otherwise identified

<CTS>

SURVEILLANCE REQUIREMENTS

------------------------------------NOTES------------------------------------ [3]

1. Refer to Table 3.3.5.2-1 to determine which SRs apply for each RCIC Function.

2. When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed as follows: (a) for up to 6 hours for Functions 2 and 5; and (b) for up to 6 hours for Functions 1, 3, and 4 provided the associated Function maintains RCIC initiation capability.

Reactor Vessel Pressure – High

	SURVEILLANCE	FREQUENCY
	SR 3.3.5.2.1 Perform CHANNEL CHECK.	12 hours
<4.2.D.1> <T4.2.D-1>	SR 3.3.5.2.2 (1) Perform CHANNEL FUNCTIONAL TEST.	[92] (31) days [2]
	SR 3.3.5.2.3 Calibrate the trip units.	[92] days
<4.2.D.1> <T3.2.D-1> <T4.2.D-1>	SR 3.3.5.2.4 (2) Perform CHANNEL CALIBRATION.	92 days [2]
	SR 3.3.5.2.5 (3) Perform CHANNEL CALIBRATION.	(18) (24) months [2] B
<4.2.D.2>	SR 3.3.5.2.6 (4) Perform LOGIC SYSTEM FUNCTIONAL TEST.	[18] (24) months [2] B

The Allowable Value shall be ≤ 1064 psig. A

---NOTE---
Not required for the time delay portion of the channel.
----

for the time delay portion of the channel, The Allowable Value shall be ≤ 17 seconds B

1. Dresden 2 and 3 does not have RCIC System Instrumentation, but has IC System Instrumentation. Therefore, changes have been made to be consistent with current licensing basis or with the setpoint calculation methodology. B

2. The brackets have been removed and the proper plant specific information/value has been provided.

3. ISTS Table 3.3.5.2-1 has not been retained in proposed ITS 3.3.5.2, since the isolation condenser instrumentation consists of only one Function (Reactor Vessel Pressure—High). Thus, this one Function is identified in the LCO statement, and since it is subject to all of the proposed Surveillance Requirements, Note 1 to the Surveillance Requirements, referencing Table 3.3.5.2-1, has been deleted and subsequent Notes renumbered as required.

<CTS>

<T3.2.A-1>
<DOC M.1>
<T4.2.A-1>

Table 3.3.6.1-1 (page 1 of 6)
Primary Containment Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Main Steam Line Isolation					
a. Reactor Vessel Water Level — Low Low (Low) Level 1	1,2,3	[2]	D	SR 3.3.6.1.1 SR 3.3.6.1.2 [SR 3.3.6.1.3] SR 3.3.6.1.6 SR 3.3.6.1.7 SR 3.3.6.1.8	≥ [-113] -56.77 inches
b. Main Steam Line Pressure — Low	1	[2]	E	[SR 3.3.6.1.3] SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.7 SR 3.3.6.1.8	≥ [825] 831 psig
d. c. Main Steam Line Flow — High	1,2,3	[2] per MSL	D	SR 3.3.6.1.1 SR 3.3.6.1.2 [SR 3.3.6.1.3] SR 3.3.6.1.6 SR 3.3.1.1.4 SR 3.3.6.1.7 SR 3.3.6.1.8	≤ [138% rated steam flow] 160.5 psid (Unit 2) ≤ 117.1 psid (Unit 3)
d. Condenser Vacuum — Low	1, 2(a), 3(a)	[2]	D	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.7	≥ [7] inches Hg vacuum
e. Main Steam Tunnel Line Temperature — High	1,2,3	[8] 2 per trip string	D	SR 3.3.6.1.1 SR 3.3.6.1.2 [SR 3.3.6.1.3] SR 3.3.6.1.6 SR 3.3.6.1.7 SR 3.3.6.1.8	≤ [196] 200 °F
f. Main Steam Tunnel Differential Temperature — High	1,2,3	[2]	D	SR 3.3.6.1.1 SR 3.3.6.1.2 [SR 3.3.6.1.3] SR 3.3.6.1.6 SR 3.3.6.1.7	≤ [ ]°F
g. Turbine Building Area Temperature — High	1,2,3	[32]	D	[SR 3.3.6.1.1] SR 3.3.6.1.2 SR 3.3.6.1.6 SR 3.3.6.1.7	≤ [200]°F
h. Manual Initiation	1,2,3	[1]	G	SR 3.3.6.1.7	NA
c. Main Steam Line Pressure - Timer	1	2	E	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 0.280 seconds (unit 2) ≤ 0.236 seconds (unit 3)

(continued)

(a) With any turbine [stop valve] not closed.

Margin annotations: 3, 5, 6, 7, 8, 9, 11, 13, A, B

<CTS>
<DOC M.3>
<T 3.2.A-1 Footnote (h)>

3

Insert Function 3.b

b. HPCI Steam Line Flow-Timer	1, 2, 3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≥ 3.2 seconds and ≤ 8.8 seconds

B

All changes [1] unless otherwise identified

<CTS>

<3.6.F>
<4.6.F>
<DOC M.1>

Table 3.3.6.3-1 (page 1 of 1)
Relief Valve ~~Low-Low Set~~ Instrumentation

FUNCTION	REQUIRED CHANNELS PER FUNCTION	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
~~1. Reactor Steam Dome Pressure — High~~	~~[1 per LLS valve]~~	~~[SR 3.3.6.3.1]~~ ~~SR 3.3.6.3.4~~ ~~[SR 3.3.6.3.5]~~ ~~SR 3.3.6.3.6~~ ~~SR 3.3.6.3.7~~	~~≤ [1054] psig~~
~~2. Low-Low Set Pressure Setpoints~~	~~[2 per LLS valve]~~	~~[SR 3.3.6.3.1]~~ ~~SR 3.3.6.3.4~~ ~~[SR 3.3.6.3.5]~~ ~~SR 3.3.6.3.6~~ ~~SR 3.3.6.3.7~~	~~Low: Open ≤ [1010] psig Close ≤ [860] psig~~ ~~Medium-Low: Open ≤ [1025] psig Close ≤ [875] psig~~ ~~Medium-High: Open ≤ [1040] psig Close ≤ [890] psig~~ ~~High: Open ≤ [1050] psig Close ≤ [900] psig~~
~~3. Tailpipe Pressure Switch~~	~~[22] [2 per S/RV]~~	~~[SR 3.3.6.3.1]~~ ~~SR 3.3.6.3.2~~ ~~[SR 3.3.6.3.3]~~ ~~SR 3.3.6.3.6~~ ~~[SR 3.3.6.3.7]~~	~~≥ [80] psig and ≤ [100] psig~~
1. Low Set Relief Valves			
a. Reactor Vessel Pressure Setpoint	1 per valve	SR 3.3.6.3.1 SR 3.3.6.3.3	≤ 1110.5 psig [A]
b. Reactuation Time Delay	2 per valve	SR 3.3.6.3.2 SR 3.3.6.3.3	≥ 8.5 seconds and ≤ 11.4 seconds [B]
2. Relief Valves			
a. Reactor Vessel Pressure Setpoint	1 per valve	SR 3.3.6.3.1 SR 3.3.6.3.3	≤ 1133.5 psig [A]

<CTS>

SURVEILLANCE REQUIREMENTS

NOTES

1. Refer to Table 3.3.8.1-1 to determine which SRs apply for each LOP Function.

[1] 2. When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 2 hours provided the associated Function maintains ~~DG~~ LOP initiation capability.

	SURVEILLANCE	FREQUENCY
	~~SR 3.3.8.1.1 Perform CHANNEL CHECK.~~	~~12 hours~~ [2]
<T4.2.B-1> [2]	SR 3.3.8.1.~~2~~ 1 Perform CHANNEL FUNCTIONAL TEST.	~~31 days~~ 18 months [3]
<T4.2.B-1>	SR 3.3.8.1.~~3~~ 2 Perform CHANNEL CALIBRATION.	~~18~~ [2] months
<4.2.B.2>	SR 3.3.8.1.~~4~~ 5 Perform LOGIC SYSTEM FUNCTIONAL TEST.	~~18~~ 24 months [2]
	SR 3.3.8.1.3 Perform CHANNEL FUNCTIONAL TEST.	24 months
	SR 3.3.8.1.4 Perform CHANNEL CALIBRATION.	24 months [3]

all changes are [2] *unless otherwise identified*

<T3.2.B-1>
<T4.2.B-1>
<T3.2.B-1 Footnote (g)>
<T3.2.B-1 Footnote (j)>

Table 3.3.8.1-1 (page 1 of 1)
Loss of Power Instrumentation

FUNCTION	REQUIRED CHANNELS PER BUS	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. 4.16 KV Emergency Bus Undervoltage (Loss of Voltage) [*4160 V Essential Service System* [1]]			
a. Bus Undervoltage [4]	2	SR 3.3.8.1.1 [3] SR 3.3.8.1.2 (3) SR 3.3.8.1.3 (4) SR 3.3.8.1.4 (5)	≥ 2800 (2796.85) V and ≤ (3063.20) V
b. Time Delay	2	SR 3.3.8.1.2 SR 3.3.8.1.3 SR 3.3.8.1.4	≥ 1 seconds and ≤ 6.5 seconds
2. 4.16 KV Emergency Bus Undervoltage (Degraded Voltage)			
a. Bus Undervoltage [*/Time Delay* [5]]	2	SR 3.3.8.1.1 (1) SR 3.3.8.1.2 (2) SR 3.3.8.1.3 (4) SR 3.3.8.1.4	≥ (3861) V and ≤ (3911) V [*with time delay ≥ 5.7 seconds and ≤ 8.3 seconds* [5]]
b. Time Delay [*(No LOCA)* [1]]	2	SR 3.3.8.1.2 (1) SR 3.3.8.1.3 (2) SR 3.3.8.1.4 (5)	≥ (27.9) seconds and ≤ (32.1) seconds

JUSTIFICATION FOR DEVIATIONS FROM NUREG-1433, REVISION 1
ITS: 3.3.8.1 - LOP INSTRUMENTATION

1. The proper Dresden 2 and 3 plant specific nomenclature/value/design requirements have been provided.

2. The brackets have been removed and the proper plant specific information/value has been provided or the requirement has been deleted. The following requirements have been renumbered to reflect the deletion, as applicable.

3. The ISTS SR 3.3.8.1.2 CHANNEL FUNCTIONAL TEST Frequency has been changed from 31 days to 18 months consistent with the current licensing basis for the degraded voltage Functions. In addition, a 24 month CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION frequency have been added, consistent with the 24 month surveillance interval extension justifications for the Loss of Voltage Function. B

4. ISTS Table 3.3.8.1-1, Function 1.b, 4.16 kV Emergency Bus Undervoltage (Loss of Voltage) Time Delay, has been deleted. The Dresden 2 and 3 instrumentation design does not include a time delay associated with the loss of voltage function, except as provided by the bus undervoltage relay inverse time/voltage characteristics. The previous Function has been renumbered as required.

5. ISTS Table 3.3.8.1-1, Function 2.a, 4.16 kV Emergency Bus Undervoltage (Degraded Voltage), has been revised to include the inherent (adjustable) time delay associated with the degraded voltage relays.

<CTS>

SURVEILLANCE REQUIREMENTS (continued)

	SURVEILLANCE	FREQUENCY
<4.9.G.2.a> <4.9.G.2.b> <4.9.G.2.c>	SR 3.3.8.2.2 Perform CHANNEL CALIBRATION. The Allowable Values shall be: a. Overvoltage ≤ [132] 128.6 V. b. Undervoltage ≥ [108] 106.3 V, with time delay set to [zero] ≤ 3.9 seconds. c. Underfrequency ≥ [57] 55.7 Hz, with time delay set to [zero].	[18] 24 months 3 with time delay set to ≤ 3.9 seconds 3
<4.9.G.2>	SR 3.3.8.2.3 Perform a system functional test.	[18] 24 months 3

B

all changes are [3] unless otherwise identified

BASES (continued)

REFERENCES

1. (4) FSAR, Figure [ ]. Section 7.2 [4]

2. UFSAR Section 5.2.2.
3. UFSAR, Section 6.2.1.3.2.
4. UFSAR, Chapter 15.

(5)→2. FSAR, Section [15.1.2]. 4.7 [4]

(6)→3. NEDO-23842, "Continuous Control Rod Withdrawal in the Startup Range," April 18, 1978.

4. FSAR, Section [5.2.2].

(7)→5. (4) FSAR, Section [15.1.38]. 4.10 [4]

(8)→6. FSAR, Section [6.3.3]. 15.6.5

7. FSAR, Chapter [15].

9. UFSAR, Section 15.2.5.

(10)→8. P. Check (NRC) letter to G. Lainas (NRC), "BWR Scram Discharge System Safety Evaluation," December 1, 1980.

11. UFSAR, Section 15.2.3.
12. UFSAR, Section 15.2.2.

(13)→9. NEDO-30851-P-A (C), "Technical Specification Improvement Analyses for BWR Reactor Protection System," March 1988.

(14)→10. FSAR, Table [7.2-1]. Technical Requirements Manual

1B

BASES

REFERENCES (continued)

6. NEDO-21231, "Banked Position Withdrawal Sequence," January 1977.

Reference 10 from previous page

9 7. NRC SER, "Acceptance of Referencing of Licensing Topical Report NEDE-24011-P-A," "General Electric Standard Application for Reactor Fuel, Revision 8, Amendment 17," December 27, 1987.

12 8. NEDC-30851-P-A, Supplement 1, "Technical Specification Improvement Analysis for BWR Control Rod Block Instrumentation," October 1988.

11 9. GENE-770-06-1-A, "Addendum to Bases for Changes to Surveillance Test Intervals and Allowed Out-of-Service Times for Selected Instrumentation Technical Specifications," February 1991. December 1992

1 B

2 Insert BKGD-3

The LPCI System initiation logic also contains LPCI Loop Select Logic whose purpose is to identify and direct LPCI flow to the unbroken recirculation loop if a Design Basis Accident (DBA) occurs. The LPCI Loop Select Logic is initiated upon the receipt of either a LPCI Reactor Vessel Water Level - Low Low signal or a LPCI Drywell Pressure - High signal, as discussed previously. When initiated, the LPCI Loop Select Logic first determines recirculation pump operation by sensing the differential pressure (dp) between the suction and discharge of each pump. There are four dp switches monitoring each recirculation loop which are, in turn, connected to relays whose contacts are connected to two trip systems. The dp switches will trip when the dp across the pump is approximately 2 psid. The contacts are arranged in a one-out-of-two taken twice logic for each recirculation pump. If the logic senses that either pump is not running, i.e., single loop operation, then a trip signal is sent to both recirculation pumps to eliminate the possibility of pipe breaks being masked by the operating recirculation pump pressure. However, the pump trip signal is delayed approximately 0.5 seconds to ensure that at least one pump is off since the break detection sensitivity is greater with both pumps running. If a pump trip signal is generated, reactor steam dome pressure must drop to a specified value before the logic will continue. This adjusts the selection time to optimize sensitivity and still ensure that LPCI injection is not unnecessarily delayed. The reactor steam dome pressure is sensed by four pressure switches which in turn are connected to relays whose contacts are connected to two trip systems. The contacts are arranged in a one-out-of-two taken twice logic. After the satisfaction of this pressure requirement or if both recirculation pumps indicate they are running, a 2 second time delay is provided to allow momentum effects to establish the maximum differential pressure for loop selection. Selection of the unbroken recirculation loop is then initiated. This is done by comparing the absolute pressure of the two recirculation riser loops. The broken loop is indicated by a lower pressure than the unbroken loop. The loop with the higher pressure is then used for LPCI injection. If, after a small time delay (approximately 0.5 seconds), the pressure in loop A is not indicating higher than loop B, the logic will provide a signal to close the B recirculation loop discharge valve, open the LPCI injection valve to the B recirculation loop and close the LPCI injection valve to the A recirculation loop. This is the "default" choice in the LPCI Loop Select Logic. If recirculation loop A pressure indicates higher than loop B pressure, approximately 2 psig, the recirculation discharge valve in loop A is closed, the LPCI injection valve to loop A is signaled to open and the LPCI injection valve to loop B is signaled to close. The four dp switches which provide input to this portion of the logic detect the pressure difference between the corresponding risers to the jet pumps in each recirculation loop. The four dp switches are connected to relays whose contacts are connected to two trip systems. The contacts in each trip system are arranged in a one-out-of-two taken twice logic. There are two redundant trip systems in the LPCI Loop Select Logic. The complete logic in each trip system must actuate for operation of the LPCI Loop Select Logic.

all changes are [1] unless otherwise identified

BASES

SURVEILLANCE REQUIREMENTS

SR 3.3.5.2.3 (continued)

must be readjusted to be equal to or more conservative than accounted for in the appropriate setpoint methodology.

The Frequency of 92 days is based on the reliability analysis of Reference 1.

SR 3.3.5.2.4 (2) and SR 3.3.5.2.5 (3)

A CHANNEL CALIBRATION is a complete check of the instrument loop and the sensor. This test verifies the channel responds to the measured parameter within the necessary range and accuracy. CHANNEL CALIBRATION leaves the channel adjusted to account for instrument drifts between successive calibrations consistent with the plant specific setpoint methodology.

A Note to SR 3.3.5.2.2 states that this SR is not required for the time delay portion of these channels. This allowance is consistent with the plant specific setpoint methodology. This portion of the channels must be calibrated in accordance with SR 3.3.5.2.3. (B)

The Frequency of SR 3.3.5.2.4 (2) is based upon the assumption of a 92 day calibration interval in the determination of the magnitude of equipment drift in the setpoint analysis. (B)

The Frequency of SR 3.3.5.2.5 (3) is based upon the assumption of an 18 (24) month calibration interval in the determination of the magnitude of equipment drift in the setpoint analysis. (B)

SR 3.3.5.2.6 (4) (B)

The LOGIC SYSTEM FUNCTIONAL TEST demonstrates the OPERABILITY of the required initiation logic for a specific channel. The system functional testing performed in LCO 3.5.3 overlaps this Surveillance to provide complete testing of the safety function.

The 18 (24) month Frequency is based on the need to perform this Surveillance under the conditions that apply during a plant outage and the potential for an unplanned transient if the Surveillance were performed with the reactor at power. Operating experience has shown that these components usually pass the Surveillance when performed at the 18 (24) month Frequency.

(continued)

All changes are [1] unless noted otherwise

BASES

APPLICABLE SAFETY ANALYSES, LCO, and APPLICABILITY

[4]

1.e., 1.f., 1.g. Area and Differential Temperature—High (continued) Main Steam Line Tunnel

Eight thermocouples provide input to the Differential Temperature—High Function. The output of these thermocouples is used to determine the differential temperature. Each channel consists of a differential temperature instrument that receives inputs from thermocouples that are located in the inlet and outlet of the area cooling system for a total of four available channels.

[4] Main Steam Line Tunnel Temperature —High

The ambient and differential temperature monitoring Allowable Value is chosen to detect a leak equivalent to between 1% and 10% rated steam flow. of less than [B]

These Functions isolate the Group 1 valves.

[4]

1.h. Manual Initiation

The Manual Initiation push button channels introduce signals into the MSL isolation logic that are redundant to the automatic protective instrumentation and provide manual isolation capability. There is no specific FSAR safety analysis that takes credit for this Function. It is retained for the overall redundancy and diversity of the isolation function as required by the NRC in the plant licensing basis.

There are two push buttons for the logic, one manual initiation push button per trip system. There is no Allowable Value for this Function since the channels are mechanically actuated based solely on the position of the push buttons.

Two channels of Manual Initiation Function are available and are required to be OPERABLE in MODES 1, 2, and 3, since these are the MODES in which the MSL isolation automatic Functions are required to be OPERABLE.

(continued)

BASES

SURVEILLANCE REQUIREMENTS (continued)

returned to OPERABLE status or the applicable Condition entered and Required Actions taken.

SR 3.3.8.1.1

Performance of the CHANNEL CHECK once every 12 hours ensures that a gross failure of instrumentation has not occurred. A CHANNEL CHECK is normally a comparison of the parameter indicated on one channel to a similar parameter on other channels. It is based on the assumption that instrument channels monitoring the same parameter should read approximately the same value. Significant deviations between the instrument channels could be an indication of excessive instrument drift in one of the channels or something even more serious. A CHANNEL CHECK will detect gross channel failure; thus, it is key to verifying the instrumentation continues to operate properly between each CHANNEL CALIBRATION.

Agreement criteria are determined by the plant staff based on a combination of the channel instrument uncertainties, including indication and readability. If a channel is outside the criteria, it may be an indication that the instrument has drifted outside its limit.

The Frequency is based upon operating experience that demonstrates channel failure is rare. The CHANNEL CHECK supplements less formal, but more frequent, checks of channels during normal operational use of the displays associated with channels required by the LCO.

4 A

SR 3.3.8.1.2 and SR 3.3.8.1.3 4

A CHANNEL FUNCTIONAL TEST is performed on each required channel to ensure that the entire channel will perform the intended function. Any setpoint adjustment shall be consistent with the assumptions of the current plant specific setpoint methodology. 1

The Frequencies of 31 days is 18 months and 24 months are based on operating experience with regard to channel OPERABILITY and drift, which demonstrates that failure of more than one channel of a given Function in any 31 day 18 month or 24 month interval, as applicable, is a rare event. 4

B B B

(continued)

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.3.8.1.② and SR 3.3.8.1.4 [4] (B)

A CHANNEL CALIBRATION is a complete check of the instrument loop and the sensor. This test verifies the channel responds to the measured parameter within the necessary range and accuracy. CHANNEL CALIBRATION leaves the channel adjusted to account for instrument drifts between successive calibrations consistent with the plant specific setpoint methodology.

Any setpoint adjustment shall be consistent with the assumptions of the current plant specific setpoint methodology. [1]

The Frequency is based upon the assumption of an 18 month or 24 month calibration interval, as applicable, in the determination of the magnitude of equipment drift in the setpoint analysis. [4] (B)

SR 3.3.8.1.⑤

The LOGIC SYSTEM FUNCTIONAL TEST demonstrates the OPERABILITY of the required actuation logic for a specific channel. The system functional testing performed in LCO 3.8.1 and LCO 3.8.2 overlaps this Surveillance to provide complete testing of the assumed safety functions.

The ⑱ 24 month Frequency is based on the need to perform this Surveillance under the conditions that apply during a plant outage and the potential for an unplanned transient if the Surveillance were performed with the reactor at power. Operating experience has shown these components usually pass the Surveillance when performed at the ⑱ month Frequency.

[2] REFERENCES

1. U FSAR, Figure [ ] Section 8.3.1.7. [5]
2. U FSAR, Section [5.2].
3. U FSAR, Section [6.3].
4. U FSAR, Chapter [15].

"GENERIC" LESS RESTRICTIVE CHANGES:
EXTENDING SURVEILLANCE FREQUENCIES FROM 18 MONTHS TO 24 MONTHS FOR CHANNEL CALIBRATION SURVEILLANCES
("LE.x" Labeled Comments/Discussions)

In accordance with the criteria set forth in 10 CFR 50.92, ComEd has evaluated this proposed Technical Specifications change and determined it does not represent a significant hazards consideration. The following is provided in support of this conclusion.

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

   The proposed change involves a change in the instrumentation channel calibration surveillance testing intervals to 24 months. The proposed change does not physically impact the plant nor does it impact any design or functional requirements of the associated systems. That is, the proposed change does not degrade the performance or increase the challenges of any safety systems assumed to function in the accident analysis. The proposed change does not impact the Surveillance Requirements themselves nor the way in which the Surveillances are performed. Additionally, the proposed change does not introduce any new accident initiators since no accidents previously evaluated have as their initiators anything related to the frequency of surveillance testing. The proposed change does not affect the availability of equipment or systems required to mitigate the consequences of an accident because of the availability of redundant systems or equipment and because other test performed more frequently will identify potential equipment problems. Furthermore, an historical review of surveillance test results indicated that all failures identified were unique, non-repetitive, and not related to any time-based failure modes, and indicated no evidence of any failures that would invalidate the above conclusions. Therefore, the proposed change does not increase the probability or consequences of an accident previously evaluated.

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

   The proposed change involves a change in the instrumentation channel calobration surveillance testing intervals to 24 months. The proposed change does not introduce any failure mechanisms of a different type than those previously evaluated since there are no physical changes being made to the facility. In addition, the Surveillance Requirements themselves and the way Surveillances are performed will remain unchanged. Furthermore, an historical review of surveillance test results indicated no evidence of any failures that would invalidate the above conclusions. Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

TECHNICAL CHANGES - LESS RESTRICTIVE

LA.2 (cont'd) SR 3.2.2.1 requires the MCPRs to be verified to be greater than the limits specified in the COLR once within 12 hours after THERMAL POWER is $\geq$ 25% RTP and once per 24 hours thereafter. The MCPR limits specified in the COLR are based on MG set scoop tube settings. Therefore, if the MG set scoop tube settings are not set in accordance with the relocated requirement, the MCPR must be declared not within limits. These controls are considered adequate to ensure that MCPR will be within limit during normal and transient conditions. During transients initiated at reduced core flow the transient analysis assumes a failed speed rate (not speed limit) controller which results in an infinitely slow recirculation pump run-up rate which results in the most limiting MCPR. Most failures in the recirculation flow control system would actually result in a faster transient which will be mitigated by the Average Power Range Monitor Flow Biased Neutron Flux scram instrumentation required in proposed ITS 3.3.1.1, Reactor Protection System Instrumentation." Therefore, the relocated details are not required to be in the ITS to provide adequate protection of the public health and safety. The TRM will be incorporated by reference into the UFSAR at ITS implementation. Changes to the TRM will be controlled by the provisions of 10 CFR 50.59. Additionally, a discussion of the scoop tube stop settings and verification requirements will be included in the UFSAR, with changes controlled by the provisions of 10 CFR 50.59. B

LA.3 The CTS 3.6.A Action 2 requirement to "immediately initiate measures to place the unit in at least STARTUP" when no recirculation loops are in operation is relocated to the Bases in the form of a discussion that "action must be taken as soon as practicable" to be in MODE 2. Immediate action may not always be the conservative method to assure safety. The 8 hour Completion Time of ITS 3.4.1 Required Action A.1 ensure appropriate actions are taken in a timely manner to place the unit in MODE 2. Therefore, the relocated requirement is not required to be in the ITS to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS.

"Specific"

L.1 The explicit requirement in CTS 3.6.A Action 1.e to electrically prohibit the idle recirculation pump from starting except to permit testing in preparation for returning the pump to service has been deleted. This requirement is not necessary to minimize the consequences of any design basis accident. Plant operating practice and procedures are adequate to ensure the pumps are not inadvertently started. In addition, the requirements in CTS 3.6.D (ITS 3.4.9, "Reactor Coolant System Pressure and Temperature (P/T) Limits") will help ensure that thermal stresses resulting from the startup of an idle recirculation pump will not exceed design allowances.

TECHNICAL CHANGES - LESS RESTRICTIVE

"Generic"

LA.1 The detail in CTS 4.6.G.2 of what Drywell Floor Drain Sump Monitoring System instrumentation (pump discharge flow integrator) is subject to a CHANNEL CALIBRATION is proposed to be relocated to the Bases. This detail is not necessary to ensure that a CHANNEL CALIBRATION is performed. Proposed SR 3.4.5.2, in conjunction with the Bases, requires the CHANNEL CALIBRATION to verify the accuracy of the drywell floor drain sump pump discharge flow integrator instrument string. This is consistent with the intent of CTS 4.6.G.2 and provides assurance that the instrumentation is OPERABLE when required. Therefore, the relocated detail is not required to be in the ITS to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS.

"Specific"

None

RELOCATED SPECIFICATIONS

R.1 At Dresden 2 and 3, the primary containment atmosphere particulate radioactivity sampling system is not actually a system (i.e., a sensor, indicator, etc.) It consists of two containment penetrations (sampling and return lines) and their associated isolation valves, including two air operated primary containment isolation valves (PCIVs) per line. A device can be connected to the penetration lines to obtain grab samples. Grab samples of the primary containment atmosphere can also be obtained using the primary containment sample manifold. Once obtained, the grab samples are analyzed using appropriate laboratory detector/counting systems. Since the primary containment atmosphere particulate radioactivity sampling system is not, in itself, a leakage detection system, it does not satisfy Regulatory Guide 1.45 and is not capable of detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA). Furthermore, the evaluation summarized in NEDO-31466 determined that the loss of the primary containment atmosphere particulate radioactivity sampling system is a non-significant risk contributor to core damage frequency and offsite release. Therefore, the requirements specified for this system do not satisfy the 10 CFR 50.36(c)(2)(ii) Technical Specification screening criteria as documented in the Application of Selection Criteria to the Dresden 2 and 3 Technical Specifications and will be relocated to the Technical Requirements Manual (TRM). The TRM will be incorporated by reference into the Dresden 2 and 3 UFSAR at ITS implementation. Changes to the UFSAR will be controlled in accordance with 10 CFR 50.59. 3

TECHNICAL CHANGES - LESS RESTRICTIVE

L.4 (cont'd) volume of water (the 12 hour Frequency will be retained as indicated in proposed SR 3.5.2.1.b), and the ECCS are OPERABLE per Specification 3.5.B. In the ITS, the requirements of 3/4.5.C and 3/4.5.B are incorporated in one Specification (ITS 3.5.2) and only the normal Surveillance Frequencies are proposed. This change is based on the fact that it is overly conservative to assume that systems or components are inoperable when a surveillance has not been performed. The opposite is in fact the case, the vast majority of surveillances demonstrate that systems or components in fact are operable. Therefore, even with low suppression pool level, the normal frequencies (e.g., LPCI testing in accordance with the Inservice Testing Frequency) are considered sufficient to ensure the OPERABILITY of the systems and that the parameters are within limits.

L.5 The condensate storage tank (known as the contaminated condensate storage tank in the ITS) water level requirement in CTS 3.5.B.1.a.2), CTS 3.5.B.2.b.2) and CTS 3.5.C.2.c for MODE 4 and 5 is proposed to be decreased from 140,000 available gallons to 50,000 available gallons 21 ft. from the bottom of the tank) in ITS SR 3.5.2.1.b. The new water level is based on ensuring adequate net positive suction head (NPSH) and vortex prevention for all of the ECCS pumps, and provides 50,000 gallons of water for a recirculation/makeup volume. These three considerations (NPSH, vortexing, and recirculation/makeup volume) are described in the Bases as the reason for the level requirement. The proposed water level requirement will ensure there is a sufficient volume of water available for more than ten minutes with one ECCS pump operating at the required flow rate. This will provide time for the operators to obtain additional water supply for the contaminated condensate storage tank or obtain an alternate makeup source. B

RELOCATED SPECIFICATIONS

None

A.1

ITS 3.5.3

EMERGENCY CORE COOLING SYSTEMS

3.5 - LIMITING CONDITIONS FOR OPERATION

D. Isolation Condenser

LCO 3.5.3 The isolation condenser (IC) system shall be OPERABLE.

APPLICABILITY:

OPERATIONAL MODE(s) 1, 2 and 3 with reactor steam dome pressure >150 psig.

ACTION: (Immediately)

ACTION A — With the IC system inoperable, operation may continue provided the HPCI system is OPERABLE; restore the IC system to OPERABLE status within 14 days or

ACTION B — be in at least HOT SHUTDOWN within the next 12 hours and reduce reactor steam dome pressure to ≤150 psig within the following 24 hours.

4.5 - SURVEILLANCE REQUIREMENTS

D. Isolation Condenser

The IC system shall be demonstrated OPERABLE:

SR 3.5.3.1 1. At least once per 24 hours by verifying the shell side water volume and the shell side water temperature to be within limits. (add proposed limit values) M.2 B

SR 3.5.3.2 2. At least once per 31 days by verifying that each valve, manual, power operated or automatic in the flow path that is not locked, sealed or otherwise secured in position, is in its correct position.

SR 3.5.3.3 3. At least once per (18) (24) months by verifying the IC system actuates on an actual or simulated automatic initiation signal. LD.1

SR 3.5.3.4 4. At least once per 5 years by verifying the system heat removal capability. M.1

ADMINISTRATIVE

A.1 In the conversion of the Dresden 2 and 3 current Technical Specifications (CTS) to the proposed plant specific Improved Technical Specifications (ITS), certain wording preferences or conventions are adopted that do not result in technical changes (either actual or interpretational). Editorial changes, reformatting, and revised numbering are adopted to make the ITS consistent with the BWR Standard Technical Specifications, NUREG-1433, Rev. 1 (i.e., the Improved Standard Technical Specifications (ISTS)).

TECHNICAL CHANGES - MORE RESTRICTIVE

M.1 CTS 4.5.D.4 requires verifying the IC System heat removal capability at least once per 5 years. Proposed ITS SR 3.5.3.4 retains this requirement and in addition specifies acceptance criteria of removal of the design heat load. Although consistent with the current plant requirements, the addition of these acceptance criteria in Technical Specifications is considered more restrictive.

M.2 CTS 4.5.D.1 requires the verification that the shell side water volume and shell side water temperature are within limits every 24 hours. The explicit values for the limits are not specified. The explicit shell side water volume and temperature limits have been added as indicated in proposed SR 3.5.3.1. Since the explicit limits have been added to the Technical Specifications, this change is more restrictive on plant operation. B

TECHNICAL CHANGES - LESS RESTRICTIVE

"Generic"

LD.1 The Frequency for performing CTS 4.5.D.3 (proposed SR 3.5.3.3) has been extended from 18 months to 24 months. The IC system functional test (proposed SR 3.5.3.3) ensures that a system initiation signal (actual or simulated) to the automatic initiation logic of IC will cause the system or subsystems to operate as designed, including actuation of the system throughout its emergency operating sequence, and actuation of all automatic valves to their required positions. The proposed change will allow this Surveillance to extend its Surveillance Frequency from the current 18 month Surveillance Frequency (i.e., a maximum of 22.5 months accounting for the allowable grace period specified in current Specification 4.0.B and proposed SR 3.0.2) to a 24 month Surveillance Frequency (i.e., a maximum of 30 months accounting for the allowable grace period specified in current Specification 4.0.B and proposed SR 3.0.2). This proposed change was evaluated in accordance with the guidance provided in NRC Generic Letter No. 91-04, "Changes in Technical Specification

TECHNICAL CHANGES - LESS RESTRICTIVE

LD.1 (cont'd) Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," dated April 2, 1991. Reviews of historical maintenance and surveillance data have shown that this test normally passes its Surveillance at the current Frequency. An evaluation has been performed using this data, and it has been determined that the effect on safety due to the extended Surveillance Frequency will be minimal. This conclusion is based on the following evaluation. The increased interval between SR performances is acceptable because IC is not a system that is taken credit for in the safety analysis. Additionally, the functions performed by IC can be performed by HPCI, and Technical Specifications do not permit HPCI and IC to be inoperable concurrently. Therefore, the impact of this change, if any, on system availability is small. Furthermore, as stated in the NRC Safety Evaluation Report (dated August 2, 1993) relating to extension of the Peach Bottom Atomic Power Station, Unit Numbers 2 and 3 surveillance intervals from 18 to 24 months:

> "Industry reliability studies for boiling water reactors (BWRs), prepared by the BWR Owners Group (NEDC-30936P) show that the overall safety systems' reliabilities are not dominated by the reliabilities of the logic system, but by that of the mechanical components, (e.g., pumps and valves), which are consequently tested on a more frequent basis. Since the probability of a relay or contact failure is small relative to the probability of mechanical component failure, increasing the logic system functional test interval represents no significant change in the overall safety system unavailability."

The review of historical surveillance data also demonstrated that there are no failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to CTS 4.5.D.3 as implemented in SR 3.5.3.3. In addition, the proposed 24 month Surveillance Frequency, if performed at the maximum interval allowed by proposed SR 3.0.2 (30 months) does not invalidate any assumptions in the plant licensing basis.

"Specific"

None

RELOCATED SPECIFICATIONS

None

ACTIONS

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. ---------NOTE--------- Only applicable to penetration flow paths with two or more PCIVs. ---------------------- One or more penetration flow paths with one PCIV inoperable for reasons other than Condition D.	A.1 AND	Isolate the affected penetration flow path by use of at least one closed and de-activated automatic valve, closed manual valve, blind flange, or check valve with flow through the valve secured.	4 hours except for main steam line AND 8 hours for main steam line (continued)

B

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. ---------NOTE--------- Only applicable to penetration flow paths with two or more PCIVs. --------------------- One or more penetration flow paths with two or more PCIVs inoperable for reasons other than Condition D.	B.1 Isolate the affected penetration flow path by use of at least one closed and de-activated automatic valve, closed manual valve, or blind flange.	1 hour
C. ---------NOTE--------- Only applicable to penetration flow paths with only one PCIV. --------------------- One or more penetration flow paths with one PCIV inoperable for reasons other than Condition D.	C.1 Isolate the affected penetration flow path by use of at least one closed and de-activated automatic valve, closed manual valve, or blind flange. AND	4 hours except for excess flow check valves (EFCVs) and penetrations with a closed system AND 72 hours for EFCVs and penetrations with a closed system (continued)

ACTIONS

CONDITION	REQUIRED ACTION		COMPLETION TIME
C. (continued)	C.2	--------NOTES-------- 1. Isolation devices in high radiation areas may be verified by use of administrative means. 2. Isolation devices that are a locked, sealed, or otherwise secured may be verified by use of administrative means. -------------------- Verify the affected penetration flow path is isolated.	Once per 31 days
D. MSIV leakage rate not within limit.	D.1	Restore leakage rate to within limit.	8 hours
E. Required Action and associated Completion Time of Condition A, B, C, or D not met in MODE 1, 2, or 3.	E.1 <u>AND</u> E.2	Be in MODE 3. Be in MODE 4.	12 hours 36 hours

(continued)

BASES

BACKGROUND (continued)

requirements in the LCO for reactor building-to-suppression chamber vacuum breakers provide assurance that the isolation capability is available without conflicting with the vacuum relief function.

The primary containment purge valves are 18 inches in diameter; vent valves are 2, 6, and 18 inches in diameter. The 18 inch primary containment vent and purge valves are normally maintained closed in MODES 1, 2, and 3 to ensure the primary containment boundary is maintained except for torus purge valve 1601-56. This valve is normally open for pressure control. This is acceptable since this valve and other vent and purge valves are designed to automatically close on LOCA conditions. The isolation valves on the 18 inch vent lines from the suppression chamber and drywell have 2 inch bypass lines around them for use during normal reactor operation. Use of the 2 inch vent valves will reduce oxygen content during operation and prevent high pressure from reaching the Standby Gas Treatment System filter trains and the Reactor Building Ventilation System in the unlikely event of a loss of coolant accident (LOCA) during venting.

APPLICABLE SAFETY ANALYSES

The PCIVs LCO was derived from the assumptions related to minimizing the loss of reactor coolant inventory, and establishing the primary containment boundary during major accidents. As part of the primary containment boundary, PCIV OPERABILITY supports leak tightness of primary containment. Therefore, the safety analysis of any event requiring isolation of primary containment is applicable to this LCO.

The DBAs that result in a release of radioactive material for which the consequences are mitigated by PCIVs are a LOCA and a main steam line break (MSLB). In the analysis for each of these accidents, it is assumed that PCIVs are either closed or close within the required isolation times following event initiation. This ensures that potential paths to the environment through PCIVs (including primary containment purge valves) are minimized. Of the events analyzed in References 2 and 3, the LOCA is the most limiting event due to radiological consequences. The closure time of the main steam isolation valves (MSIVs) is a significant variable from a radiological standpoint. The MSIVs are required to close within 3 to 5 seconds since the

(continued)

BASES

APPLICABLE SAFETY ANALYSES (continued)

3 second closure time is assumed in the MSIV closure (the most severe overpressurization transient) analysis (Ref. 4) and the LOCA analysis (Ref. 2), and the 5 second closure time provides added margin to the 10 seconds assumed in the MSLB analysis (Ref. 3). Likewise, it is assumed that the primary containment isolates such that release of fission products to the environment is controlled.

The DBA analysis assumes that isolation of the primary containment is complete and leakage is terminated, except for the maximum allowable leakage rate, L_a, prior to fuel damage.

The single failure criterion required to be imposed in the conduct of unit safety analyses was considered in the original design of the primary containment vent and purge valves. Two valves in series on each vent and purge line provide assurance that both the supply and exhaust lines could be isolated even if a single failure occurred.

PCIVs satisfy Criterion 3 of 10 CFR 50.36(c)(2)(ii).

LCO

PCIVs form a part of the primary containment boundary. The PCIV safety function is related to minimizing the loss of reactor coolant inventory and establishing the primary containment boundary during a DBA.

