WOLF CREEK
NUCLEAR OPERATING CORPORATION

Richard A. Muench
Vice President Engineering
and Information Services

MAR 8 2001

ET 01-0014

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Station P1-137
Washington, D. C. 20555

Subject: Docket No. 50-482: Revision 14 of the Wolf Creek Updated Safety Analysis Report

Gentlemen:

Enclosure 1 to this letter provides the submittal of the Wolf Creek Updated Safety Analysis Report (USAR), Revision 14. This submittal satisfies the Final Safety Analysis Report (FSAR) updating requirement of 10 CFR 50.71(e)(4). One copy of the entire USAR is being submitted on CD-ROM as allowed by NRC Regulatory Issue Summary (RIS) 2001-05, dated January 25, 2001.

Enclosure 2 to this letter provides those changes made to the Wolf Creek Generating Station (WCGS), Unit 1 Technical Requirements Manual (TRM) (Revisions 4 through 6) and includes a List of Effective Pages. The WCGS TRM is incorporated by reference into the USAR.

Attachment 1 to this letter provides information relative to changes in regulatory commitments. This information is provided in accordance with the guidance of Nuclear Energy Institute's NEI 99-04, "Guidelines for Managing NRC Commitments," Revision 0, July, 1999.

Attachment 2 to this letter describes specific technical changes that have been processed since issuance of the USAR, Revision 13. In addition to these technical changes, several editorial changes have been made and are included in this Revision 14. Several of the changes are the result of heightened awareness of USAR compliance and the USAR validation effort.

Attachment 3 to this letter provides a discussion of the changes made in TRM Revisions 4 through 6.

A053

No commitments are identified in this correspondence.

If you have any questions concerning this matter, please contact me at (620) 364-4034, or Mr. Tony Harris at (620) 364-4038.

Very truly yours,

Richard A. Muench

RAM/rlr

Attachment 1 - Commitment Changes
Attachment 2 - USAR Change Request
Attachment 3 - Revisions to the Technical Requirements Manual (TRM)
Enclosure 1 - Updated Safety Analysis Report
Enclosure 2 - TRM Replacement Pages

cc: J. N. Donohew (NRC), w/a, w/e
W. D. Johnson (NRC), w/a, w/e
E. W. Merschoff (NRC), w/a, w/e
Senior Resident Inspector (NRC), w/a, w/e

STATE OF KANSAS)
) **SS**
COUNTY OF COFFEY)

Richard A. Muench, of lawful age, being first duly sworn upon oath says that he is Vice President Engineering and Information Services of Wolf Creek Nuclear Operating Corporation; that he has read the foregoing document and knows the contents thereof; that he has executed the same for and on behalf of said Corporation with full power and authority to do so; and that the facts therein stated are true and correct to the best of his knowledge, information and belief.

By R A Muench

Richard A. Muench
Vice President Engineering
and Information Services

SUBSCRIBED and sworn to before me this 8th day of March, 2001.

Rhonda L. Rodgers
Notary Public

NOTARY PUBLIC
STATE OF KANSAS
RHONDA L. RODGERS
My Appt. Exp. 5-11-2002

Expiration Date May 11, 2002

COMMITMENT CHANGES

Commitment No.: 1995-137

Commitment Description: Letter WM 95-0087, dated May 19, 1995, "RAI for Completion of Commitment to NRC GL 89-10," states: "WCNOC has committed to testing the following MOV's every five years: EMHV8801A, EMHV8807B, EJHV8701A, BGHV8111, and ALHV0007." The commitment has been deleted based upon the following explanation. This commitment was made prior to the issuance of Generic Letter 96-05, Periodic Verification (PV), as part of the close-out to Generic Letter 89-10. WCNOC tested the 5 specified MOV's, and later committed to the implementation of a PV program as well as active participation in the Joint Owners Group (JOG) differential pressure (D/P) testing program. Letter WO 99-0060 issued in July, 1999, re-enforced WCNOC's commitment to PV which basically implements the long-term testing commitments beyond Generic Letter 89-10. This commitment can be deleted, based on successful completion of the Refuel VIII testing, the implementation of the PV program, and the active participation in the JOG D/P testing matrix. The program requirements are carried in Procedure AP 23D-001, "Motor Operated Valve Program."