The power operated, automatic isolation valves are required to have isolation times within limits and actuate on an automatic isolation signal. While the reactor building-to-suppression chamber vacuum breakers isolate primary containment penetrations, they are excluded from this Specification. Controls on their isolation function are adequately addressed in LCO 3.6.1.7, "Reactor Building-to-Suppression Chamber Vacuum Breakers." The valves covered by this LCO are listed with their associated stroke times in the Technical Requirements Manual (Ref. 1).

The normally closed manual PCIVs are considered OPERABLE when the valves are closed and blind flanges are in place, or open under administrative controls. Normally closed automatic PCIVs which are required by design (e.g., to meet

(continued)

ACTIONS (continued)

The ACTIONS are modified by Notes 3 and 4. Note 3 ensures that appropriate remedial actions are taken, if necessary, if the affected system(s) are rendered inoperable by an inoperable PCIV (e.g., an Emergency Core Cooling System subsystem is inoperable due to a failed open test return valve). Note 4 ensures appropriate remedial actions are taken when the primary containment leakage limits are exceeded. Pursuant to LCO 3.0.6, these actions are not required even when the associated LCO is not met. Therefore, Notes 3 and 4 are added to require the proper actions be taken.

A.1 and A.2

With one or more penetration flow paths with one PCIV inoperable, except for MSIV leakage rate not within limit, the affected penetration flow paths must be isolated. The method of isolation must include the use of at least one isolation barrier that cannot be adversely affected by a single active failure. Isolation barriers that meet this criterion are a closed and de-activated automatic valve, a closed manual valve, a blind flange, and a check valve with flow through the valve secured. For a penetration isolated in accordance with Required Action A.1, the device used to isolate the penetration should be the closest available valve to the primary containment. The Required Action must be completed within the 4 hour Completion Time (8 hours for main steam lines). The Completion Time of 4 hours is reasonable considering the time required to isolate the penetration and the relative importance of supporting primary containment OPERABILITY during MODES 1, 2, and 3. For main steam lines, an 8 hour Completion Time is allowed. The Completion Time of 8 hours for the main steam lines allows a period of time to restore the MSIVs to OPERABLE status given the fact that MSIV closure will result in isolation of the main steam line(s) and a potential for plant shutdown.

For affected penetrations that have been isolated in accordance with Required Action A.1, the affected penetration flow path(s) must be verified to be isolated on a periodic basis. This is necessary to ensure that primary containment penetrations required to be isolated following an accident, and no longer capable of being automatically isolated, will be in the isolation position should an event

(continued)

ACTIONS

A.1 and A.2 (continued)

occur. This Required Action does not require any testing or device manipulation. Rather, it involves verification that those devices outside primary containment and capable of potentially being mispositioned are in the correct position. The Completion Time of "once per 31 days for isolation devices outside primary containment" is appropriate because the devices are operated under administrative controls and the probability of their misalignment is low. For the devices inside primary containment, the time period specified "prior to entering MODE 2 or 3 from MODE 4, if primary containment was de-inerted while in MODE 4 if not performed within the previous 92 days" is based on engineering judgment and is considered reasonable in view of the inaccessibility of the devices and the existence of other administrative controls ensuring that device misalignment is an unlikely possibility.

Condition A is modified by a Note indicating that this Condition is only applicable to those penetration flow paths with two or more PCIVs. For penetration flow paths with one PCIV, Condition C provides the appropriate Required Actions.

Required Action A.2 is modified by two Notes. Note 1 applies to isolation devices located in high radiation areas and allows them to be verified by use of administrative means. Allowing verification by administrative means is considered acceptable, since access to these areas is typically restricted. Note 2 applies to isolation devices that are locked, sealed, or otherwise secured in position and allows these devices to be verified closed by use of administrative means. Allowing verification by administrative means is considered acceptable, since the function of locking, sealing, or securing components is to ensure that these devices are not inadvertently repositioned. Therefore, the probability of misalignment, once they have been verified to be in the proper position, is low.

B.1

With one or more penetration flow paths with two or more PCIVs inoperable, except for MSIV leakage rate not within limit, either the inoperable PCIVs must be restored to OPERABLE status or the affected penetration flow path must B

(continued)

ACTIONS

B.1 (continued)

be isolated within 1 hour. The method of isolation must include the use of at least one isolation barrier that cannot be adversely affected by a single active failure. Isolation barriers that meet this criterion are a closed and de-activated automatic valve, a closed manual valve, and a blind flange. The 1 hour Completion Time is consistent with the ACTIONS of LCO 3.6.1.1.

Condition B is modified by a Note indicating this Condition is only applicable to penetration flow paths with two or more PCIVs. For penetration flow paths with one PCIV, Condition C provides the appropriate Required Actions.

C.1 and C.2

With one or more penetration flow paths with one PCIV inoperable except for MSIV leakage rate not within limit, the inoperable valve must be restored to OPERABLE status or the affected penetration flow path must be isolated. The method of isolation must include the use of at least one isolation barrier that cannot be adversely affected by a single active failure. Isolation barriers that meet this criterion are a closed and de-activated automatic valve, a closed manual valve, and a blind flange. A check valve may not be used to isolate the affected penetration. The Completion Time of 4 hours for valves other than EFCVs and in penetrations with a closed system is reasonable considering the time required to isolate the penetration and the relative importance of supporting primary containment OPERABILITY during MODES 1, 2, and 3. The Completion Time of 72 hours for penetrations with a closed system is reasonable considering the relative stability of the closed system (hence, reliability) to act as a penetration isolation boundary and the relative importance of supporting primary containment OPERABILITY during MODES 1, 2, and 3. The closed system must meet the requirements of Reference 5. The Completion Time of 72 hours for EFCVs is also reasonable considering the instrument and the small pipe diameter of penetration (hence, reliability) to act as a penetration

(continued)

ACTIONS

C.1 and C.2 (continued)

isolation boundary and the small pipe diameter of the affected penetrations. In the event the affected penetration flow path is isolated in accordance with Required Action C.1, the affected penetration must be verified to be isolated on a periodic basis. This is necessary to ensure that primary containment penetrations required to be isolated following an accident are isolated. This Required Action does not require any testing or valve manipulation. Rather, it involves verification that those devices outside containment and capable of potentially being mispositioned are in the correct position. The Completion Time of once per 31 days is appropriate because the devices are operated under administrative controls and the probability of their misalignment is low.

Condition C is modified by a Note indicating that this Condition is only applicable to penetration flow paths with only one PCIV. For penetration flow paths with two or more PCIVs, Conditions A and B provide the appropriate Required Actions. This Note is necessary since this Condition is written specifically to address those penetrations with a single PCIV.

Required Action C.2 is modified by two Notes. Note 1 applies to isolation devices located in high radiation areas and allows them to be verified by use of administrative means. Allowing verification by administrative means is considered acceptable, since access to these areas is typically restricted. Note 2 applies to isolation devices that are locked, sealed, or otherwise secured in position and allows these devices to be verified closed by use of administrative means. Allowing verification by administrative means is considered acceptable, since the function of locking, sealing, or securing components is to ensure that these devices are not inadvertently repositioned. Therefore, the probability of misalignment, once they have been verified to be in the proper position, is low.

(continued)

ACTIONS (continued)

D.1

With the MSIV leakage rate (SR 3.6.1.3.10) not within limit, the assumptions of the safety analysis may not be met. Therefore, the leakage must be restored to within limit within 8 hours. Restoration can be accomplished by isolating the penetration that caused the limit to be exceeded by use of one closed and de-activated automatic valve, closed manual valve, or blind flange. When a penetration is isolated, the leakage rate for the isolated penetration is assumed to be the actual pathway leakage through the isolation device. If two isolation devices are used to isolate the penetration, the leakage rate is assumed to be the lesser actual pathway leakage of the two devices. The Completion Time of 8 hours allows a period of time to restore MSIV leakage rate to within limit given the fact that MSIV closure will result in isolation of the main steam line(s) and a potential for plant shutdown.

E.1 and E.2

If any Required Action and associated Completion Time cannot be met in MODE 1, 2, or 3, the plant must be brought to a MODE in which the LCO does not apply. To achieve this status, the plant must be brought to at least MODE 3 within 12 hours and to MODE 4 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

F.1 and F.2

If any Required Action and associated Completion Time cannot be met for PCIV(s) required OPERABLE in MODE 4 or 5, the unit must be placed in a condition in which the LCO does not apply. Action must be immediately initiated to suspend operations with a potential for draining the reactor vessel (OPDRVs) to minimize the probability of a vessel draindown and subsequent potential for fission product release. Actions must continue until OPDRVs are suspended. If suspending an OPDRV would result in closing the shutdown cooling isolation valves, an alternative Required Action is provided to immediately initiate action to restore the

(continued)

SURVEILLANCE REQUIREMENTS

SR 3.6.1.3.2

PCIVs outside primary containment is relatively easy, the 31 day Frequency was chosen to provide added assurance that the PCIVs are in the correct positions. This SR does not apply to valves that are locked, sealed, or otherwise secured in the closed position, since these were verified to be in the correct position upon locking, sealing, or securing.

Two Notes have been added to this SR. The first Note allows valves and blind flanges located in high radiation areas to be verified by use of administrative controls. Allowing verification by administrative controls is considered acceptable since access to these areas is typically restricted for ALARA reasons. Therefore, the probability of misalignment of these PCIVs, once they have been verified to be in the proper position, is low. A second Note has been included to clarify that PCIVs open under administrative controls are not required to meet the SR during the time that the PCIVs are open. These controls consist of stationing a dedicated operator at the controls of the valve, who is in continuous communication with the control room. In this way the penetration can be rapidly isolated when a need for primary containment isolation is indicated.

SR 3.6.1.3.3

This SR verifies that each primary containment manual isolation valve and blind flange located inside primary containment and not locked, sealed, or otherwise secured and is required to be closed during accident conditions is closed. The SR helps to ensure that post accident leakage of radioactive fluids or gases outside the primary containment boundary is within design limits. For PCIVs inside primary containment, the Frequency "prior to entering MODE 2 or 3 from MODE 4 if primary containment was de-inerted while in MODE 4, if not performed within the previous 92 days" is appropriate since these PCIVs are operated under administrative controls and the probability of their misalignment is low. This SR does not apply to valves that are locked, sealed, or otherwise secured in the closed position, since these were verified to be in the correct position upon locking, sealing, or securing.

(continued)

BASES (continued)

REFERENCES

1. Technical Requirements Manual.
2. UFSAR, Section 15.6.5.
3. UFSAR, Section 15.6.4.
4. UFSAR, Section 15.2.4.
5. UFSAR, Section 6.2.4.1.

BASES (continued)

APPLICABLE SAFETY ANALYSES

Initial suppression pool water level affects suppression pool temperature response calculations, calculated drywell pressure during vent clearing for a DBA, calculated pool swell loads for a DBA LOCA, and calculated loads due to relief valve discharges. Suppression pool water level must be maintained within the limits specified so that the safety analysis of Reference 1 remains valid.

Suppression pool water level satisfies Criteria 2 and 3 of 10 CFR 50.36(c)(2)(ii).

LCO

A limit that suppression pool water level be ≥ 14 ft 6.5 inches and ≤ 14 ft 10.5 inches above the bottom of the suppression chamber is required to ensure that the primary containment conditions assumed for the safety analyses are met. Either the high or low water level limits were used in the safety analyses, depending upon which is more conservative for a particular calculation.

APPLICABILITY

In MODES 1, 2, and 3, a DBA would cause significant loads on the primary containment. In MODES 4 and 5, the probability and consequences of these events are reduced due to the pressure and temperature limitations in these MODES. The requirements for maintaining suppression pool water level within limits in MODE 4 or 5 is addressed in LCO 3.5.2, "ECCS-Shutdown."

ACTIONS

A.1

With suppression pool water level outside the limits, the conditions assumed for the safety analyses are not met. If water level is below the minimum level, the pressure suppression function still exists as long as the downcomers are covered, HPCI turbine exhaust is covered, and relief valve quenchers are covered. If suppression pool water level is above the maximum level, protection against overpressurization still exists due to the margin in the peak containment pressure analysis and the capability of the Suppression Pool Spray System. Therefore, continued operation for a limited time is allowed. The 2 hour Completion Time is sufficient to restore suppression pool water level to within limits. Also, it takes into account the low probability of an event impacting the suppression pool water level occurring during this interval. B

(continued)

3.7 - LIMITING CONDITIONS FOR OPERATION

4.7 - SURVEILLANCE REQUIREMENTS

ACTION D c. Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

(add proposed Note 1 to Required Action B) A.4

2. With the primary containment air lock interlock mechanism inoperable, restore the air lock interlock mechanism to OPERABLE status within 24 hours, or lock at least one air lock door closed and verify that the door is locked closed at least once per 31 days. Personnel entry and exit through the airlock is permitted provided one OPERABLE air lock door remains locked closed at all times and an individual is dedicated to assure that both air lock doors are not opened simultaneously.

ACTION B

(add proposed Required Action B.1) M.1

A.5

(add proposed Note to Required Action B.3) L.3

L.6

LA.1

(add proposed ACTION D) M.2 (B)

3. With the primary containment air lock inoperable, except as a result of an inoperable air lock door or interlock mechanism, maintain at least one air lock door closed; restore the inoperable air lock to OPERABLE status within 24 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

ACTION C

ACTION D

(add proposed Required Action C.1) A.3

(verify) (within 1 hour) L.2

ADMINISTRATIVE

A.4 (cont'd) does not exist to be closed (ITS 3.6.1.2 Required Actions A.1, A.2, A.3, B.1, B.2, and B.3 cannot be met). Since this change only provides clearer direction and is consistent with the interpretation of the CTS, the change is considered administrative.

A.5 The revised presentation of CTS 3.7.C Action 1.a and Action 2 (based on the BWR ISTS, NUREG-1433, Rev. 1) do not explicitly detail options to "restore...to OPERABLE status." This action is always an option, and is implied in all Actions. Omitting this action from the ITS is editorial.

A.6 The requirement for performing the overall air lock leakage test is a requirement of 10 CFR 50 Appendix J (as described in the Primary Containment Leakage Rate Testing Program in Section 5.5 of the ITS). This requirement is embodied in proposed SR 3.6.1.2.1. It is possible that the test would not be able to be performed with an inoperable air lock door, and a plant shutdown would be required due to the inability to perform the required Surveillance. However, this restriction on continued operation need not be specified (as is the case in CTS 3.7.C Action 1.b) since it exists inherently as a result of the required Appendix J testing. Therefore, no change in operation requirements or intent is made, and the proposed revision to eliminate a specific restriction on continued operation is considered an administrative presentation preference.

A.7 Not used. 3

TECHNICAL CHANGES - MORE RESTRICTIVE

M.1 A new Required Action has been added to CTS 3.7.C Action 2 (primary containment air lock interlock mechanism inoperable) to verify an OPERABLE door is closed in the air lock within 1 hour. The 1 hour is allowed to complete the verification in ITS 3.6.1.2 Required Action B.1 since the level of degradation associated with the CTS Actions is no worse than that allowed for Primary Containment Integrity (CTS 3.7.A) not maintained. CTS 3.7.A (ITS 3.6.1.1) allows the primary containment to be inoperable for 1 hour. Also, the primary containment air lock doors are normally closed except for entry and exit. Therefore, the probability that the OPERABLE air lock door is open is low during the 1 hour period. This requirement is consistent with current Actions in CTS 3.7.C to maintain the air lock closed for other air lock inoperabilities (CTS 3.7.C Actions 1 and 3). This added requirement will help ensure primary containment integrity is maintained.

TECHNICAL CHANGES - MORE RESTRICTIVE (continued)

M.2 CTS 3.7.C Action 2 (for an inoperable primary containment air lock interlock mechanism) does not include a default Action (be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours) consistent with other Actions in CTS 3.7.C. Therefore, for an inoperable primary containment air lock interlock mechanism, CTS LCO 3.0.C must be entered and the plant must be in MODE 3 in 13 hours and MODE 4 in 37 hours. A new ACTION has been added to CTS 3.7.C Action 2 to clarify the default requirements when the CTS Action cannot be met. ITS 3.6.1.2 ACTION D is proposed to be added as the default action which will require the plant to be in MODE 3 in 12 hours and MODE 4 in 36 hours. Since this change will require the plant to be in MODE 3 and 4 in less time (i.e., 1 hour), this change is considered more restrictive on plant operation. 3

TECHNICAL CHANGES - LESS RESTRICTIVE

"Generic"

LA.1 The purpose as to why a portion of CTS 3.7.C Action 2, which prescribes the necessary administrative controls during entry and exit of personnel through an air lock with an inoperable air lock interlock mechanism (i.e., "to assure that both air lock doors are not opened simultaneously"), is proposed to be relocated to the Bases. The proposed requirement in ITS 3.6.1.2 Required Action B Note 2 will require entry into and exit from primary containment under the control of a dedicated individual. This is sufficient to ensure the appropriate administrative controls are enforced. In addition, the Bases prescribes that entry into and exit from the primary containment is under the control of a dedicated individual stationed to ensure that only one door is opened at a time. As a result, this detail is not necessary to be included in the Technical Specifications to ensure the administrative controls are applied. As such, the relocated detail is not required to be in the ITS to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS.

"Specific"

L.1 ITS 3.6.1.2 ACTIONS Note 1 is added to the Technical Specifications to allow entry through a closed or locked air lock door for the purpose of making repairs to air lock components. If the outer door is inoperable, then it may be easily accessed for repair. If the inner door is the one that is inoperable, it is proposed to allow entry through the OPERABLE outer door, which means there is a short time during which the primary containment boundary is not intact (during access

TECHNICAL CHANGES - LESS RESTRICTIVE

L.1 (cont'd) through the outer door). The proposed allowance will have strict administrative controls, which are detailed in the Bases. A dedicated (i.e., not involved with any repair or other maintenance effort) individual will be assigned to ensure: 1) the door is opened only for the period of time required to gain entry into or exit from the air lock, and 2) the OPERABLE door is re-locked prior to the departure of the dedicated individual.

Repairs are directed towards reestablishing two OPERABLE doors in the air lock. Two OPERABLE doors closed is clearly the most desirable plant condition for air locks. The CTS 3.7.C Actions, in some circumstances, allow indefinite operation with only one OPERABLE door locked closed. Two OPERABLE doors closed is clearly an improvement on safety over one OPERABLE door locked closed. By not allowing access to make repairs, the CTS 3.7.C Actions could result in an inability of the plant to establish and maintain this highest level of safety possible (two OPERABLE doors closed), without a forced plant shutdown.

Therefore, allowing entry and exit, while temporarily allowing loss of containment integrity, is proposed based on the expected result of restoring two OPERABLE doors to the air lock. Restricting this access to make repairs of an inoperable door or air lock ensures this allowance applies only towards meeting this goal. This change is acceptable due to the low probability of an event that could pressurize the primary containment during the short time in which the containment integrity is compromised, and the increased safety attained by completing repairs such that two OPERABLE doors can be closed.

L.2 In reference to immediately maintaining an air lock door closed, the word "maintain" in CTS 3.7.C Actions 1.a and 3 is changed to "verify" and 1 hour is allowed to complete the verification in ITS 3.6.1.2 (Required Actions A.1 and C.2). This change is acceptable because the level of degradation associated with the CTS Actions is no worse than that allowed for Primary Containment Integrity (CTS 3.7.A) not maintained. CTS 3.7.A (ITS 3.6.1.1) allows the primary containment to be inoperable for 1 hour. Also, the primary containment air lock doors are normally closed except for entry and exit. Therefore, the probability that the OPERABLE air lock door is open is low during the 1 hour period.

L.3 Notes have been added to CTS 3.7.C Actions 1.b and 2 (ITS 3.6.1.2 Required Actions A.3 and B.3) to allow administrative means to be used to verify locked closed OPERABLE air lock doors in high radiation areas or areas with limited access due to inerting. The air locks are initially verified to be in the proper position and access to them is restricted during operation due to the high levels of radiation or since the containment is inerted. Therefore, the probability of misalignment of the air locks are acceptably small. Eliminating the physical

ADMINISTRATIVE

A.4 (cont'd) necessarily apply. The clarification is consistent with the intent and interpretation of the existing Technical Specifications, and is therefore considered administrative.

A.5 CTS 3.7.D Action 1 and the CTS 3.6.M Action do not specify penetrations with one or two isolation valves. However, ITS 3.6.1.3 Condition A applies if the affected penetration has two or more valves, and only one is inoperable. This inherently ensures maintaining "at least one isolation valve OPERABLE." In the case of containment penetrations designed with only one isolation valve (ITS 3.6.1.3 Condition C), the system boundary is considered an adequate barrier and the penetration is not considered "open" when the single isolation valve is open. This change is a presentation preference and is administrative in nature.

A.6 The revised presentation of CTS 3.7.D Actions 1.a and 2.a and the CTS 3.6.M Action (based on the BWR ISTS, NUREG-1433, Rev. 1) does not explicitly detail options to "restore...to OPERABLE status." This action is always an option, and is implied in all Actions. Omitting these actions from the ITS is editorial.

A.7 CTS 4.7.D.2 requires testing of each power operated or automatic PCIV required to close on an isolation signal, but specifically excludes testing requirements for the traversing in-core probe system explosive isolation valves. In addition, CTS 4.7.D.2 only requires each automatic isolation valve to be verified that it actuates to its isolation position. ITS SR 3.6.1.3.7 requires the verification that each automatic PCIV actuates to the isolation position on an actual (see Discussion of Change L.6 below) or simulated isolation signal. The explicit exclusion of the explosive isolation valves is not necessary since these valves are not required to close on an isolation (automatic) signal. Requirements for testing the TIP explosive isolation valves are included in CTS 4.7.D.5.a and b and retained in ITS SR 3.6.1.3.4 and 9, respectively. This change is considered administrative since no technical changes are being made. This change is consistent with the BWR ISTS, NUREG-1433, Rev. 1.

A.8 The allowance in CTS 3.7.D Action 2, which states that the provisions of Specification 3.0.C are not applicable, has been deleted since it is redundant to the "Otherwise..." action. That is, CTS LCO 3.0.C (ITS LCO 3.0.3) is not applicable anyway since a shutdown action has been provided. Therefore, deletion of these allowances is administrative.

TECHNICAL CHANGES - LESS RESTRICTIVE (continued)

L.2 CTS 3.7.D Action 1.c and the CTS 3.6.M Action list some, but not all, of the possible acceptable isolation devices that may be used to satisfy the need to isolate a penetration with an inoperable isolation valve. ITS 3.6.1.3 ACTIONS provide a complete list of acceptable isolation devices. Since the result of the ACTIONS continues to be an acceptably isolated penetration for continued operation, the proposed change does not adversely affect safe operation. Many penetrations are designed with check valves as acceptable isolation barriers. With forward flow in the line secured, a check valve is essentially equivalent to a closed manual valve. For those penetrations designed with check valves as acceptable isolation devices, the ITS provides an equivalent level of safety. For penetrations not designed with check valves for isolation, the ITS does not affect the requirements to isolate with a closed deactivated automatic valve, closed manual valve, or blind flange. ITS ACTIONS allowing closed manual valves or check valves with flow secured also apply to isolating main steam lines, even though the design does not provide for these type of isolation devices. This change is simply a result of simplicity in providing a consistent presentation for all penetrations. While this apparent flexibility does not result in any actual technical change in the Technical Specifications, it is listed here for completeness.

L.3 In the event two or more valves in a penetration are inoperable, CTS 3.7.D Action 1 and the CTS 3.6.M Action for MSIVs, which require maintaining one isolation valve OPERABLE, would not be met and an immediate shutdown would be required. ITS 3.6.1.3 ACTION B provides 1 hour prior to commencing a required shutdown. This proposed 1 hour period is consistent with the existing time allowed for conditions when the primary containment is inoperable. The proposed change will provide consistency in ACTIONS for these various primary containment degradations. This change to CTS 3.7.D and 3.6.M is acceptable due to the low probability of an event that could pressurize the primary containment during the short time in which continued operation is allowed and the capability to isolate a primary containment penetration is lost.

L.4 An allowance is proposed for intermittently opening, under administrative control, closed primary containment isolation valves, other than those currently allowed to be opened using CTS 3.7.D LCO and Action 1 footnote a (locked or sealed closed valves). The allowance is presented in ITS 3.6.1.3 ACTIONS Note 1, and in Note 2 to SR 3.6.1.3.2 and SR 3.6.1.3.3. Opening of primary containment penetrations on an intermittent basis is required for performing surveillances,

A.1

3.7 - LIMITING CONDITIONS FOR OPERATION

F. Reactor Building - Suppression Chamber Vacuum Breakers

LCO 3.6.1.7 All reactor building - suppression chamber vacuum breakers shall be OPERABLE and closed. LA.1

APPLICABILITY:

OPERATIONAL MODE(s) 1, 2 and 3.

L.1 ACTION: (add proposed ACTIONS Note)

ACTION C — 1. With one reactor building - suppression chamber vacuum breaker line inoperable for opening with both valves known to be closed, restore the inoperable vacuum breaker line to OPERABLE status within 7 days or be

ACTION E — in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

L.1 (add proposed ACTION D)

ACTION A — 2. With one reactor building - suppression chamber vacuum breaker line otherwise inoperable, verify at least one vacuum

ACTION B — breaker in the line to be closed within 2 hours (1) and restore the open vacuum M.1

ACTION A — breaker to the closed position within 7 days or be in at least HOT

ACTION E — SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

L.2 — 3. ~~With the position indicator of the air operated reactor building - suppression chamber vacuum breaker inoperable, restore the inoperable position indicator to OPERABLE status within 14 days or verify the vacuum breaker to be closed at least once per 24 hours by an~~

4.7 - SURVEILLANCE REQUIREMENTS

L.4 (add proposed Note 1 to SR 3.6.1.7.1)

F. Reactor Building - Suppression Chamber Vacuum Breakers

Each reactor building - suppression chamber vacuum breaker shall be: (add proposed Note 2 to SR 3.6.1.7.1) A.3

SR 3.6.1.7.1 1. Verified closed at least once per ~~7~~ (14) days. L.3

B

2. Demonstrated OPERABLE:

SR 3.6.1.7.2 a. At least once per 92 days when tested pursuant to Specification 4.0.E by:

B

1) Cycling the vacuum breaker through at least one test cycle.

~~2) Verifying the air operated vacuum breaker position indicator OPERABLE by observing expected valve movement during the cycling test.~~ L.2

(24) LD.1

SR 3.6.1.7.3 b. At least once per ~~18~~ months by:

1) Demonstrating that the force required to open each vacuum breaker does not exceed the equivalent of 0.5 psid.

~~2) Verifying the air operated vacuum breaker position indicator OPERABLE by performance of a CHANNEL CALIBRATION.~~ L.2

DISCUSSION OF CHANGES
ITS: 3.6.1.7 - REACTOR BUILDING-TO-SUPPRESSION CHAMBER VACUUM BREAKERS

ADMINISTRATIVE

A.1 In the conversion of the Dresden 2 and 3 current Technical Specifications (CTS) to the proposed plant specific Improved Technical Specifications (ITS), certain wording preferences or conventions are adopted that do not result in technical changes (either actual or interpretational). Editorial changes, reformatting, and revised numbering are adopted to make the ITS consistent with the BWR Standard Technical Specifications, NUREG-1433, Rev. 1 (i.e., the Improved Standard Technical Specifications (ISTS)).

A.2 Not used.

A.3 A Note has been added to CTS 4.7.F.1, the Surveillance that verifies the vacuum breakers are closed. Note 2 to SR 3.6.1.7.1 has been added to clearly state that the vacuum breakers do not have to be closed when they are performing their intended function, which is to open to relieve vacuum. Since it is obvious that OPERABILITY is still being maintained, this addition is considered administrative. B

TECHNICAL CHANGES - LESS RESTRICTIVE

LD.1 (cont'd) CTS 4.7.F.2.b.1 requires that the reactor building-to-suppression chamber vacuum breaker butterfly valve opening setpoint be verified every 18 months. This SR ensures that each reactor building-to-suppression chamber vacuum breaker check valve and vacuum breaker butterfly valve is capable of performing its safety function as assumed in the safety analysis. ITS SR 3.6.1.7.2 requires that each vacuum breaker must be functionally tested once per 92 days by cycling each reactor building-to-suppression chamber vacuum breaker check valve and vacuum breaker butterfly valve to ensure that it opens adequately to perform its design function and returns to the fully closed position. This more frequent testing performed during the operating cycle, although not ensuring the specified setpoint, does ensure that the vacuum breaker check valves and vacuum breaker butterfly valves are capable of being cycled open and shut. Furthermore, the vacuum relief system design for the active components provides two 100% redundant relief paths. Therefore, based on the more frequent testing and the design of the vacuum relief system, the impact, if any, of this change on system availability is minimal.

Reviews of historical maintenance and surveillance data have shown that this test normally passes the Surveillance at the current Frequency. An evaluation has been performed using this data, and it has been determined that the effect on safety due to the extended Surveillance Frequency will be minimal. In addition, the proposed 24 month Surveillance Frequency, if performed at the maximum interval allowed by proposed SR 3.0.2 (30 months) does not invalidate any assumptions in the plant licensing basis.

"Specific"

L.1 CTS 3.7.F Action 1 allows only one reactor building-to-suppression chamber vacuum breaker line to be inoperable for opening without requiring a shutdown. With two vacuum breaker lines inoperable for opening, entry into CTS 3.0.C is required and the plant must commence a reactor shutdown within one hour. In ITS 3.6.1.7, proposed ACTION D allows two lines to have all vacuum breakers inoperable for opening for up to one hour without requiring a shutdown (as is currently required by CTS LCO 3.0.C). This one hour limit is consistent with the time provided in CT 3.7.A for an inoperable primary containment, which is effectively the status of the plant if one or both vacuum breakers in both lines will not open. If these Required Actions and associated Completion Times are not met, ITS 3.6.1.7 ACTION E will require a plant shutdown to MODE 3 in 12 hours and MODE 4 in 36 hours, which is also consistent with the current time provided in CTS 3.0.C. While the times to reach shutdown conditions are

TECHNICAL CHANGES - LESS RESTRICTIVE

L.1 (cont'd) equivalent, the proposed ITS Actions do not require the plant to commence the actual shutdown within one hour and therefore may not require a notification as required by 10 CFR 50.72. The allowance not to enter CTS 3.0.C (LCO 3.0.3) is acceptable since for most design bases events the opening of the reactor building-to-suppression chamber vacuum breakers may not be necessary for accident mitigation and since the actual depressurization is far less than originally expected in the original design. In addition, since this Condition has been added to cover situations when two penetrations are inoperable at the same time, an ACTION Note has been added which provides more explicit instructions for the proper application of the Actions for Technical Specification compliance. In conjunction with the proposed Specification 1.3, "Completion Times," the ITS 3.6.1.7 ACTIONS Note ("Separate Condition entry is allowed for each line") provides proper direction for inoperable vacuum breakers on two lines. It is intended that each inoperable vacuum breaker line is allowed a certain time to complete the Required Actions. This is acceptable since, during the extended time allowed, isolation capability is maintained and the capability to relieve pressure is maintained. The Note allowance is also consistent with the CTS allowance for the PCIV penetrations. 3

L.2 The vacuum breaker position indication instrumentation in CTS 3.7.F Action 3, CTS 4.7.F.2.a.2), and CTS 4.7.F.2.b.2) does not necessarily relate directly to the respective system OPERABILITY. The BWR ISTS, NUREG-1433 does not specify indication-only equipment to be OPERABLE to support OPERABILITY of a system or component. Control of the availability of, and necessary compensatory activities if not available, for indications and monitoring instruments are addressed by plant operational procedures and policies. Vacuum breaker position is required to be known to be able to satisfy the ITS 3.6.1.7 Surveillance Requirements (SR 3.6.1.7.1, SR 3.6.1.7.2, and SR 3.6.1.7.3) for the vacuum breakers. If position indication is not available and vacuum breaker position can not be determined, then the Surveillance Requirements cannot be satisfied and the appropriate actions must be taken for inoperable vacuum breakers in accordance with the ACTIONS of ITS 3.6.1.7. As a result, the requirements for the vacuum breaker position indication are adequately addressed by the requirements of ITS 3.6.1.7 and the associated SRs and are proposed to be deleted from Technical Specifications.

L.3 The Frequency for CTS 4.7.F.1, which requires verifying the vacuum breakers are closed, has been extended from 7 days to 14 days in proposed SR 3.6.1.7.1. For the position verification, most other safety-related valves, including those that affect primary containment, are verified once per 31 days. Therefore, based

TECHNICAL CHANGES - LESS RESTRICTIVE

L.3 (cont'd) on this extended interval for similar requirements on component position Surveillances, and the fact that the valves are normally found in their correct position, the 14 day Frequency is considered adequate.

L.4 CTS 4.7.F requires the vacuum breakers be closed at all times; with no explicit allowance to be open when performing their intended function (i.e., when relieving vacuum), and no allowance to be open during performance of required Surveillances. ITS SR 3.6.1.7.1 Note 1 states that the vacuum breakers can be opened when performing required Surveillances. This addition provides specific ITS direction, which is consistent with the intent of maintaining "OPERABLE" vacuum breakers. This allowance will not affect the ability of the vacuum breaker to perform its intended function of relieving vacuum or of providing an isolated containment barrier in the event of positive containment pressure. Therefore, this change involves no negative impact on safety. B

RELOCATED SPECIFICATIONS

None

A.1

ITS 3.6.2.2

L.1

3.7 - LIMITING CONDITIONS FOR OPERATION

ACTION A [within 1 hour or be in at least HOT

ACTION B { SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

2. In OPERATIONAL MODE(s) 1 or 2 with the suppression pool average water temperature >95°F, except as permitted above, restore the average temperature to ≤95°F within 24 hours or reduce THERMAL POWER to ≤1% RATED THERMAL POWER within the next 12 hours.

3. With the suppression pool average water temperature >105°F during testing which adds heat to the suppression pool, except as permitted above, stop all testing which adds heat to the suppression pool and restore the average temperature to ≤95°F within 24 hours or reduce THERMAL POWER to ≤1% RATED THERMAL POWER within the next 12 hours.

4. With the suppression pool average water temperature >110°F, immediately place the reactor mode switch in the Shutdown position and operate at least one low pressure coolant injection loop in the suppression pool cooling mode.

5. With the suppression pool average water temperature >120°F, depressurize the reactor pressure vessel to <150 psig (reactor steam dome pressure) within 12 hours.

4.7 - SURVEILLANCE REQUIREMENTS

3. Deleted.

4. Deleted.

5. At least once per 18 months by conducting a drywell to suppression chamber bypass leak test at an initial differential pressure of 1.0 psid and verifying that the measured leakage is within the specified limit. If any drywell to suppression chamber bypass leak test fails to meet the specified limit, the test schedule for subsequent tests shall be reviewed and approved by the Commission. If two consecutive tests fail to meet the specified limit, a test shall be performed at least every 9 months until two consecutive tests meet the specified limit, at which time the 18 month test schedule may be resumed.

B

See ITS 3.6.2.1

B

DISCUSSION OF CHANGES
ITS: 3.6.2.2 - SUPPRESSION POOL WATER LEVEL

ADMINISTRATIVE

A.1 In the conversion of the Dresden 2 and 3 current Technical Specifications (CTS) to the proposed plant specific Improved Technical Specifications (ITS), certain wording preferences or conventions are adopted that do not result in technical changes (either actual or interpretational). Editorial changes, reformatting, and revised numbering are adopted to make the ITS consistent with the BWR Standard Technical Specifications, NUREG-1433, Rev. 1 (i.e., the Improved Standard Technical Specifications (ISTS)).

A.2 Not used.

A.3 The CTS LCO 3.5.C.2, CTS 3.5.C Action 2, CTS 4.5.C.2 requirements, and footnote a, relating to the suppression pool level requirements while in MODES 4 and 5, have been moved to ITS 3.5.2, "ECCS — Shutdown," in accordance with the format of the BWR ISTS, NUREG-1433, Rev. 1. Any technical changes to these requirements will be addressed in the Discussion of Changes for ITS: 3.5.2.

TECHNICAL CHANGES - MORE RESTRICTIVE

None

TECHNICAL CHANGES - LESS RESTRICTIVE

"Generic"

LA.1 The details relating to suppression chamber OPERABILITY in CTS 3.5.C.1 (reference for suppression chamber level) are proposed to be relocated to the Bases. ITS 3.6.2.2 will continue to require the suppression chamber level to be maintained. The details for system OPERABILITY are not necessary in the LCO. The definition of OPERABILITY suffices. As such, the relocated details are not required to be in the ITS to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS.

ADMINISTRATIVE

A.1 In the conversion of the Dresden 2 and 3 current Technical Specifications (CTS) to the proposed plant specific Improved Technical Specifications (ITS), certain wording preferences or conventions are adopted that do not result in technical changes (either actual or interpretational). Editorial changes, reformatting, and revised numbering are adopted to make the ITS consistent with the BWR Standard Technical Specifications, NUREG-1433, Rev. 1 (i.e., the Improved Standard Technical Specifications (ISTS)).

A.2 The CTS 3.7.J Action for failing to meet the LCO requires reactor power to be reduced to < 15% RTP within 8 hours. ITS 3.6.3.1 ACTION B revises the CTS Action to require the power to be reduced to ≤ 15% RTP. The CTS 3.7.J and ITS 3.6.3.1 Actions should specify a MODE or other conditions in which the LCO does not apply. To achieve this, power should be reduced to ≤ 15% RTP. Below 15% RTP, the Applicability is exited and the Actions are no longer required (in accordance with CTS 3.0.A and 3.0.B and ITS LCO 3.0.1 and 3.0.2). Since the CTS 3.7.J Action can also be suspended at 15% RTP for the same reason, the change is considered administrative.

A.3 CTS 4.7.J requires oxygen concentration in primary containment to be verified within limit prior to entering the Applicability of CTS 3.7.J (within 24 hours after THERMAL POWER is greater than 15% of RTP). This redundant requirement is deleted. CTS 4.0.D and ITS SR 3.0.4 require surveillances to be performed prior to entering the Applicability of an LCO. Therefore, this requirement does not need to be repeated as a separate Surveillance Frequency and its deletion is considered administrative. 3

TECHNICAL CHANGES - MORE RESTRICTIVE

None

TECHNICAL CHANGES - LESS RESTRICTIVE

None

RELOCATED SPECIFICATIONS

None

A.1

CONTAINMENT SYSTEMS | SECONDARY CONTAINMENT INTEGRITY 3/4.7.N

3.7 - LIMITING CONDITIONS FOR OPERATION

N. SECONDARY CONTAINMENT INTEGRITY

SECONDARY CONTAINMENT INTEGRITY shall be maintained.

APPLICABILITY:

OPERATIONAL MODE(s) 1, 2, 3 and *.

ACTION:

1. Without SECONDARY CONTAINMENT INTEGRITY in OPERATIONAL MODES(s) 1, 2 or 3, restore SECONDARY CONTAINMENT INTEGRITY within 4 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

2. Without SECONDARY CONTAINMENT INTEGRITY in OPERATIONAL MODE *, suspend handling of irradiated fuel in the secondary containment, CORE ALTERATION(s), and operations with a potential for draining the reactor vessel. The provisions of Specification 3.0.C are not applicable.

4.7 - SURVEILLANCE REQUIREMENTS

N. SECONDARY CONTAINMENT INTEGRITY

SECONDARY CONTAINMENT INTEGRITY shall be demonstrated by:

1. Verifying at least once per 24 hours that the pressure within the secondary containment is ≥0.25 inches of vacuum water gauge.

2. Verifying at least once per 31 days that:

   a. At least one door in each secondary containment air lock is closed. L.2 — add proposed Required Action A.1 (B)

   b. *All secondary containment penetrations[a] not capable of being closed by OPERABLE secondary containment automatic isolation dampers (Valves) A.2 and required to be closed during accident conditions are closed. (Not locked, sealed, or otherwise secured) L.5

   Required Action A.2 and SR 3.6.4.2.1

3. At least once per 18 months by operating one standby gas treatment subsystem at a flow rate ≤4000 cfm for one hour and maintaining ≥0.25 inches of vacuum water gauge in the secondary containment.

<see ITS 3.6.4.1>

[SR 3.6.4.2.1 Note 1 and Required Action A.2 Note]

* When handling irradiated fuel in the secondary containment, during CORE ALTERATION(s), and operations with a potential for draining the reactor vessel.

[SR 3.6.4.2.1 Note 2]

a [Valves and blind flanges in high-radiation areas may be verified by use of administrative controls.] [Normally locked or sealed-closed penetrations may be opened intermittently under administrative controls.] L.1

TECHNICAL CHANGES - LESS RESTRICTIVE

L.1 (cont'd) dedicated operator, who is in continuous communication with the control room, at the controls of the isolation device. The allowance is presented in ITS 3.6.4.2 ACTIONS Note 1 and SR 3.6.4.2.1 Note 2. Opening of secondary containment penetrations on a intermittent basis is required for many of the same reasons as primary containment penetrations and the potential impact on consequences is less significant. The proposed allowance is acceptable due to the low probability of an event that would release radioactivity in the secondary containment during the short time in which the SCIV is open and the administrative controls established to ensure the affected penetration can be isolated when a need for secondary containment isolation is indicated.