Commitment No.: 1995-138

Commitment Description: Letter WM 95-0087, dated May 19, 1995, "RAI for Completion of Commitment to NRC GL 89-10," states: "Five butterfly valves which were tested in Refuel VIII to validate design assumptions will either have to be follow-up tested before the completion of RFXI, or the design assumptions will have to be verified." The commitment has been superseded by a subsequent commitment in letter ET 97-0024 which encompasses the programmatic testing of these valves. This commitment was made prior to the issuance of Generic Letter 96-05, "Periodic Verification," as part of the close-out to Generic Letter 89-10. WCNOC tested the 5 specified MOV's, and later committed to the implementation of a Periodic Verification (PV) program as well as active participation in the Joint Owners Group (JOG) differential pressure (D/P) testing program. Letter WO 99-0060 issued in July, 1999, documents the acceptance of the butterfly testing program. This commitment can be deleted based on successful completion of the Refuel VIII testing, the implementation of the PV program, and the active participation in the JOG D/P testing matrix. Procedure AP 23D-001, "Motor Operated Valve Program," carries the program requirements.

Commitment No.: 1996-067

Commitment Description: Letter WM 96-0038, dated March 15, 1996, on the WCGS icing event restart issues, states: "The Manager Maintenance issued letter MD 96-0014, dated March 15, 1996, placing into effect a requirement that a separate and knowledgeable individual responsible for oversight be assigned for unplanned corrective maintenance activities on the Turbine-Driven Auxiliary Feedwater Pump (TDAFWP) and the Emergency Diesel Generators (EDGs). This has been directed for the purpose of providing extra vigilance to assure the correctness of maintenance activities, and equipment reliability. The efficacy of this oversight will be evaluated in 6 months. This action also provides added oversight on adherence to work instructions, use of Stop-Think-Act-Review (STAR) at the work location, and the use of

questioning attitudes. An individual providing oversight, whose sole duty is to ensure correctness of work being done, will be assigned to oversee TDAFWP work (see long term corrective action). This action will be completed prior to restart from RFVIII." Letter WM 96-0038 further stated that refinements to the corrective actions would be made, as appropriate, based upon technical reviews or discovery of new information.

This commitment was changed March 13, 2000 as referenced in letter WM 96-0081. The commitment in letter WM 96-0081 is summarized as follows: The issuance of interoffice correspondence letter MD 96-0014 by the Manager Maintenance placed into effect a requirement that an independent supervisory oversight individual be assigned for unscheduled corrective maintenance activities on the TDAFWP and the EDGs. The purpose of this directive was to provide extra vigilance to ensure correctness of maintenance activities and equipment reliability. The effectiveness of this oversight and the need to continue will be evaluated during the fourth quarter 1996.

The follow-up closure to the database stated that "Refinements to the corrective actions discussed in the statement will be made, as appropriate, based upon technical reviews or discovery of new information." The oversight process was re-evaluated at a later date and was retained based on requirements rather than functional effectiveness. Additionally, further clarifications evolved to define the oversight for "unplanned and emergent corrective maintenance" on the same components. Given the recent increased level of tools (computer programs for work planning), training, knowledge, and skill of the Maintenance staff, this commitment can be further modified. Based on the discretion of the Manager Maintenance, an independent oversight may be assigned to any maintenance task on any highly critical plant component for any unplanned or emergent corrective maintenance.

Considering the aforementioned improvements, the requirement for the assignment of an independent oversight in recent years has provided little, if any, added effectiveness. Additionally, the department has spent critical time finding an independent oversight person that could have been better spent focusing on the problem at hand. Therefore, the requirement for independent oversight program should be optional depending on the nature of the tasks and should no longer be required. The proposed commitment change makes the independent oversight person an option for ANY maintenance activity, rather than a requirement for only unscheduled corrective maintenance on the TDAFWP and the EDGs. Maintenance can still assign independent oversight to these components under any circumstances, as needed. Therefore, though the commitment is changed from a requirement on these components to an option on any maintenance activity, this change is not considered a reduction in commitment.