L.2 In the event both dampers in a penetration are inoperable in an open penetration, the CTS 3.7.O Action, which requires maintaining one isolation damper OPERABLE, would not be met and an immediate shutdown would be required. ITS 3.6.4.2 ACTION B provides 4 hours prior to commencing a required shutdown. This proposed 4 hour period is consistent with the existing time allowed for conditions when the secondary containment is inoperable. In the event a valve or blind flange is inoperable in a single valve/blind flange penetration, CTS 4.7.N.2.b would not be met, requiring CTS 3.7.N Action 1 or 2 to be entered as appropriate. CTS 3.7.N Action 1 requires the valve/blind flange to be restored within 4 hours or to shutdown the unit, and CTS 3.7.N Action 2 requires immediate suspension of various shutdown evolutions. ITS 3.6.4.2 Required Action A.1 provides 8 hours to commence the unit shutdown or suspend various shutdown evolutions. The proposed change will provide consistency in ACTIONS for these various secondary containment degradations. These changes to CTS 3.7.O are acceptable due to the low probability of an event requiring the secondary containment during the short time in which continued operation is allowed and the capability to isolate a secondary containment penetration is lost. In addition, the penetrations affected by the proposed 8 hour time period are of a small diameter, thus their impact on the secondary containment is not as great as the automatic isolation dampers.

L.3 CTS 4.7.O.1 is proposed to be deleted. Any time the OPERABILITY of a system or component has been affected by repair, maintenance, or replacement of a component, post maintenance testing is required to demonstrate OPERABILITY of the system or component. After restoration of a component that caused a required SR to be failed, ITS SR 3.0.1 requires the appropriate SRs (in this case SR 3.6.4.2.2) to be performed to demonstrate the OPERABILITY of the affected components. Therefore, explicit post maintenance Surveillance Requirements in CTS 4.7.O.1 are not required and have been deleted from the Technical Specifications.

TECHNICAL CHANGES - LESS RESTRICTIVE (continued)

L.4 The phrase "actual or," in reference to the isolation test signal in CTS 4.7.O.2, has been added to proposed SR 3.6.4.2.3, which verifies that each SCIV actuates on an automatic isolation signal. This allows satisfactory automatic SCIV isolations for other than Surveillance purposes to be used to fulfill the Surveillance Requirement. Operability is adequately demonstrated in either case since the SCIV itself cannot discriminate between "actual" or "test" signals.

L.5 The requirements of CTS 4.7.N.2.b, related to verification of the position of secondary containment isolation penetrations not capable of being closed by OPERABLE secondary containment isolation valves (SCIVs), are revised in proposed SR 3.6.4.2.1 and ITS 3.6.4.2 Required Action A.2 (Note 2) to exclude verification of manual valves and blind flanges that are locked, sealed, or otherwise secured in the correct position. The purpose of CTS 4.7.N.2.b is to ensure that manual secondary containment isolation devices that may be misaligned are in correct position to help ensure that post accident leakage of radioactive fluids or gases outside the secondary containment boundary is within design and analysis limits. For manual valves or blind flanges that are locked, sealed or otherwise secured in the correct position, the potential of these devices to be inadvertently misaligned is low. In addition, manual valves and blind flanges that are locked, sealed or otherwise secured in the correct position are verified to be in the correct position prior to locking, sealing, or securing. As a result of this control of the position of these manual secondary containment isolation devices, the periodic Surveillance of these devices in CTS 4.7.N.2.b is not required to help ensure that post accident leakage of radioactive fluids or gases outside the secondary containment boundary is maintained within the design and analysis limits. This change also provides the benefit of reduced radiation exposure to plant personnel through the elimination of the requirement to check the position of the manual valves and blind flanges, located in the radiation areas, that are locked, sealed or otherwise secured in the correct position.

RELOCATED SPECIFICATIONS

None

TECHNICAL CHANGES - LESS RESTRICTIVE

"Generic"

LA.1 The detail in CTS LCO 3.7.P relating to system design (i.e., that the SGT subsystems are "independent") is proposed to be relocated to the Bases. This is a design detail that is not necessary to be included in the Technical Specifications to ensure the OPERABILITY of the SGT subsystems, since OPERABILITY requirements are adequately addressed in ITS 3.6.4.3. Therefore, the relocated detail is not required to be in the ITS to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS.

LA.2 Details in CTS 4.7.P.1 of the methods for performing the standby gas treatment subsystem 31 day operating Surveillance (by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers) and CTS 4.7.P.4.b.1 (verifying "Manual initiation from the control room") are proposed to be relocated to the Bases. These details are not necessary to ensure the OPERABILITY of the standby gas treatment subsystems. The requirements of ITS 3.6.4.3 and SR 3.6.4.3.1 are adequate to ensure the standby gas treatment subsystems are maintained OPERABLE. The requirement in CTS 4.7.P.4.b.1 is performed as part of proposed SR 3.6.4.3.1. Therefore, the relocated details are not required to be in the ITS to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS. B

LD.1 The Frequency for performing CTS 4.7.P.4.b has been extended from 18 months to 24 months in proposed ITS SR 3.6.4.3.3 to facilitate a change to the Dresden 2 and 3 refuel cycle from 18 months to 24 months. The proposed change will allow these Surveillances to extend their Surveillance Frequency from the current 18 month Surveillance Frequency (i.e., a maximum of 22.5 months accounting for the allowable grace period specified in CTS 4.0.B and proposed SR 3.0.2) to a 24 month Surveillance Frequency (i.e., a maximum of 30 months accounting for the allowable grace period specified in CTS 4.0.B and proposed Specification 3.0.2). This proposed change was evaluated in accordance with the guidance provided in NRC Generic Letter No. 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," dated April 2, 1991.

SR 3.6.4.3.3 verifies each SGT subsystem actuates on an actual or simulated initiation signal. Extending the Surveillance interval for this verification is acceptable in part because the system is operated every 31 days to satisfy the requirements of SR 3.6.4.3.1 which operates each SGT subsystem for a specified period of time that ensures both subsystems are OPERABLE and that all

<CTS>

3.6 CONTAINMENT SYSTEMS

3.6.1.3 Primary Containment Isolation Valves (PCIVs)

<3.7.D>
<3.6.M>

LCO 3.6.1.3 Each PCIV, except reactor building-to-suppression chamber vacuum breakers, shall be OPERABLE.

<Appl 3.7.D>
<DOC M.1>
<Appl 3.6.M>

APPLICABILITY: MODES 1, 2, and 3,
When associated instrumentation is required to be OPERABLE per LCO 3.3.6.1, "Primary Containment Isolation Instrumentation."

ACTIONS

-----NOTES-----

1. Penetration flow paths (except for purge valve penetration flow paths) may be unisolated intermittently under administrative controls. [1]
2. Separate Condition entry is allowed for each penetration flow path.
3. Enter applicable Conditions and Required Actions for systems made inoperable by PCIVs.
4. Enter applicable Conditions and Required Actions of LCO 3.6.1.1, "Primary Containment," when PCIV leakage results in exceeding overall containment leakage rate acceptance criteria (in MODES 1, 2, and 3). [2]

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. -----NOTE----- Only applicable to penetration flow paths with two [or more] PCIVs. [8] ---------- One or more penetration flow paths with one PCIV inoperable (except for purge valve leakage not within limit). [8] [TSTF-207] for reasons other than Condition(s) D and E [C] <3.7.D Act i> <3.6.M Act> [TSTF-207]	A.1 Isolate the affected penetration flow path by use of at least one closed and de-activated automatic valve, closed manual valve, blind flange, or check valve with flow through the valve secured. AND	4 hours except for main steam line AND 8 hours for main steam line [B]
		(continued) [B]

<CTS>

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. ---------NOTE--------- Only applicable to penetration flow paths with two PCIVs. --------------------- One or more penetration flow paths with two PCIVs inoperable [except for purge valve leakage not within limit].	B.1 Isolate the affected penetration flow path by use of at least one closed and de-activated automatic valve, closed manual valve, or blind flange.	1 hour
C. ---------NOTE--------- Only applicable to penetration flow paths with only one PCIV. --------------------- One or more penetration flow paths with one PCIV inoperable.	C.1 Isolate the affected penetration flow path by use of at least one closed and de-activated automatic valve, closed manual valve, or blind flange.	[4] hours except for excess flow check valves (EFCVs) AND 12 hours [for EFCVs]
	AND	
	C.2 --------NOTE-------- Isolation devices in high radiation areas may be verified by use of administrative means. ---------------------- Verify the affected penetration flow path is isolated.	Once per 31 days
[D. Secondary containment bypass leakage rate,] not within limit.	D.1 Restore leakage rate to within limit.	[4 hours]

(continued)

Handwritten markups:

<Doc L.3> TSTF-207 [8] or more; for reasons other than Condition[s] D [and E] [7] [8]; AND 72 hours for EFCVs and penetrations with a closed system [4]

<3.7.D Act 1> <3.7.D Act 2> <4.7.A.2> <4.7.A Footnote (b)>

and penetrations with a closed system [4]

TSTF-269 [5] 1. 2. Isolation devices that are locked, sealed, or otherwise secured may be verified by use of administrative means.

TSTF-207 [1] 4 hours for hydrostatically tested line leakage [not on a closed system] AND

TSTF-207 [8] One or more [1]

<3.6.M Act>

TSTF-207 [1] for secondary containment bypass leakage]

MSIV leakage rate, [purge valve leakage rate,] [hydrostatically tested line leakage rate,] [or] [EFCV leakage rate] TSTF-207 [1]

AND 8 hours for MSIV leakage AND [24 hours for purge valve leakage] AND [72 hours for hydrostatically tested line leakage [on a closed system] [and EFCV leakage]

1. This bracketed requirement has been deleted because it is not applicable to Dresden 2 and 3. The following requirements have been renumbered, where applicable, to reflect this deletion.

2. The words "in MODES 1, 2, and 3" have been deleted from ITS 3.6.1.3 ACTIONS Note 4 since there are no PCIV leakage tests required in MODES other than MODES 1, 2, and 3 for Dresden 2 and 3 (i.e., there are no PCIVs required to be OPERABLE in MODES other than MODES 1, 2, and 3 that have specific leakage limits). In addition, ISTS SR 3.6.1.3.2 Note 1 has been deleted for the same reason. The following Note number has been deleted since the deletion of this Note leaves only one applicable Note.

3. Not used.

4. ITS 3.6.1.3 Required Action C.1 Completion Times have been modified to be consistent with approved TSTF-30, Rev. 3. The change also provides a 72 hour Completion Time for EFCVs consistent with TSTF-323.

5. Not used.

6. The words in ISTS 3.6.1.3 Condition I (ITS 3.6.1.3 Condition F), "or during operations with a potential for draining the reactor vessel (OPDRVs)," have been deleted. There are no PCIVs required to be OPERABLE in the Dresden 2 and 3 ITS whose Applicability is only during OPDRVs. The only PCIVs required when not in MODES 1, 2, and 3 are the shutdown cooling isolation valves, and their Applicability is MODES 1, 2, 3, 4 and 5. This Condition is still applicable in MODES 4 and 5, which are the only MODES that OPDRVs can be performed. Therefore, the "during OPDRVs" Applicability is duplicative of the MODES 4 and 5 Applicability and has been deleted.

7. The acronym "OPDRVs" has been defined, consistent with the format of the ITS, since it is the first use of this term in this Specification.

8. The brackets have been removed and the proper plant specific information/value has been provided.

9. The Primary Containment Leakage Rate Testing Program has been added to ITS Section 5.5, similar to TSTF-52. The Program references the requirements of 10 CFR 50 Appendix J and approved exemptions, therefore, the Surveillances have been modified to reference the Program. This is consistent with the Current Licensing Basis and TSTF-52.

10. The 18 inch torus purge valve has been excluded from the requirement in ISTS SR 3.6.1.3.2 (ITS SR 3.6.1.3.1), since it is normally open for pressure control.

11. Not used.

12. Changes have been made (additions, deletions, and/or changes to the NUREG) to reflect the plant specific nomenclature, number, reference, system description, analysis description, or licensing basis description.

except for torus purge valve 1601-56. This valve is normally open for pressure control. This is acceptable since this valve and other vent and purge valves are designed to automatically close on LOCA conditions

BASES

BACKGROUND (continued)

The primary containment purge lines are [18] inches in diameter; vent lines are [18] inches in diameter. The [18] inch primary containment purge valves are normally maintained closed in MODES 1, 2, and 3 to ensure the primary containment boundary is maintained. The isolation valves on the [18] inch vent lines have [2] inch bypass lines around them for use during normal reactor operation. Two additional redundant excess flow isolation dampers are provided on the vent line upstream of the Standby Gas Treatment (SGT) System filter trains. These isolation dampers, together with the PCIVs, will prevent high pressure from reaching the SGT System filter trains in the unlikely event of a loss of coolant accident (LOCA) during venting. Closure of the excess flow isolation dampers will not prevent the SGT System from performing its design function (that is, to maintain a negative pressure in the secondary containment). To ensure that a vent path is available, a [2] inch bypass line is provided around the dampers.

Handwritten insertions: "2, 6, and"; "valves"; "vent and"; "from the suppression chamber and drywell"; "Use of the 2 inch vent valves"; "Standby Gas Treatment"; "reduce oxygen content during operation and"; "and the Reactor Building Ventilation System"

APPLICABLE SAFETY ANALYSES

The PCIVs LCO was derived from the assumptions related to minimizing the loss of reactor coolant inventory, and establishing the primary containment boundary during major accidents. As part of the primary containment boundary, PCIV OPERABILITY supports leak tightness of primary containment. Therefore, the safety analysis of any event requiring isolation of primary containment is applicable to this LCO.

The DBAs that result in a release of radioactive material within primary containment are a LOCA and a main steam line break (MSLB). In the analysis for each of these accidents, it is assumed that PCIVs are either closed or close within the required isolation times following event initiation. This ensures that potential paths to the environment through PCIVs (including primary containment purge valves) are minimized. Of the events analyzed in Reference (1), the MSLB is the most limiting event due to radiological consequences. The closure time of the main steam isolation valves (MSIVs) is a significant variable from a radiological standpoint. The MSIVs are required to close within 3 to 5 seconds since the 5 second closure time is assumed in the analysis. The safety analyses assume that the purge valves were closed at event initiation. Likewise, it is assumed that the primary

Handwritten insertions: "for which the consequences are mitigated by PCIVs"; "a control rod drop accident (CRDA)"; "LOCA"; "2 and 3"; "the 3 second closure time is assumed in the MSIV closure (the most severe overpressurization transient) analysis (Ref. 4) and the LOCA analysis (Ref. 2), and"; "provides added margin to the 10 seconds"; "MSLB"; "(Ref. 3)"

(continued)

BASES

ACTIONS (continued)

communication with the control room. In this way, the penetration can be rapidly isolated when a need for primary containment isolation is indicated. Due to the size of the primary containment purge line penetration and the fact that those penetrations exhaust directly from the containment atmosphere to the environment, the penetration flow path containing these valves is not allowed to be opened under administrative controls. A single purge valve in a penetration flow path may be opened to effect repairs to an inoperable valve, as allowed by SR 3.6.1.3.1. [6]

A second Note has been added to provide clarification that, for the purpose of this LCO, separate Condition entry is allowed for each penetration flow path. This is acceptable, since the Required Actions for each Condition provide appropriate compensatory actions for each inoperable PCIV. Complying with the Required Actions may allow for continued operation, and subsequent inoperable PCIVs are governed by subsequent Condition entry and application of associated Required Actions.

The ACTIONS are modified by Notes 3 and 4. Note 3 ensures that appropriate remedial actions are taken, if necessary, if the affected system(s) are rendered inoperable by an inoperable PCIV (e.g., an Emergency Core Cooling System subsystem is inoperable due to a failed open test return valve). Note 4 ensures appropriate remedial actions are taken when the primary containment leakage limits are exceeded. Pursuant to LCO 3.0.6, these actions are not required even when the associated LCO is not met. Therefore, Notes 3 and 4 are added to require the proper actions be taken.

secondary containment bypass leakage rate, MSIV leakage rate, purge valve leakage rate, or hydrostatically tested line leakage rate or EFCV leakage rate [6] (B) TSTF-207

A.1 and A.2

With one or more penetration flow paths with one PCIV inoperable (except for purge valve leakage not within limits), the affected penetration flow paths must be isolated. The method of isolation must include the use of at least one isolation barrier that cannot be adversely affected by a single active failure. Isolation barriers that meet this criterion are a closed and de-activated automatic valve, a closed manual valve, a blind flange, and a check valve with flow through the valve secured. For a penetration isolated in accordance with Required Action A.1,

(continued)

BASES

ACTIONS

A.1 and A.2 (continued)

the device used to isolate the penetration should be the closest available valve to the primary containment. The Required Action must be completed within the 4 hour Completion Time (8 hours for main steam lines). The Completion Time of 4 hours is reasonable considering the time required to isolate the penetration and the relative importance of supporting primary containment OPERABILITY during MODES 1, 2, and 3. For main steam lines, an 8 hour Completion Time is allowed. The Completion Time of 8 hours for the main steam lines allows a period of time to restore the MSIVs to OPERABLE status given the fact that MSIV closure will result in isolation of the main steam line(s) and a potential for plant shutdown.

For affected penetrations that have been isolated in accordance with Required Action A.1, the affected penetration flow path(s) must be verified to be isolated on a periodic basis. This is necessary to ensure that primary containment penetrations required to be isolated following an accident, and no longer capable of being automatically isolated, will be in the isolation position should an event occur. This Required Action does not require any testing or device manipulation. Rather, it involves verification that those devices outside primary containment and capable of potentially being mispositioned are in the correct position. The Completion Time of "once per 31 days for isolation devices outside primary containment" is appropriate because the devices are operated under administrative controls and the probability of their misalignment is low. For the devices inside primary containment, the time period specified "prior to entering MODE 2 or 3 from MODE 4, if primary containment was de-inerted while in MODE 4, if not performed within the previous 92 days" is based on engineering judgment and is considered reasonable in view of the inaccessibility of the devices and the existence of other administrative controls ensuring that device misalignment is an unlikely possibility.

Condition A is modified by a Note indicating that this Condition is only applicable to those penetration flow paths with two or more PCIVs. For penetration flow paths with one PCIV, Condition C provides the appropriate Required Actions.

Required Action A.2 is modified by two Notes. Note 1 applies to isolation devices located in high radiation areas, and

(continued)

BASES

ACTIONS

A.1 and A.2 (continued)

allows them to be verified by use of administrative means. Allowing verification by administrative means is considered acceptable, since access to these areas is typically restricted. [TSTF-269] [Insert A.1 and A.2] Therefore, the probability of misalignment of these devices, once they have been verified to be in the proper position, is low. [9]

B.1

With one or more penetration flow paths with two [or more] [TSTF-207] [2] PCIVs inoperable, [except for secondary containment bypass leakage rate, MSIV leakage rate, purge valve leakage rate, or hydrostatically tested line leakage rate or EFCV leakage rate not within limit,] [4] [TSTF-207] either the inoperable PCIVs must be restored to OPERABLE status or the affected penetration flow path must be isolated within 1 hour. The method of isolation must include the use of at least one isolation barrier that cannot be adversely affected by a single active failure. Isolation barriers that meet this criterion are a closed and de-activated automatic valve, a closed manual valve, and a blind flange. The 1 hour Completion Time is consistent with the ACTIONS of LCO 3.6.1.1. (B)

Condition B is modified by a Note indicating this Condition is only applicable to penetration flow paths with two [or more] [TSTF-207] [2] PCIVs. For penetration flow paths with one PCIV, Condition C provides the appropriate Required Actions.

C.1 and C.2

With one or more penetration flow paths with one PCIV inoperable, [except for ...] the inoperable valve must be restored to OPERABLE status or the affected penetration flow path must be isolated. The method of isolation must include the use of at least one isolation barrier that cannot be adversely affected by a single active failure. Isolation barriers that meet this criterion are a closed and de-activated automatic valve, a closed manual valve, and a blind flange. A check valve may not be used to isolate the affected penetration. [TSTF-30] Required Action C.1 must be completed within the [4] hour Completion Time. The Completion Time of [4] hours [for a penetration with a closed system] [TSTF-30] [72] is reasonable considering the relative stability of the closed system (hence, reliability) to act as a penetration isolation boundary and the relative importance of supporting primary containment OPERABILITY during (B)

(continued)

The Completion Time of 4 hours for valves other than EFCVs and in penetrations with a closed system is reasonable considering the time required to isolate the penetration and the relative importance of supporting primary containment OPERABILITY during MODES 1, 2, and 3.

BASES

ACTIONS

C.1 and C.2 (continued)

MODES 1, 2, and 3. The Completion Time of 12 hours is reasonable considering the instrument and the small pipe diameter of penetration (hence, reliability) to act as a penetration isolation boundary and the small pipe diameter of the affected penetrations. In the event the affected penetration flow path is isolated in accordance with Required Action C.1, the affected penetration must be verified to be isolated on a periodic basis. This is necessary to ensure that primary containment penetrations required to be isolated following an accident are isolated. The Completion Time of once per 31 days for verifying each affected penetration is isolated is appropriate because the valves are operated under administrative controls and the probability of their misalignment is low.

Condition C is modified by a Note indicating that this Condition is only applicable to penetration flow paths with only one PCIV. For penetration flow paths with two PCIVs, Conditions A and B provide the appropriate Required Actions.

Required Action C.2 is modified by a Note that applies to valves and blind flanges located in high radiation areas and allows them to be verified by use of administrative means. Allowing verification by administrative means is considered acceptable, since access to these areas is typically restricted. Therefore, the probability of misalignment of these valves, once they have been verified to be in the proper position, is low.

D.1

With the secondary containment bypass leakage rate or MSIV leakage rate not within limit, the assumptions of the safety analysis may not be met. Therefore, the leakage must be restored to within limit within 4 hours. Restoration can be accomplished by isolating the penetration that caused the limit to be exceeded by use of one closed and de-activated automatic valve, closed manual valve, or blind flange. When a penetration is isolated, the leakage rate for the isolated penetration is assumed to be the actual pathway leakage through the isolation device. If two isolation devices are used to isolate the penetration, the leakage rate is assumed

(continued)

The closed system must meet the requirements of Reference 5.

This Required Action does not require any testing or valve manipulation. Rather, it involves verification that those devices outside containment and capable of potentially being mispositioned are in the correct position.

This Note is necessary since this Condition is written specifically to address those penetrations with a single PCIV.

TSTF-207 TSTF-269 TSTF-30

(SR 3.6.1.3.13)] [purge valve leakage rate (SR 3.6.1.3.7), [or] [hydrostatically tested line leakage rate (SR 3.6.1.3.14),] or [EFCV leakage rate (SR 3.6.1.3.10)]

6
TSTF 207

BASES

ACTIONS

D.1 (continued)

for hydrostatically tested line leakage [not on a closed system] and for secondary containment bypass leakage

to be the lesser actual pathway leakage of the two devices. The 4 hour Completion Time is reasonable considering the time required to restore the leakage by isolating the penetration and the relative importance of secondary containment bypass leakage to the overall containment function.

Insert D.1-1
TSTF-207
11

E.1, E.2, and E.3

In the event one or more containment purge valves are not within the purge valve leakage limits, purge valve leakage must be restored to within limits or the affected penetration must be isolated. The method of isolation must be by the use of at least one isolation barrier that cannot be adversely affected by a single active failure. Isolation barriers that meet this criterion are a [closed and de-activated automatic valve, closed manual valve, and blind flange]. If a purge valve with resilient seals is utilized to satisfy Required Action E.1, it must have been demonstrated to meet the leakage requirements of SR 3.6.1.3.7. The specified Completion Time is reasonable, considering that one containment purge valve remains closed so that a gross breach of containment does not exist.

In accordance with Required Action E.2, this penetration flow path must be verified to be isolated on a periodic basis. The periodic verification is necessary to ensure that containment penetrations required to be isolated following an accident, which are no longer capable of being automatically isolated, will be in the isolation position should an event occur. This Required Action does not require any testing or valve manipulation. Rather, it involves verification that those isolation devices outside containment and potentially capable of being mispositioned are in the correct position. For the isolation devices inside containment, the time period specified as "prior to entering MODE 2 or 3 from MODE 4 if not performed within the previous 92 days" is based on engineering judgment and is considered reasonable in view of the inaccessibility of the isolation devices and other administrative controls that will ensure that isolation device misalignment is an unlikely possibility.

(continued)

within limits [11] TSTF-207

Insert D.1-1

[11] leakage rate

For MSIV leakage, an 8 hour Completion Time is allowed. The Completion Time of 8 hours for MSIV leakage allows a period of time to restore the MSIVs to OPERABLE status given the fact that MSIV closure will result in isolation of the main steam line(s) and potential for plant shutdown. [11] [The 24 hour Completion Time for purge valve leakage is acceptable considering the purge valves remain closed so that a gross breach of the containment does not exist.] [The 72 hour Completion Time for hydrostatically tested line leakage [on a closed system] is acceptable based on the available water seal expected to remain as a gaseous fission product boundary during the accident [, and, in many cases, an associated closed system].] The closed system must meet the requirements of Reference 5. The 72 hour Completion Time for EFCV leakage is acceptable based on the instrument and the small pipe diameter of the penetration (hence, reliability) to act as a penetration isolation boundary.

[REVIEWER'S NOTE: The bracketed options provided in ACTION D reflect options in plant design and options in adopting the associated leakage rate Surveillances.

The options (both in ACTION D and ACTION E) for purge valve leakage, are based primarily on the design. If leakage rates can be measured separately for each purge valve, ACTION E is intended to apply. This would be required to be able to implement Required Action E.3. Should the design allow only for leak testing both purge valves simultaneously, then the Completion Time for ACTION D should include the "24 hours for purge valve leakage" and ACTION E should be eliminated.

The option for EFCV is based on the acceptance criteria of SR 3.6.1.3.10. If the acceptable criteria is a specific leakage rate (e.g., 1 gph) then the Completion Time for ACTION D should include the "72 hours for EFCV leakage." If the acceptance criteria for SR 3.6.1.3.10 is non-specific (e.g., "actuates to the closed position") then there is no specific leakage criteria and the EFCV Completion Time is not adopted.

Similarly, adopting Completion Times for secondary containment bypass and/or hydrostatically tested lines is based on whether the associated SRs are adopted.

The additional bracketed options for whether the hydrostatically tested line is with or without a closed system is predicated on plant-specific design. If the design is such that there are not both types of hydrostatically tested lines (some with and some without closed systems), the specific 'closed system' wording can be removed and the appropriate 4 or 72 hour Completion Time retained. In the event there are both types, the clarifying wording remains and the brackets are removed.]

BASES

SURVEILLANCE REQUIREMENTS (continued)

TSTF-45

SR 3.6.1.3.3 (2) [6]

This SR verifies that each primary containment isolation manual valve and blind flange that is located outside primary containment (and not locked, sealed, or otherwise secured) and is required to be closed during accident conditions is closed. The SR helps to ensure that post accident leakage of radioactive fluids or gases outside the primary containment boundary is within design limits. [7]

This SR does not require any testing or valve manipulation. Rather, it involves verification that those PCIVs outside primary containment, and capable of being mispositioned, are in the correct position. Since verification of valve [5] position for PCIVs outside primary containment is relatively easy, the 31 day Frequency was chosen to provide added assurance that the PCIVs are in the correct positions. This SR does not apply to valves that are locked, sealed, or otherwise secured in the closed position, since these were verified to be in the correct position upon locking, sealing, or securing.

1B

Two Notes have been added to this SR. The first Note allows valves and blind flanges located in high radiation areas to be verified by use of administrative controls. Allowing verification by administrative controls is considered acceptable since the primary containment is inerted and access to these areas is typically restricted during MODES 1, 2, and 3 for ALARA reasons. [7] Therefore, the probability of misalignment of these PCIVs, once they have been verified to be in the proper position, is low. A second Note has been included to clarify that PCIVs that are [7] open under administrative controls are not required to meet the SR during the time that the PCIVs are open. These controls consist of stationing a dedicated operator at the controls of the valve, who is in continuous communication with the control room. In this way, the penetration can be rapidly isolated when a need for primary containment isolation is indicated. [7]

SR 3.6.1.3.4 (3) [6]

TSTF-45

This SR verifies that each primary containment manual isolation valve and blind flange that is located inside primary containment (and not locked, sealed, or otherwise secured) and is required to be closed during accident conditions is closed. The SR helps to ensure that post accident leakage of radioactive fluids or gases outside the primary containment boundary is within design limits. For PCIVs inside primary containment, the Frequency defined as (of) [7] "prior to entering MODE 2 or 3 from MODE 4 if primary containment was de-inerted while in MODE 4, if not performed within the previous 92 days" is appropriate since these PCIVs are operated under administrative controls and the probability of their misalignment is low. [7]

(continued)

BASES

SURVEILLANCE REQUIREMENTS

[10] TSTF-30 changes not shown

SR 3.6.1.3.15 (continued)

Verifying each [ ] inch primary containment purge valve is blocked to restrict opening to ≤ [50]% is required to ensure that the valves can close under DBA conditions within the times assumed in the analysis of References 2 and 6. [The SR is modified by a Note stating that this SR is only required to be met in MODES 1, 2, and 3.] If a LOCA occurs, the purge valves must close to maintain containment leakage within the values assumed in the accident analysis. At other times when purge valves are required to be capable of closing (e.g., during movement of irradiated fuel assemblies), pressurization concerns are not present, thus the purge valves can be fully open. The [18] month Frequency is appropriate because the blocking devices are typically removed only during a refueling outage. [6]

REFERENCES

(2) 1. (U)FSAR, Chapter [15]. Section 15.6.5 [2]
(3) 2. (U)FSAR, Table [6.2-8]. Section 15.6.4
3. 10 CFR 50, Appendix J.
4. (U)FSAR, Section [6.2]. 15.2.4 [2]
(1) 5. FSAR, Section [15.1.39]. Technical Requirements Manual [1]
5. UFSAR, Section 6.2.4.1.

[1]

1B

1B

JUSTIFICATION FOR DEVIATIONS FROM NUREG-1433, REVISION 1
ITS BASES: 3.6.1.3 - PRIMARY CONTAINMENT ISOLATION VALVES

1. Changes have been made (additions, deletions, and/or changes to the NUREG) to reflect the plant specific nomenclature, number, reference, system description, analysis description, or licensing basis description.

2. The brackets have been removed and the proper plant specific information/value has been provided.

3. This paragraph in the Applicable Safety Analyses Section of Bases 3.6.1.3 has been modified since it is incorrect; neither the DBA analysis nor the IST Program have a specific assumption for closure time of PCIVs. The analysis assumes the valves will close prior to fuel damage, which is not expected for some time. The closure times of the principle PCIVs are currently specified in the UFSAR, and are based upon such factors as valve size and valve operator capability. In addition, the words in SR 3.6.1.3.5 stating that the isolation times are in the IST Program have also been deleted since these times are also located in the UFSAR.

4. This bracketed requirement/information has been deleted because it is not applicable to Dresden 2 and 3.

5. These changes have been made for consistency with similar phrases in other parts of the Bases and/or to be consistent with the Specification.

6. Changes have been made to reflect those changes made to the Specification.

7. Editorial change made for enhanced clarity.

8. Typographical/grammatical error corrected.

9. This change was approved to be made in NUREG-1433, Rev. 1 per change package BWR-15, C.5, but apparently was not made. A similar change was made to NUREG-1433, Rev. 1, Bases 3.6.4.2, Required Actions A.1 and A.2.

10. Some of the Bases changes for TSTF-30, Rev. 2, have not been adopted since the SRs/ information is not applicable to Dresden 2 and 3.

11. These changes to TSTF-207, Rev. 5, and TSTF-30, Rev. 3, were made due to plant specific differences or due to typographical/consistency errors. 6

12. The discussion in the LCO section about closed valves is modified. This editorial preference is based on an incomplete and misleading discussion of the valves. This change does not modify the requirements or the interpretation of the requirements.

JUSTIFICATION FOR DEVIATIONS FROM NUREG-1433, REVISION 1
ITS BASES: 3.6.1.7 - REACTOR BUILDING-TO-SUPPRESSION CHAMBER VACUUM BREAKERS

1. Changes have been made (additions, deletions, and/or changes to the NUREG) to reflect the plant specific nomenclature, number, reference, system description, analysis description, or licensing basis description.

2. The brackets have been removed and the proper plant specific information/value has been provided.

3. These details concerning the five cases which are considered in the safety analyses with respect to reactor building-to-suppression chamber vacuum breakers have been deleted. This level of detail is not necessary to be included in the Bases for understanding of the LCO requirements.

4. Inadvertent actuation of the suppression pool spray system is not the main concern for depressurizing the drywell, a LOCA inside the drywell is the main concern. Therefore, this section has been reworded to place proper emphasis on the proper reason. In addition, inadvertent actuation of suppression pool spray is not a concern at all relative to causing an excessive negative pressure event; drywell spray is the system that can cause this event. Therfore the Bases have been changed from suppression pool spray to drywell spray when discussing this event. 3

5. Changes have been made to reflect those changes made to the Specification.

6. The alternate method has been deleted since it is not valid for Dresden 2 and 3.

7. Editorial change made for enhanced clarity.

8. These changes have been made for consistency with similar phrases in other parts of the Bases and/or to be consistent with the Specification.

BASES (continued)

APPLICABLE SAFETY ANALYSES

Initial suppression pool water level affects suppression pool temperature response calculations, calculated drywell pressure during vent clearing for a DBA, calculated pool swell loads for a DBA LOCA, and calculated loads due to S/RV discharges. Suppression pool water level must be maintained within the limits specified so that the safety analysis of Reference 1 remains valid. relief valve 2

Suppression pool water level satisfies Criteria 2 and 3 of the NRC Policy Statement. 10 CFR 50.36 (c)(2)(ii) 2

LCO

A limit that suppression pool water level be ≥ 12 ft 2 inches and ≤ 12 ft 6 inches is required to ensure that the primary containment conditions assumed for the safety analyses are met. Either the high or low water level limits were used in the safety analyses, depending upon which is more conservative for a particular calculation.

1 14 ft 6.5 inches | 14 ft 10.5 inches 1 | above the bottom of the suppression chamber 2

APPLICABILITY

In MODES 1, 2, and 3, a DBA would cause significant loads on the primary containment. In MODES 4 and 5, the probability and consequences of these events are reduced due to the pressure and temperature limitations in these MODES. The requirements for maintaining suppression pool water level within limits in MODE 4 or 5 is addressed in LCO 3.5.2, "ECCS-Shutdown."

ACTIONS

A.1

With suppression pool water level outside the limits, the conditions assumed for the safety analyses are not met. If water level is below the minimum level, the pressure suppression function still exists as long as main vents are covered, HPCI and RCIC turbine exhausts are covered, and S/RV quenchers are covered. If suppression pool water level is above the maximum level, protection against overpressurization still exists due to the margin in the peak containment pressure analysis and the capability of the Drywell Spray System. Therefore, continued operation for a

the downcomers | is | relief valve | Suppression Pool | 2 | B

(continued)

BASES

APPLICABILITY (continued)

2 ALTERATIONS, or during movement of irradiated fuel assemblies in the [secondary] containment. Moving irradiated fuel assemblies in the [secondary] containment may also occur in MODES 1, 2, and 3. 4

ACTIONS

The ACTIONS are modified by three Notes. The first Note allows penetration flow paths to be unisolated intermittently under administrative controls. These controls consist of stationing a dedicated operator, who is in continuous communication with the control room, at the controls of the isolation device. In this way, the penetration can be rapidly isolated when a need for [secondary] containment isolation is indicated. 2

3 The second Note provides clarification that for the purpose of this LCO separate Condition entry is allowed for each penetration flow path. This is acceptable, since the Required Actions for each Condition provide appropriate compensatory actions for each inoperable SCIV. Complying with the Required Actions may allow for continued operation, and subsequent inoperable SCIVs are governed by subsequent Condition entry and application of associated Required Actions.

The third Note ensures appropriate remedial actions are taken, if necessary, if the affected system(s) are rendered inoperable by an inoperable SCIV.

A.1 and A.2

In the event that there are one or more penetration flow paths with one SCIV inoperable, the affected penetration flow path(s) must be isolated. The method of isolation must include the use of at least one isolation barrier that cannot be adversely affected by a single active failure. Isolation barriers that meet this criterion are a closed and de-activated automatic SCIV, a closed manual valve, and a blind flange. For penetrations isolated in accordance with Required Action A.1, the device used to isolate the penetration should be the closest available device to
2 [secondary] containment. The Required Action must be completed within the 8 hour Completion Time. The specified time period is reasonable considering the time required to

(continued)

NO SIGNIFICANT HAZARDS CONSIDERATION
ITS: 3.6.1.7 - REACTOR BUILDING-TO-SUPPRESSION CHAMBER VACUUM BREAKER

L.1 CHANGE

In accordance with the criteria set forth in 10 CFR 50.92, ComEd has evaluated this proposed Technical Specifications change and determined it does not represent a significant hazards consideration. The following is provided in support of this conclusion.

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

   This change would allow 1 hour of operation with one or both vacuum breakers in both lines inoperable for opening and would allow separate Condition entry for each line. The vacuum breakers are not initiators of any previously analyzed accident. Therefore, the change does not significantly increase the frequency of such accidents. The change will not increase the consequences of an accident previously analyzed since continued operation is not allowed with both lines inoperable (i.e., isolation capability is maintained), thus the consequences are the same during the additional time periods as it is during the current shutdown times.

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

   The proposed change does not introduce a new mode of plant operation and does not involve physical modification to the plant. Therefore, it does not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

   The change is acceptable based on the small probability of an event requiring the vacuum breakers and the desire to minimize plant transients. This 1 hour Completion Time is also consistent with the allowed times for other containment inoperabilities (i.e., leakage). The allowance for separate Condition entry for each line is also consistent with the CTS allowance for PCIV penetrations. As such, any reduction in a margin of safety will be insignificant and offset by the benefit gained from providing some time to restore the vacuum breakers.

L.4 CHANGE

In accordance with the criteria set forth in 10 CFR 50.92, ComEd has evaluated this proposed Technical Specifications change and determined it does not represent a significant hazards consideration. The following is provided in support of this conclusion.

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

   This change provides an exception allowing the vacuum breakers to be open when performing required Surveillances (the exception is to the Surveillance that would otherwise require the vacuum breakers to be closed at all times). The vacuum breakers are not assumed to be an initiator of any previously analyzed accident. Therefore, the change does not involve a significant increase in the probability of an accident previously evaluated. The Surveillance exception is made only for circumstances where the vacuum breaker is under the immediate control of an operator (manually opening to confirm Operability). As such, the vacuum breaker is expected to continue to perform its intended and assumed safety function, and therefore this change does not significantly increase the consequences of an accident previously evaluated. B

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

   The proposed change does not introduce a new mode of plant operation and does not involve physical modification to the plant. Therefore, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

   The change will not result in a reduction in a margin of safety since the vacuum breakers are still required to be OPERABLE. The exception is made only for circumstances where the vacuum breaker is under immediate control of an operator (manually opening to confirm Operability). As such, the vacuum breaker is expected to continue to perform its intended and assumed safety function, and therefore this change does not involve a significant reduction in the margin of safety.

L.2 CHANGE

In accordance with the criteria set forth in 10 CFR 50.92, ComEd has evaluated this proposed Technical Specifications change and determined it does not represent a significant hazards consideration. The following is provided in support of this conclusion.

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

   This change would allow additional time to isolate a secondary containment penetration if both isolation dampers in a two damper penetration are inoperable or one isolation device in a one device penetration is inoperable. Secondary containment isolation is not considered as an initiator of any previously analyzed accident. Therefore, this change does not significantly increase the probability of such accidents. The proposed change allows additional temporary operation with less than the required isolation capability. However, the consequences of an event that may occur during the extended outage time would not be any different than during the currently allowed outage time for other loss of secondary containment integrity situations. Therefore, this change does not significantly increase the consequences of any previously analyzed accident.

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

   This change does not result in any changes to the equipment design or capabilities or to the operation of the plant. Further, since the change impacts only the Required Action Completion Time for the system and does not result in any change in the response of the equipment to an accident, the change does not create the possibility of a new or different kind of accident from any previously analyzed accident.

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

   This change impacts only the Required Action Completion Time for inoperable devices that provide secondary containment isolation. The methodology and limits of the accident analysis are not affected, and the secondary containment response in unaffected. Therefore, the change does not involve a significant reduction in the margin of safety.

A.1

3.8 - LIMITING CONDITIONS FOR OPERATION

A. Containment Cooling Service Water System

LCO 3.7.1 At least the following independent containment cooling service water (CCSW) subsystems, with each subsystem comprised of: LA.1

1. Two OPERABLE CCSW pumps, and

2. An OPERABLE flow path capable of taking suction from the ultimate heat sink and transferring the water:

a. Through one LPCI heat exchanger, and separately,

b. To the associated safety related equipment,

shall be OPERABLE:

1. In OPERATIONAL MODE(s) 1, 2 and 3, two subsystems.

2. In OPERATIONAL MODE *, the subsystem(s) associated with subsystems/loops and components required OPERABLE by Specification 3.8.D. LA2

APPLICABILITY:

OPERATIONAL MODE(s) 1, 2, 3 and *. LA2

4.8 - SURVEILLANCE REQUIREMENTS

A. Containment Cooling Service Water System

SR 3.7.1.1 Each of the required CCSW subsystems shall be demonstrated OPERABLE at least once per 31 days by verifying that each valve, manual or power operated, in the flow path that is not locked, sealed or otherwise secured in position, is in its correct position or can be aligned to the correct position. A.2

B

* When handling irradiated fuel in the secondary containment, during CORE ALTERATION(s), and operations with a potential for draining the reactor vessel. LA2

DISCUSSION OF CHANGES
ITS: 3.7.1 - CONTAINMENT COOLING SERVICE WATER (CCSW) SYSTEM

ADMINISTRATIVE

A.1 In the conversion of the Dresden 2 and 3 current Technical Specifications (CTS) to the proposed plant specific Improved Technical Specifications (ITS), certain wording preferences or conventions are adopted that do not result in technical changes (either actual or interpretational). Editorial changes, reformatting, and revised numbering are adopted to make the ITS consistent with the BWR Standard Technical Specifications, NUREG-1433, Rev. 1 (i.e., the Improved Standard Technical Specifications (ISTS)).

A.2 CTS 4.8.A requires verification that each containment cooling service water (CCSW) subsystem valve in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position. The CCSW function is manually actuated (requiring valve lineup verification and repositioning as necessary and starting of the CCSW pumps by the operator). In the CTS, it is recognized and interpreted that "in the correct position" allows the valves to be in a non-accident position provided they can be realigned to the correct position. In the ITS, the words "in the correct position" mean that the valves must be in the accident position, unless they are automatically aligned on an accident signal. Thus, to address the change in meaning, the additional words "or can be aligned to the correct position" have been added to CTS 4.8.A (ITS SR 3.7.1.1) to clarify that it is permissible for the CCSW System valves to be in the non-accident position and the subsystems to still be considered OPERABLE. Since this is only a clarification of the current requirement, this change is considered administrative.

TECHNICAL CHANGES - MORE RESTRICTIVE

None

TECHNICAL CHANGES - LESS RESTRICTIVE

"Generic"

LA.1 The details of CTS 3.8.A relating to system OPERABILITY, that the CCSW subsystems are independent and that each subsystem shall have two CCSW pumps capable of taking a suction from the ultimate heat sink and transferring the water through one LPCI heat exchanger and separately to the associated safety related equipment, are proposed to be relocated to the Bases. The details for system OPERABILITY are not necessary in the LCO. The definition of OPERABILITY suffices. In addition, the requirements of the Surveillances will also help ensure these relocated details are maintained. As such, the relocated

TECHNICAL CHANGES - LESS RESTRICTIVE

LA.1 (cont'd) details are not required to be in the ITS to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS.

LA.2 CTS 3/4.8.A provides LCO requirements, Actions, and Surveillance Requirements for the CCSW System when handling irradiated fuel in the secondary containment, during CORE ALTERATION(s), and operations with a potential for draining the reactor vessel. These requirements are proposed to be relocated to the Technical Requirements Manual (TRM). Since this system is a support system for other required equipment with their own Specifications, the definition of OPERABILITY in ITS 1.1 will provide sufficient assurance the system can perform its required support function. In addition, the Bases for the supported systems will require the necessary portions of the CCSW System to be OPERABLE. Therefore, the relocated requirements are not required to be in the ITS to provide adequate protection of the public health and safety. The TRM will be incorporated by reference into the Dresden 2 and 3 UFSAR at ITS Implementation. Changes to the TRM will be controlled by the provisions of 10 CFR 50.59. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS.

"Specific"

L.1 CTS 3.8.A Action 1.c requires, when one CCSW subsystem is inoperable, that the inoperable subsystem be restored to OPERABLE status within 72 hours. In ITS 3.7.1, when one CCSW subsystem is inoperable, Required Action C.1 requires the inoperable subsystem to be restored to OPERABLE status in 7 days. This change provides additional time to restore the subsystem prior to requiring a plant shutdown. In this condition, the remaining OPERABLE CCSW subsystem is capable of providing the required heat removal function. Analyses show the capacity and capability of the remaining CCSW subsystem is such that adequate cooling is provided to each of the systems supported by the CCSW System. The proposed allowed outage time of 7 days in ITS 3.7.1 Required Action B.1 and the capability of the CCSW System to perform its intended safety function, in the associated condition, is consistent with Technical Specification allowed outage times and capabilities of other safety related systems with similar levels of degradation (including those systems supported by the CCSW System in MODES 1, 2, and 3). Furthermore, since adequate CCSW

TECHNICAL CHANGES - LESS RESTRICTIVE

L.1 (cont'd) cooling is available to the supported loads (i.e., suppression pool cooling and containment spray) for the above described condition, this change also provides the benefit of avoiding the transient risk associated with an unnecessary plant shutdown. Therefore, the proposed change to the CCSW System allowed outage time is acceptable.

RELOCATED SPECIFICATIONS

None

3.8 - LIMITING CONDITIONS FOR OPERATION	4.8 - SURVEILLANCE REQUIREMENTS

D. Control Room Emergency Ventilation System

LCO 3.7.4 The control room emergency ventilation system shall be OPERABLE, with the system comprised of an OPERABLE control room emergency filtration system and an OPERABLE refrigeration control unit (RCU). LA.1 (See ITS 3.7.5)

APPLICABILITY:

OPERATIONAL MODE(s) 1, 2, 3, and *.

ACTION:

1. In OPERATIONAL MODE(s) 1, 2 or 3:

   a. ACTION A — With the control room emergency filtration system inoperable, restore the inoperable system to OPERABLE status within 7 days or ACTION B — be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

   b. With the refrigeration control unit (RCU) inoperable, restore the inoperable RCU to OPERABLE status within 30 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. (See ITS 3.7.5)

D. Control Room Emergency Ventilation System

The control room emergency ventilation system shall be demonstrated OPERABLE:

1. At least once per 18 months by verifying that the RCU has the capability to remove the required heat load. (See ITS 3.7.5) B

2. SR 3.7.4.1 At least once per 31 days by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 10 hours with the heaters operating. LA.2

3. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:

   a. Verifying that the system satisfies the in-place penetration and bypass leakage testing acceptance criteria of <0.05% and uses the test procedure guidance in Regulatory Positions C.5.a, C.5.c and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 2000 scfm ±10%.

(See ITS 5.5) (add proposed SR 3.7.4.2) A.2

Applicability * When handling irradiated fuel in the secondary containment, during CORE ALTERATION(s), and operations with a potential for draining the reactor vessel.

ADMINISTRATIVE

A.1 In the conversion of the Dresden 2 and 3 current Technical Specifications (CTS) to the proposed plant specific Improved Technical Specifications (ITS), certain wording preferences or conventions are adopted that do not result in technical changes (either actual or interpretational). Editorial changes, reformatting, and revised numbering are adopted to make the ITS consistent with the BWR Standard Technical Specifications, NUREG-1433, Rev. 1 (i.e., the Improved Technical Specification (ISTS)).

A.2 The filter testing requirements of CTS 4.8.D.3, 4.8.D.4, 4.8.D.5.a, 4.8.D.5.d, 4.8.D.6, and 4.8.D.7, are being moved to ITS 5.5.7 in accordance with the format of the BWR ISTS, NUREG-1433, Rev. 1. Any technical changes to this requirement will be addressed in the Discussion of Changes for ITS: 5.5. A Surveillance Requirement is added (proposed SR 3.7.4.2) to clarify that the tests of the Ventilation Filter Testing Program must also be completed and passed for determining OPERABILITY of the CREV System. Since this is a presentation preference that maintains current requirements, this change is considered administrative.

TECHNICAL CHANGES - MORE RESTRICTIVE

None

TECHNICAL CHANGES - LESS RESTRICTIVE

"Generic"

LA.1 The CTS 3.8.D specific details of what constitutes the Control Room Emergency Ventilation System are proposed to be relocated to the Bases. These are design details that are not necessary to be included in the Technical Specifications to ensure the OPERABILITY of the CREV System since the OPERABILITY requirements are adequately addressed in ITS 3.7.4, "Control Room Emergency Ventilation System." As such, the relocated details are not required to be in the ITS to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS.

A.1

3.8 - LIMITING CONDITIONS FOR OPERATION

D. Control Room Emergency Ventilation System (AC) A.2

LCO 3.7.5 The control room emergency ventilation (AC) system shall be OPERABLE with the system comprised of an OPERABLE control room emergency filtration system and an OPERABLE refrigeration control unit (RCU). A.1 <See ITS 3.7.4>

APPLICABILITY:

OPERATIONAL MODE(s) 1, 2, 3, and *.

ACTION:

1. In OPERATIONAL MODE(s) 1, 2 or 3:

<See ITS 3.7.4>

a. With the control room emergency filtration system inoperable, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

b. With the refrigeration control unit (RCU) inoperable, restore the inoperable RCU to OPERABLE status within 30 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. (ACTION A; ACTION B)

Control Room Emergency Ventilation AC System A.2

4.8 - SURVEILLANCE REQUIREMENTS

D. Control Room Emergency Ventilation System (AC) A.2

The control room emergency ventilation system shall be demonstrated OPERABLE:

1. At least once per 18 (24) months by verifying that the RCU has the capability to remove the required heat load. LD.1 SR 3.7.5.1 — Control room emergency ventilation AC system A.2

2. At least once per 31 days by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 10 hours with the heaters operating. <See ITS 3.7.4>

3. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:

a. Verifying that the system satisfies the in-place penetration and bypass leakage testing acceptance criteria of <0.05% and uses the test procedure guidance in Regulatory Positions C.5.a, C.5.c and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 2000 scfm ±10%. <See ITS 5.5>

B

Applicability * When handling irradiated fuel in the secondary containment, during CORE ALTERATION(s), and operations with a potential for draining the reactor vessel.

ADMINISTRATIVE CHANGES

A.1 In the conversion of the Dresden 2 and 3 current Technical Specifications (CTS) to the proposed plant specific Improved Technical Specifications (ITS), certain wording preferences or conventions are adopted that do not result in technical changes (either actual or interpretational). Editorial changes, reformatting, and revised numbering are adopted to make the ITS consistent with the BWR Standard Technical Specifications, NUREG-1433, Rev. 1 (i.e., the Improved Technical Specification (ISTS)).

A.2 CTS 3.8.D states that the control room emergency ventilation system includes the control room refrigeration control unit. In addition, the CTS 3.8.D Actions and the CTS 4.8.D Surveillance Requirements discuss both the control room emergency ventilation system and the refrigeration control unit. In the ITS, these two requirements have been split into separate Technical Specifications; ITS 3.7.4 for the Control Room Emergency Ventilation (CREV) System and ITS 3.7.5 for the Control Room Emergency Ventilation AC System. Therefore, in ITS 3.7.5, the LCO, Actions, and Surveillance Requirements all refer to the Control Room Emergency Ventilation AC System. Since the Control Room Emergency Ventilation AC System is included in ITS 3.7.5, this change is considered administrative.

TECHNICAL CHANGES - MORE RESTRICTIVE

None

TECHNICAL CHANGES - LESS RESTRICTIVE

"Generic"

LA.1 The CTS 3.8.D specific details of what constitutes the Control Room Emergency Ventilation AC System are proposed to be relocated to the Bases. These are design details that are not necessary to be included in the Technical Specifications to ensure the OPERABILITY of the Control Room Emergency Ventilation AC System since OPERABILITY requirements are adequately addressed in ITS 3.7.5. As such, the relocated details are not required to be in the ITS to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS.

DISCUSSION OF CHANGES
ITS: 3.7.8 - SPENT FUEL STORAGE POOL WATER LEVEL

ADMINISTRATIVE

A.1 In the conversion of the Dresden 2 and 3 current Technical Specifications (CTS) to the proposed plant specific Improved Technical Specifications (ITS), certain wording preferences or conventions are adopted that do not result in technical changes (either actual or interpretational). Editorial changes, reformatting, and revised numbering are adopted to make the ITS consistent with the BWR Standard Technical Specifications, NUREG-1433, Rev. 1 (i.e., the Improved Technical Specification (ISTS)).

A.2 CTS 3.10.H, which requires the spent fuel pool water level to be within limit, has an Applicability of "whenever irradiated fuel assemblies are in the spent fuel storage pool." However, the CTS 3.10.H Action only requires suspension of fuel movement and crane operations with loads. (In addition, the relocation of crane operations with loads is specifically discussed in Discussion of Change LA.1 below). Thus, the spent fuel pool water level is not required to be maintained within the limit as long as fuel movement is suspended. With fuel movement suspended, fuel pool level can be outside the limits for an unlimited amount of time. The Applicability of ITS 3.7.8 is limited to circumstances when irradiated fuel assemblies are being moved in the spent fuel storage pool or when new fuel is being moved in the spent fuel storage pool with irradiated fuel assemblies in the spent fuel storage pool. This is acceptable since the purpose of ITS 3.7.8 is to ensure sufficient water is above the irradiated fuel assemblies to meet the assumptions of a fuel handling accident. With no fuel being handled, a fuel handling accident cannot occur. Therefore, since CTS 3.10.H already allows continued operation with the spent fuel pool water level not within the limit (provided fuel handling is suspended), this change is considered administrative.

TECHNICAL CHANGES - MORE RESTRICTIVE

M.1 CTS 3.10.H requires the spent fuel water level to be maintained at a level of $\geq$ 33 ft. ITS 3.7.8 requires the spent fuel storage pool water level to be $\geq$ 19 ft over the top of irradiated fuel assemblies seated in the spent fuel storage pool racks. This change results in an increase in the water level of approximately 9 inches. This change is necessary to ensure the minimum water level in the spent fuel storage pool meets the assumptions of the fuel handling accident. Since this change increases the minimum required spent fuel storage pool water level, the change imposes more restrictive requirements on the movement of fuel assemblies. | B

BASES (continued)

SURVEILLANCE REQUIREMENTS

SR 3.8.3.1

The tests of new fuel oil prior to addition to the storage tanks are a means of determining whether new fuel oil is of the appropriate grade and has not been contaminated with substances that would have an immediate detrimental impact on diesel engine combustion. If results from these tests are within acceptable limits, the fuel oil may be added to the storage tanks without concern for contaminating the entire volume of fuel oil in the storage tanks. These tests are to be conducted prior to adding the new fuel to the storage tank(s). The tests, limits, and applicable ASTM Standards are as follows:

a. Sample the new fuel oil in accordance with ASTM D4057-95 (Ref. 5);

b. Verify that the new fuel oil sample has: (1) an absolute specific gravity at 60°F of ≥ 0.83 and ≤ 0.89 or an API gravity at 60°F of ≥ 27 and ≤ 39 when tested in accordance with ASTM D1298-99 (Ref. 5); (2) a kinematic viscosity at 40°C of ≥ 1.9 centistokes and ≤ 4.1 centistokes when tested in accordance with ASTM D445-97 (Ref. 5); and (3) a flash point of ≥ 125°F when tested in accordance with ASTM D93-99c (Ref. 5); and

c. Verify that the new fuel oil has a clear and bright appearance with proper color when tested in accordance with ASTM D4176-93 (Ref. 5) or a water and sediment content within limits when tested in accordance with ASTM D2709-96e (Ref. 5). The clear and bright appearance with proper color test is only applicable to fuels that meet the ASTM color requirements (i.e., ASTM color 5 or less).

Failure to meet any of the above limits is cause for rejecting the new fuel oil, but does not represent a failure to meet the LCO concern since the fuel oil is not added to the storage tanks.

Following the initial new fuel oil sample, the fuel oil is analyzed within 31 days following addition of the new fuel oil to the fuel oil storage tank(s) to establish that the other properties specified in Table 1 of ASTM D975-98b (Ref. 5) are met for new fuel oil when tested in accordance

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.8.3.1 (continued)

with ASTM D975-98b (Ref. 5), except that the analysis for sulfur may be performed in accordance with ASTM D1552-95 (Ref. 5), ASTM D2622-98 (Ref. 5), or ASTM D4294-98 (Ref. 5). The 31 day period is acceptable because the fuel oil properties of interest, even if they were not within stated limits, would not have an immediate effect on DG operation. This Surveillance ensures the availability of high quality fuel oil for the DGs.

Fuel oil degradation during long term storage shows up as an increase in particulate, mostly due to oxidation. The presence of particulate does not mean that the fuel oil will not burn properly in a diesel engine. The particulate can cause fouling of filters and fuel oil injection equipment, however, which can cause engine failure.

Particulate concentrations should be determined in accordance with ASTM D5452-98 (Ref. 5). This method involves a gravimetric determination of total particulate concentration in the fuel oil and has a limit of 10 mg/l. It is acceptable to obtain a field sample for subsequent laboratory testing in lieu of field testing.

The Frequency of this test takes into consideration fuel oil degradation trends that indicate that particulate concentration is unlikely to change significantly between Frequency intervals.

SR 3.8.3.2

This Surveillance ensures that, without the aid of the refill compressor, sufficient air start capacity for each DG is available. The system design requirements provide for a minimum of three engine starts without recharging. The pressure specified in this SR is intended to support the lowest value at which the three starts can be accomplished.

The 31 day Frequency takes into account the capacity, capability, redundancy, and diversity of the AC sources and other indications available in the control room, including alarms, to alert the operator to below normal air start pressure.

(continued)

BASES (continued)

REFERENCES

1. Regulatory Guide 1.137, Rev. 1, October 1979.
2. ANSI N195, 1976.
3. UFSAR, Chapter 6.
4. UFSAR, Chapter 15.
5. ASTM Standards: D4057-95; D1298-99; D445-97; D93-99c; D4176-93; D2709-96e; D975-98b; D1552-95; D2622-98; D4294-98; and D5452-98.

3

ADMINISTRATIVE

A.1 In the conversion of the Dresden 2 and 3 current Technical Specifications (CTS) to the proposed plant specific Improved Technical Specifications (ITS), certain wording preferences or conventions are adopted that do not result in technical changes (either actual or interpretational). Editorial changes, reformatting, and revised numbering are adopted to make the ITS consistent with the BWR Standard Technical Specifications, NUREG-1433, Rev. 1 (i.e, the Improved Standard Technical Specifications (ISTS)).

A.2 The details relating to the required fuel oil day tank level in CTS 3.9.A.2.a and the bulk fuel oil storage tank level in CTS 3.9.A.2.b have been moved to proposed SR 3.8.1.4. No technical changes are being made; therefore, this change is considered administrative in nature.

A.3 Note 2 has been added to CTS 4.9.A.2.c for clarity. The proposed Note allows a modified DG start involving idling and gradual acceleration to synchronous speed as recommended by the manufacturer. When modified start procedures are not used, the time, voltage, and frequency tolerance of CTS 4.9.A.7 (SR 3.8.1.8) must be met. Since CTS 4.9.A.2.c currently allows this (a time requirement is not specified), this change is considered to be administrative.

A.4 CTS 4.9.A.2.c, 4.9.A.2.d, 4.9.A.7, 4.9.A.8.b, 4.9.A.8.c, 4.9.A.8.h specify requirements for testing of the DG associated with both units. DG 2/3 is common to both units, and therefore, a Note is added to the ITS SRs (SR 3.8.1.2, SR 3.8.1.3, SR 3.8.1.8, SR 3.8.1.10, SR 3.8.1.11, SR 3.8.1.15, and SR 3.8.1.16) to clearly state current plant interpretation of Technical Specifications; i.e., a single test of the common DG at the specified Frequency will satisfy the Surveillance for both units. This is acceptable since the main purpose of the Surveillance can be met by performing the test on either unit. If the DG fails one of these Surveillances, the DG is considered inoperable on both units, unless the cause of the failure can be directly related to only one unit.

A.5 CTS 4.9.A.2.c footnote c and CTS 4.9.A.7 footnote c, which state that Surveillance Requirement 4.9.A.7 (the DG start with a 13 second time requirement) may be substituted for Surveillance Requirement 4.9.A.2.c (the slow start), has been deleted. This type of Note does not exist for other CTS requirements where another test may be credited. This is standard practice and fully satisfies the requirements with or without such specified identification. A specific Note in proposed SR 3.8.1.2 would present confusion for other SRs which may be satisfied by alternate testing but for which the specific SR does not contain a similar note. Since no technical changes are being made this change is considered to be administrative. This change is consistent with the approved changes in TSTF-253.

TECHNICAL CHANGES - LESS RESTRICTIVE (continued)

L.9 The manner in which the DG is started for CTS 4.9.A.8.h (i.e., that the DG must be within the proper voltage and frequency within a certain time limit after the start signal) has not been included in proposed SR 3.8.1.15. While this test can be performed only after a fast start, the manner in which the DG is started does not affect the test. In addition, maintaining voltage and frequency (as required by CTS 4.9.A.8.h) is routine for this test to ensure the loads are maintained within the necessary limits, and does not need to be specified. Other Surveillance Requirements being maintained in the ITS (e.g., CTS 4.9.A.7, proposed SR 3.8.1.8) continue to require verifying the DG start time and voltage and frequency limits. If these limits are found not to be met during the performance of proposed SR 3.8.1.15, then the DG would be declared inoperable. As a result, these requirements are not necessary to be included in the Technical Specifications to ensure the diesel generators are maintained OPERABLE.

L.10 Explicit post maintenance Surveillance Requirements as required by CTS 4.9.A.9 (i.e., after any modifications which could affect DG interdependence) have been deleted. Any time the OPERABILITY of a system or component has been affected by repair, maintenance, or replacement of a component, post maintenance testing is required to demonstrate OPERABILITY of the system or component. After restoration of a component that caused a required SR to be failed, ITS SR 3.0.1 requires the appropriate SRs (in this case, SR 3.8.1.20) to be performed to demonstrate the OPERABILITY of the affected components. Therefore, explicit post maintenance Surveillance Requirements are not required and have been deleted from the Technical Specifications.

L.11 CTS 4.9.A.9 requires the DGs to accelerate to 900 rpm in ≤ 13 seconds. For these DGs, 900 rpm is equivalent to a frequency of 60 Hz. The ITS will require the minimum frequency to be 58.8 Hz, as shown in proposed SR 3.8.1.20. The accident analysis requires the DG to be capable of being loaded within 13 seconds. This can be accomplished at 58.8 Hz. It is not necessary to require the DG frequency to be at 60 Hz in order to load the DG. In addition, the steady state frequency is already allowed to be at a minimum of 58.8 Hz for the fast start Surveillance (CTS 4.9.A.7). This new minimum frequency is also consistent with Regulatory Guide 1.9, Rev. 3, from which the ITS SR is derived. 2

L.12 The load range requirements of CTS 4.9.A.2.d (monthly full load test), CTS 4.9.A.8.c (full load rejection test), and CTS 4.9.A.8.h (24 hour endurance test, only the 22 hour full load test portion is affected) have been relaxed slightly to provide margin to the DG's continuous rating. This change provides

TECHNICAL CHANGES - LESS RESTRICTIVE

L.1 (cont'd) condition. In an effort to consistently address this concern and to avoid potential conflicting Technical Specifications, the Surveillances that would require the DG to be connected to the offsite source are excepted from performance requirements. The exception does not take exception to the requirement for the DG to be capable of performing the particular function; just to the requirement to demonstrate it while that source of power is being relied on to support meeting the LCO. The exception is being presented as Note 1 to proposed SR 3.8.2.1 and excludes proposed SR 3.8.1.3 (the DG 1 hour load test), SR 3.8.1.10 (the DG single largest load reject test), SR 3.8.1.11 (DG full load rejection test), SR 3.8.1.12 (the loss of power test), SR 3.8.1.14 (bypass of automatic trips), SR 3.8.1.15 (the DG 24 hour run), SR 3.8.1.16 (hot start test), SR 3.8.1.17 (DG synchronization test), SR 3.8.1.18 (the DG load block test), and SR 3.8.1.19 (the ECCS simulation test).

L.2 CTS 4.9.B, which provides the Surveillance Requirements for the AC Sources while in Modes 4 and 5 and during handling of irradiated fuel in the secondary containment, requires the Surveillances of CTS 4.9.A to be performed. Two of the Surveillances of CTS 4.9.A are the DG start on an ECCS initiation signal (4.9.A.8.e) and the DG start and load on an ECCS initiation signal concurrent with a loss of offsite power signal (4.9.A.8.f). Proposed Note 2 to SR 3.8.2.1 will exempt these two Surveillances (proposed SRs 3.8.1.13 and 3.8.1.19) when the associated ECCS subsystem(s) are not required to be Operable. The CTS and ITS do not require the ECCS subsystem(s) to be Operable in Mode 5 when the spent fuel storage pool gates are removed and water level is ≥ 23 ft over the top of the reactor pressure vessel flange. The CTS and ITS also do not require the ECCS subsystem(s) to be Operable when defueled. The DGs are required to support the equipment powered from the emergency buses. However, when the ECCS subsystem(s) are not required to be Operable, then there is no reason to require the DGs to autostart on an ECCS initiation signal. In addition, the ECCS initiation signal is only an anticipatory start signal; the DGs are only needed during a LOCA if a loss of offsite power occurs concurrently. The DGs are also required to autostart if a loss of offsite power occurs. The requirement to autostart the required DG(s) on a loss of offsite power signal is being maintained in the ITS (proposed SR 3.8.1.12). Thus, when in these conditions (associated ECCS subsystem(s) not required to be Operable), there is no reason to require the DGs to be capable of automatically starting on an ECCS actuation signal (either by itself or concurrent with a loss of offsite power signal). B

RELOCATED SPECIFICATIONS

None

ADMINISTRATIVE

A.1 In the conversion of the Dresden 2 and 3 current Technical Specifications (CTS) to the proposed plant specific Improved Technical Specifications (ITS), certain wording preferences or conventions are adopted that do not result in technical changes (either actual or interpretational). Editorial changes, reformatting, and revised numbering are adopted to make the ITS consistent with the BWR Standard Technical Specifications, NUREG-1433, Rev. 1 (i.e., the Improved Standard Technical Specifications (ISTS)).

A.2 The ITS present the battery cell parameter limits in a separate LCO (ITS 3.8.6). The battery hardware components (battery and charger) remain in a DC Sources LCO (ITS 3.8.4). This is in accordance with the format of the BWR ISTS, NUREG-1433, Rev. 1. Any technical changes to the battery cell parameter requirements of Table 4.9.C-1 (including CTS 4.9.C.1.a and 4.9.C.2.a) and CTS 3.9.C Actions 4, 5, and 6, and the average electrolyte temperature requirements of CTS 4.9.C.2.c are addressed in the Discussion of Changes for ITS: 3.8.6. B

A.3 Not used.

A.4 The explicit requirement in CTS 4.9.C.1.b to verify correct breaker alignment to each battery charger has been deleted. The ITS SR 3.8.4.1 requirement to verify battery terminal voltage, on float charge is adequate. Float charge is the condition in which the charger is supplying the continuous charge required to overcome the internal losses of a battery and to maintain the battery in a fully charged state. Therefore, the charger must be in service and aligned correctly to meet this surveillance. Therefore, the explicit requirement to periodically verify breaker alignment to each charger is considered to be unnecessary for ensuring compliance with the applicable Technical Specification OPERABILITY requirements and its removal is considered administrative.

A.5 CTS 4.9.C.3.d requires verifying the battery charger will supply a load equal to the manufacturer's rating for at least 4 hours. Since battery charger ratings do not change, the appropriate values have been included in ITS SRs 3.8.4.3 and 3.8.4.7. The Surveillance Frequency for SR 3.8.4.3 is being maintained at 18 months for the 250 V battery chargers in accordance with the current licensing basis based on battery charger performance. However, as discussed in Discussion of Change LD.1 below, the Surveillance Frequency for SR 3.8.4.7 is proposed to be extended from 18 months to 24 months for the 125 V battery chargers. Replacing the current statement with the specific manufacturer's ratings and establishing separate SRs based on Surveillance Frequencies are presentation preferences consistent with the format of the BWR ISTS, NUREG-1433, Rev. 1, and is considered an administrative change.

ADMINISTRATIVE

A.1 In the conversion of the Dresden 2 and 3 current Technical Specifications (CTS) to the proposed plant specific Improved Technical Specifications (ITS), certain wording preferences or conventions are adopted that do not result in technical changes (either actual or interpretational). Editorial changes, reformatting, and revised numbering are adopted to make the ITS consistent with the BWR Standard Technical Specifications, NUREG-1433, Rev. 1 (i.e., the Improved Standard Technical Specifications (ISTS)).

A.2 The ITS present the battery hardware components (battery and charger) in the DC Sources LCO (ITS 3.8.5). The battery cell parameters are presented in a separate LCO (ITS 3.8.6).

TECHNICAL CHANGES - MORE RESTRICTIVE

M.1 The existing requirement of CTS 3.9.D for the 250 VDC and 125 VDC electrical power sources to be OPERABLE during shutdown conditions is not specific as to what the sources must be powering. The requirement in ITS LCO 3.8.5 specifies that the sources necessary to supply DC power to all equipment required to be OPERABLE in the current plant condition must be OPERABLE. This added restriction conservatively assures the needed sources of power are OPERABLE, even if this results in both of the 250 VDC and both of the 125 VDC sources being required. CTS 3.9.D Action has been subsequently modified to be "one or more required" instead of the current "any of the above," to account for this potential addition. 3

Since the ITS DC source OPERABILITY requirements require supplying power to all necessary loads, if one or more required DC loads are not being supplied the required DC power, the DC source is inoperable. In this event it may not be necessary to suspend all CORE ALTERATIONS, irradiated fuel handling, and OPDRVs as required by CTS 3.9.D Action. Conservative actions can be assured if all required equipment without the necessary DC power is declared inoperable and the associated ACTIONS of the individual equipment taken (ITS 3.8.5 Required Action A.1). Therefore, along with the conservative additional requirements placed on the DC systems, Required Action A.1, which requires the associated supported equipment to be declared inoperable, is also added. These additions represent restrictions consistent with implicit assumptions for operation in shutdown conditions (required equipment receiving the necessary required power); restrictions which are not currently imposed via the Technical Specifications.

ADMINISTRATIVE (continued)

A.5 CTS 3.9.C Action 4 allows the Category A parameters(s) to be not within limits and the battery to be considered OPERABLE, provided the associated battery charger is OPERABLE. The specific requirement for the battery charger has been deleted. Whenever any required DC battery charger is inoperable, entry into the associated actions for the DC sources is required (CTS 3.9.C Action 1 and 2 and ITS 3.8.4 ACTIONS). Therefore, the explicit requirement is not necessary in the ITS. Since no technical changes are being made, this change is considered administrative.

A.6 A specific Condition has been added in ITS 3.8.6 ACTION B to explicitly require the battery to be declared inoperable when the temperature is not within limit or when Category A or B limits have not been restored within the applicable time. Currently, the battery temperature is a Surveillance in the DC Sources — Operating Specification (CTS 4.9.C.2.c), thus failure of the Surveillance would result in an inoperable battery. Since this Surveillance has been moved to this new Specification (ITS 3.8.6), an ACTION has been provided to require the battery to be declared inoperable (ITS 3.8.6 ACTION B, second Condition). The current battery parameter limit actions (CTS 3.9.C Actions 4, 5, and 6) do not specifically state to declare the battery inoperable at the end of the allowed restoration time. However, since this is obviously the intent, an ACTION has also been provided (ITS 3.8.6 ACTION B, first Condition). Since this change only provides more explicit direction of the CTS requirements, this change is considered administrative.

TECHNICAL CHANGES - MORE RESTRICTIVE

M.1 A new requirement has been added to CTS 3.9.C Actions 4 and 5 for when a Category A or B limit is not met. ITS 3.8.6 Required Action A.1 requires a check within 1 hour that the pilot cell electrolyte level and float voltage are within the Category C limits (CTS Table 4.9.C-1 Category B allowable values). This action ensures that if the pilot cell is exceeding Category C limits, the battery will be declared inoperable immediately. As such, this change is an additional restriction on plant operation.

M.2 The CTS Table 4.9.C-1 footnote (c) allowance to correct the Category B float voltage limit for average electrolyte temperature has been deleted based on IEEE-450, 1987 recommendations. This change is an additional restriction on plant operation.

A.1

3.9 - LIMITING CONDITIONS FOR OPERATION

E. Distribution - Operating

The following power distribution systems shall be ~~energized:~~ OPERABLE

A.2 — Division 1 and Division 2

LCO 3.8.7.a and b

1. A.C. power distribution~~, consisting of:~~

~~a. Both Unit engineered safety features 4160 volt buses:~~

~~1) For Unit 2, Nos. 23-1 and 24-1.~~

~~2) For Unit 3, Nos. 33-1 and 34-1.~~

~~b. Both Unit engineered safety features 480 volt buses:~~

~~1) For Unit 2, Nos. 28 and 29.~~

~~2) For Unit 3, Nos. 38 and 39.~~

~~c. The Unit 120 volt Essential Service Bus and Instrument Bus.~~

A.2 — Division 1 and Division 2

LCO 3.8.7.c

2. ~~250 volt~~ D.C. power distribution~~, consisting of:~~

~~a. For Unit 2, TB MCC 2 and RB MCC 2.~~

~~b. For Unit 3, TB MCC 3 and RB MCC 3.~~

~~3. For Unit 2, 125 volt D.C. power distribution, consisting of:~~

~~a. TB Main Bus Nos. 2A-1and 3A,~~

~~b. TB Res. Bus Nos. 2B and 2B-1,~~

~~c. Reserve Bus No. 2, and~~

~~d. RB Distribution Panel No. 2.~~

; and

The portions of the opposite unit's Division 2 AC and DC electrical power distribution subsystems necessary to support equipment required to be OPERABLE by LCO 3.6.4.3, "Standby Gas Treatment (SGT) System," LCO 3.7.4, "Control Room Emergency Ventilation (CREV) System" (Unit 3 only), LCO 3.7.5, "Control Room Emergency Ventilation Air Conditioning (AC) System" (Unit 3 only), and LCO 3.8.1, "AC Sources - Operating."

M.3

LA.1

LA.1

4.9 - SURVEILLANCE REQUIREMENTS

E. Distribution - Operating

SR 3.8.7.1 Each of the required power distribution system divisions shall be determined energized at least once per 7 days by verifying correct breaker alignment and voltage on the busses/MCCs/panels.

(B)

.9 - LIMITING CONDITIONS FOR OPERATION

4.9 - SURVEILLANCE REQUIREMENTS

4. For Unit 3, 125 volt D.C. power distribution, consisting of: — LA.1

a. TB Main Bus Nos. 2A-1, 3A and 3A-1,

b. TB Res. Bus Nos. 3B and 3B-1, and

c. RB Distribution Panel No. 3.

APPLICABILITY:

OPERATIONAL MODE(s) 1, 2, and 3.

ACTIONS:

(or more) — L.1

ACTIONS A, B, and C — 1. With one (or more) of the above required A.C. distribution systems not energized (inoperable — LA.1), re-energize the system within 8 hours (add proposed Required Actions A.1, B.1, and C.1 Second Completion Time — M.1)

ACTION F — or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

(or more) — L.1

ACTION D — 2. With one (or more) of the above required D.C. distribution systems not energized (inoperable), re-energize the system within 2 hours (add proposed Required Action D.1 Second Completion Time — M.1)

ACTION F — or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

add Proposed ACTION E — M.3

add Proposed ACTION G — M.2

B

ADMINISTRATIVE

A.1 In the conversion of the Dresden 2 and 3 current Technical Specifications (CTS) to the proposed plant specific Improved Technical Specifications (ITS), certain wording preferences or conventions are adopted that do not result in technical changes (either actual or interpretational). Editorial changes, reformatting, and revised numbering are adopted to make the ITS consistent with the BWR Standard Technical Specifications, NUREG-1433, Rev. 1 (i.e., the Improved Standard Technical Specifications (ISTS)).

A.2 CTS LCO 3.9.E currently identifies the electrical buses and distribution panels which comprise the AC and DC power distribution systems. The details relating to the electrical power distribution system design and OPERABILITY are proposed to be relocated to the Bases (see LA.1 discussion below). As a result, ITS LCO 3.8.7 does not include a detailed listing of the electrical power distribution system components required for OPERABILITY in terms of Division 1 and Division 2 electrical power distribution subsystems. Although not previously indicated in CTS LCO 3.9.E, Dresden 2 and 3 currently include the Division 1 and Division 2 subsystem designations for the applicable electrical power distribution system buses, motor control centers, and distribution panels. The subsystems and associated components are consistent with those proposed for ITS LCO 3.8.7. Therefore, the existing OPERABILITY requirements are not altered. Furthermore, since a listing of the applicable power distribution system components is retained in the Bases, the use of the Division 1 and Division 2 subsystem designations in ITS LCO 3.8.7 in lieu of listing the applicable components is a presentational preference change only. As such, the change is considered administrative.

TECHNICAL CHANGES - MORE RESTRICTIVE

M.1 The Completion Times of ITS 3.8.7 ACTIONS A, B, C, and D have a limitation in addition to the 8 hour or 2 hour limit of CTS 3.9.E Actions 1 and 2. This additional limit establishes a maximum time allowed for any combination of distribution subsystems listed in ITS LCO 3.8.7.a and b to be inoperable during any single contiguous occurrence of failing to meet the LCO. If a Division 1 AC distribution subsystem is inoperable while, for instance, a Division 1 125 V DC bus is inoperable and subsequently returned OPERABLE, the LCO may already have been not met for up to 8 hours. This situation could lead to a total duration of 10 hours since initial failure of the LCO to restore the Division 1 125 V DC distribution system. Then, a Division 1 AC subsystem could again become inoperable, and the DC distribution restored OPERABLE. This could continue indefinitely. Therefore, to preclude this situation and place an appropriate restriction on any such unusual situation, the additional Completion Time of "16 hours from discovery of failure to meet LCO 3.8.7.a or b" is proposed.

TECHNICAL CHANGES - MORE RESTRICTIVE (continued)

M.2 CTS 3.9.E Action 1 allows 8 hours to restore one inoperable AC subsystem and Action 2 allows 2 hours to restore one inoperable DC subsystem. Certain combinations of inoperable AC and DC subsystems will result in a loss of safety function (e.g., an inoperable Division 1 AC subsystem in combination with an inoperable Division 2 DC subsystem). ITS 3.8.7 adds ACTION G, which requires entry into ITS 3.0.3 if the loss of one or more electrical power distribution subsystems results in a loss of safety function. ITS 3.8.7 Required Action G.1 preserves the intent of ITS 3.0.3 and reflects an additional restriction on plant operation.

M.3 ITS LCO 3.8.7.c requires the opposite unit's electrical power distribution subsystem capable of supporting equipment required to be OPERABLE by LCO 3.6.4.3, "Standby Gas Treatment (SGT) System, LCO 3.7.4, "Control Room Emergency Ventilation (CREV) System" (Unit 3 only), LCO 3.7.5, "Control Room Emergency Ventilation Air Conditioning (AC) System" (Unit 3 only), and LCO 3.8.1, "AC Sources-Operating." This is required to ensure that all necessary electrical power is available to support operation of equipment common to both units. An Action (ITS 3.8.7 ACTION E) has been added, which requires the restoration of the opposite unit's required electrical power distribution subsystems to OPERABLE status within 7 days. This Action is required based on the definition of OPERABILITY and provides assurance that electrical power is available to the equipment within an acceptable time period. Existing requirements in the CTS would require entry into CTS 3.7.P Action 1 (one standby gas treatment subsystem inoperable) and CTS 3.8.D Action 1.a (Control Room Emergency Ventilation System) where restoration is required in 7 days. In addition, existing requirements would also require entry into CTS 3.8.D Action 1.b (Control Room Emergency Ventilation AC System) where restoration is required in 30 days. Thus, the same inoperability conditions would result in CTS Actions (CTS 3.7.P Action 1 and CTS 3.8.D Action 1.a) and allowed outage times that are equivalent to those proposed for ITS 3.8.7 ACTION E and its associated Completion Time. Therefore, the portion of the change (with respect to Standby Gas Treatment System and Control Room Emergency Ventilation System) is a presentation preference change and can be considered administrative. However, the addition of the requirement to support the requirements of LCO 3.8.1, "AC Sources - Operating" and the limitation placed on the Completion Time for restoration of the electrical power

TECHNICAL CHANGES - MORE RESTRICTIVE

M.3 (cont'd) distribution subsystem associated with the Control Room Emergency Ventilation AC System are considered more restrictive since the opposite unit AC sources requirements are not currently required by CTS 3.9.A and since the Completion Time for restoration of Control Room Emergency Ventilation AC System related inoperabilities has been reduced from 30 days to 7 days. Therefore, this change is considered more restrictive.