USAR Change Request	Description

00-003 **REVISE THE USAR TO CORRECT STATEMENTS DEFINING PLANT SAFETY REVIEW COMMITTEE RESPONSIBILITIES.**

Page: 17.2-47 Page: 13.4-1

00-004 **REVISE THE USAR TO CORRECT AN INCONSISTENCY, AS IDENTIFIED BY THE FIDELITY EFFORT, WITHIN THE USAR REGARDING THE OPERATION OF THE FUEL OIL PUMP IN THE EVENT OF A FUEL OIL/LUBE OIL FIRE.**

Page: 9.5B-189 Page: 9.5B-187

00-005 **REVISE THE USAR FOR CLARITY, ACCURACY, AND CONSISTENCY AND CORRECT EDITORIAL ERRORS WITH DESIGN DOCUMENTS AND DESIGN PROVISIONS FOR THE FIRE PROTECTION SYSTEM.**

Page: 9.5B-165	Page: 9.5B-114	Page: 9.5B-122	Page: 9.5B-132	Page: 9.5B-139
Page: 9.5B-142	Page: 9.5B-146	Page: 9.5B-148	Page: 9.5B-151	Page: 9.5B-112
Page: 9.5B-158	Page: 9.5B-195	Page: 9.5B-166	Page: 9.5B-170	Page: 9.5B-4
Page: 9.5B-172	Page: 9.5B-178	Page: 9.5B-179	Page: 9.5B-180	Page: 9.5-4
Page: 9.5B-190	Page: 9.5B-191	Page: 9.5B-194	Page: 9.5B-156	

Table: 9.5A-1 Sheet: 37

00-009 **REVISE THE USAR TO INCORPORATE THE DECAY HEAT GENERATION VALUE AT 20 HOURS AFTER REACTOR SHUTDOWN AND TO MAKE A CLARIFICATION CHANGE.**

Page: 5.0-vii

Table: 5.4-7 Sheet: 1

00-012 **REVISE THE USAR TO REMOVE A REFERENCE TO A SPECIFIC VENDOR OF THERMAL INSULATION.**

Page: 6.2-45

00-013 **REVISE THE USAR TO CORRECT FIRE RATINGS.**

Page: 9.5B-97

Figure: 9.5.1-2 Sheet: 1

USAR Change Request	Description

00-014 **REVISE THE USAR TO INCORPORATE CHANGES DUE TO REVISION 0 OF THE RADIOLOGICAL EMERGENCY RESPONSE PLAN.**

Page: 18.1-25 Page: 13.3-1 Page: 13.2-22 Page: 13.1-10 Page: 12.5-4
Page: 2.1-4

00-015 **REVISE THE USAR TO CORRECT A TYPOGRAPHICAL ERROR.**

Figure: 9.3-8 Sheet: 3

00-016 **REVISE THE USAR TO CHANGE THE DESCRIPTIONS OF CERTAIN FIRE AREAS.**

Page: 9.5B-182 Page: 9.5B-69 Page: 9.5B-45

00-017 **REVISE THE USAR TO MAKE VARIOUS EDITORIAL CORRECTIONS AND CLARIFICATION CHANGES.**

Page: 7.0-ix Page: 7.7-35 Page: 7.7-31 Page: 7.7-30 Page: 7.7-15

Table: 7.7-5 Sheet: 1 Table: 7.7-4 Sheet: 3 Table: 7.7-4 Sheet: 1

00-018 **REVISE THE USAR TO MAKE NUMEROUS ADMINISTRATIVE CHANGES AND TO INCORPORATE INFORMATION MISSED BY A PREVIOUS CHANGE.**

Page: 11.5-18 Page: 11.5-15 Page: 11.5-9 Page: 11.5-6 Page: 11.5-5

Table: 11.5-4 Sheet: 1 Table: 11.5-3 Sheet: 1 Table: 11.5-2 Sheet: 1
Table: 11.5-1 Sheet: 2 Table: 11.5-1 Sheet: 1 Table: 12.3-2 Sheet: 1

00-019 **REVISE THE USAR TO CORRECT AN INDICATED POSITION OF A VALVE ON A CONTROLLED DRAWING THAT WAS INADVERTENTLY MODIFIED BY THE PREVIOUS REVISION.**

Figure: 9.3-8 Sheet: 1

00-020 **REVISE THE USAR TO REFLECT A CHANGE IN ORGANIZATION DUE TO THE RESIGNATION OF THE MANAGER LICENSING AND CORRECTIVE ACTION.**

Page: 18.1-17 Page: 18.1-16 Page: 17.2-47 Page: 17.2-46 Page: 13.1-21
Page: 13.1-15 Page: 13.1-14 Page: 13.1-6 Page: 13.1-5