TECHNICAL CHANGES - LESS RESTRICTIVE

"Generic"

LA.1 The details of CTS 3.9.E relating to system design and OPERABILITY are proposed to be relocated to the Bases. The details for system OPERABILITY are not necessary in the LCO. The definition of OPERABILITY suffices. The design details are not necessary to be included in the Technical Specifications to ensure the OPERABILITY of the Distribution Systems since OPERABILITY requirements are adequately addressed in ITS 3.8.7, "Distribution Systems — Operating." Therefore, the relocated details are not required to be in the ITS to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS.

"Specific"

L.1 CTS 3.9.E Action 1 allows 8 hours to restore one inoperable AC subsystem and Action 2 allows 2 hours to restore one inoperable DC subsystem. No time is provided if buses are inoperable in Division 1 and 2 AC subsystems concurrently or in Division 1 and 2 DC subsystems concurrently. Thus a CTS 3.0.C entry is required. ITS 3.8.7 ACTIONS A, D, and E, allow one "or more" AC and DC electrical power distribution subsystems to be concurrently inoperable, without requiring an ITS 3.0.3 entry; either 8 hours or 2 hours (8 hours for AC and 2 hours for DC) will be allowed to restore the inoperabilities. However, ITS 3.8.7 ACTION G is also added to require that if two or more electrical power distribution subsystems are inoperable and result in a loss of function, then ITS 3.0.3 must be entered immediately. Thus if both Division 1 and Division 2 AC subsystems have similar buses inoperable, which result in a loss of function,

A.1

3.9 - LIMITING CONDITIONS FOR OPERATION

F. Distribution - Shutdown

LCO 3.8.8 The following power distribution systems shall be energized OPERABLE with:

1. A.C. power distribution consisting of: to support equipment required to be OPERABLE M.1

   a. One Unit engineered safety features 4160 volt bus:

      1) For Unit 2, No. 23-1 or 24-1,

      2) For Unit 3, No. 33-1 or 34-1.

   b. One associated Unit engineered safety features 480 volt bus:

      1) For Unit 2, No. 28 or 29,

      2) For Unit 3, No. 38 or 39.

   LA.1

2. For Unit 2, 125 volt D.C. power distribution consisting of either: ; and the opposite unit's Division 2 electrical power distribution subsystems to support equipment required to be OPERABLE M.1

   a. TB Main Bus No. 2A-1, and RB Distribution Panel No. 2, or

   b. TB Main Bus No. 3A Reserve Bus No. 2, and TB Res. Bus Nos. 2B and 2B-1.

3. For Unit 3, 125 volt D.C. power distribution, consisting of either:

   a. TB Main Bus Nos. 3A and 3A-1, and RB Distribution Panel No. 3, or

   b. TB Main Bus No. 2A-1 and TB Res. Bus Nos. 3B and 3B-1.

   LA.1

4.9 - SURVEILLANCE REQUIREMENTS

F. Distribution - Shutdown

SR 3.8.8.1 Each of the required power distribution system divisions shall be determined energized at least once per 7 days by verifying correct breaker alignment and voltage on the busses/MCCs/panels.

1B

A.1

3.9 - LIMITING CONDITIONS FOR OPERATION | **4.9 - SURVEILLANCE REQUIREMENTS**

APPLICABILITY:

OPERATIONAL MODE(s) 4, 5, and when handling irradiated fuel in the secondary containment.

add proposed ACTIONS Note M.2

ACTIONS:

one or more

ACTION A With less than the above required A.C. or D.C. distribution systems energized, suspend CORE ALTERATIONS, suspend handling of irradiated fuel in the secondary containment, and suspend operations with a potential for draining the reactor vessel.

add proposed Required Action A.1 M.1

inoperable LA.1 B

add proposed Required Actions A.2.4 and A.2.5 M.3

BASES

SURVEILLANCE REQUIREMENTS

SR 3.8.3.1 (continued)

provided and unit operators would be aware of any large uses of fuel oil during this period.

SR 3.8.3.2

This Surveillance ensures that sufficient lubricating oil inventory is available to support at least 7 days of full load operation for each DG. The [500] gal requirement is based on the DG manufacturer's consumption values for the run time of the DG. Implicit in this SR is the requirement to verify the capability to transfer the lube oil from its storage location to the DG, when the DG lube oil sump does not hold adequate inventory for 7 days of full load operation without the level reaching the manufacturer's recommended minimum level.

A 31 day Frequency is adequate to ensure that a sufficient lube oil supply is onsite, since DG starts and run time are closely monitored by the plant staff.

SR 3.8.3.3 (1)

of new fuel oil prior to addition to the storage tanks

The tests listed below are a means of determining whether new fuel oil is of the appropriate grade and has not been contaminated with substances that would have an immediate detrimental impact on diesel engine combustion. If results from these tests are within acceptable limits, the fuel oil may be added to the storage tanks without concern for contaminating the entire volume of fuel oil in the storage tanks. These tests are to be conducted prior to adding the new fuel to the storage tank(s), but in no case is the time between receipt of new fuel and conducting the tests to exceed 31 days. The tests, limits, and applicable ASTM Standards are as follows:

a. Sample the new fuel oil in accordance with ASTM D4057-[95] (Ref. 6 (5));

b. Verify in accordance with the tests specified in ASTM D975-[ ] (Ref. 6) that the new fuel oil sample has: (1) an absolute specific gravity at 60/60°F of ≥ 0.83 and ≤ 0.89 or an API gravity at 60°F of ≥ 27° and ≤ 39° when tested in accordance with ASTM D1298-99 (Ref. 5); (2) a kinematic

(continued)

[1] The clear and bright appearance with proper color test is only applicable to fuels that meet the ASTM color requirements (i.e., ASTM color 5 or less).

BASES

SURVEILLANCE REQUIREMENTS

SR 3.8.3.3 (continued) (when tested in accordance with ASTM D445-97 (Ref. 5)) (when tested in accordance with ASTM D93-99c (Ref. 5))

viscosity at 40°C of ≥ 1.9 centistokes and ≤ 4.1 centistokes, and a flash point of ≥ 125°F; and

c. Verify that the new fuel oil has a clear and bright appearance with proper color when tested in accordance with ASTM D4176-[ ] (Ref. 6). (or a water and sediment content within limits when tested in accordance with ASTM D2709-96e (Ref. 5))

Failure to meet any of the above limits is cause for rejecting the new fuel oil, but does not represent a failure to meet the LCO concern since the fuel oil is not added to the storage tanks.

Within [31] days following the initial new fuel oil sample, the fuel oil is analyzed to establish that the other properties specified in Table 1 of ASTM D975-[ ] (Ref. 6) are met for new fuel oil when tested in accordance with ASTM D975-[ ] (Ref. 6), except that the analysis for sulfur may be performed in accordance with ASTM D1552-[ ] (Ref. 6) or ASTM D2622-[ ] (Ref. 6). The [31] day period is acceptable because the fuel oil properties of interest, even if they were not within stated limits, would not have an immediate effect on DG operation. This Surveillance ensures the availability of high quality fuel oil for the DGs.

(Within 31 days following addition of the new fuel oil to the fuel oil storage tank(s)) (D4294-98) (ASTM D1552-95 (Ref. 5))

Fuel oil degradation during long term storage shows up as an increase in particulate, mostly due to oxidation. The presence of particulate does not mean that the fuel oil will not burn properly in a diesel engine. The particulate can cause fouling of filters and fuel oil injection equipment, however, which can cause engine failure.

Particulate concentrations should be determined in accordance with ASTM D2276-[ ] (Ref. 6), Method A. This method involves a gravimetric determination of total particulate concentration in the fuel oil and has a limit of 10 mg/l. It is acceptable to obtain a field sample for subsequent laboratory testing in lieu of field testing. [For those designs in which the total volume of stored fuel oil is contained in two or more interconnected tanks, each tank must be considered and tested separately.] (D5452-98)

The Frequency of this test takes into consideration fuel oil degradation trends that indicate that particulate

(continued)

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.8.3.6

Draining of the fuel oil stored in the supply tanks, removal of accumulated sediment, and tank cleaning are required at 10 year intervals by Regulatory Guide 1.137 (Ref. 2), paragraph 2.f. This SR is typically performed in conjunction with ASME Boiler and Pressure Vessel Code, Section XI (Ref. 7), examinations of the tanks. To preclude the introduction of surfactants in the fuel oil system, the cleaning should be accomplished using sodium hypochlorite solutions or their equivalent, rather than soap or detergents. This SR is for preventive maintenance. The presence of sediment does not necessarily represent a failure of this SR, provided that accumulated sediment is removed during performance of the Surveillance.

REFERENCES

1. FSAR, Section [9.5.2].
2. Regulatory Guide 1.137, Rev. 1, October 1979
3. ANSI N195, 1976.
4. FSAR, Chapter [6].
5. FSAR, Chapter [15].
6. ASTM Standards: D4057-[ ]; D975-[ ]; D4176-[ ]; D1552-[ ]; D2622-[ ]; and D2276-[ ].
7. ASME, Boiler and Pressure Vessel Code, Section XI.

ADMINISTRATIVE

A.1 CTS 3/4.12.C has been deleted from the Dresden 2 and 3 ITS consistent with the Technical Specifications Change Request submitted to the NRC for approval per ComEd letter PSLTR-00-0057, dated February 23, 2000. The changes identified revise the heatup, cooldown, and inservice test limitations for the reactor pressure vessel of each unit to a maximum of 32 Effective Full Power Years. This proposed change relies on recently approved American Society of Mechanical Engineers methodology for determining allowable pressure and temperature limits. Based on the methodology and associated results, this special operations Specification is not required. A similar Technical Specifications amendment was recently issued for Duke Energy, Oconee Nuclear Station. As such, this change is administrative.

TECHNICAL CHANGES - MORE RESTRICTIVE

None

TECHNICAL CHANGES - LESS RESTRICTIVE

None

RELOCATED SPECIFICATIONS

None

TECHNICAL CHANGES - LESS RESTRICTIVE

LA.1 (cont'd) Feature). Therefore, removing these details from the Technical Specifications, while maintaining the details in the UFSAR, will not impact safe operation of the facility, and is not required to be in the ITS to provide adequate protection of the public health and safety.

LA.2 Primary containment configuration and design details in CTS 5.2.A, primary containment design temperatures and pressures in CTS 5.2.B, and secondary containment design details in CTS 5.2.C, are proposed to be relocated to UFSAR, Sections 6.2.1 and 6.2.3, where they currently exist. Any changes to these design parameters described in the UFSAR must conform to the requirements of 10 CFR 50.59. Furthermore, sufficient detail relating to these features exists in CTS and ITS LCOs to ensure any changes which may affect safety would require prior NRC review and approval. Since the features with a potential to affect safety are sufficiently addressed by LCOs, and other features, if altered in accordance with 10 CFR 50.59, would not result in a significant affect on safety, the criteria of 10 CFR 50.36(c)(4) for including as a Design Feature are not met. Therefore, removing these details from the Technical Specifications, while maintaining the detail in the UFSAR, will not impact safe operation of the facility, and is not required to be in the ITS to provide adequate protection of the public health and safety.

LA.3 The nominal active control rod assembly absorber length described in CTS 5.3.B is proposed to be relocated to the UFSAR, Section 4.6.2, where it is currently described (by reference). Any changes to this design parameter referenced in the UFSAR must conform to the requirements of 10 CFR 50.59.

Furthermore, sufficient detail relating to this feature exists in a CTS and ITS LCO (e.g., SHUTDOWN MARGIN) to ensure changes that may impact safety would require prior NRC review and approval. Since this feature with a potential to impact safety is sufficiently addressed by an LCO, the criteria of 10 CFR 50.36(c)(4) for including as a Design Feature are not met. Therefore, allowing the removal of this detail from Technical Specifications, while maintaining the information in the UFSAR, will not impact safe operation of the facility, and is not required to be in the ITS to provide adequate protection of the public health and safety.

"Specific"

None

5.5 Programs and Manuals

5.5.7 Ventilation Filter Testing Program (VFTP) (continued)

ESF Ventilation System	Penetration	Flowrate
Standby Gas Treatment (SGT) System	< 1.0%	≥ 3600 cfm and ≤ 4400 cfm
Control Room Emergency Ventilation (CREV) System	< 0.05%	≥ 1800 scfm and ≤ 2200 scfm

c. Demonstrate for each of the ESF systems that a laboratory test of a sample of the charcoal adsorber, when obtained as described in Regulatory Guide 1.52, Revision 2, shows the methyl iodide penetration less than the value specified below when tested in accordance with ASTM D3803-1989 at a temperature of 30°C and relative humidity (RH) specified below:

ESF Ventilation System	Penetration	RH
Standby Gas Treatment (SGT) System	2.5%	70%
Control Room Emergency Ventilation (CREV) System	0.5%	70%

d. Demonstrate for each of the ESF systems that the pressure drop across the combined HEPA filters and the charcoal adsorbers is less than the value specified below when tested at the system flowrate specified as follows:

(continued)

TECHNICAL CHANGES - LESS RESTRICTIVE

"Specific"

L.1 CTS 4.9.A.5.b requires verifying new fuel oil meets the ASTM standard for API gravity. Proposed ITS 5.5.9.a.1 allows new fuel oil to meet either API gravity or absolute specific gravity. This is acceptable since both methods are considered appropriate in determining the qualifications of the new fuel.

CTS 4.9.A.5.b requires verifying new fuel oil meets the ASTM standards for water and sediment and the visual test for free water and particulate concentration. Proposed ITS 5.5.9.a.3 allows the performance of a clear and bright appearance test with proper color or a water and sediment test. The allowance to perform a water and sediment test, in lieu of the clear and bright test, is necessary since Dresden receives dyed fuel and the performance of a visual test in accordance with ASTM D4176 (as specified in the CTS Bases) is not considered appropriate for dyed fuel not meeting the color requirements of ASTM D4176. However, the water and sediment test is considered an appropriate test when using dyed fuel since the actual water and sediment content is determined in accordance with ASTM D2709 as specified in the CTS and proposed ITS 3.8.3 Bases

CTS 4.9.A.5.b requires sampling and verification that new fuel oil meets ASTM standards for "water and sediment" prior to addition to the fuel oil storage tanks. Proposed ITS 5.5.9.b relaxes these requirements for new fuel by allowing "water and sediment" analyses of the new fuel (for fuel oil that meets the color requirements of ASTM D4176) to be performed within 31 days after the addition of any new fuel oil to the storage tanks.

CTS 4.9.A.6.b requires sampling of stored fuel oil every 31 days to verify particulate contaminants $<$ 10 mg/liter, and "water and sediment" and "kinematic viscosity" are within ASTM limits. Proposed ITS 5.5.9.c relaxes the requirements for bulk stored fuel oil by not including the 31 day requirement to verify "water and sediment" and "kinematic viscosity" and providing a limit for particulate contaminants of $\leq$ 10 mg/liter in lieu of $<$ 10 mg/liter.

These changes are acceptable because the purpose of the fuel oil analyses is to ensure proper fuel oil quality is maintained to support the operation of the emergency DGs. The proposed "new" fuel oil requirements in ITS 5.5.9.a (prior to addition to the storage tanks) ensure the fuel oil is of the appropriate grade (API gravity or absolute specific gravity, kinematic viscosity, flash point, and appearance or water and sediment content) and that it may be added to the stored fuel without concern for contaminating the entire stored fuel volume such

ATTACHMENT 2

Revision B to LaSalle County Station, Units 1 and 2 Proposed Improved Technical Specifications Submittal dated March 3, 2000

Revision B to LaSalle County Station
Improved Technical Specifications Summary of Changes

This attachment provides a brief summary of the changes in Revision B of the proposed Improved Technical Specifications (ITS) submittal for LaSalle County Nuclear Station, Units 1 and 2. The original Technical Specifications amendment request (i.e., Revision 0) was submitted to the NRC by letter dated March 3, 2000, as revised (i.e., Revision A) by letter dated June 5, 2000.

In the submittal of March 3, 2000, it was identified that the supporting calculations for Allowable Values needed for ITS Section 3.3, "Instrumentation," had not been completed. Commonwealth Edison (ComEd) Company committed to submit any changes to the ITS Allowable Values and Surveillance Frequencies resulting from the second group of calculations by September 15, 2000. Changes resulting from the second group of calculations are provided in this revision to the ITS submittal (i.e., Revision B).

In addition, changes committed to in the ComEd Request For Additional Information (RAI) responses for Section 3.6 are also provided in this Revision B submittal, as well as minor corrections to various sections of the March 3, 2000 submittal.

Section 3.2

1. A typographical error was noted in the Reference section of the ITS 3.2.1 Bases, in that an incorrect document number was used. This has been corrected. This change affects ITS 3.2.1, Bases page B 3.2.1-4 and the ISTS Bases markup insert page B 3.2-4.

Section 3.3

1. Changes to the Allowable Values from the second group of calculations have been made. These changes are the result of the ComEd Setpoint Methodology (i.e., Nuclear Engineering Standard NES-EIC-20.04, "Analysis of Instrument Channel Setpoint Error and Instrument Loop Accuracy," submitted to the NRC by ComEd letter dated March 24, 2000), and also includes assuming a 30 month calibration interval (except for the degraded voltage Functions, which assume a 22.5 month calibration interval) in the determination of the magnitude of drift used in the applicable setpoint calculations. The Allowable Values for the following ITS Instrumentation Functions were confirmed to be valid or were revised. The validated values or revised values are identified by the removal of the square brackets from the values. In addition, the Channel Functional Test and Channel Calibration Frequencies for the degraded voltage Functions were changed to 18 months and the Channel Calibrations for all other affected Functions were either changed or confirmed to be 24 months.

   ITS Table 3.3.1.1-1, Functions 5 and 8;
   ITS LCO 3.3.4.1, SR 3.3.4.1.2;
   ITS Table 3.3.5.1-1, Functions 1.c, 2.c, 4.c, 4.g, 5.c, and 5.f;
   ITS Table 3.3.5.2-1, Function 3;
   ITS 3.3.6.1-1, Functions 3.b, 4.a, and 4.b;
   ITS Table 3.3.8.1-1, Functions 1.a, 1.b, 1.c, 1.d, 1.e, 2.a, 2.b, 2.c, 2.d, and 2.e; and
   ITS LCO 3.3.8.2, SR 3.3.8.2.2.

   These changes affect ITS 3.3.1.1, pages 3.3.1.1-8 and 3.3.1.1-9, ITS 3.3.4.1 page 3.3.4.1-3, ITS 3.3.5.1, pages 3.3.5.1-8, 3.3.5.1-9, 3.3.5.1-10, and 3.3.5.1-11, ITS 3.3.5.2 page 3.3.5.2-4, ITS 3.3.6.1, pages 3.3.6.1-7 and 3.3.6.1-8, ITS 3.3.8.1, pages 3.3.8.1-2 and 3.3.8.1-3, ITS 3.3.8.2 page 3.3.8.2-4, ITS Bases 3.3.8.1, pages B 3.3.8.1-3, B 3.3.8.1-4, B 3.3.8.1-5, B 3.3.8.1-7, and B 3.3.8.1-8, the CTS markup for ITS 3.3.5.1, pages 7 of 30, 8 of 30, 22 of 30, and 23 of 30, the Discussion of Changes for ITS 3.3.5.1, DOC M.5 (page 4), DOC LE.1 (pages 9, 10, and 11), and DOC LF.1 (page 13), the CTS markup for ITS 3.3.6.1, pages 4 of 34, 5 of 34, 15 of 34, 16 of 34, 21 of 34, 22 of 34, 32 of 34, and 33 of 34, the Discussion of Changes for ITS 3.3.6.1, DOC M.3

(page 4) and DOC LE.1 (pages 16 and 19), the CTS markup for ITS 3.3.8.1, pages 1 of 14, 2 of 14, 4 of 14, 5 of 14, 7 of 14, 8 of 14, 9 of 14, 11 of 14, 12 of 14, and 14 of 14, the Discussion of Changes for ITS 3.3.8.1, DOC M.3 (pages 2 and 3), DOC LA.2 (page 3), DOC LD.1 (page 4), and DOC LE.1 (pages 5 and 6), the Discussion of Changes for ITS 3.3.8.2, DOC LE.1 (page 4), the ISTS markup for ITS 3.3.1.1, pages 3.3-8 and 3.3-9, the ISTS markup for ITS 3.3.4.1 page 3.3-29, the ISTS markup for ITS 3.3.5.1, pages 3.3-41, 3.3-42, 3.3-44, and 3.3-45, the ISTS markup for ITS 3.3.5.2 page 3.3-49, the ISTS markup for ITS 3.3.6.1, pages 3.3-58 and 3.3-59, the ISTS markup for ITS 3.3.8.1, pages 3.3-81 and 3.3-82, the Justification for Deviations to ITS 3.3.8.1, JFD 3 (page 1), the ISTS markup for ITS 3.3.8.2 page 3.3-85, and the ISTS Bases markup for ITS 3.3.8.1, pages B 3.3-235, B 3.3-236, B 3.3-238, and B 3.3-239.

2. A typographical error was noted in the Reference sections of the ITS 3.3.1.1 Bases and ITS 3.3.2.1 Bases, in that incorrect document numbers were used. This has been corrected. This change affects ITS 3.3.1.1 Bases page B 3.3.1.1-34, ITS 3.3.2.1 Bases page B 3.3.2.1-13, the ISTS Bases markup for ITS 3.3.1.1, page B 3.3-32, and the ISTS Bases markup for ITS 3.3.2.1, insert page B 3.3-52q.

3. A markup error was noted in ITS 3.3.1.1. This has been corrected. This change affects the CTS markup for ITS 3.3.1.1, pages 1 of 22 and 12 of 22.

4. A typographical error was noted in that an incorrect Trip Function number was used in a Discussion of Change. This has been corrected. This change affects the Discussion of Changes for ITS 3.3.2.2, DOC LE.1 (page 4).

5. A typographical error was noted in that an incorrect CTS Table number was used in a Discussion of Change. This has been corrected. This change affects the Discussion of Changes for ITS 3.3.4.1, DOC LA.3 (page 4).

6. A Discussion of Change was modified to more clearly discuss the actual change. This change affects the Discussion of Changes for ITS 3.3.5.1, DOC A.8 (page 2).

7. A typographical error was noted in that an incorrect CTS Table number was used in a Discussion of Change. This has been corrected. This change affects the Discussion of Changes for ITS 3.3.6.1, DOC M.6 (page 5).

8. A typographical error was noted (the word "Value" was used in lieu of "Valve"). This has been corrected. This change affects the Discussion of Changes for ITS 3.3.6.1, DOC LA.5 (page 7).

9. A Discussion of Change has been clarified to use the complete Function name. This affects the Discussion of Changes for ITS 3.3.6.1, DOC LD.1 (page 12).

10. A typographical error was noted in that an incorrect CTS Table number was used in a Discussion of Change. This has been corrected. This change affects the Discussion of Changes for ITS 3.3.7.1, DOC M.2 (page 2).

<u>Section 3.6</u>

1. The change committed to in the ComEd response to RAI 3.6.1.1-5 has been made. This change affects ITS 3.6.1.1 Bases page B 3.6.1.1-4 and the ISTS Bases markup page B 3.6-4.

2. The change committed to in the ComEd response to RAI 3.6.1.2-2 has been made. This change affects the Discussion of Changes for ITS 3.6.1.2, DOC L.5 (page 5).

3. The change committed to in the ComEd response to RAI 3.6.1.3-5 has been made. This change affects the CTS markup for ITS 3.6.1.3, pages 5 of 10 and 10 of 10.

4. The change committed to in the ComEd response to RAI 3.6.1.3-9 has been made. This change affects the ISTS 3.6.1.3 Bases markup page B 3.6-27.

5. The change committed to in the ComEd response to RAI 3.6.1.3-10 has been made. This change affects ITS 3.6.1.3, pages 3.6.1.3-1 and 3.6.1.3-3, and Bases pages B 3.6.1.3-4, B 3.6.1.3-6, and B 3.6.1.3-9, the ISTS markup pages 3.6-9 and 3.6-11, the Justification for Deviations to ITS 3.6.1.3, JFD 3 (page 1), JFD 4 (page 1), and JFD 8 (page 1), the ISTS Bases markup pages B 3.6-19, B 3.6-20, B 3.6-21, B 3.6-22, and insert pages B 3.6-22 and B 3.6-22a, and Justification for Deviations to ITS Bases 3.6.1.3, JFD 16 (page 2).

6. The change committed to in the ComEd response to RAI 3.6.1.3-13 has been made. This change affects ITS 3.6.1.3 Bases page B 3.6.1.3-7, ISTS Bases markup page B 3.6-21, and Justification for Deviations to ITS 3.6.1.3 Bases, JFD 16 (page 2).

7. The change committed to in the ComEd response to RAI 3.6.3.1-3 has been made. This change affects the CTS markup to ITS 3.6.3.1, pages 1 of 2 and 2 of 2, the Discussion of Changes for ITS 3.6.3.1, DOC LA.3 (pages 1 and 2) and DOC L.3 (page 3), and the No Significant Hazards Consideration for ITS 3.6.3.1, NSHC L.3 (page 3).

8. The change committed to in the ComEd response to RAI 3.6.4.2-2 has been made. This change affects the CTS markup to ITS 3.6.4.2, pages 3 of 6 and 6 of 6, the Discussion of Changes for ITS 3.6.4.2, DOC L.2 (page 4), and the No Significant Hazards Consideration for ITS 3.6.4.2, NSHC L.2 (page 2).

9. The change committed to in the ComEd response to RAI 3.6.4.3-1 has been made. This change affects the Discussion of Changes for ITS 3.6.4.3, DOC A.4 (page 1).

Section 3.7

1. It was noted that a change to the CTS Actions for ITS 3.7.6 was not described in the Discussion of Changes. This has been corrected. This change affects the CTS markup to ITS 3.7.6, pages 1 of 2 and 2 of 2, and the Discussion of Changes for ITS 3.7.6, DOC L.2 (pages 2 and 3).

Section 3.8

1. A markup error was noted in ITS 3.8.1. This has been corrected. This change affects the CTS markup to ITS 3.8.1, page 9 of 28.

2. A typographical error was noted in that an incorrect CTS reference number was used in a Discussion of Change. This has been corrected. This change affects the Discussion of Changes for ITS 3.8.2, DOC M.2 (page 3).

3. The Bases description of the fuel oil testing program has been changed to be consistent with more current standards and for consistency with the Dresden and Quad Cities ITS. This change affects ITS 3.8.3 Bases pages B 3.8.3-6 and B 3.8.3-8 and the ISTS Bases markup pages B 3.8-47, B 3.8-48, and B 3.8-50.

4. A typographical error was noted in that an incorrect ITS SR number was used in a Discussion of Change. This has been corrected. This change affects the Discussion of Changes for ITS 3.8.4, DOC L.2 (page 6).

5. A markup error was noted in ITS 3.8.8. This has been corrected. This change affects the CTS markup to ITS 3.8.8, page 6 of 8.

6. A typographical error was noted in that an incorrect ITS LCO number and description was used in a Discussion of Change. This has been corrected. This change affects the Discussion of Changes for ITS 3.8.8, DOC A.3 (page 1).

Section 3.10

1. A typographical error was noted in that an incorrect CTS reference number was used in a Discussion of Change. This has been corrected. This change affects the Discussion of Changes for ITS 3.10.5, DOC A.3 (page 1), DOC A.4 (page 1), and DOC L.1 (page 2).

LaSalle ITS Rev. B Submittal

DISCARD AND INSERTION INSTRUCTIONS

VOLUME 2	
SECTIONS 3.1 AND 3.2	
DISCARD	**INSERT**
ITS Bases Page B 3.2.1-4	ITS Bases Page B 3.2.1-4
ISTS Bases markup Insert Page B 3.2-4	ISTS Bases markup Insert Page B 3.2-4

VOLUME 3	
SECTION 3.3	
DISCARD	**INSERT**
ITS page 3.3.1.1-8	ITS page 3.3.1.1-8
ITS page 3.3.1.1-9	ITS page 3.3.1.1-9
ITS page 3.3.4.1-3	ITS page 3.3.4.1-3
ITS Page 3.3.5.1-8	ITS Page 3.3.5.1-8
ITS Page 3.3.5.1-9	ITS Page 3.3.5.1-9
ITS Page 3.3.5.1-10	ITS Page 3.3.5.1-10
ITS Page 3.3.5.1-11	ITS Page 3.3.5.1-11
ITS Page 3.3.5.2-4	ITS Page 3.3.5.2-4
ITS Page 3.3.6.1-7	ITS Page 3.3.6.1-7
ITS Page 3.3.6.1-8	ITS Page 3.3.6.1-8
ITS Page 3.3.8.1-2	ITS Page 3.3.8.1-2
ITS Page 3.3.8.1-3	ITS Page 3.3.8.1-3
ITS Page 3.3.8.2-4	ITS Page 3.3.8.2-4
ITS Bases Page B 3.3.1.1-34	ITS Bases Page B 3.3.1.1-34
ITS Bases Page B 3.3.2.1-13	ITS Bases Page B 3.3.2.1-13
ITS Bases Page B 3.3.8.1-3	ITS Bases Page B 3.3.8.1-3
ITS Bases Page B 3.3.8.1-4	ITS Bases Page B 3.3.8.1-4
ITS Bases Page B 3.3.8.1-5	ITS Bases Page B 3.3.8.1-5
ITS Bases Page B 3.3.8.1-6	ITS Bases Page B 3.3.8.1-6
ITS Bases Page B 3.3.8.1-7	ITS Bases Page B 3.3.8.1-7
ITS Bases Page B 3.3.8.1-8	ITS Bases Page B 3.3.8.1-8
CTS Markup for Specification 3.3.1.1 page 1 of 22	CTS Markup for Specification 3.3.1.1 page 1 of 22
CTS Markup for Specification 3.3.1.1 page 12 of 22	CTS Markup for Specification 3.3.1.1 page 12 of 22
Discussion of Changes for ITS 3.3.2.2 page 4	Discussion of Changes for ITS 3.3.2.2 page 4
Discussion of Changes for ITS 3.3.4.1 page 4	Discussion of Changes for ITS 3.3.4.1 page 4
CTS Markup for Specification 3.3.5.1 page 7 of 30	CTS Markup for Specification 3.3.5.1 page 7 of 30
CTS Markup for Specification 3.3.5.1 page 8 of 30	CTS Markup for Specification 3.3.5.1 page 8 of 30
CTS Markup for Specification 3.3.5.1 page 22 of 30	CTS Markup for Specification 3.3.5.1 page 22 of 30
CTS Markup for Specification 3.3.5.1 page 23 of 30	CTS Markup for Specification 3.3.5.1 page 23 of 30

VOLUME 3	
SECTION 3.3	
DISCARD	**INSERT**
Discussion of Changes for ITS 3.3.5.1 page 2	Discussion of Changes for ITS 3.3.5.1 page 2
Discussion of Changes for ITS 3.3.5.1 page 4	Discussion of Changes for ITS 3.3.5.1 page 4
Discussion of Changes for ITS 3.3.5.1 pages 9, 10, 11, 12, 13, 14, 15, and 16	Discussion of Changes for ITS 3.3.5.1 pages 9, 10, 11, 12, 13, 14, 15, 16, and 17
CTS Markup for Specification 3.3.6.1 page 4 of 34	CTS Markup for Specification 3.3.6.1 page 4 of 34
CTS Markup for Specification 3.3.6.1 page 5 of 34	CTS Markup for Specification 3.3.6.1 page 5 of 34
CTS Markup for Specification 3.3.6.1 page 15 of 34	CTS Markup for Specification 3.3.6.1 page 15 of 34
CTS Markup for Specification 3.3.6.1 page 16 of 34	CTS Markup for Specification 3.3.6.1 page 16 of 34
CTS Markup for Specification 3.3.6.1 page 21 of 34	CTS Markup for Specification 3.3.6.1 page 21 of 34
CTS Markup for Specification 3.3.6.1 page 22 of 34	CTS Markup for Specification 3.3.6.1 page 22 of 34
CTS Markup for Specification 3.3.6.1 page 32 of 34	CTS Markup for Specification 3.3.6.1 page 32 of 34
CTS Markup for Specification 3.3.6.1 page 33 of 34	CTS Markup for Specification 3.3.6.1 page 33 of 34
Discussion of Changes for ITS 3.3.6.1 page 4	Discussion of Changes for ITS 3.3.6.1 page 4
Discussion of Changes for ITS 3.3.6.1 page 5	Discussion of Changes for ITS 3.3.6.1 page 5
Discussion of Changes for ITS 3.3.6.1 page 7	Discussion of Changes for ITS 3.3.6.1 page 7
Discussion of Changes for ITS 3.3.6.1 pages 12 and 13	Discussion of Changes for ITS 3.3.6.1 pages 12 and 13
Discussion of Changes for ITS 3.3.6.1 page 16	Discussion of Changes for ITS 3.3.6.1 page 16
Discussion of Changes for ITS 3.3.6.1 pages 18 and 19	Discussion of Changes for ITS 3.3.6.1 pages 18 and 19

VOLUME 3	
SECTION 3.3	
DISCARD	**INSERT**
Discussion of Changes for ITS 3.3.7.1 page 2	Discussion of Changes for ITS 3.3.7.1 page 2
CTS Markup for Specification 3.3.8.1 page 1 of 14	CTS Markup for Specification 3.3.8.1 page 1 of 14
CTS Markup for Specification 3.3.8.1 page 2 of 14	CTS Markup for Specification 3.3.8.1 page 2 of 14
CTS Markup for Specification 3.3.8.1 page 4 of 14	CTS Markup for Specification 3.3.8.1 page 4 of 14
CTS Markup for Specification 3.3.8.1 page 5 of 14	CTS Markup for Specification 3.3.8.1 page 5 of 14
CTS Markup for Specification 3.3.8.1 page 7 of 14	CTS Markup for Specification 3.3.8.1 page 7 of 14
CTS Markup for Specification 3.3.8.1 page 8 of 14	CTS Markup for Specification 3.3.8.1 page 8 of 14
CTS Markup for Specification 3.3.8.1 page 9 of 14	CTS Markup for Specification 3.3.8.1 page 9 of 14
CTS Markup for Specification 3.3.8.1 page 11 of 14	CTS Markup for Specification 3.3.8.1 page 11 of 14
CTS Markup for Specification 3.3.8.1 page 12 of 14	CTS Markup for Specification 3.3.8.1 page 12 of 14
CTS Markup for Specification 3.3.8.1 page 14 of 14	CTS Markup for Specification 3.3.8.1 page 14 of 14
Discussion of Changes for ITS 3.3.8.1 pages 2, 3, 4, 5 and 6	Discussion of Changes for ITS 3.3.8.1 pages 2, 3, 4, 5 and 6
Discussion of Changes for ITS 3.3.8.2 page 4	Discussion of Changes for ITS 3.3.8.2 page 4

VOLUME 4	
SECTION 3.3	
DISCARD	**INSERT**
ISTS markup page 3.3-8	ISTS markup page 3.3-8
ISTS markup page 3.3-9	ISTS markup page 3.3-9
ISTS markup page 3.3-29	ISTS markup page 3.3-29
ISTS markup page 3.3-41	ISTS markup page 3.3-41
ISTS markup page 3.3-42	ISTS markup page 3.3-42
ISTS markup page 3.3-44	ISTS markup page 3.3-44
ISTS markup page 3.3-45	ISTS markup page 3.3-45
ISTS markup page 3.3-49	ISTS markup page 3.3-49
ISTS markup page 3.3-58	ISTS markup page 3.3-58
ISTS markup page 3.3-59	ISTS markup page 3.3-59
ISTS markup page 3.3-81	ISTS markup page 3.3-81
ISTS markup page 3.3-82	ISTS markup page 3.3-82
Justification for Deviations to ITS 3.3.8.1 page 1	Justification for Deviations to ITS 3.3.8.1 page 1
ISTS markup page 3.3-85	ISTS markup page 3.3-85
ISTS Bases markup page B 3.3-32	ISTS Bases markup page B 3.3-32
ISTS Bases markup insert page B 3.3-52q	ISTS Bases markup insert page B 3.3-52q
ISTS Bases markup page B 3.3-235	ISTS Bases markup page B 3.3-235
ISTS Bases markup page B 3.3-236	ISTS Bases markup page B 3.3-236
ISTS Bases markup page B 3.3-238	ISTS Bases markup page B 3.3-238
ISTS Bases markup page 3.3-239	ISTS Bases markup page 3.3-239

VOLUME 6	
SECTION 3.6	
DISCARD	**INSERT**
ITS Page 3.6.1.3-1	ITS Page 3.6.1.3-1
ITS Page 3.6.1.3-3	ITS Page 3.6.1.3-3
ITS Bases Page B 3.6.1.1-4	ITS Bases Page B 3.6.1.1-4
ITS Bases Page B 3.6.1.3-4	ITS Bases Page B 3.6.1.3-4
ITS Bases Page B 3.6.1.3-6	ITS Bases Page B 3.6.1.3-6
ITS Bases Page B 3.6.1.3-7	ITS Bases Page B 3.6.1.3-7
ITS Bases Page B 3.6.1.3-9	ITS Bases Page B 3.6.1.3-9
Discussion of Changes for ITS 3.6.1.2 page 5	Discussion of Changes for ITS 3.6.1.2 page 5
CTS Markup for Specification 3.6.1.3 page 5 of 10	CTS Markup for Specification 3.6.1.3 page 5 of 10
CTS Markup for Specification 3.6.1.3 page 10 of 10	CTS Markup for Specification 3.6.1.3 page 10 of 10
CTS Markup for Specification 3.6.3.1 page 1 of 2	CTS Markup for Specification 3.6.3.1 page 1 of 2
CTS Markup for Specification 3.6.3.1 page 2 of 2	CTS Markup for Specification 3.6.3.1 page 2 of 2
Discussion of Changes for ITS 3.6.3.1 pages 1, 2, 3, and 4	Discussion of Changes for ITS 3.6.3.1 pages 1, 2, 3, and 4
CTS Markup for Specification 3.6.4.2 page 3 of 6	CTS Markup for Specification 3.6.4.2 page 3 of 6
CTS Markup for Specification 3.6.4.2 page 6 of 6	CTS Markup for Specification 3.6.4.2 page 6 of 6
Discussion of Changes for ITS 3.6.4.2 pages 4, 5, and 6	Discussion of Changes for ITS 3.6.4.2 pages 4, 5, and 6
Discussion of Changes for ITS 3.6.4.3 page 1	Discussion of Changes for ITS 3.6.4.3 page 1

VOLUME 7	
SECTION 3.6	
DISCARD	**INSERT**
ISTS markup page 3.6-9	ISTS markup page 3.6-9
ISTS markup page 3.6-11	ISTS markup page 3.6-11
Justification for Deviations to ITS 3.6.1.3 pages 1, 2, 3 and 4	Justification for Deviations to ITS 3.6.1.3 pages 1 and 2
ISTS Bases markup page B 3.6-4	ISTS Bases markup page B 3.6-4
ISTS Bases markup page B 3.6-19	ISTS Bases markup page B 3.6-19
ISTS Bases markup page B 3.6-20	ISTS Bases markup page B 3.6-20
ISTS Bases markup page B 3.6-21	ISTS Bases markup page B 3.6-21
ISTS Bases markup insert page B 3.6-22	ISTS Bases markup page B 3.6-22
ISTS Bases insert markup page B 3.6-22	ISTS Bases markup insert page B 3.6-22 and B 3.6-22a
ISTS Bases markup page B 3.6-27	ISTS Bases markup page B 3.6-27
Justification for Deviations to ITS 3.6.1.3 Bases page 2	Justification for Deviations to ITS 3.6.1.3 Bases page 2
No Significant Hazards Consideration for ITS 3.6.3.1 page 3	No Significant Hazards Consideration for ITS 3.6.3.1 page 3
No Significant Hazards Consideration for ITS 3.6.4.2 page 2	No Significant Hazards Consideration for ITS 3.6.4.2 page 2

VOLUME 8	
SECTION 3.7	
DISCARD	**INSERT**
CTS Markup for Specification 3.7.6 page 1 of 2	CTS Markup for Specification 3.7.6 page 1 of 2
CTS Markup for Specification 3.7.6 page 2 of 2	CTS Markup for Specification 3.7.6 page 2 of 2
Discussion of Changes for ITS 3.7.6 pages 2 and 3	Discussion of Changes for ITS 3.7.6 pages 2 and 3

VOLUME 9	
SECTION 3.8	
DISCARD	**INSERT**
ITS Bases page B 3.8.3-6	ITS Bases page B 3.8.3-6
ITS Bases page B 3.8.3-8	ITS Bases page B 3.8.3-8
CTS Markup for Specification 3.8.1 page 9 of 28	CTS Markup for Specification 3.8.1 page 9 of 28
Discussion of Changes for ITS 3.8.2 page 3	Discussion of Changes for ITS 3.8.2 page 3
Discussion of Changes for ITS 3.8.4 page 6	Discussion of Changes for ITS 3.8.4 page 6
CTS Markup for Specification 3.8.8 page 6 of 8	CTS Markup for Specification 3.8.8 page 6 of 8
Discussion of Changes for ITS 3.8.8 page 1	Discussion of Changes for ITS 3.8.8 page 1
ISTS Bases markup page B 3.8-47	ISTS Bases markup page B 3.8-47
ISTS Bases markup page B 3.8-48	ISTS Bases markup page B 3.8-48
ISTS Bases markup page B 3.8-50	ISTS Bases markup page B 3.8-50

VOLUME 10	
SECTIONS 3.9 AND 3.10	
DISCARD	**INSERT**
Discussion of Changes for ITS 3.10.5 pages 1 and 2	Discussion of Changes for ITS 3.10.5 pages 1 and 2

BASES (continued)

REFERENCES

1. NEDE-24011-P-A, "General Electric Standard Application for Reactor Fuel," (as specified in Technical Specification 5.6.5).

2. EMF-94-217(NP), Revision 1, "Boiling Water Reactor Licensing Methodology Summary," November 1995.

1 Insert B 3.2.1 Ref

1. NEDE-24011-P-A, "General Electric Standard Application for Reactor Fuel," (as specified in Technical Specification 5.6.5).

2. EMF-94-217(NP), Revision 1, "Boiling Water Reactor Licensing Methodology Summary," November 1995.

Table 3.3.1.1-1 (page 2 of 3)
Reactor Protection System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION D.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
2. Average Power Range Monitors (continued)					
d. Inop	1,2	2	G	SR 3.3.1.1.8 SR 3.3.1.1.9 SR 3.3.1.1.15	NA
3. Reactor Vessel Steam Dome Pressure — High	1,2	2	G	SR 3.3.1.1.9 SR 3.3.1.1.10 SR 3.3.1.1.15 SR 3.3.1.1.17	≤ 1059.0 psig
4. Reactor Vessel Water Level — Low, Level 3	1,2	2	G	SR 3.3.1.1.1 SR 3.3.1.1.9 SR 3.3.1.1.13 SR 3.3.1.1.15 SR 3.3.1.1.17	≥ 11.0 inches
5. Main Steam Isolation Valve — Closure	1	8	F	SR 3.3.1.1.9 SR 3.3.1.1.13 SR 3.3.1.1.15 SR 3.3.1.1.17	≤ 13.7% closed
6. Drywell Pressure — High	1,2	2	G	SR 3.3.1.1.9 SR 3.3.1.1.13 SR 3.3.1.1.15	≤ 1.93 psig
7. Scram Discharge Volume Water Level — High					
a. Transmitter/Trip Unit	1,2	2	G	SR 3.3.1.1.9 SR 3.3.1.1.13 SR 3.3.1.1.15	≤ 767 ft 8.55 in elevation
	5(a)	2	H	SR 3.3.1.1.9 SR 3.3.1.1.13 SR 3.3.1.1.15	≤ 767 ft 8.55 in elevation

(continued)

(a) With any control rod withdrawn from a core cell containing one or more fuel assemblies.

Table 3.3.1.1-1 (page 3 of 3)
Reactor Protection System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION D.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
7. Scram Discharge Volume Water Level — High (continued)					
b. Float Switch	1,2	2	G	SR 3.3.1.1.9 SR 3.3.1.1.13 SR 3.3.1.1.15	≤ 767 ft 8.55 in elevation
	5(a)	2	H	SR 3.3.1.1.9 SR 3.3.1.1.13 SR 3.3.1.1.15	≤ 767 ft 8.55 in elevation
8. Turbine Stop Valve — Closure	≥ 25% RTP	4	E	SR 3.3.1.1.9 SR 3.3.1.1.13 SR 3.3.1.1.15 SR 3.3.1.1.16 SR 3.3.1.1.17	≤ 8.9% closed
9. Turbine Control Valve Fast Closure, Trip Oil Pressure — Low	≥ 25% RTP	2	E	SR 3.3.1.1.9 SR 3.3.1.1.13 SR 3.3.1.1.15 SR 3.3.1.1.16 SR 3.3.1.1.17	≥ 425.5 psig
10. Reactor Mode Switch — Shutdown Position	1,2	2	G	SR 3.3.1.1.12 SR 3.3.1.1.15	NA
	5(a)	2	H	SR 3.3.1.1.12 SR 3.3.1.1.15	NA
11. Manual Scram	1,2	2	G	SR 3.3.1.1.5 SR 3.3.1.1.15	NA
	5(a)	2	H	SR 3.3.1.1.5 SR 3.3.1.1.15	NA

(a) With any control rod withdrawn from a core cell containing one or more fuel assemblies.

SURVEILLANCE REQUIREMENTS

------------------------------------NOTE------------------------------------
When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 6 hours provided the associated Function maintains EOC-RPT trip capability.

SURVEILLANCE		FREQUENCY
SR 3.3.4.1.1	Perform CHANNEL FUNCTIONAL TEST.	92 days
SR 3.3.4.1.2	Perform CHANNEL CALIBRATION. The Allowable Values shall be: a. TSV – Closure ≤ 8.9% closed. b. TCV – Fast Closure, Trip Oil Pressure – Low: ≥ 425.5 psig.	24 months
SR 3.3.4.1.3	Perform LOGIC SYSTEM FUNCTIONAL TEST, including breaker actuation.	24 months
SR 3.3.4.1.4	Verify TSV – Closure and TCV – Fast Closure, Trip Oil Pressure – Low Functions are not bypassed when THERMAL POWER is ≥ 25% RTP.	24 months

(continued)

Table 3.3.5.1-1 (page 1 of 4)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Low Pressure Coolant Injection-A (LPCI) and Low Pressure Core Spray (LPCS) Subsystems					
a. Reactor Vessel Water Level — Low Low Low, Level 1	1,2,3, $4^{(a)}$,$5^{(a)}$	$2^{(b)}$	B	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≥ -147.0 inches
b. Drywell Pressure — High	1,2,3	$2^{(b)}$	B	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≤ 1.77 psig
c. LPCI Pump A Start — Time Delay Relay	1,2,3, $4^{(a)}$,$5^{(a)}$	1	C	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≤ 5.5 seconds
d. Reactor Steam Dome Pressure — Low (Injection Permissive)	1,2,3	2	D	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≥ 490 psig and ≤ 522 psig
	$4^{(a)}$,$5^{(a)}$	2	B	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≥ 490 psig and ≤ 522 psig
e. LPCS Pump Discharge Flow — Low (Bypass)	1,2,3, $4^{(a)}$,$5^{(a)}$	1	D	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.5	≥ 1240 gpm and ≤ 1835 gpm
f. LPCI Pump A Discharge Flow — Low (Bypass)	1,2,3, $4^{(a)}$,$5^{(a)}$	1	D	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.5	≥ 1330 gpm and ≤ 2144 gpm
g. LPCS and LPCI A Injection Line Pressure—Low (Injection Permissive)	1,2,3	1 per valve	D	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≥ 490 psig and ≤ 522 psig
	$4^{(a)}$,$5^{(a)}$	1 per valve	B	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≥ 490 psig and ≤ 522 psig
h. Manual Initiation	1,2,3, $4^{(a)}$,$5^{(a)}$	1	C	SR 3.3.5.1.5	NA

(continued)

(a) When associated ECCS subsystem(s) are required to be OPERABLE per LCO 3.5.2, "ECCS—Shutdown."

(b) Also required to initiate the associated diesel generator (DG).

Table 3.3.5.1-1 (page 2 of 4)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
2. LPCI B and LPCI C Subsystems					
a. Reactor Vessel Water Level — Low Low Low, Level 1	1,2,3, 4(a),5(a)	2(b)	B	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≥ -147.0 inches
b. Drywell Pressure — High	1,2,3	2(b)	B	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≤ 1.77 psig
c. LPCI Pump B Start — Time Delay Relay	1,2,3, 4(a),5(a)	1	C	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≤ 5.5 seconds
d. Reactor Steam Dome Pressure — Low (Injection Permissive)	1,2,3	2	D	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≥ 490 psig and ≤ 522 psig
	4(a),5(a)	2	B	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≥ 490 psig and ≤ 522 psig
e. LPCI Pump B and LPCI Pump C Discharge Flow — Low (Bypass)	1,2,3, 4(a),5(a)	1 per pump	D	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.5	≥ 1330 gpm and ≤ 2144 gpm
f. LPCI B and LPCI C Injection Line Pressure—Low (Injection Permissive)	1,2,3	1 per valve	D	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≥ 490 psig and ≤ 522 psig
	4(a),5(a)	1 per valve	B	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≥ 490 psig and ≤ 522 psig
g. Manual Initiation	1,2,3, 4(a),5(a)	1	C	SR 3.3.5.1.5	NA

(continued)

(a) When associated ECCS subsystem(s) are required to be OPERABLE per LCO 3.5.2.

(b) Also required to initiate the associated DG.

Table 3.3.5.1-1 (page 3 of 4)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
3. High Pressure Core Spray (HPCS) System					
a. Reactor Vessel Water Level — Low Low, Level 2	1,2,3, 4(a),5(a)	4(b)	B	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≥ -83 inches
b. Drywell Pressure — High	1,2,3	4(b)	B	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≤ 1.77 psig
c. Reactor Vessel Water Level — High, Level 8	1,2,3, 4(a),5(a)	2	C	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≤ 66.5 inches
d. HPCS Pump Discharge Pressure — High (Bypass)	1,2,3, 4(a),5(a)	1	D	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≥ 113.2 psig
e. HPCS System Flow Rate — Low (Bypass)	1,2,3, 4(a),5(a)	1	D	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.5	≥ 1380 gpm and ≤ 1704 gpm
f. Manual Initiation	1,2,3, 4(a),5(a)	1	C	SR 3.3.5.1.5	NA
4. Automatic Depressurization System (ADS) Trip System A					
a. Reactor Vessel Water Level — Low Low Low, Level 1	1,2(c),3(c)	2	E	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≥ -147.0 inches
b. Drywell Pressure — High	1,2(c),3(c)	2	E	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≤ 1.77 psig
c. ADS Initiation Timer	1,2(c),3(c)	1	F	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≤ 118 seconds

(continued)

(a) When associated ECCS subsystem(s) are required to be OPERABLE per LCO 3.5.2.

(b) Also required to initiate the associated DG.

(c) With reactor steam dome pressure > 150 psig.

Table 3.3.5.1-1 (page 4 of 4)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
4. ADS Trip System A (continued)					
d. Reactor Vessel Water Level — Low, Level 3 (Confirmatory)	1,2(c),3(c)	1	E	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≥ 11.0 inches
e. LPCS Pump Discharge Pressure — High	1,2(c),3(c)	2	F	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≥ 131.2 psig and ≤ 271.0 psig
f. LPCI Pump A Discharge Pressure — High	1,2(c),3(c)	2	F	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≥ 105.0 psig and ≤ 128.6 psig
g. ADS Drywell Pressure Bypass Timer	1,2(c),3(c)	2	F	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≤ 598 seconds
h. Manual Initiation	1,2(c),3(c)	2	F	SR 3.3.5.1.5	NA
5. ADS Trip System B					
a. Reactor Vessel Water Level — Low Low Low, Level 1	1,2(c),3(c)	2	E	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≥ -147.0 inches
b. Drywell Pressure — High	1,2(c),3(c)	2	E	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≤ 1.77 psig
c. ADS Initiation Timer	1,2(c),3(c)	1	F	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≤ 118 seconds
d. Reactor Vessel Water Level — Low, Level 3 (Confirmatory)	1,2(c),3(c)	1	E	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≥ 11.0 inches
e. LPCI Pumps B & C Discharge Pressure — High	1,2(c),3(c)	2 per pump	F	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≥ 105.0 psig and ≤ 128.6 psig
f. ADS Drywell Pressure Bypass Timer	1,2(c),3(c)	2	F	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.5	≤ 598 seconds
g. Manual Initiation	1,2(c),3(c)	2	F	SR 3.3.5.1.5	NA

(c) With reactor steam dome pressure > 150 psig.

Table 3.3.5.2-1 (page 1 of 1)
Reactor Core Isolation Cooling System Instrumentation

FUNCTION	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Reactor Vessel Water Level — Low Low, Level 2	4	B	SR 3.3.5.2.2 SR 3.3.5.2.3 SR 3.3.5.2.4	≥ -83 inches
2. Reactor Vessel Water Level — High, Level 8	2	C	SR 3.3.5.2.1 SR 3.3.5.2.2 SR 3.3.5.2.3 SR 3.3.5.2.4	≤ 66.5 inches
3. Condensate Storage Tank Level — Low	2	D	SR 3.3.5.2.2 SR 3.3.5.2.3 SR 3.3.5.2.4	≥ 713.6 ft
4. Manual Initiation	1	C	SR 3.3.5.2.4	NA

Table 3.3.6.1-1 (page 2 of 4)
Primary Containment Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
2. Primary Containment Isolation (continued)					
e. Reactor Vessel Water Level—Low Low Low, Level 1	1,2,3	2	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≥ -137.0 inches
f. Reactor Vessel Water Level—Low, Level 3	1,2,3	2	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≥ 11.0 inches
g. Manual Initiation	1,2,3	1	G	SR 3.3.6.1.5	NA
3. Reactor Core Isolation Cooling (RCIC) System Isolation					
a. RCIC Steam Line Flow — High	1,2,3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5	≤ 176.0 inches water
b. RCIC Steam Line Flow—Timer	1,2,3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≥ 2.6 seconds and ≤ 5.5 seconds
c. RCIC Steam Supply Pressure — Low	1,2,3	2	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≥ 58.2 psig
d. RCIC Turbine Exhaust Diaphragm Pressure — High	1,2,3	2	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 300 inches water
e. RCIC Equipment Room Temperature — High	1,2,3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 291.0°F
f. RCIC Equipment Room Differential Temperature — High	1,2,3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 189.0°F
g. RCIC Steam Line Tunnel Temperature — High	1,2,3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 277.0°F
h. RCIC Steam Line Tunnel Differential Temperature — High	1,2,3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 155.0°F
i. Drywell Pressure — High	1,2,3	2	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 1.77 psig

(continued)

Table 3.3.6.1-1 (page 3 of 4)
Primary Containment Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
3. RCIC System Isolation (continued)					
j. Manual Initiation	1,2,3	1(b)	G	SR 3.3.6.1.5	NA
4. Reactor Water Cleanup (RWCU) System Isolation					
a. Differential Flow — High	1,2,3	1	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 82.8 gpm
b. Differential Flow — Timer	1,2,3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 48.9 seconds
c. RWCU Heat Exchanger Areas Temperature-High	1,2,3	1 per area	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 157.0°F
d. RWCU Heat Exchanger Areas Ventilation Differential Temperature — High	1,2,3	1 per area	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 38.5°F
e. RWCU Pump and Valve Area Temperature — High	1,2,3	1 per area	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 209.0°F
f. RWCU Pump and Valve Area Differential Temperature — High	1,2,3	1 per area	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 91.0°F
g. RWCU Holdup Pipe Area Temperature — High	1,2,3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 209.0°F
h. RWCU Holdup Pipe Area Ventilation Differential Temperature — High	1,2,3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 91.0°F
i. RWCU Filter/ Demineralizer Valve Room Area Temperature—High	1,2,3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 209.0°F
j. RWCU Filter/ Demineralizer Valve Room Area Ventilation Differential Temperature — High	1,2,3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 91.0°F

(continued)

(b) Only inputs into one of two trip systems.

SURVEILLANCE REQUIREMENTS

------------------------------------NOTES------------------------------------

1. Refer to Table 3.3.8.1-1 to determine which SRs apply for each LOP Function.

2. When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 2 hours provided the associated Function maintains LOP initiation capability.

SURVEILLANCE		FREQUENCY
SR 3.3.8.1.1	Perform CHANNEL FUNCTIONAL TEST.	18 months
SR 3.3.8.1.2	Perform CHANNEL CALIBRATION.	18 months
SR 3.3.8.1.3	Perform CHANNEL FUNCTIONAL TEST.	24 months
SR 3.3.8.1.4	Perform CHANNEL CALIBRATION.	24 months
SR 3.3.8.1.5	Perform LOGIC SYSTEM FUNCTIONAL TEST.	24 months

B

Table 3.3.8.1-1 (page 1 of 1)
Loss of Power Instrumentation

FUNCTION	REQUIRED CHANNELS PER DIVISION	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Divisions 1 and 2 — 4.16 kV Emergency Bus Undervoltage			
a. Loss of Voltage — 4.16 kV Basis	2	SR 3.3.8.1.3 SR 3.3.8.1.4 SR 3.3.8.1.5	≥ 2422 V and ≤ 3091 V
b. Loss of Voltage — Time Delay	2	SR 3.3.8.1.3 SR 3.3.8.1.4 SR 3.3.8.1.5	≥ 3.1 seconds and ≤ 10.9 seconds
c. Degraded Voltage — 4.16 kV Basis	2	SR 3.3.8.1.1 SR 3.3.8.1.2 SR 3.3.8.1.5	≥ 3814 V and ≤ 3900 V
d. Degraded Voltage — Time Delay, No LOCA	2	SR 3.3.8.1.1 SR 3.3.8.1.2 SR 3.3.8.1.5	≥ 270.1 seconds and ≤ 329.9 seconds
e. Degraded Voltage — Time Delay, LOCA	2	SR 3.3.8.1.1 SR 3.3.8.1.2 SR 3.3.8.1.5	≥ 9.4 seconds and ≤ 10.9 seconds
2. Division 3 — 4.16 kV Emergency Bus Undervoltage			
a. Loss of Voltage — 4.16 kV Basis	2	SR 3.3.8.1.3 SR 3.3.8.1.4 SR 3.3.8.1.5	≥ 2596 V and ≤ 3137 V
b. Loss of Voltage — Time Delay	2	SR 3.3.8.1.3 SR 3.3.8.1.4 SR 3.3.8.1.5	≤ 10.9 seconds
c. Degraded Voltage — 4.16 kV Basis	2	SR 3.3.8.1.1 SR 3.3.8.1.2 SR 3.3.8.1.5	≥ 3814 V and ≤ 3900 V
d. Degraded Voltage — Time Delay, No LOCA	2	SR 3.3.8.1.1 SR 3.3.8.1.2 SR 3.3.8.1.5	≥ 270.1 seconds and ≤ 329.9 seconds
e. Degraded Voltage — Time Delay, LOCA	2	SR 3.3.8.1.1 SR 3.3.8.1.2 SR 3.3.8.1.5	≥ 9.4 seconds and ≤ 10.9 seconds

B

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.3.8.2.1	------------------NOTE------------------ Only required to be performed prior to entering MODE 2 or 3 from MODE 4, when in MODE 4 for ≥ 24 hours. --- Perform CHANNEL FUNCTIONAL TEST.	184 days
SR 3.3.8.2.2	Perform CHANNEL CALIBRATION. The Allowable Values shall be: a. Overvoltage ≤ 131.4 V (with time delay set to ≤ 3.92 seconds). b. Undervoltage ≥ 108.7 V (with time delay set to ≤ 3.92 seconds). c. Underfrequency ≥ 57.3 Hz (with time delay set to ≤ 3.92 seconds)	24 months
SR 3.3.8.2.3	Perform a system functional test.	24 months

BASES (continued)

REFERENCES

1. UFSAR, Section 7.2.

2. UFSAR, Section 5.2.2.

3. UFSAR, Section 6.3.3.

4. UFSAR, Chapter 15.

5. UFSAR, Section 15.4.1.

6. NEDO-23842, "Continuous Control Rod Withdrawal in the Startup Range," April 18, 1978.

7. UFSAR, Section 7.6.3.3.

8. UFSAR, Section 15.4.9.

9. Letter, P. Check (NRC) to G. Lainas (NRC), "BWR Scram Discharge System Safety Evaluation," December 1, 1980.

10. NEDC-30851-P-A, "Technical Specification Improvement Analyses for BWR Reactor Protection System," March 1988.

11. Technical Requirements Manual.

12. NEDO-32291-A, "System Analyses for the Elimination of Selected Response Time Testing Requirements," October 1995.

BASES

REFERENCES (continued)

4. UFSAR, Section 15.4.2.3.

5. UFSAR, Section 15.4.9.

6. "Modifications to the Requirements for Control Rod Drop Accident Mitigating Systems," BWR Owners' Group, July 1986.

7. NRC SER, "Acceptance of Referencing of Licensing Topical Report NEDE-24011-P-A," "General Electric Standard Application for Reactor Fuel, Revision 8, Amendment 17," December 27, 1987.

8. GENE-770-06-1-A, "Addendum to Bases for Changes to Surveillance Test Intervals and Allowed Out-of-Service Times for Selected Instrumentation Technical Specifications," December 1992.

9. NEDC-30851-P-A, Supplement 1, "Technical Specification Improvement Analysis for BWR Control Rod Block Instrumentation," October 1988.

BASES

APPLICABLE SAFETY ANALYSES, LCO, and APPLICABILITY (continued)

The Allowable Values are specified for each Function in the Table. Nominal trip setpoints are specified in the setpoint calculations. The nominal setpoints are selected to ensure that the setpoint does not exceed the Allowable Value between CHANNEL CALIBRATIONS. Operation with a trip setpoint less conservative than the nominal trip setpoint, but within the Allowable Value, is acceptable. A channel is inoperable if its actual trip setpoint is not within its required Allowable Value. Trip setpoints are those predetermined values of output at which an action should take place. The setpoints are compared to the actual process parameter (e.g., degraded voltage), and when the measured output value of the process parameter exceeds the setpoint, the associated device (e.g., trip unit) changes state. The analytic limits are derived from the limiting values of the process parameters obtained from the safety analysis. The trip setpoints are determined from the analytic limits, corrected for defined process, calibration, and instrument errors. The Allowable Values are then determined, based on the trip setpoint values, by accounting for the calibration based errors. These calibration based errors are limited to reference accuracy, instrument drift, errors associated with measurement and test equipment, and calibration tolerance of loop components. The trip setpoints and Allowable Values determined in this manner provide adequate protection because instrument uncertainties, process effects, calibration tolerances, instrument drift, and severe environment errors (for channels that must function in harsh environments as defined by 10 CFR 50.49) are accounted for and appropriately applied for the instrumentation.

The specific Applicable Safety Analyses, LCO, and Applicability discussions are listed below on a Function by Function basis.

4.16 kV Emergency Bus Undervoltage

1.a, 1.b, 2.a, 2.b. 4.16 kV Emergency Bus Undervoltage (Loss of Voltage)

Loss of voltage on a 4.16 kV emergency bus indicates that offsite power may be completely lost to the respective emergency bus and is unable to supply sufficient power for proper operation of the applicable equipment. Therefore,

(continued)

BASES

APPLICABLE SAFETY ANALYSES, LCO, and APPLICABILITY

4.16 kV Emergency Bus Undervoltage

1.a, 1.b, 2.a, 2.b. 4.16 kV Emergency Bus Undervoltage (Loss of Voltage) (continued)

the power supply to the bus is transferred from the offsite power supply to DG power. This transfer is initiated when the voltage on the bus drops below the relay settings with a short time delay. The transfer occurs prior to the bus voltage dropping below the minimum Loss of Voltage Function Allowable Value but after the voltage drops below the maximum Loss of Voltage Function Allowable Value (loss of voltage with a short time delay). The short time delay prevents inadvertent relay actuations due to momentary voltage dips. For Divisions 1 and 2, the time delay varies inversely with decreasing voltage. For Division 3, the time delay is a fixed value. The time delay values are bounded by the upper and lower Allowable Values, as applicable. This ensures that adequate power will be available to the required equipment.

The Bus Undervoltage Allowable Values are low enough to prevent inadvertent power supply transfer since they are below the minimum expected voltage during normal and emergency operation, but high enough to ensure power is available to the required equipment. The Time Delay Allowable Values are long enough to provide time for the offsite power supply to recover to normal voltages, but short enough to ensure that power is available to the required equipment.

Two channels of each 4.16 kV Emergency Bus Undervoltage (Loss of Voltage) Function per associated emergency bus are required to be OPERABLE when the associated DG is required to be OPERABLE to ensure that no single instrument failure can preclude the DG function. For the Division 1 and 2 4.16 kV emergency buses, the Loss of Voltage Functions are 1) 4.16 kV Basis and 2) Time Delay. For the Division 3 4.16 kV emergency bus, the Loss of Voltage Functions are: 1) 4.16 kV Basis and 2) Time Delay. Refer to LCO 3.8.1, "AC Sources – Operating," and LCO 3.8.2, "AC Sources – Shutdown," for Applicability Bases for the DGs.

(continued)

BASES

APPLICABLE SAFETY ANALYSES, LCO, and APPLICABILITY (continued)

1.c, 1.d, 1.e, 2.c, 2.d, 2.e. 4.16 kV Emergency Bus Undervoltage (Degraded Voltage)

A reduced voltage condition on a 4.16 kV emergency bus indicates that while offsite power may not be completely lost to the respective emergency bus, power may be insufficient for starting large motors without risking damage to the motors that could disable the ECCS function. Therefore, power supply to the bus is transferred from offsite power to onsite DG power when the voltage on the bus drops below the Degraded Voltage Function Allowable Values (degraded voltage with a time delay). This ensures that adequate power will be available to the required equipment.

The Bus Undervoltage Allowable Values are low enough to prevent inadvertent power supply transfer, but high enough to ensure that sufficient power is available to the required equipment. The Time Delay Allowable Values are long enough to provide time for the offsite power supply to recover to normal voltages, but short enough to ensure that sufficient power is available to the required equipment.

Two channels of each 4.16 kV Emergency Bus Undervoltage (Degraded Voltage) Function per associated emergency bus are required to be OPERABLE when the associated DG is required to be OPERABLE to ensure that no single instrument failure can preclude the DG function. The Degraded Voltage Functions are: 1) 4.16 kV Basis; 2) Time Delay, No LOCA; and 3) Time Delay, LOCA. Refer to LCO 3.8.1 and LCO 3.8.2 for Applicability Bases for the DGs.

ACTIONS

A Note has been provided to modify the ACTIONS related to LOP instrumentation channels. Section 1.3, Completion Times, specifies that once a Condition has been entered, subsequent divisions, subsystems, components, or variables expressed in the Condition discovered to be inoperable or not within limits will not result in separate entry into the Condition. Section 1.3 also specifies that Required Actions of the Condition continue to apply for each additional failure, with Completion Times based on initial entry into the Condition. However, the Required Actions for inoperable LOP instrumentation channels provide appropriate

(continued)

BASES

ACTIONS (continued)

compensatory measures for separate inoperable channels. As such, a Note has been provided that allows separate Condition entry for each inoperable LOP instrumentation channel.

A.1

With one or more channels of a Function inoperable, the Function may not be capable of performing the intended function. Therefore, only 1 hour is allowed to restore the inoperable channel to OPERABLE status. If the inoperable channel cannot be restored to OPERABLE status within the allowable out of service time, the channel must be placed in the tripped condition per Required Action A.1. Placing the inoperable channel in trip would conservatively compensate for the inoperability, restore capability to accommodate a single failure, and allow operation to continue. Alternately, if it is not desired to place the channel in trip (e.g., as in the case where placing the channel in trip would result in a DG initiation), Condition B must be entered and its Required Action taken.

The Completion Time is intended to allow the operator time to evaluate and repair any discovered inoperabilities. The 1 hour Completion Time is acceptable because it minimizes risk while allowing time for restoration or tripping of channels.

B.1

If any Required Action and associated Completion Time is not met, the associated Function may not be capable of performing the intended function. Therefore, the associated DG(s) are declared inoperable immediately. This requires entry into applicable Conditions and Required Actions of LCO 3.8.1 and LCO 3.8.2, which provide appropriate actions for the inoperable DG(s).

SURVEILLANCE REQUIREMENTS

As noted at the beginning of the SRs, the SRs for each LOP Instrumentation Function are located in the SRs column of Table 3.3.8.1-1.

(continued)

BASES

SURVEILLANCE REQUIREMENTS (continued)

The Surveillances are modified by a Note to indicate that when a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 2 hours provided the associated Function maintains LOP initiation capability. LOP initiation capability is maintained provided the associated Function can perform the load shed and control scheme for two of the three 4.16 kV emergency buses. Upon completion of the Surveillance, or expiration of the 2 hour allowance, the channel must be returned to OPERABLE status or the applicable Condition entered and Required Actions taken.

SR 3.3.8.1.1 and SR 3.3.8.1.3

A CHANNEL FUNCTIONAL TEST is performed on each required channel to ensure that the channel will perform the intended function. Any setpoint adjustment shall be consistent with the assumptions of the current plant specific setpoint methodology.

The Frequencies of 18 months and 24 months are based on plant operating experience with regard to channel OPERABILITY and drift that demonstrates that failure of more than one channel of a given Function in any 18 month or 24 month interval, as applicable, is rare.

SR 3.3.8.1.2 and SR 3.3.8.1.4

A CHANNEL CALIBRATION is a complete check of the instrument loop and the sensor. This test verifies the channel responds to the measured parameter within the necessary range and accuracy. CHANNEL CALIBRATION leaves the channel adjusted to account for instrument drifts between successive calibrations consistent with the plant specific setpoint methodology.

The Frequency is based on the assumption of an 18 month or 24 month calibration interval, as applicable, in the determination of the magnitude of equipment drift in the setpoint analysis.

(continued)

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.3.8.1.5

The LOGIC SYSTEM FUNCTIONAL TEST demonstrates the OPERABILITY of the required actuation logic for a specific channel. The system functional testing performed in LCO 3.8.1 and LCO 3.8.2 overlaps this Surveillance to provide complete testing of the assumed safety functions. The 24 month Frequency is based on the need to perform this Surveillance under the conditions that apply during a plant outage and the potential for an unplanned transient if the Surveillance were performed with the reactor at power. Operating experience has shown these components usually pass the Surveillance when performed at the 24 month Frequency.

REFERENCES

1. UFSAR, Section 8.2.3.3.
2. UFSAR, Section 5.2.
3. UFSAR, Section 6.3.
4. UFSAR, Chapter 15.

3/4.3 INSTRUMENTATION

A.1

3/4.3.1 REACTOR PROTECTION SYSTEM INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

LCO 3.3.1.1 — 3.3.1 As a minimum, the reactor protection system instrumentation channels shown in Table 3.3.1-1 shall be OPERABLE with the REACTOR PROTECTION SYSTEM RESPONSE TIME as shown in Table 3.3.1-2. LA.1
SR 3.3.1.1.17

APPLICABILITY: As shown in Table 3.3.1-1.

ACTION: Add proposed ACTIONS NOTE 1 — A.2

Action A — a. With one channel required by Table 3.3.1-1 inoperable in one or more Functional Units, place the inoperable channel and/or that trip system in the tripped condition* within 12 hours. LA.2

Actions A, B, and C — b. With two or more channels required by Table 3.3.1-1 inoperable in one or more Functional Units: LA.2

Action C — 1. Within one hour, verify sufficient channels remain OPERABLE or tripped* to maintain trip capability in the Functional Unit, and

Action B — 2. Within 6 hours, place the inoperable channel(s) in one trip system and/or that trip system** in the tripped condition*, and LA.2

Action A — 3. Within 12 hours, restore the inoperable channels in the other trip system to an OPERABLE status or tripped*. LA.2

Action D — c. Otherwise, take the ACTION required by Table 3.3.1-1 for the Functional Unit.

SURVEILLANCE REQUIREMENTS

Note 1 to Surveillance Requirements — 4.3.1.1 Each reactor protection system instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations for the OPERATIONAL CONDITIONS and at the frequencies shown in Table 4.3.1.1-1.

SR 3.3.1.1.15 — 4.3.1.2 LOGIC SYSTEM FUNCTIONAL TESTS and simulated automatic operation of all channels shall be performed at least once per 18 (24) months. LA.3 LD.1 LA.1 (B)

SR 3.3.1.1.17 — 4.3.1.3 The REACTOR PROTECTION SYSTEM RESPONSE TIME of each reactor trip functional unit shown in Table 3.3.1-2 shall be demonstrated to be within its limit at least once per 18 months. Each test shall include at least one channel per trip system such that all channels are tested at least once every N times 18 months where N is the total number of redundant channels in a specific reactor trip system. A.3

Add proposed Note 4 — A.3

* An inoperable channel need not be placed in the tripped condition where this would cause the Trip Function to occur. In these cases, if the inoperable channel is not restored to OPERABLE status within the required time, the ACTION required by Table 3.3.1-1 for the Functional Unit shall be taken. LA.2
Action D

** This ACTION applies to that trip system with the most inoperable channels; if both trip systems have the same number of inoperable channels, the ACTION can be applied to either trip system.

Addressed by Definition of STAGGERED TEST BASIS, Note 3, and DOC A.5

3/4.3 INSTRUMENTATION

3/4.3.1 REACTOR PROTECTION SYSTEM INSTRUMENTATION A.1

LIMITING CONDITION FOR OPERATION

LCO 3.3.1.1 3.3.1 As a minimum, the reactor protection system instrumentation channels shown in Table 3.3.1-1 shall be OPERABLE with the REACTOR PROTECTION SYSTEM SR 3.3.1.1.17 RESPONSE TIME as shown in Table 3.3.1-2. LA.1

APPLICABILITY: As shown in Table 3.3.1-1.

ACTION: Add proposed ACTIONS NOTE 1 A.2

Action A a. With one channel required by Table 3.3.1-1 inoperable in one or more Functional Units, place the inoperable channel and/or that trip system in the tripped condition* within 12 hours. LA.2

Actions A, B and C b. With two or more channels required by Table 3.3.1-1 inoperable in one or more Functional Units: LA.2

Action C 1. Within one hour, verify sufficient channels remain OPERABLE or tripped* to maintain trip capability in the Functional Unit, and

Action B 2. Within 6 hours, place the inoperable channel(s) in one trip system and/or that trip system** in the tripped condition*, and LA.2

Action A 3. Within 12 hours, restore the inoperable channels in the other trip system to an OPERABLE status or tripped*. LA.2

Action D c. Otherwise, take the ACTION required by Table 3.3.1-1 for the Functional Unit.

SURVEILLANCE REQUIREMENTS

Note 1 to Surveillance Requirements 4.3.1.1 Each reactor protection system instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations for the OPERATIONAL CONDITIONS and at the frequencies shown in Table 4.3.1.1-1.

SR 3.3.1.1.15 4.3.1.2 LOGIC SYSTEM FUNCTIONAL TESTS and simulated automatic operation of all channels shall be performed at least once per 18 (24) months. LA.3 LD.1

SR 3.3.1.1.17 4.3.1.3 The REACTOR PROTECTION SYSTEM RESPONSE TIME of each reactor trip functional unit shown in Table 3.3.1-2 shall be demonstrated to be within its limit at least once per 18 months. Each test shall include at least one channel per trip system such that all channels are tested at least once every N times 18 months where N is the total number of redundant channels in a specific reactor trip system. A.3 LA.1 B

Add proposed Note 4 A.3

* An inoperable channel or trip system need not be placed in the tripped condition where this would cause the Trip Function to occur. In these cases, if the inoperable channel is not restored to OPERABLE status within the required time, the ACTION required by Table 3.3.1-1 for the Functional Unit shall be taken. LA.2 Action D

** This ACTION applies to that trip system with the most inoperable channels; if both trip systems have the same number of inoperable channels, the ACTION can be applied to either trip system.

Addressed by Definition of STAGGERED TEST BASIS, Note 3, and DOC A.5

TECHNICAL CHANGES - LESS RESTRICTIVE

LD.1 (cont'd) Based on the above discussion, the impact, if any, of this change on system availability is minimal.

LE.1 The Frequency for performing the CHANNEL CALIBRATION Surveillance of CTS 4.3.8.1 and Table 4.3.8.1-1 Trip Function a (proposed SR 3.3.2.2.3) has been extended from 18 months to 24 months. The proposed change will allow this Surveillance to extend the Surveillance Frequency from the current 18 month Surveillance Frequency (i.e., a maximum of 22.5 months accounting for the allowable grace period specified in CTS 4.0.2 and proposed SR 3.0.2) to a 24 month Surveillance Frequency (i.e., a maximum of 30 months accounting for the allowable grace period specified in CTS 4.0.2 and proposed SR 3.0.2). This proposed change was evaluated in accordance with the guidance provided in NRC Generic Letter No. 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," dated April 2, 1991. The CHANNEL CALIBRATION Surveillance is performed to ensure that at a previously evaluated setpoint actuation takes place to provide the required safety function. Extending the SR Frequency is acceptable because the instrumentation purchased for these functions are highly reliable and meet the design criteria of safety related equipment. The instrumentation is designed with redundant and independent channels which provide means to verify proper instrumentation performance during operation, and adequate redundancy to ensure a high confidence of system performance even with the failure of a single component.

Furthermore, the impacted Feedwater System and Main Turbine High Water Level Trip Instrumentation have been evaluated based on manufacturer and model number to determine that the instrumentation's actual drift falls within the assumed design allowance in the associated setpoint calculation. This function is performed by Rosemount 1151DP4 differential pressure transmitters and Bailey 745 bistable switches. The Rosemount transmitters' and Bailey bistable switches' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Based on the design of the instrumentation and drift evaluations, it is concluded that the impact, if any, on system availability is minimal as a result of the change in the surveillance test interval.

TECHNICAL CHANGES - LESS RESTRICTIVE

LA.2 (cont'd) requires the EOC-RPT System Instrumentation to be OPERABLE and SR 3.3.4.1.5 and SR 3.3.4.1.6 require that EOC-RPT System Instrumentation response times be periodically verified to be within limits. Therefore, the requirements of ITS 3.3.4.1 and the associated Surveillance Requirements are adequate to ensure the EOC-RPT System Instrumentation is maintained OPERABLE. As such, these relocated details are not necessary to be in the ITS to provide adequate protection of the public health and safety. The TRM will be incorporated by reference into the LaSalle 1 and 2 UFSAR at ITS implementation. Changes to the TRM will be controlled by the provisions of 10 CFR 50.59.

LA.3 CTS 3.3.4.2 requires the Trip Setpoints to be set consistent with the values shown in the Trip Setpoint column of Table 3.3.4.2-2. CTS 3.3.4.2 Action a requires inoperable channels to be restored to OPERABLE status with trip setpoints adjusted consistent with the Trip Setpoint values. Trip setpoints are operational details that are not directly related to the OPERABILITY of the instrumentation. These details are to be relocated to the Technical Requirements Manual (TRM) and the references to these setpoints in CTS 3.3.4.2 are deleted. The Allowable Value is the required limitation for the associated Function and this value is retained in the Technical Specifications. These relocated trip setpoints are not required to be in the ITS to provide adequate protection of the public health and safety. The TRM will be incorporated by reference into the LaSalle 1 and 2 UFSAR at ITS implementation. Any changes to the relocated trip setpoints in the TRM will be controlled by the provisions of 10 CFR 50.59. B

LA.4 CTS 4.3.4.2.3 requires EOC—RPT System Response Time testing and includes a description of the Frequency application that is consistent with the ITS definition of STAGGERED TEST BASIS when applied to the two input Functions. ITS SR 3.3.4.1.5 is proposed with a Frequency that includes the STAGGERED TEST BASIS. The application by Function information is relocated to the Bases to maintain the current application clarity. This is a detail that is not necessary to be included in the Technical Specifications to ensure the OPERABILITY of the EOC—RPT Instrumentation. Therefore, the relocated detail is not required to be in the ITS to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS.