Figure: 13.1-3 Sheet: 1 Figure: 13.1-4 Sheet: 1 Figure: 13.1-2d Sheet: 1
Figure: 13.1-2c Sheet: 1 Figure: 13.1-2b Sheet: 1 Figure: 13.1-2a Sheet: 1
Figure: 13.1-2 Sheet: 1 Figure: 13.1-1 Sheet: 1

USAR Change Request	Description

00-021 **REVISE THE USAR TO CORRECT VARIOUS EDITORIAL AND TYPOGRAPHICAL ERRORS AS IDENTIFIED BY THE USAR FIDELITY REVIEW EFFORT AND A REVIEW OF REVISION 13 TO THE USAR.**

Page: 5.4-28 Page: 1.0-v Page: 1.0-vii Page: 1.0-viii Page: 1.2-17
Page: 1.2-21 Page: 1.2-22 Page: 1.0-iii Page: 1.7-1 Page: 1.0-vi
Page: 5.4-46 Page: 10.0-vii Page: 13.0-iv Page: 13.4-2 Page: 13.5-5
Page: 17.2-45 Page: 18.1-11 Page: 260-3 Page: 450-3 Page: 1.2-23

Table: 13.5-4 Sheet: 1 Table: 13.5-3 Sheet: 1 Table: 6.3-1 Sheet: 2
Table: 5.2-5 Sheet: 1

Figure: 15.1-13 Sheet: 1 Figure: 10.4-5 Sheet: 1

00-022 **REVISE THE USAR TO UPDATE WOLF CREEK'S DISCUSSIONS PERTAINING TO REGULATORY GUIDE COMMITMENTS AS DISCUSSED IN THE USAR.**

Page: 4.4-36 Page: 4.2-45 Page: 3A-60 Page: 3A-57 Page: 3A-55
Page: 3A-26 Page: 5.3-12 Page: 3A-5

Table: 9.4-3 Sheet: 3 Table: 9.4-2 Sheet: 17 Table: 9.4-2 Sheet: 16
Table: 9.4-2 Sheet: 9 Table: 9.4-2 Sheet: 8 Table: 1.6-2 Sheet: 12

00-023 **REVISE THE USAR TO CLARIFY PORTIONS OF CHAPTER 18 AS HISTORICAL AND MAKE OTHER CLARIFICATION CHANGES.**

Page: 18.2-103 Page: 18.2-81 Page: 18.2-67 Page: 18.2-58 Page: 18.2-57
Page: 18.2-43 Page: 18.2-38 Page: 18.2-37 Page: 18.0-1

00-024 **REVISE THE USAR TO UPDATE WOLF CREEK'S COMMITMENT TO REGULATORY GUIDES 1.129 AND 1.32 TO REFERENCE A LATER VERSION OF AN IEEE STANDARD.**

Page: 8.3-50 Page: 8.3-47 Page: 8.3-45 Page: 8.3-44 Page: 8.3-43
Page: 8.1-7 Page: 3A-55 Page: 3A-14

00-025 **REVISE THE USAR TO INDICATE A CHANGE TO EXEMPTIONS FROM PHYSICAL SEPARATION REQUIREMENTS.**

Page: 8.3-39

00-026 **REVISE THE USAR TO REFLECT MORE ACCURATELY WOLF CREEK TO NRC CORRESPONDENCE AND A COMMITMENT.**

Page: 6.3-6

USAR Change Request	Description

00-027 **REVISE THE USAR TO REFLECT THE CHANGE-OUT OF A DOMESTIC WATER HEATER SKID.**

Figure: 9.2-5a Sheet: 1

00-028 **REVISE THE USAR TO REMOVE INCOMPLETE AND MISLEADING WORDING REGARDING QUALIFICATION CRITERIA FOR INDIVIDUALS WHO ASSIST IN THE REVIEW OF ONGOING REVISIONS TO THE FIRE PROTECTION SYSTEM.**

Table: 9.5A-1 Sheet: 2

00-030 **REVISE THE USAR TO REMOVE INACCURATE DESCRIPTION REMARKS REGARDING CONTAINMENT ISOLATION SIGNALS.**

Page: 7.3-34

00-032 **REVISE THE USAR TO CLARIFY THE VERTICAL CHASE ZONES ONLY ARE LEAK TIGHT IN THE REFUELING AND SPENT FUEL POOL LEAK DETECTION SYSTEMS.**