Table 3.3.5.1-1

TABLE 3.3.3-2

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION SETPOINTS

LF.1

FUNCTION TRIP FUNCTION	TRIP SETPOINT	ALLOWABLE VALUE
A. DIVISION 1 TRIP SYSTEM (LA.3)		
1. RHR-A (LPCI MODE) AND LPCS SYSTEM		
a. a. Reactor Vessel Water Level - Low Low Low, Level 1	≥- 129 inches*	≥- 136 inches*
b. b. Drywell Pressure - High	≤ 1.69 psig	≤ 1.89 psig
e. c. LPCS Pump Discharge Flow-Low	≥ 750 gpm	≥ 640 gpm
g. d. LPCS and LPCI A Injection Valve Injection Line-Low Pressure Interlock	500 psig	500 ± 20 psig
d. e. LPCS and LPCI A Injection Valve Reactor Pressure-Low Pressure Interlock	500 psig	500 ± 20 psig
c. f. LPCI Pump A Start Time Delay Relay	≤ 5 seconds	≤ 6 seconds
f. g. LPCI Pump A Discharge Flow-Low	≥ 1000 gpm	≥ 550 gpm
h h. Manual Initiation	NA	NA
2. AUTOMATIC DEPRESSURIZATION SYSTEM TRIP SYSTEM "A"		
a. a. Reactor Vessel Water Level - Low Low Low, Level 1	≥- 129 inches*	≥- 136 inches*
b. b. Drywell Pressure - High	≤ 1.69 psig	≤ 1.89 psig
c. c. Initiation Timer	≤ 105 seconds	≤ 117 seconds
d. d. Reactor Vessel Water Level-Low, Level 3	≥ 12.5 inches*	≥ 11 inches*
e. e. LPCS Pump Discharge Pressure-High	≥ 146 psig, increasing	≥ 136 psig, increasing
f. f. LPCI Pump A Discharge Pressure-High	≥ 119 psig, increasing	≥ 106 psig, increasing
h g. Manual Initiation	NA	NA
g h. Drywell Pressure Bypass Timer	≤ 9.0 minutes	Footnote (a)
i. Manual Inhibit	NA	NA

LA.1 M.4 add upper limit A add upper limit M.4 add upper limit M.4 R.1

(a) The sum of the time delays associated with the ADS initiation timer and the drywell pressure bypass time shall be less than or equal to 687 seconds.

LF.1 add explicit limit B

Page 7 of 30

ITS 3.3.5.1

Table 3.3.5.1-1

TABLE 3.3.3-2 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION SETPOINTS

FUNCTION TRIP FUNCTION	TRIP SETPOINT	ALLOWABLE VALUE
B. DIVISION 2 TRIP SYSTEM (LA.3)	(LA.1)	(LF.1)
2 1. RHR B AND C (LPCI MODE)		
a. a. Reactor Vessel Water Level - Low Low Low, Level 1	≥- 129 inches*	≥- 136 inches*
b. b. Drywell Pressure - High	≤ 1.69 psig	≤ 1.89 psig
f. c. LPCI B and C Injection Valve Injection Line-Low Pressure Interlock	500 psig	500 psig ±20 psig
c. d. LPCI Pump B Start Time Delay Relay	≤ 5 seconds	≤ 6 seconds
e. e. LPCI Pump Discharge Flow-Low	≥ 1000 gpm	≥ 550 gpm (add upper limit — M 4)
g. f. Manual Initiation	NA	NA
d. g. LPCI B and C Injection Valve Reactor Pressure Low Pressure Interlock	500 psig	500 ± 20 psig
5 2. AUTOMATIC DEPRESSURIZATION SYSTEM TRIP SYSTEM "B"		
a. a. Reactor Vessel Water Level - Low Low Low, Level 1	≥- 129 inches*	≥- 136 inches*
b. b. Drywell Pressure - High	≤ 1.69 psig	≤ 1.89 psig
c. c. Initiation Timer	≤ 105 seconds	≤ 117 seconds
d. d. Reactor Vessel Water Level-Low, Level 3	≥ 12.5 inches*	≥ 11 inches*
e. e. LPCI Pump B and C Discharge Pressure-High	≥ 119 psig, increasing	≥ 106 psig, increasing (add upper limit — M.4)
g. f. Manual Initiation	NA	NA
f. g. Drywell Pressure Bypass Timer	≤ 9.0 minutes	~~Footnote (a)~~ (add explicit limit)
~~h. Manual Inhibit~~ (R.1)	~~NA~~	~~NA~~

A

~~(a) The sum of the time delays associated with the ADS initiation timer and the drywell pressure bypass time shall be less than or equal to 687 seconds.~~ (LF.1)

B

Table 3.3.5.1-1

TABLE 3.3.3-2

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION SETPOINTS

LA SALLE - UNIT 2

FUNCTION / TRIP FUNCTION	TRIP SETPOINT	ALLOWABLE VALUE
A. DIVISION 1 TRIP SYSTEM		
1. RHR-A (LPCI MODE) AND LPCS SYSTEM		
a. a. Reactor Vessel Water Level - Low Low Low, Level 1	>- 129 inches*	>- 136 inches*
b. b. Drywell Pressure - High	< 1.69 psig	< 1.89 psig
e c. LPCS Pump Discharge Flow-Low	> 750 gpm	> 640 gpm
g d. LPCS and LPCI A Injection Valve Injection Line-Low Pressure Interlock	500 psig	500 ± 20 psig
d e. LPCS and LPCI A Injection Valve Reactor Pressure-Low Pressure Interlock	500 psig	500 ± 20 psig
c. f. LPCI Pump A Start Time Delay Relay	< 5 seconds	< 6 seconds
f. g. LPCI Pump A Discharge Flow-Low	> 1000 gpm	> 550 gpm
h h. Manual Initiation	N.A.	N.A.
2. AUTOMATIC DEPRESSURIZATION SYSTEM TRIP SYSTEM "A"		
a. a. Reactor Vessel Water Level - Low Low Low, Level 1	>- 129 inches*	>- 136 inches*
b b. Drywell Pressure - High	< 1.69 psig	< 1.89 psig
c. c. Initiation Timer	< 105 seconds	< 117 seconds
d. d. Reactor Vessel Water Level-Low, Level 3	> 12.5 inches*	> 11 inches*
e. e. LPCS Pump Discharge Pressure-High	> 146 psig, increasing	> 136 psig, increasing
f. f. LPCI Pump A Discharge Pressure-High	> 119 psig, increasing	> 106 psig, increasing
h. g. Manual Initiation	N.A.	N.A.
g. h. Drywell Pressure Bypass Timer	< 9.0 minutes	Footnote (a)
i. Manual Inhibit	N.A.	N.A.

(a) The sum of the time delays associated with the ADS initiation timer and the drywell pressure bypass timer shall be less than or equal to 687 seconds.

LA.1 LA.3 LF.1 M.4 add upper limit A A.1 add upper limits R.1 LF.1 add explicit limit B

Table 3.3.5.1-1

TABLE 3.3.3-2 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION SETPOINTS

Function TRIP FUNCTION	TRIP SETPOINT [LA.1]	ALLOWABLE VALUE [LF.1]
B. DIVISION 2 TRIP SYSTEM [LA.3]		
2. 1. RHR B AND C (LPCI MODE)		
a. a. Reactor Vessel Water Level - Low Low Low, Level 1	>- 129 inches*	>- 136 inches*
b. b. Drywell Pressure - High	≤ 1.69 psig	≤ 1.89 psig
f. c. LPCI B and C Injection Valve Injection Line Low Pressure Interlock	500 psig	500 ± 20 psig
c. d. LPCI Pump B Start Time Delay Relay	< 5 seconds	< 6 seconds
e. e. LPCI Pump Discharge Flow-Low	≥ 1000 gpm	≥ 550 gpm
g. f. Manual Initiation	N.A.	N.A.
d. g. LPCI B and C Injection Valve Reactor Pressure-Low Pressure Interlock	500 psig	500 ± 20 psig (add upper limit [M.4])
5. 2. AUTOMATIC DEPRESSURIZATION SYSTEM TRIP SYSTEM "B"		
a. a. Reactor Vessel Water Level - Low Low Low, Level 1	>- 129 inches*	>- 136 inches*
b. b. Drywell Pressure - High	≤ 1.69 psig	≤ 1.89 psig
c. c. Initiation Timer	≤ 105 seconds	≤ 117 seconds
d. d. Reactor Vessel Water Level-Low, Level 3	≥ 12.5 inches*	≥ 11 inches*
e. e. LPCI Pump B and C Discharge Pressure-High	≥ 119 psig, increasing	≥ 106 psig, increasing (add upper limit)
g. f. Manual Initiation	N.A.	N.A.
f. g. Drywell Pressure Bypass Timer	< 9.0 minutes	Footnote (a) (add explicit limit)
h. Manual Inhibit [R.1]	N.A.	N.A.

(a) The sum of the time delays associated with the ADS initiation timer and the drywell pressure bypass timer shall be less than or equal to 687 seconds. [LF.1]

A | A.1 | B

ADMINISTRATIVE (continued)

A.6 The technical content of the requirements of CTS Tables 3.3.3-1, 3.3.3-2, and 4.3.3.1-1, Trip Functions D.1 and D.2, including CTS Table 3.3.3-1 Action 37 and footnotes (d) and **, CTS Table 3.3.3-2 footnote #, and CTS Table 4.3.3.1-1 footnote **, are being moved to ITS 3.3.8.1, "Loss of Power Instrumentation," in accordance with the format of the BWR ISTS, NUREG-1434, Rev. 1. Any technical changes to these requirements are addressed in the Discussion of Changes for ITS: 3.3.8.1, in this Section.

A.7 CTS Table 3.3.3-1 Actions 30, 32, and 34 require declaring the associated system or ADS Trip System inoperable when the time to restore the channel has expired (24 hours). When the restoration time provided in these Actions have expired for the ADS Functions, the associated ADS Trip System is declared inoperable, and the action provided in CTS 3.3.3 Action c is taken, since this Action provides the required actions when an ADS Trip System is inoperable. Action c provides 72 hours or 7 days to restore the ADS Trip System, depending upon whether or not both RCIC and HPCS systems are Operable, and when the restoration time expires, a shutdown is required. In ITS 3.3.5.1 ACTIONS E and F, the requirement to declare the associated system (i.e., ADS trip system) inoperable has been deleted. In its place, the total time to restore the channel has been provided. These four CTS Actions have essentially been combined into two proposed ACTIONS, depending upon whether or not the channel is allowed to be tripped (ITS 3.3.5.1 ACTIONS E and F, respectively). Since the total time to restore the channel/trip system has not changed, except as discussed in Discussion of Change L.3 below, this change is considered administrative.

A.8 CTS Table 3.3.3-1 ACTION 35 specifies requirements associated with the HPCS Reactor Vessel Water Level Function and Drywell Pressure Function channels on a trip system basis. The channels associated with these Functions are arranged in a one-out-of-two-taken twice logic. In CTS Table 3.3.3-1 ACTION 35, when one or more channels are inoperable in a trip system, action must be taken to place the trip system in the tripped condition within 24 hours. ITS 3.3.5.1 Required Action B.3 requires placing the channel(s) in trip within 24 hours since there is no manual pushbutton or switch to place only the associated trip system in trip. Tripping a channel results in a trip of the associated trip system. Since this change simply represents a presentation preference the deletion of the term "trip system" from the CTS is considered administrative.

TECHNICAL CHANGES - MORE RESTRICTIVE

M.2 (cont'd) These additional requirements provides clear direction of the necessary Actions when in this condition. The Required Actions will only allow continued operations for 1 hour if a loss of initiation capability of a Function for both divisions/trip systems occurs. This will minimize the time the Function for both divisions/trip systems does not provide initiation capability, and is more restrictive on plant operation.

M.3 Not used.

M.4 The following additional Allowable Values have been added: a) A maximum Allowable Value for the LPCS, LPCI, and HPCS Pump Discharge Flow — Low (Bypass) (CTS Table 3.3.3-2 Trip Functions A.1.c, A.1.g, B.1.e, and C.1.g; ITS Table 3.3.5.1-1 Function 1.e, 1.f, 2.e, and 3.e), has been provided to ensure the valves will close to provide assumed ECCS flow to the core; and b) Maximum Allowable Values for the LPCS and RHR Pump Discharge Pressure—High (CTS Table 3.3.3-2 Trip Functions A.2.e, A.2.f, and B.2.e; ITS Table 3.3.5.1-1 Functions 4.e, 4.f, and 5.e) have been provided to ensure the setpoint is below the shutoff head of the low pressure ECCS pumps. The new Allowable Values are based upon the most recent setpoint calculations. These are additional restrictions on plant operation.

M.5 Not used. B

M.6 CTS Table 3.3.3-1 Trip Function A.2.g and B.2.f each require one manual channel to be OPERABLE for the ADS Manual Initiation Functions in each division. This has been increased from one to two for each division (or trip system) to ensure the Manual Initiation Function remains OPERABLE. The ADS Manual Initiation Function includes two push button channels (CTS Table 3.3.3-1 Trip Functions A.2.g and B.2.f) to actuate the two ADS trip strings in each trip system. Since this change actually adds the requirement to maintain an additional push button channel OPERABLE in each ADS trip system, this change is considered more restrictive, however necessary to ensure the ADS Manual Function is OPERABLE in each trip system.

TECHNICAL CHANGES - LESS RESTRICTIVE

LE.1 (cont'd) **Trip Functions A.1.d, B.1.c:** LPCS/LPCI Injection Valve Injection Line Pressure Low Interlock (currently 18 months)

This function is performed by Static-O-Ring 5N6-E45-NX-C1A-TTX6 pressure switches. The Static-O-Ring pressure switches' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Trip Functions A.1.e, B.1.g: LPCS/LPCI Injection Valve Reactor Pressure Low Interlock (currently 18 months)

This function is performed by Static-O-Ring 5N6-E45-NX-C1A-TTX6 pressure switches. The Static-O-Ring pressure switches' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Trip Functions A.1.f, B.1.d: LPCI Pump A/B Start Time Delay Relay (currently 92 days)

This function is performed by Agastat Model 7012 Time Delay Relays. The time delay relays' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Trip Functions A.2.a, B.2.a: ADS Reactor Vessel Water Level - Low Low Low, Level 1 (currently 18 months)

This function is performed by Rosemount 1154DH5 Transmitters and 710DU Master Trip Units. The Rosemount transmitters' and trip units' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

TECHNICAL CHANGES - LESS RESTRICTIVE

LE.1 (cont'd)

Trip Functions A.2.c, B.2.c: ADS Initiation Timer (currently 92 days)

This function is performed by Agastat Model ETR Time Delay Relays. The time delay relays' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Trip Functions A.2.d, B.2.d: ADS Reactor Vessel Water Level - Low, Level 3, (Permissive) (currently 18 months)

This function is performed by Rosemount 1154DH4 Transmitters and 710DU Master Trip Units. The Rosemount transmitters' and trip units' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Trip Functions A.2.e: LPCS Pump Discharge Pressure - High (currently 92 days)

This function is performed by Static-O-Ring 6N6-B45-U8-C1A-JJTTNQ and 6N6-B45-NX-C1A-JJTTX7 pressure switches. The Static-O-Ring pressure switches' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Trip Functions A.2.f: LPCI Pump A Discharge Pressure - High (currently 92 days)

This function is performed by Static-O-Ring 6N6-B45-NX-C1A-JJTTX7 pressure switches. The Static-O-Ring pressure switches' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

TECHNICAL CHANGES - LESS RESTRICTIVE

LE.1 (cont'd) **Trip Functions A.2.h, B.2.g:** ADS Drywell Pressure Bypass Timer (currently 92 days)

This function is performed by Agastat Model ETR Time Delay Relays. The time delay relays' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Trip Functions B.2.e: LPCI Pump B and C Discharge Pressure - High (currently 18 months)

This function is performed by Static-O-Ring 6N6-B45-NX-C1A-JJTTX7 pressure switches. The Static-O-Ring pressure switches' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Trip Function C.1.a: HPCS Reactor Vessel Water Level - Low Low, Level 2 (currently 18 months)

This function is performed by Rosemount 1154DH5 Transmitters and 710DU Master Trip Units. The Rosemount transmitters' and trip units' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Trip Function C.1.c: HPCS Reactor Vessel Water Level - High, Level 8 (currently 18 months)

This function is performed by Rosemount 1154DH4 Transmitters and 710DU Master Trip Units. The Rosemount transmitters' and trip units' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

TECHNICAL CHANGES - LESS RESTRICTIVE

LE.1 (cont'd) **Trip Functions C.1.f:** HPCS Pump Discharge Pressure - High (currently 92 days)

This function is performed by Static-O-Ring 6N6-B45-NX-C1A-JJTTX7 pressure switches. The Static-O-Ring pressure switches' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Based on the design of the instrumentation and the drift evaluations, it is concluded that the impact, if any, on system availability is minimal as a result of the change in the surveillance test interval.

A review of the surveillance test history was performed to validate the above conclusion. This review of the surveillance test history demonstrates that there are no failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month surveillance frequency. In addition, the proposed 24-month Surveillance Frequencies, if performed at the maximum interval allowed by proposed SR 3.0.2 (30 months) do not invalidate any assumptions in the plant licensing basis.

LF.1 This change revises the Current Technical Specifications (CTS) Allowable Values to the Improved Technical Specifications (ITS) Allowable Values. ITS Section 3.3 reflects Allowable Values consistent with the philosophy of BWR ISTS, NUREG-1434, Rev. 1. These Allowable Values have been established consistent with the methods described in ComEd's Instrument Setpoint Methodology (Nuclear Engineering Standard NES-EIC-20.04, "Analysis of Instrument Channel Setpoint Error and Instrument Loop Accuracy"). For most cases, the Allowable Value determinations were calculated using plant specific operating and surveillance trend data or an allowance as provided for by the Instrument Setpoint Methodology. For all other cases, vendor documented performance specifications for drift were used. The Allowable Value verification used actual plant operating and surveillance trend information to ensure the validity of the developed Allowable Value. All changes to safety analysis limits applied in the methodologies were evaluated and confirmed as ensuring safety analysis licensing acceptance limits are maintained. All design limits applied in the methodologies were confirmed as ensuring that applicable design requirements of the associated systems and equipment are maintained. The methodologies used have been compared with the guidance of ANSI/ISA S67.04-Part I-1994 and ANSI/ISA RP67.04-Part II-1994. Plant calibration procedures will ensure that the assumptions regarding calibration accuracy, measurement and test equipment accuracy, and setting tolerance are maintained.

TECHNICAL CHANGES - LESS RESTRICTIVE

LF.1 (cont'd) Setpoints for each design or safety analysis limit have been established by accounting for the applicable instrument accuracy, calibration and drift uncertainties, environmental effects, power supply fluctuations, as well as uncertainties related to process and primary element measurement accuracy using the Instrument Setpoint Methodology. The Allowable Values have been established from each design or safety analysis limit by combining the errors associated with channel/instrument calibration (e.g., device accuracy, setting tolerance, and drift) with the calculated Nominal Trip Setpoint also using the Instrument Setpoint Methodology.

Additionally, each applicable channel/instrument has been evaluated and analyzed to support a fuel cycle extension to a 24 month interval. These evaluations and analyses have been performed utilizing the guidance provided in EPRI TR-103335, "Guidelines for Instrument Calibration Extension/Reduction Programs, Revision 1. The EPRI guidance was used to demonstrate that the data collected by the operating plant (from surveillance testing) has remained acceptable and reasonable with regard to the manufacturers design specifications.

Use of the previously discussed methodologies for determining Allowable Values, instrument setpoints, and analyzing channel/instrument performance ensure that the design basis and associated safety limits will not be exceeded during plant operation. These evaluations, determinations, and analyses now form a portion of the plants design bases.

In addition, CTS Table 3.3.3-2 requires the Trip Setpoint of the Drywell Pressure Bypass Timer (Trip Functions A.2.h and B.2.h) to be ≤ 9.0 minutes. However, the Allowable Value specified requires the sum of the time delays associated with the ADS initiation timer and the drywell pressure bypass timer to be less than or equal to 687 seconds. An explicit value, determined as described above, has been included in the proposed Table 3.3.5.1-1 Allowable Value column for Functions 4.g and 5.f. Since the proposed combined value of the initiation timer and the drywell bypass timer is greater than 687 seconds, the proposed Allowable Value is considered less restrictive on plant operations. B

"Specific"

L.1 CTS 3.3.3 Action c requires restoration of an ADS Trip System to Operable status when it is inoperable; it does not allow placing the inoperable channels in trip and continuing to operate. CTS Table 3.3.3-1 Action 32 requires an inoperable ADS Reactor Vessel Water Level - Low, Level 3 (Permissive) channel (Trip Functions A.2.d and B.2.d) to be restored to Operable status; it does not allow placing the inoperable channel in trip and continuing to operate.

TECHNICAL CHANGES - LESS RESTRICTIVE

L.1 (cont'd) An option is provided in ITS 3.3.5.1 Required Action E.2 to place all inoperable channels in the tripped condition. This conservatively compensates for the inoperable status, restores the single failure capability, and provides the required initiation capability of the instrumentation. Therefore, providing this option does not impact safety. However, if this action would result in system actuation, then declaring the system inoperable is the preferred action.

L.2 The pressure at which ADS is required to be OPERABLE, as specified in CTS Table 3.3.3-1 footnote (#), CTS Table 4.3.3.1-1 footnote #, and CTS 3.3.3 Action c, is increased from 122 psig to 150 psig in ITS 3.3.5.1 to provide consistency of the OPERABILITY requirements for all ECCS and RCIC equipment. Small break loss of coolant accidents at low pressures (i.e., between 122 psig and 150 psig) are bounded by analysis performed at higher pressures. The ADS is required to operate to lower the pressure sufficiently so that the low pressure coolant injection (LPCI) and low pressure core spray (LPCS) systems can provide makeup to mitigate such accidents. Since these systems can provide adequate cooling up to approximately 200 psig, there is no safety significance in the ADS not being OPERABLE between 122 psig and 150 psig.

L.3 CTS Table 3.3.3-1 Action 30.b requires the associated ECCS to be declared inoperable immediately when more than one channel of a Trip Function is inoperable. CTS Table 3.3.3-1 Action 35.b requires the HPCS to be declared inoperable when channels in both trip systems are inoperable. These Actions apply to the following CTS Table 3.3.3-1 Trip Functions: LPCS, LPCI, and ADS Reactor Vessel Water Level - Low, Low, Low, Level 1 (Trip Functions A.1.a, A.2.a, B.1.a, and B.2.a), HPCS Reactor Vessel Water Level - Low, Low, Level 2 (Trip Function C.1.a), LPCS, LPCI, ADS, and HPCS Drywell Pressure - High (Trip Functions A.1.b, A.2.b, B.1.b, B.2.b, and C.1.b). ITS 3.3.5.1 ACTION B will allow 24 hours and ITS 3.3.5.1 ACTION E will allow 96 hours or 8 days (depending upon whether HPCS and RCIC Systems are both OPERABLE) to place inoperable channels in trip when two channels of a Function are inoperable, prior to declaring the associated ECCS inoperable, provided ECCS initiation capability is maintained.

The channels for each of the individual LPCS, LPCI, and ADS Functions are combined in a two-out-of-two logic; thus when one or both channels of an individual Trip Function are inoperable, the individual Trip Function will not perform its intended function. When one of the two channels are inoperable and the associated Function cannot perform its function, CTS Table 3.3.3-1 Action 30.a currently allows 24 hours to trip a channel (i.e., loss of the Trip Function is currently allowed for 24 hours).

TECHNICAL CHANGES - LESS RESTRICTIVE

L.3 (cont'd) The channels for the HPCS Functions are combined in a one-out-of-two-taken-twice logic; thus if one channel in each trip system of a Function is inoperable, the Function can still perform its intended function. This condition is analogous to the Functions described above, since Action 35.a allows 24 hours to trip the inoperable channel when only one channel is inoperable.

The 24 hour, 96 hour, and 8 day out of service time was evaluated and approved for use at LaSalle 1 and 2 by the NRC in the Safety Evaluation Report dated August 2, 1994. Therefore, allowing two channels of a LPCS, LPCI, and ADS Function to be inoperable is equivalent to one channel inoperable; in both cases, the Function cannot perform its intended function. Allowing two HPCS channels (one per trip system) of a Function to be inoperable is acceptable since the Function can still perform its intended function. However, this 24 hour, 96 hour, or 8 day time (provided in ITS 3.3.5.1 Required Actions B.3 and E.2) will only be allowed if the redundant ECCS (in the case of LPCS and LPCI) or trip system (in the case of ADS and HPCS) is maintaining initiation capability (ITS 3.3.5.1 Required Actions B.1, B.2, and E.1). This will ensure the overall ECCS function is maintained during the associated time. In addition, allowing all channels to be tripped in lieu of restoring the channels conservatively compensates for the inoperable status, restores the single failure capability, and provides the required initiation capability of the instrumentation. Therefore, providing this option does not impact safety. However, if this action would result in system actuation, then declaring the system inoperable is the preferred action.

L.4 CTS Table 3.3.3-1 Action 38.a, requires, when one LPCS and LPCI A or one LPCI B and C Injection Valve Reactor Pressure-Low (Permissive) channel (CTS Table 3.3.3-1 Trip Functions A.1.e and B.1.g) is inoperable, the inoperable channel must be removed within 24 hours. This instrumentation provides a permissive to open the LPCI and LPCS injection valves when the reactor pressure has decreased to an acceptable pressure, such that opening the injection valves will not result in overpressurization of the LPCI or LPCS Systems. This requirement has been deleted. The Action assumes the channel fails in the tripped condition, but this is not always true; it can fail such that a trip would not occur. The requirement to remove the inoperable channel within 24 hours is not necessary to ensure the LPCI and LPCS Systems are not overpressurized. In order for the associated injection valves to open, another signal from the associated LPCS and LPCI A or LPCI B and C Injection Valve Injection Pressure-Low Permissive channel (CTS Table 3.3.3-1, Trip Functions A.1.d and B.1.c) must also occur. The OPERABILITY of these Functions continues to be controlled in accordance with Technical Specifications (ITS Table 3.3.5.1-1 Functions 1.g and 2.f). Therefore, the LPCI and LPCS Systems will continue to be protected from overpressurization.

TECHNICAL CHANGES - LESS RESTRICTIVE (continued)

L.5 CTS 4.4.2.2, in part, verifies that the low-low set function does not interfere with the OPERABILITY of the ADS by a CHANNEL CALIBRATION. The logic channels associated with the low-low set function are electrically interconnected. However, the only possible impact that could prevent ADS operation is in the common portion of the logic. This logic is energize to operate. Thus the non-interference requirement for the ADS function is demonstrated through a periodic functional test of the low-low set function. Thus the CHANNEL CALIBRATION for this purpose is being removed from the ITS. However, a periodic functional test of the low-low set function will continue to be performed and provide assurance that the common portions of ADS are not affected. Therefore, this CHANNEL CALIBRATION requirement is not required and can be deleted. The periodic functional test of the low-low set function will be included in the TRM. The TRM will be incorporated by reference into the LaSalle 1 and 2 UFSAR at ITS implementation. Change to the TRM will be controlled by the provisions of 10 CFR 50.59.

L.6 CTS Table 3.3.3-1 Action 31 requires the inoperable channel to be placed in trip. This Action applies to the Functions that control the ECCS minimum flow valves. Placing a channel in trip does not compensate for the inoperability, and it may be a less safe action to take. When a channel is placed in trip, the minimum flow valve will remain either open or closed. Open results in ECCS flow bypass and the flow assumed in the ECCS analysis may not be met. When closed, the minimum flow valve will not open to provide minimum flow protection. Therefore, for these types of Functions, the channel must only be restored, as provided in ITS 3.3.5.1; it is not required to be tripped. If it is not restored, then the associated subsystem must be declared inoperable and appropriate actions taken, consistent with CTS Table 3.3.3-1 Action 31. This applies to the following CTS Table 3.3.3-1 Trip Functions: A.1.c, A.1.g, B.1.e, C.1.f, and C.1.g.

RELOCATED SPECIFICATIONS

R.1 The ADS Manual Inhibit Switch Function of CTS Tables 3.3.3-1, 3.3.3-2, and 4.3.3.1-1, Trip Functions A.2.i and B.2.h is an operational function only and is not considered in any design basis accident or transient. It does provide mitigation of the consequences of a non-design basis ATWS event; however the evaluation summarized in NEDO-31466, November 1987, determined the loss of ADS Manual Inhibit Switch Function to be a non-significant risk contributor to core damage frequency and offsite release. Therefore, the requirements specified for this Function in CTS 3.3.3 did not satisfy the NRC Policy Statement Technical Specification screening criteria as documented in the Application of Selection Criteria to the LaSalle 1 and 2 Technical Specifications

RELOCATED SPECIFICATIONS

R.1 (cont'd) and have been relocated to the Technical Requirements Manual (TRM). The TRM will be incorporated by reference into the LaSalle 1 and 2 UFSAR at ITS implementation. Changes to the TRM will be controlled in accordance with 10 CFR 50.59.

Table 3.3.6.1-1

TABLE 3.3.6-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION

TRIP FUNCTION	VALVE GROUPS OPERATED BY SIGNAL	MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM (b)	APPLICABLE OPERATIONAL CONDITION	ACTION
4 3. **REACTOR WATER CLEANUP SYSTEM ISOLATION**		Note 2 to Surveillance Requirements		
4.a, 4.b a. Δ Flow - High	5	1	1, 2, 3	22 F
4.c b. Heat Exchanger Area Temperature - High	5	1/heat exchanger	1, 2, 3	22 F
4.d c. Heat Exchanger Area Ventilation ΔT - High	5	1/heat exchanger	1, 2, 3	22 F
4.l d. SLCS Initiation	5(h) — footnote (b)	2 NA	1, 2, 3	22 I
4.k e. Reactor Vessel Water Level - Low Low, Level 2	5	2	1, 2, 3	22 F
4.e f. Pump and Valve Area Temperature - High	5	1/area	1, 2, 3	22 F
4.f g. Pump and Valve Area Ventilation ΔT - High	5	1/area	1, 2, 3	22 F
4.g h. Holdup Pipe Area Temperature - High	5	1	1, 2, 3	22 F
4.h i. Holdup Pipe Area Ventilation ΔT - High	5	1	1, 2, 3	22F
4.i j. Filter/Demineralizer Valve Room Area Temperature - High	5	1	1, 2, 3	22 F
4.j k. Filter/Demineralizer Valve Room Area Ventilation ΔT - High	5	1	1, 2, 3	22 F
l. Pump Suction Flow - High	5	1	1, 2, 3	22

LA.5 L.4 L.11 LA.9 B A.1

ITS 3.3.6.1

Page 4 of 34

Table 3.3.6.1-1

TABLE 3.3.2-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION

Function TRIP FUNCTION	LA.5 VALVE GROUPS OPERATED BY SIGNAL	MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM (b) [Note 2 to Surveillance Requirements]	APPLICABLE OPERATIONAL CONDITION	ACTION
3 4. REACTOR CORE ISOLATION COOLING SYSTEM ISOLATION				
3.a,3.b a. RCIC Steam Line Flow - High	8	1	1, 2, 3	22 F
3.c b. RCIC Steam Supply Pressure - Low	8, 9(g)	2	1, 2, 3	22 F
3.d c. RCIC Turbine Exhaust Diaphragm Pressure - High	8	2	1, 2, 3	22 F
3.e d. RCIC Equipment Room Temperature - High	8	1	1, 2, 3	22 F
3.g e. RCIC Steam Line Tunnel Temperature - High	8	1	1, 2, 3	22 F
3.h f. RCIC Steam Line Tunnel Δ Temperature - High	8	1	1, 2, 3	22 F
3.i g. Drywell Pressure - High	9(g)	2	1, 2, 3	22 F
3.f h. RCIC Equipment Room Δ Temperature - High	8	1	1, 2, 3	22 F

LA.5

B

A.1

ITS 3.3.6.1

Page 5 of 34

Table 3.3.6.1-1

TABLE 3.2.1-1

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

A.5 — 1, 2

Function TRIP FUNCTION	SR 3.3.6.1.1 CHANNEL CHECK	SR 3.3.6.1.2 CHANNEL FUNCTIONAL TEST	SR 3.3.6.1.3 SR 3.3.6.1.4 CHANNEL CALIBRATION	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED
A. AUTOMATIC INITIATION				
1. PRIMARY CONTAINMENT ISOLATION				
a. Reactor Vessel Water Level				
2.f 1) Low, Level 3	S	Q	4 - R (24 months, LE.1)	1, 2, 3
2.a 2) Low Low, Level 2	NA	Q	4 - R	1, 2, 3
1.a, 2.e 3) Low Low Low, Level 1	S	Q	4 - R	1, 2, 3
2.b b. Drywell Pressure - High	NA	Q	4 - R	1, 2, 3
c. Main Steam Line				
1) DELETED				
1.b 2) Pressure - Low	NA	Q	Q-3	1
1.c 3) Flow - High	NA	Q	3 - R (92 days, M.6)	1, 2, 3
d. DELETED				
1.d e. Condenser Vacuum - Low	NA	Q	4 - R	1, 2*, 3*
1.e f. Main Steam Line Tunnel Δ Temperature - High	NA	Q	4 - R (24 months, LE.1)	1, 2, 3
2. SECONDARY CONTAINMENT ISOLATION (A.6 moved to ITS 3.3.6.2)				
2.c a. Reactor Building Vent Exhaust Plenum Radiation - High	S	Q	4 - R	1, 2, 3 and **
2.b b. Drywell Pressure - High	NA	Q	4 - R	1, 2, 3
2.a c. Reactor Vessel Water Level - Low Low, Level 2	NA	Q	4 - R	1, 2, 3 and #
2.d d. Fuel Pool Vent Exhaust Radiation - High	S	Q	4 - R	1, 2, 3 and **
4 3. REACTOR WATER CLEANUP SYSTEM ISOLATION				
4.a, 4.b a. Δ Flow - High	S	Q	4 - R (24 months, LE.1)	1, 2, 3
4.c b. Heat Exchanger Area Temperature - High	NA	Q	4 - R	1, 2, 3
4.d c. Heat Exchanger Area Ventilation ΔT - High	NA	Q	4 - R	1, 2, 3
4.l d. SLCS Initiation	NA	Q R (A.12)	NA	1, 2, 3 (L.4)
4.k e. Reactor Vessel Water Level - Low Low, Level 2	NA	Q (24 months, LD.1)	4 - R (24 months, LE.1)	1, 2, 3

A.6 moved to ITS 3.3.6.2

A.1

B

ITS 3.3.6.1

Table 3.3.6.1-1

TABLE 4.3.2.1-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

Function	TRIP FUNCTION	SR 3.3.6.1.1 CHANNEL CHECK	SR 3.3.6.1.2 CHANNEL FUNCTIONAL TEST	SR 3.3.6.1.3 SR 3.3.6.1.4 CHANNEL CALIBRATION	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED
4.e	f. Pump and Valve Area Temperature - High	NA	Q	4-@ (24 months, LE.1)	1, 2, 3
4.f	g. Pump and Valve Area Ventilation ΔT - High	NA	Q	4-@	1, 2, 3
4.g	h. Holdup Pipe Area Temperature - High	NA	Q	4-@	1, 2, 3
4.h	i. Holdup Pipe Area Ventilation ΔT - High	NA	Q	4-@	1, 2, 3
4.i	j. Filter/Demineralizer Valve Room Area Temperature - High	NA	Q	4-@	1, 2, 3
4.j	k. Filter/Demineralizer Valve Room Area Ventilation ΔT - High	NA	Q	4-@	1, 2, 3
	~~l. Pump Suction Flow - High~~ (LA.9)	~~S~~	~~Q~~	~~R~~	~~1, 2, 3~~
3	4. REACTOR CORE ISOLATION COOLING SYSTEM ISOLATION				
3.a, 3.b	a. RCIC Steam Line Flow - High	NA	Q	3-@ (24 months - Function 3.b only)	1, 2, 3
3.c	b. RCIC Steam Supply Pressure - Low	NA	Q	4-@	1, 2, 3
3.d	c. RCIC Turbine Exhaust Diaphragm Pressure - High	NA	Q	4-@	1, 2, 3
3.e	d. RCIC Equipment Room Temperature - High	NA	Q	4-@	1, 2, 3
3.g	e. RCIC Steam Line Tunnel Temperature - High	NA	Q	4-@	1, 2, 3
3.h	f. RCIC Steam Line Tunnel Δ Temperature - High	NA	Q	4-@	1, 2, 3
3.i	g. Drywell Pressure - High	NA	Q	4-@	1, 2, 3
3.f	h. RCIC Equipment Room Δ Temperature - High	NA	Q	4-@ (24 months, LE.1)	1, 2, 3

5. ~~Deleted.~~

B A.1

Page 16 of 34

ITS 3.3.6.1

Table 3.3.6.1-1

TABLE 3.3.2-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION

Function TRIP FUNCTION	VALVE GROUPS OPERATED BY SIGNAL	MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM (b) Note 2 to Surveillance Requirements	APPLICABLE OPERATIONAL CONDITION	ACTION
4. 3. REACTOR WATER CLEANUP SYSTEM ISOLATION				
4.a, 4.b a. Δ Flow - High	5	1	1, 2, 3	22 F
4.c b. Heat Exchanger Area Temperature - High	5	1/heat exchanger	1, 2, 3	22 F
4.d c. Heat Exchanger Area Ventilation ΔT - High	5	1/heat exchanger	1, 2, 3	22 F
4.l d. SLCS Initiation	5 (1) - footnote (b) A.9	2 NA	1, 2, 5 L.4	22 I L.11
4.k e. Reactor Vessel Water Level - Low Low, Level 2	5	2	1, 2, 3	22 F
4.e f. Pump and Valve Area Temperature - High	5	1/area	1, 2, 3	22 F
4.f g. Pump and Valve Area Ventilation ΔT - High	5 LA.5	1/area	1, 2, 3	22 F
4.g h. Holdup Pipe Area Temperature - High	5	1	1, 2, 3	22 F
4.h i. Holdup Pipe Area Ventilation ΔT - High	5	1	1, 2, 3	22 F
4.i j. Filter/Demineralizer Valve Room Area Temperature - High	5	1	1, 2, 3	22 F
4.j k. Filter/Demineralizer Valve Room Area Ventilation ΔT - High	5	1	1, 2, 3	22 F
l. Pump Suction Flow - High	5	1	1, 2, 3	22 LA.9

B

A.1

Page 21 of 34

ITS 3.3.6.1

Table 3.3.6.1-1

TABLE 3.3.2-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION

Function TRIP FUNCTION		LA.5 VALVE GROUPS OPERATED BY SIGNAL	MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM (b) Note 2 to Surveillance Requirements	APPLICABLE OPERATIONAL CONDITION	ACTION
3	4. REACTOR CORE ISOLATION COOLING SYSTEM ISOLATION				
3.a, 3.b	a. RCIC Steam Line Flow - High	8	1	1, 2, 3	22 F
3.c	b. RCIC Steam Supply Pressure - Low	8, 9[(g)]	2	1, 2, 3	22 F
3.d	c. RCIC Turbine Exhaust Diaphragm Pressure - High	8	2	1, 2, 3	22 F
3.e	d. RCIC Equipment Room Temperature - High	8	1	1, 2, 3	22 F
3.g	e. RCIC Steam Line Tunnel Temperature - High	8	1	1, 2, 3	22 F
3.h	f. RCIC Steam Line Tunnel Δ Temperature - High	8	1	1, 2, 3	22 F
3.i	g. Drywell Pressure - High	9[(g)]	2	1, 2, 3	22 F
3.f	h. RCIC Equipment Room Δ Temperature - High	8	1	1, 2, 3	22 F

LA.5

B

A.1

B

ITS 3.3.6.1

Page 22 of 34

Table 3.3.6.1-1

TABLE 3.2.1-1

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

Function	TRIP FUNCTION	SR 3.3.6.1.1 CHANNEL CHECK	SR 3.3.6.1.2 CHANNEL FUNCTIONAL TEST	SR 3.3.6.1.3 SR 3.3.6.1.4 CHANNEL CALIBRATION	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED
A.5	A. AUTOMATIC INITIATION				
1, 2	1. PRIMARY CONTAINMENT ISOLATION				
	a. Reactor Vessel Water Level				
2.f	1) Low, Level 3	S	Q	4 – R (24 months) LE.1	1, 2, 3
2.a	2) Low Low, Level 2	NA	Q	4 – R	1, 2, 3
1.a, 2.e	3) Low Low Low, Level 1	S	Q	4 – R	1, 2, 3
2.b	b. Drywell Pressure - High	NA	Q	4 – R	1, 2, 3
	c. Main Steam Line				
	1) DELETED				
1.b	2) Pressure - Low	NA	Q	3 – Q	1
1.c	3) Flow - High	NA	Q	3 – R (92 days) M.6	1, 2, 3
1.d	d. DELETED				
1.e	e. Condenser Vacuum - Low	NA	Q	4 – R	1, 2*, 3*
	f. Main Steam Line Tunnel Δ Temperature - High	NA	Q	4 – R (24 months) LE.1	1, 2, 3
A.6 moved to ITS 3.3.6.2	2. SECONDARY CONTAINMENT ISOLATION				
2.c	a. Reactor Building Vent Exhaust Plenum Radiation - High	S	Q	4 – R	1, 2, 3 and **
2.b	b. Drywell Pressure - High	NA	Q	4 – R	1, 2, 3
2.a	c. Reactor Vessel Water Level - Low Low, Level 2	NA	Q	4 – R	1, 2, 3, and #
2.d	d. Fuel Pool Vent Exhaust Radiation - High	S	Q	4 – R (24 months) LE.1	1, 2, 3 and **
4	3. REACTOR WATER CLEANUP SYSTEM ISOLATION				
4.a, 4.b	a. Δ Flow - High	S	Q	4 – R	1, 2, 3
4.c	b. Heat Exchanger Area Temperature - High	NA	Q	4 – R	1, 2, 3
4.d	c. Heat Exchanger Area Ventilation ΔT - High	NA	Q	4 – R	1, 2, 3
4.l	d. SLCS Initiation	NA	~~Q~~ R (24 months) A.12, LD.1	NA	1, 2, (3) L.4
4.k	e. Reactor Vessel Water Level - Low Low, Level 2	NA	Q	4 – R (24 months) LE.1	1, 2, 3

A.6 moved to ITS 3.3.6.2

D.1

B

ITS 3.3.6.1

Page 32 of 34

3.3.6.1-1

TABLE 4.3.2.1-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

Function	TRIP FUNCTION	SR 3.3.6.1.1 CHANNEL CHECK	SR 3.3.6.1.2 CHANNEL FUNCTIONAL TEST	SR 3.3.6.1.3 SR 3.3.6.1.4 CHANNEL CALIBRATION	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED
4.e	f. Pump and Valve Area Temperature - High	NA	Q	4-Q (24 months)	1, 2, 3
4.f	g. Pump and Valve Area Ventilation ΔT - High	NA	Q	4-Q	1, 2, 3
4.g	h. Holdup Pipe Area Temperature - High	NA	Q	4-Q	1, 2, 3
4.h	i. Holdup Pipe Area Ventilation ΔT - High	NA	Q	4-Q	1, 2, 3
4.i	j. Filter/Demineralizer Valve Room Area Temperature - High	NA	Q	4-Q	1, 2, 3
4.j	k. Filter/Demineralizer Valve Room Area Ventilation ΔT - High	NA	Q	4-Q	1, 2, 3
	~~l. Pump Suction Flow - High~~	~~S~~	~~Q~~	~~R~~	~~1, 2, 3~~
3	4. REACTOR CORE ISOLATION COOLING SYSTEM ISOLATION				
3.a, 3.b	a. RCIC Steam Line Flow - High	NA	Q	Q-3 (24 months, Function 3.b only)	1 2, 3
3.c	b. RCIC Steam Supply Pressure - Low	NA	Q	4-Q	1 2, 3
3.d	c. RCIC Turbine Exhaust Diaphragm Pressure - High	NA	Q	4-Q	1 2, 3
3.e	d. RCIC Equipment Room Temperature - High	NA	Q	4-Q	1 2, 3
3.g	e. RCIC Steam Line Tunnel Temperature - High	NA	Q	4-Q	1 2, 3
3.h	f. RCIC Steam Line Tunnel Δ Temperature - High	NA	Q	4-Q	1 2, 3
3.i	g. Drywell Pressure - High	NA	Q	4-Q	1 2, 3
3.f	h. RCIC Equipment Room Δ Temperature - High	NA	Q	4-Q (24 months)	1 2, 3

~~5. DELETED~~

LE.1 LA.9 A.1 LE.1

Page 33 of 34

ITS 3.3.6.1

TECHNICAL CHANGES - MORE RESTRICTIVE

M.2 (cont'd) Pressure—High Functions. ACTION H will require the plant to be in MODE 3 in 12 hours and MODE 4 in 36 hours. ACTION F applies to the Reactor Building Ventilation Exhaust Radiation—High and the Fuel Pool Ventilation Exhaust Radiation—High Functions. ACTION F will require the isolation of the affected penetration flow path(s) within 1 hour. These proposed actions are appropriate based on the penetrations for which these Functions provide isolation. This change is an additional restriction on plant operation and is consistent with NUREG-1434, Rev. 1.

M.3 Allowable Values for two Functions have been added, ITS Table 3.3.6.1-1 Function 3.b and Function 4.b. These Functions are Timer Functions that delay initiation of the RCIC Steam Flow—High and RWCU Differential Flow—High Functions, respectively. Currently, these Functions isolate the RCIC or RWCU PCIVs, as applicable only after a time delay. The actual time delay Allowable Value is currently controlled in plant procedures. This change is an additional restriction on plant operation necessary to ensure RCIC and RWCU PCIVs isolate properly.

M.4 The CTS Tables 3.3.2-1 and 4.3.2.1-1 Trip Function A.6.a Applicability for the Reactor Vessel Water Level—Low, Level 3 Function has been changed to include MODES 4 and 5. This Function isolates the RHR Shutdown Cooling (SDC) System valves (Group 6) and these new Applicabilities will protect against potential draining of the reactor vessel through the RHR SDC suction line during shutdown conditions, which is when the RHR SDC System is normally operated. In addition, when RHR System integrity is maintained in MODES 4 and 5, only one of the two low water level instrumentation trip systems will be required. This is provided in ITS Table 3.3.6.1-1 Note (c). With the piping intact and no maintenance being performed that has a potential for draining the reactor vessel through the RHR System, both trip systems are not required since one trip system can isolate the suction piping (by closing one of the suction isolation valves). An appropriate ACTION (ITS 3.3.6.1 ACTION J) has also been added for when the channel(s) of the Function is inoperable in MODES 4 and 5. This is an additional restriction on plant operations and is consistent with the BWR ISTS, NUREG-1434, Rev. 1.

TECHNICAL CHANGES - MORE RESTRICTIVE (continued)

M.5 The number of required channels for the Group 1 MSIV Manual Initiation Function (CTS Table 3.3.2-1 Trip Function B.1 and B.2) has been increased from "1" per trip system to "2" per trip system in ITS Table 3.3.6.1-1 Function 1.f. The design of the Group 1 logic for MSIVs includes two manual push buttons per trip system, with one from each trip system being required to actuate the MSIVs. Currently, only one channel per trip system is required. Therefore, this part of the change is more restrictive on plant operation and will ensure MSIVs can be manually actuated.

M.6 CTS Table 4.3.2.1-1 specifies "R" (i.e., once per 18 months) for the CHANNEL CALIBRATION of Function A.1.c.3), Primary Containment Isolation - Main Steam Line Flow—High. ITS Table 3.3.6.1-1 requires a CHANNEL CALIBRATION of this same Function (ITS Table 3.3.6.1-1 Function 1.c) every 92 days. This change is required as a result of a surveillance history review performed to support surveillance interval extensions to 24 months. The differential pressure switches associated with this Function were shown to have a history of failures. Therefore, the CHANNEL CALIBRATION of the channels of this Function is currently being performed once per 92 days. This change represents an additional restriction on plant operation necessary to ensure the subject Function is maintained OPERABLE between CHANNEL CALIBRATIONS. |B

M.7 CTS Table 3.3.2-1, Trip Functions B.1 and B.2 require the Manual Initiation function for primary containment isolation valves in Groups 1, 2, 5, 6 and 7. Group 10 is added to be included with ITS Table 3.3.6.1-1 Function 2.g. The two channels associated with this Manual Initiation concurrently isolate Groups 2, 4, 7 and 10. Of these, only Groups 2, 4 and 7 are currently identified in CTS. Therefore, this change is more restrictive on plant operation and will ensure these PCIVs are included in the manual actuation capability.

TECHNICAL CHANGES - LESS RESTRICTIVE

"Generic"

LA.1 CTS 3.3.2 requires the Trip Setpoints to be set consistent with the values shown in the Trip Setpoint column of Table 3.3.2-2. CTS 3.3.2 Action a requires inoperable channels to be restored to OPERABLE status with trip setpoints adjusted consistent with the Trip Setpoint values. Trip Setpoints are operational details that are not directly related to the OPERABILITY of the instrumentation.

TECHNICAL CHANGES - LESS RESTRICTIVE

LA.3 (cont'd) to restore isolation capability (including tripping one of the affected trip systems). As such, the relocated details are not required to be in Technical Specifications to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the Bases Control Program described in Chapter 5 of the ITS.

LA.4 The detail in CTS 4.3.2.2 relating to methods (simulated automatic operations) for performing the LOGIC SYSTEM FUNCTIONAL TESTS are proposed to be relocated to the Bases. This detail is not necessary to ensure the OPERABILITY of the primary containment isolation instrumentation. The requirements of ITS 3.3.6.1 and proposed SR 3.3.6.1.5 are adequate to ensure the primary containment isolation instrumentation is maintained OPERABLE. Therefore, the relocated detail is not required to be in the ITS to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS.

LA.5 System design and operational details in CTS Table 3.3.2-1 (the Valve Groups operated by signal column, the logic description in Notes f, g, and h, and that the Manual Initiation Functions isolate the inboard and outboard valves) are proposed to be relocated to the Bases. However, a statement that the channels only input into one trip system is maintained as footnote (b) to ITS Table 3.3.6.1-1. Details relating to system design and operation are unnecessary in the LCO. These details are not necessary to ensure the OPERABILITY of the primary containment isolation instrumentation. The requirements of ITS 3.3.6.1 and the associated Surveillance Requirements are adequate to ensure the primary containment isolation instrumentation is maintained OPERABLE. Therefore, the relocated details are not required to be in the ITS to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS. |⚠

LA.6 The CTS Table 3.3.2-2 detail that the Allowable Value for the Reactor Vessel Pressure—High is corrected for cold water head with reactor vessel flooded (footnote "**") is proposed to be relocated to the Bases. These details are not necessary to be included in the Technical Specifications to ensure the OPERABILITY of the primary containment isolation instrumentation. The OPERABILITY requirements are adequately addressed in ITS 3.3.6.1 and the specified Allowable Values. Therefore, the relocated detail is not required to be in the ITS to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the Bases Control Program described in Chapter 5 of the ITS.

TECHNICAL CHANGES - LESS RESTRICTIVE

LB.2 (cont'd) may be placed in an inoperable status for up to 8 hours for required surveillance testing without placing the channel in the tripped condition provided that the redundant isolation valve, inboard or outboard, as applicable, in each line is OPERABLE and all required actuation instrumentation for that redundant valve is OPERABLE, or place the trip system in the tripped condition. The current words "provided at least one other OPERABLE channel in the same trip system is monitoring that parameter" are intended to ensure that the trip capability of the Function is maintained. However, it does not provide this assurance for all logic system designs. In addition, for those trips systems that have only one channel, the 8 hour allowance has been reduced to 6 hours and the wording has been simplified to require trip capability of the Function to be maintained. The reduction in the allowed out of service time from 8 hours to 6 hours is consistent with the specified reliability analyses. Therefore, the Note has been modified in ITS 3.3.6.1 (Note 2 to the Surveillance Requirements) to state "provided the associated Function maintains isolation capability." This is the intent of the current Note and is based on previously conducted reliability analyses (NEDC-31677-P-A, July 1990, and NEDC-30851-P-A, Supplement 2, March 1989). The results of the NRC review of these generic reliability analyses as it relates to LaSalle 1 and 2 is documented in the NRC Safety Evaluation Report (SER) dated August 2, 1995. The SER concluded that the generic reliability analyses are acceptable to LaSalle 1 and 2 and that LaSalle 1 and 2 meets all requirements of the NRC SERs accepting the generic reliability analyses.

LD.1 The Frequency for performing the LOGIC SYSTEM FUNCTIONAL TEST (LSFT) of CTS 4.3.2.2 (proposed SR 3.3.6.1.5), the ISOLATION SYSTEM RESPONSE TIME test of CTS 4.3.2.3 (proposed SR 3.3.6.1.6), and the CHANNEL FUNCTIONAL TEST (CFT) for the RWCU SLCS Initiation Function and the Manual Initiation Functions specified in CTS Table 4.3.2.1-1 (changed to LSFT in Discussion of Change A.12 above) has been extended from 18 months to 24 months. These SRs ensures that Isolation Actuation Instrumentation logic will function as designed to ensure proper response during an analyzed event. The proposed change will allow these Surveillances to extend their Surveillance Frequency from the current 18 month Surveillance frequency (i.e., a maximum of 22.5 months accounting for the allowable grace period specified in CTS 4.0.2 and proposed SR 3.0.2) to a 24-month Surveillance Frequency (i.e., a maximum of 30 months accounting for the allowable grace period specified in CTS 4.0.2 and proposed SR 3.0.2). This proposed change was evaluated in accordance with the guidance provided in NRC Generic Letter No. 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," dated April 2, 1991. Reviews of historical maintenance and surveillance data have shown that these tests

TECHNICAL CHANGES - LESS RESTRICTIVE

LD.1 (cont'd) normally pass their surveillances at the current frequency. An evaluation has been performed using this data and it has been determined that the effect on safety due to the extended Surveillance Frequency will be minimal.

Most instrument channels are tested on a more frequent basis during the operating cycle in accordance with CTS 4.3.2.1, the CFT. This testing of the isolation instrumentation ensures that a significant portion of the Isolation Actuation Instrumentation circuitry is operating properly and will detect significant failures of this circuitry. The PCIVs including the actuating logic is designed to be single failure proof and therefore, is highly reliable.

Based on the inherent system and component reliability and the testing performed during the operating cycle, the impact, if any, from this change on system availability is minimal. The review of historical surveillance data also demonstrated that there are no failures that would invalidate this conclusion. In addition, the proposed 24 month Surveillance Frequencies, if performed at the maximum interval allowed by proposed SR 3.0.2 (30 months) do not invalidate any assumptions in the plant licensing basis.

Furthermore, as stated in the NRC Safety Evaluation Report (dated August 2, 1993) relating to extension of the Peach Bottom Atomic Power Station, Unit Numbers 2 and 3 surveillance intervals from 18 to 24 months:

"Industry reliability studies for boiling water reactors (BWRs), prepared by the BWR Owners Group (NEDC-30936P) show that the overall safety systems' reliabilities are not dominated by the reliabilities of the logic system, but by that of the mechanical components, (e.g., pumps and valves), which are consequently tested on a more frequent basis. Since the probability of a relay or contact failure is small relative to the probability of mechanical component failure, increasing the Logic System Functional Test interval represents no significant change in the overall safety system unavailability."

Based on the above discussion, the impact, if any, of this change on system availability is minimal.

LE.1 The Frequency for performing the CHANNEL CALIBRATION Surveillance of current Surveillance 4.3.2.1 and Table 4.3.2.1-1 for trip functions A.1.a.1), A.1.a.2), A.1.a.3), A.1.b, A.1.e, A.1.f, A.2.a, A.2.b, A.2.c, A.2.d, A.3.a, A.3.b, A.3.c, A.3.e, A.3.f, A.3.g, A.3.h, A.3.i, a.3.j, A.3.k, A.4.b, A.4.c, A.4.d, A.4.e, A.4.f, A.4.g, A.4.h, A.6.a, and A.6.b have been extended to 24 months. The proposed change will allow this Surveillance to extend the

TECHNICAL CHANGES - LESS RESTRICTIVE

LE.1 (cont'd)

Trip Function A.2.a: Reactor Building Vent Exhaust Plenum Radiation - High (currently 18 months)

This function is performed by GE 194X927G01 detectors and GE 129B2802G011 radiation monitors. These instruments were evaluated utilizing a qualitative analysis (i.e., engineering judgment). The results of the analysis support a 24 month fuel cycle surveillance interval extension.

Trip Function A.2.d: Fuel Pool Vent Exhaust Radiation—High (currently 18 months)

This function is performed by GE 194X927G01 detectors, GE 129B2802G011 radiation monitors and Yokogawa 4156-500-32 recorder. These instruments were evaluated utilizing a qualitative analysis (i.e., engineering judgment). The results of the analysis support a 24 month fuel cycle surveillance interval extension.

Trip Function A.3.a: RWCU System Differential Flow - High (currently 18 months)

This function is performed by Rosemount 1153DB4, 1153DB5 Transmitters, Bailey 750 Square Root Extractors, Bailey 752 Summers, Bailey 745 Flow Switches, GE type 180 indicators, and Eagle Signal Division HP5 series Time Delay Relays. The Bailey 750 and 752 instruments and the GE 180 indicators were evaluated utilizing a qualitative analysis (i.e., engineering judgment). The Rosemount Transmitters', Bailey 745 Flow Switches', and Eagle Signal Division HP5 series Time Delay Relays' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Trip Function A.3.b: RWCU Heat Exchanger Area Temperature - High (currently 92 days)

This function is performed by thermocouples and Riley 86PEGF and 86VEFF temperature switches. The thermocouples are not calibratable, therefore, no drift evaluation was performed. The Riley instruments' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

TECHNICAL CHANGES - LESS RESTRICTIVE

LE.1 (cont'd) **Trip Function A.3.h**: RWCU Holdup Pipe Area Temperature - High (currently 92 days)

This function is performed by thermocouples and Riley 86PEGF temperature switches. The thermocouples are not calibratable, therefore, no drift evaluation was performed. The Riley instruments' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Trip Function A.3.i: RWCU Holdup Pipe Area Ventilation Differential Temperature - High (currently 92 days)

This function is performed by thermocouples and Riley 86VEFF temperature switches. The thermocouples are not calibratable, therefore, no drift evaluation was performed. The Riley instruments' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Trip Function A.3.j: RWCU Filter/Demineralizer Valve Room Area Temperature - High (currently 92 days)

This function is performed by thermocouples and Riley 86PEGF temperature switches. The thermocouples are not calibratable, therefore, no drift evaluation was performed. The Riley instruments' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Trip Function A.3.k: RWCU Filter/Demineralizer Valve Room Area Ventilation Differential Temperature - High (currently 92 days)

This function is performed by thermocouples and Riley 86VEFF temperature switches. The thermocouples are not calibratable, therefore, no drift evaluation was performed. The Riley instruments' drift was determined by quantitative analysis. The drift value determined was used in the development of,

TECHNICAL CHANGES - LESS RESTRICTIVE

LE.1 (cont'd) confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Trip Function A.4.a: RCIC Steam Line Flow - High Timer (currently 92 days)

This function is performed by Agastat Model ETR14D3BC Time Delay Relays. The time delay relays' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Trip Functions A.4.b: RCIC Steam Supply Pressure - Low (currently 92 days)

This function is performed by Static-O-Ring 6N6-B5-NX-C1A-JJTTX7 pressure switches. The Static-O-Ring pressure switches' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Trip Functions A.4.c: RCIC Turbine Exhaust Diaphragm Pressure - High (currently 92 days)

This function is performed by Static-O-Ring 6N6-B5-NX-C1A-JJTTX7 pressure switches. The Static-O-Ring pressure switches' drift was determined by quantitative analysis. The drift value determined was used in the development of, confirmation of, or revision to the current plant setpoint and the Technical Specification Allowable Value. The results of this analysis support a 24 month surveillance interval.

Trip Function A.4.d: RCIC Equipment Room Temperature - High (currently 92 days)

This function is performed by thermocouples and Riley 86PEGF and 86VEFF temperature switches. The thermocouples are not calibratable, therefore, no drift evaluation was performed. The Riley instruments' drift was determined by quantitative analysis. The drift value determined was used in the development

ADMINISTRATIVE (continued)

A.5 The information in the "*" footnote of CTS 3.3.7.1 is now provided by the definition of OPERABLE-OPERABILITY located in ITS Section 1.1 "Definitions" and therefore, it is not necessary to repeat it here. As such, this footnote is deleted as an administrative change.

A.6 The technical content of CTS 4.7.2.d.2 was divided into two Surveillances. The majority of this Surveillance is performed as proposed SR 3.3.7.1.4, a LOGIC SYSTEM FUNCTIONAL TEST (LSFT). The LSFT verifies that each signal functions properly. The actual system functional test portion is performed in the ITS 3.7.4 Surveillance Requirements. This will ensure that the entire system is tested with proper overlap.

TECHNICAL CHANGES - MORE RESTRICTIVE

M.1 The current allowance in CTS 3.3.7.1 ACTION a that provides 4 hours to adjust an Allowable Value (changed from Alarm/Trip Setpoint as described in Discussion of Change A.2 above) to within its limit prior to declaring the channel inoperable has been deleted. When the setpoint is not within its Allowable Value, the channel will be declared inoperable immediately. This will ensure the proper actions for an inoperable channel are taken, and is an additional restriction on plant operation.

M.2 CTS Table 3.3.7.1-1 Note "**", which allows a delay in entering the associated Action statement during performance of Surveillances, has been clarified to provide direct indication of the intent of the current wording. The current words "provided at least one other operable channel in the same Trip System is monitoring that Trip Function" are intended to ensure that the trip capability of the Function is maintained. However, it does not provide this assurance for this logic system design. The trip system is two-out-of-two, thus when one channel is inoperable, the trip system is not capable of starting the associated CRAF subsystem. However, the current note allows this to occur to both trip systems simultaneously. Therefore, the note has been modified in ITS 3.3.7.1 (Note to the Surveillance Requirements) to state "provided the associated Function maintains CRAF subsystem initiation capability." This is the intent of the current note and is based on previously conducted reliability analyses (GENE-770-06-1-A, December 1992). The logic design of the instrumentation is bounded by that analyzed in the reliability analysis and the conclusions of the analysis are applicable to the LaSalle 1 and 2 design. The results of the NRC review of this generic reliability analysis as it relates to LaSalle 1 and 2 is | △6

 A.1 ITS 3.3.8.1

3/4 3.3 EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

A.2

LIMITING CONDITION FOR OPERATION

LOP

LCO 3.3.8.1 3.3.3 The emergency core cooling system (ECCS) actuation instrumentation channels shown in Table 3.3.3-1 shall be OPERABLE with their trip setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3.3-2 and with EMERGENCY CORE COOLING SYSTEM RESPONSE TIME as shown in Table 3.3.3-3. LA.1 A.3

APPLICABILITY: As shown in Table 3.3.3-1. add proposed ACTIONS NOTE A.4

ACTION:

ACTION A

a. With an ECCS actuation (LOP, A.2) instrumentation channel trip setpoint less conservative than the value shown in the Allowable Values column of Table 3.3.3-2, declare the channel inoperable until the channel is restored to OPERABLE status with its trip setpoint adjusted consistent with the Trip Setpoint value. LA.1

b. With one or more ECCS actuation (LOP, A.2) instrumentation channels inoperable, take the ACTION required by Table 3.3.3-1.

< SEE ITS 3.3.5.1 >

c. With either ADS trip system "A" or "B" inoperable, restore the inoperable trip system to OPERABLE status within:

1. 7 days, provided that the HPCS and RCIC systems are OPERABLE.

2. 72 hours.

Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and reduce reactor steam dome pressure to less than or equal to 122 psig within the following 24 hours.

SURVEILLANCE REQUIREMENTS

LOP A.2

Note 1 to Surveillances 4.3.3.1 Each ECCS actuation instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations for the OPERATIONAL CONDITIONS and at the frequencies shown in Table 4.3.3.1-1. <see ITS 3.3.5.1>

LA.2

SR 3.3.8.1.5 4.3.3.2 LOGIC SYSTEM FUNCTIONAL TESTS and simulated automatic operation of all channels shall be performed at least once per 18 (24) months. LD.1 1B

4.3.3.3 The ECCS RESPONSE TIME of each ECCS trip function shown in Table 3.3.3-3 shall be demonstrated to be within the limit at least once per 18 months. Each test shall include at least one channel per trip system such that all channels are tested at least once every N times 18 months where N is the total number of redundant channels in a specific ECCS trip system.

A.3

LOP — A.2 Table 3.3.8.1-1

TABLE 3.3.3-1 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

FUNCTION

TRIP FUNCTION	MINIMUM OPERABLE CHANNELS PER TRIP FUNCTION[a]	APPLICABLE OPERATIONAL CONDITION	ACTION
C. DIVISION 3 TRIP SYSTEM			
1. HPCS SYSTEM			
a. Reactor Vessel Water Level - Low, Low, Level 2	4[b]	1, 2, 3, 4*, 5*	35
b. Drywell Pressure - High	4[b]	1, 2, 3	35
c. Reactor Vessel Water Level-High, Level 8	2[c]	1, 2, 3, 4*, 5*	32
d. Deleted			
e. Deleted			
f. Pump Discharge Pressure-High (Bypass)	1	1, 2, 3, 4*, 5*	31
g. HPCS System Flow Rate-Low (Permissive)	1	1, 2, 3, 4*, 5*	31
h. Manual Initiation	1/division	1, 2, 3, 4*, 5*	34

<SEE ITS 3.3.5.1>

D. LOSS OF POWER — LA.3

	TOTAL NO. OF INSTRUMENTS	INSTRUMENTS TO TRIP	MINIMUM OPERABLE INSTRUMENTS[d]	APPLICABLE OPERATIONAL CONDITIONS	ACTION
1. 4.16 kv Emergency Bus Undervoltage (Loss of Voltage)	2/bus	2/bus	2/bus	1, 2, 3, 4**, 5**	37
2. 4.16 kv Emergency Bus Undervoltage (Degraded Voltage)	2/bus	2/bus	2/bus	1, 2, 3, 4**, 5**	37

1a, 1b, 2.a, 2.b — 1.
1.c, 1.d, 1.e, 2.c, 2.d, 2.e — 2.
37 A and B (B) M.1

<SEE ITS 3.3.5.1>

(a) A channel instrument may be placed in an inoperable status for up to 6 hours during periods of required surveillance without placing the trip system/channel/instrument in the tripped condition provided at least one other OPERABLE channel/instrument in the same trip system is monitoring that parameter.

(b) Also actuates the associated division diesel generator.

(c) Provides signal to close HPCS pump discharge valve only on 2-out-of-2 logic.

NOTE 2 TO SURVEILLANCES (d) A channel/instrument may be placed in an inoperable status for up to 2 hours during periods of required surveillance without placing the trip system/channel/instrument in the tripped condition provided at least one other OPERABLE channel/instrument in the same trip system is monitoring that parameter.

<SEE ITS 3.3.5.1> * Applicable when the system is required to be OPERABLE per Specification 3.5.2 or 3.5.3.

Applicability ** Required when ESF equipment is required to be OPERABLE.

<SEE ITS 3.3.5.1> # Not required to be OPERABLE when reactor steam dome pressure is ≤ 122 psig.

M.2 — Provided the associated Function maintains LOP initiation capability

A.1

A.2 LOP

Table 3.3.8.1-1

TABLE 3.3.3-2 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION SETPOINTS

FUNCTION TRIP FUNCTION	TRIP SETPOINT (LA.2)	ALLOWABLE VALUE (LF.1)
C. DIVISION 3 TRIP SYSTEM		
1. HPCS SYSTEM		
a. Reactor Vessel Water Level - Low Low, Level 2	≥- 50 inches*	≥- 57 inches*
b. Drywell Pressure - High	≤ 1.69 psig	≤ 1.89 psig
c. Reactor Vessel Water Level - High, Level 8	≤ 55.5 inches*	≤ 56 inches*
d. Deleted		
e. Deleted		
f. Pump Discharge Pressure - High	≥ 120 psig	≥ 110 psig
g. HPCS System Flow Rate - Low	≥ 1000 gpm	≥ 900 gpm
h. Manual Intiation	NA	NA
D. LOSS OF POWER		
1. 4.16 kV Emergency Bus Undervoltage (Loss of Voltage)#		
a. 4.16 kV Buses	(LA.1)	(LF.1)
1) Divisions 1 and 2 (1.a, 1.b)	2625 ± 131 volts with ≤ 10 seconds time delay 2496 ± 125 volts with ≥ 4 seconds time delay	2625 ± 262 volts with ≤ 11 seconds time delay 2496 ± 250 volts with ≥ 3 seconds time delay
2) Division 3 (2.a and 2.b)	2870 ± 143 volts with ≤ 10 seconds time delay	2870 ± 287 volts with ≤ 11 seconds time delay

<SEE ITS 3.3.5.1> (C.1.a–c)

<SEE ITS 3.3.5.1>

*See Bases Figure B 3/4 3-1.

LA.3

#These are inverse time delay voltage relays or instantaneous voltage relays with a time delay. The voltages shown are the maximum that will not result in a trip. Lower voltage conditions will result in decreased trip times.

A.1 A B B

ITS 3.3.8.1

Table 3.3.8.1-1

LOP A.2

TABLE 3.3.3-2 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION SETPOINTS

Function TRIP FUNCTION	TRIP SETPOINT (LA.1)	ALLOWABLE VALUE (LF.1)
2. 4.16 kV Emergency Bus Undervoltage (Degraded Voltage)		
a. 4.16 kV Buses		
1) Divisions 1, 2 and 3 1.c, 1.d, 1.e, 2.c, 2.d, 2.e	≥3863 and ≤3877 volts with 10 ± 1 seconds time delay with LOCA signal or 5 ± 0.5 minutes time delay without LOCA signal	≥3814 and ≤3900 volts with 10 ± 1 seconds time delay with LOCA signal or 5 ± 0.5 minutes time delay without LOCA signal

B A.1 A

Page 5 of 14

ITS 3.3.8.1

LOP A.2

Table 3.3.8.1-1

TABLE 4.3.3.1-1 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

SR 3.3.8.1.1, SR 3.3.8.1.2
SR 3.3.8.1.3, SR 3.3.8.1.4

Function TRIP FUNCTION	CHANNEL CHECK	CHANNEL FUNCTIONAL TEST	CHANNEL CALIBRATION	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED
C. DIVISION 3 TRIP SYSTEM				
1. HPCS SYSTEM				
a. Reactor Vessel Water Level - Low Low, Level 2	S	Q	R	1, 2, 3, 4*, 5*
b. Drywell Pressure-High	NA	Q	Q	1, 2, 3
c. Reactor Vessel Water Level-High Level 8	S	Q	R	1, 2, 3, 4*, 5*
d. Deleted				
e. Deleted				
f. Pump Discharge Pressure-High	NA	Q	Q	1, 2, 3, 4*, 5*
g. HPCS System Flow Rate-Low	NA	Q	Q	1, 2, 3, 4*, 5*
h. Manual Initiation	NA	R	NA	1, 2, 3, 4*, 5*
D. LOSS OF POWER				
1.a, 1.b, 2.a, 2.b 1. 4.16 kV Emergency Bus Under-voltage (Loss of Voltage)	NA	NA	~~R~~ 24 months - 3, 4	1, 2, 3, 4**, 5**
1.c, 1.d, 1.e, 2.c, 2.d, 2.e 2. 4.16 kV Emergency Bus Under-voltage (Degraded Voltage)	NA	NA	R - 1, 2	1, 2, 3, 4**, 5**

<SEE ITS 3.3.5.1> (HPCS System)

B

L.D.1 L.E.1 M.1

B I

<SEE ITS 3.3.5.1>

\# Not required to be OPERABLE when reactor steam dome pressure is less than or equal to 122 psig.

* When the system is required to be OPERABLE after being manually realigned, as applicable, per Specification 3.5.2.

Applicability ** Required when ESF equipment is required to be OPERABLE.

INSTRUMENTATION LOP

3/4.3.3 EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

LIMITING CONDITION FOR OPERATION A.2

LOP LA.1

LCO 3.3.8.1 3.3.3 The emergency core cooling system (ECCS) actuation instrumentation channels shown in Table 3.3.3-1 shall be OPERABLE with their trip setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3.3-2 and with EMERGENCY CORE COOLING SYSTEM RESPONSE TIME as shown in Table 3.3.3-3. A.3

APPLICABILITY: As shown in Table 3.3.3-1. <see proposed Actions Note> A.4

ACTION: LOP A.2

ACTION A

a. With an ECCS actuation instrumentation channel trip setpoint less conservative than the value shown in the Allowable Values column of Table 3.3.3-2, declare the channel inoperable until the channel is restored to OPERABLE status with its trip setpoint adjusted consistent with the Trip Setpoint value. LA.1

b. With one or more ECCS actuation instrumentation channels inoperable, take the ACTION required by Table 3.3.3-1. LOP A.2

<SEE ITS 3.3.5.1>

c. With either ADS trip system "A" or "B" inoperable, restore the inoperable trip system to OPERABLE status within:

1. 7 days, provided that the HPCS and RCIC systems are OPERABLE.
2. 72 hours.

Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and reduce reactor steam dome pressure to less than or equal to 122 psig within the following 24 hours.

SURVEILLANCE REQUIREMENTS A.2

LOP

Note 1 to Surveillances 4.3.3.1 Each ECCS actuation instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations for the OPERATIONAL CONDITIONS and at the frequencies shown in Table 4.3.3.1-1. <See ITS 3.3.5.1>

LA.2

SR 3.3.8.1.5 4.3.3.2 LOGIC SYSTEM FUNCTIONAL TESTS and simulated automatic operation of all channels shall be performed at least once per 18 months. 24 LD.1 1B

4.3.3.3 The ECCS RESPONSE TIME of each ECCS trip function shown in Table 3.3.3-3 shall be demonstrated to be within the limit at least once per 18 months. Each test shall include at least one channel per trip system such that all channels are tested at least once every N times 18 months where N is the total number of redundant channels in a specific ECCS trip system.

A.3

LOP A.2

Table 3.3.8.1-1

TABLE 3.3.3-1 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

FUNCTION TRIP FUNCTION	MINIMUM OPERABLE CHANNELS PER TRIP FUNCTION [a]	APPLICABLE OPERATIONAL CONDITIONS	ACTION
C. DIVISION 3 TRIP SYSTEM			
1. HPCS SYSTEM			
<SEE ITS 3.3.5.1> a. Reactor Vessel Water Level - Low, Low, Level 2	4(b)	1, 2, 3, 4*, 5*	35
b. Drywell Pressure - High	4(b)	1, 2, 3	35
c. Reactor Vessel Water Level-High, Level 8	2(c)	1, 2, 3, 4*, 5*	32
d. Deleted			
e. Deleted			
f. Pump Discharge Pressure-High (Bypass)	1	1, 2, 3, 4*, 5*	31
g. HPCS System Flow Rate-Low (Permissive)	1	1, 2, 3, 4*, 5*	31
h. Manual Initiation	1/division	1, 2, 3, 4*, 5*	34

D. LOSS OF POWER

LA.3

	TOTAL NO. OF INSTRUMENTS	INSTRUMENTS TO TRIP	MINIMUM OPERABLE INSTRUMENTS(d)	APPLICABLE OPERATIONAL CONDITIONS	ACTION
1.a, 1.b, 2.a, 2.b — 1. 4.16 kV Emergency Bus Undervoltage (Loss of Voltage)	2/bus	2/bus	2/bus	1, 2, 3, 4**, 5**	37 A and B
1.c, 1.d, 1.e, 2.c, 2.d, 2.e — 2. 4.16 kV Emergency Bus Undervoltage (Degraded Voltage)	2/bus	2/bus	2/bus	1, 2, 3, 4**, 5**	37

M.1 (B)

TABLE NOTATION

<SEE ITS 3.3.5.1>
(a) A channel/instrument may be placed in an inoperable status for up to 6 hours during periods of required surveillance without placing the trip system/channel/instrument in the tripped condition provided at least one other OPERABLE channel/instrument in the same trip system is monitoring that parameter.
(b) Also actuates the associated division diesel generator.
(c) Provides signal to close HPCS pump discharge valve only on 2-out-of-2 logic.

Note 2 to Surveillances
(d) A channel/instrument may be placed in an inoperable status for up to 2 hours during periods of required surveillance without placing the trip system/channel/instrument in the tripped condition provided at least one other OPERABLE channel/instrument in the same trip system is monitoring that parameter.

<SEE ITS 3.3.5.1> * Applicable when the system is required to be OPERABLE per Specification 3.5.2 or 3.5.3.

Applicability ** Required when ESF equipment is required to be OPERABLE.

<SEE ITS 3.3.5.1> # Not required to be OPERABLE when reactor steam dome pressure is ≤ 122 psig.

M.2 Provided the associated Function maintains LOP initiation capability

A.1 ITS 3.3.8.1

Page 9 of 14

LOP A.2

Table 3.3.8.1-1

TABLE 3.3.3-2 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION SETPOINTS

A

FUNCTION TRIP FUNCTION	TRIP SETPOINT (LA.1)	ALLOWABLE VALUE (LF.1)
C. DIVISION 3 TRIP SYSTEM		
1. HPCS SYSTEM		
a. Reactor Vessel Water Level - Low Low, Level 2	>- 50 inches*	>- 57 inches*
b. Drywell Pressure - High	≤ 1.69 psig	≤ 1.89 psig
c. Reactor Vessel Water Level - High, Level 8	≤ 55.5 inches*	≤ 56 inches*
d. Deleted		
e. Deleted		
f. Pump Discharge Pressure - High	≥ 120 psig	≥ 110 psig
g. HPCS System Flow Rate - Low	≥ 1000 gpm	≥ 900 gpm
h. Manual Intiation	N.A.	N.A.
D. LOSS OF POWER		
1. 4.16 kV Emergency Bus Undervoltage (Loss of Voltage)#		
a. 4.16 kV Buses	(LA.2)	(LF.1)
1.a, 1.b 1) Divisions 1 and 2	2625 ± 131 volts with ≤ 10 second time delay 2496 ± 125 volts with ≥ 4 second time delay	2625 ± 262 volts with ≤ 11 second time delay 2496 ± 250 volts with ≥ 3 second time delay
2.a and 2.b 2) Division 3	2870 ± 143 volts with ≤ 10 second time delay	2870 ± 287 volts with ≤ 11 second time delay

<SEE ITS 3.3.5.1>

D B B

3/4 3-30

TABLE NOTATIONS

<SEE ITS 3.3.5.1>

*See Bases Figure B 3/4 3-1.

LA.3

#These are inverse time delay voltage relays or instantaneous voltage relays with a time delay. The voltages shown are the maximum that will not result in a trip. Lower voltage conditions will result in decreased trip times.

N.A. Not Applicable

<SEE ITS 3.3.5.1>

LOP A.2

Table 3.3.8.1-1

TABLE 3.3.3-2 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION SETPOINTS

Function TRIP FUNCTION	TRIP SETPOINT	ALLOWABLE VALUE
D. LOSS OF POWER (Continued)		
2. 4.16 kV Emergency Bus Undervoltage (Degraded Voltage)		
a. 4.16 kV Buses		
1) Divisions 1, 2 and 3 1.c, 1.d, 1.e, 2.c, 2.d, 2.e	≥3863 and ≤3877 volts with 10 ± 1 seconds time delay with LOCA signal or 5 ± 0.5 minutes time delay without LOCA signal	≥3814 and ≤3900 volts with 10 ± 1 seconds time delay with LOCA signal or 5 ± 0.5 minutes time delay without LOCA signal

LA.1

LF.1

A.1 (B)

(A)

Page 12 of 14

ITS 3.3.8.1

LOP A.2

Table 3.3.8.1-1

TABLE 4.3.3.1-1 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

SR 3.3.8.1.1, SR 3.3.8.1.2, SR 3.3.8.1.3, SR 3.3.8.1.4

B

FUNCTION TRIP FUNCTION	CHANNEL CHECK	CHANNEL FUNCTIONAL TEST	CHANNEL CALIBRATION	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED
<SEE ITS 3.3.5.1>				
C. DIVISION 3 TRIP SYSTEM				
1. HPCS SYSTEM				
a. Reactor Vessel Water Level - Low Low, Level 2	S	Q	R	1, 2, 3, 4*, 5*
b. Drywell Pressure-High	NA	Q	Q	1, 2, 3
c. Reactor Vessel Water Level-High Level 8	S	Q	R	1, 2, 3, 4*, 5*
d. Deleted				
e. Deleted				
f. Pump Discharge Pressure-High	NA	Q	Q	1, 2, 3, 4*, 5*
g. HPCS System Flow Rate-Low	NA	Q	Q	1, 2, 3, 4*, 5*
h. Manual Initiation	NA	R	NA	1, 2, 3, 4*, 5*
D. LOSS OF POWER				
1.a, 1.b, 2.a, 2.b — 1. 4.16 kV Emergency Bus Under-voltage (Loss of Voltage)	NA	NA	R	1, 2, 3, 4**, 5**
1.c, 1.d, 1.e, 2.c, 2.d, 2.e — 2. 4.16 kV Emergency Bus Under-voltage (Degraded Voltage)	NA	NA	R-1, L	1, 2, 3, 4**, 5**

24 months — 3, 4 LD.1 LE.1 M.1 B A.1

<SEE ITS 3.3.5.1>

TABLE NOTATIONS

#Not required to be OPERABLE when reactor steam dome pressure is less than or equal to 122 psig.
*When the system is required to be OPERABLE after being manually realigned, as applicable, per Specification 3.5.2.
**Required when ESF equipment is required to be OPERABLE.

Applicability

Page 14 of 14

ITS 3.3.8.1