Page: 9.3-16

00-033 **REVISE THE USAR TO MAKE EDITORIAL CONSISTENCY CORRECTIONS.**

Table: 7.4-2 Sheet: 9 Table: 7.4-2 Sheet: 7

00-034 **REVISE THE USAR TO CHANGE THE TITLE OF SUPERINTENDENT MAINTENANCE PLANNING TO SUPERINTENDENT ROTATING CREWS.**

Figure: 13.1-2a Sheet: 1

00-035 **REVISE THE USAR TO INCORPORATE CHANGES THAT SHOULD HAVE BEEN UPDATED VIA A PLANT MODIFICATION.**

Page: 9.1-38

Figure: 9.1-7 Sheet: 1 Figure: 9.1-6 Sheet: 1

00-037 **REVISE THE USAR TO CORRECT AN EDITORIAL ERROR THAT WAS INCURRED DUE TO A MISUNDERSTANDING OF A PREVIOUSLY PROPOSED CHANGE.**

Table: 9.2-4 Sheet: 2A

USAR Change Request	Description

00-038 **REVISE THE USAR TO CORRECT INFORMATION ABOUT A STEAM GENERATOR ATMOSPHERIC RELIEF OR SAFETY VALVE EVENT.**

Table: 15.1-1 Sheet: 2

00-039 **REVISE THE USAR TO CLARIFY THAT IT IS ACCEPTABLE TO PERFORM INSERVICE INSPECTION EXAMINATIONS WITH THE UNIT OPERATING ONLINE PROVIDED OPERATIONAL AND RADIOLOGICAL CONDITIONS PERMIT.**

Page: 6.6-4 Page: 5.2-31

00-040 **REVISE THE USAR TO CORRECT TABLE OF CONTENTS TITLES.**

Page: 9.0-xii Page: 9.0-xiv Page: 9.0-xiii Page: 9.0-i

00-041 **REVISE THE USAR TO REFLECT AN ORGANIZATIONAL CHANGE FOR THE MANAGER TRAINING.**

Page: 13.1-21

00-042 **REVISE THE USAR TO REFLECT AN ORGANIZATIONAL CHANGE FOR THE MANAGER INTEGRATED PLANT SCHEDULING.**

Page: 13.1-20

USAR Change Request	Description

00-043 **REVISE THE USAR TO CLARIFY THE TYPES OF SAFE SHUTDOWN.**

Page: 7.5-11	Page: 15.7-9	Page: 3A-58	Page: 3B-2	Page: 5.0-v
Page: 5.0-vii	Page: 7.0-iii	Page: 7.1-3	Page: 3.11(B)-1	Page: 7.5-10
Page: 3.6-17	Page: 7.6-13	Page: 7A-1	Page: 8.2-4	Page: 8.2-6
Page: 8.2-10	Page: 8.3-5	Page: 9.5-46	Page: 9.5B-7	Page: 9.5B-8
Page: 1.1-4	Page: 7.5-1	Page: 3.5-1	Page: 1.2-13	Page: 1.2-20
Page: 1.2-21	Page: 2.5-246	Page: 2.5-248	Page: 3.1-1	Page: 3.1-9
Page: 3.1-16	Page: 3.11(B)-2	Page: 3.3-1	Page: 18.2-43	Page: 3.5-4
Page: 3.5-9	Page: 3.5-12	Page: 3.5-18	Page: 3.6-1	Page: 3.6-3
Page: 3.6-4	Page: 3.6-7	Page: 3.6-8	Page: 3.6-9	Page: 3.2-4
Page: 7.0-ii	Page: 9.2-14	Page: 12.3-17	Page: 9.2-36	Page: 9.3-35
Page: 9.3-36	Page: 9.3-38	Page: 9.3-46	Page: 9.3-63	Page: 7.0-x
Page: 9.3-68	Page: 9.2-13	Page: 7.0-ix	Page: 7.0-iv	Page: 5.4A-1
Page: 5.4A-2	Page: 5.4A-3	Page: 5.4A-4	Page: 5.4A-5	Page: 5.4A-6
Page: 5.4A-7	Page: 5.4A-8	Page: 9.3-67	Page: 7.4-6	Page: 18.2-74
Page: 18.2-93	Page: 280-1	Page: 280-2	Page: 280-4	Page: 7.4-1
Page: 7.4-2	Page: 7.4-3	Page: 9.2-31	Page: 7.4-5	Page: 9.2-10
Page: 7.4-7	Page: 7.4-8	Page: 7.4-9	Page: 7.4-10	Page: 7.4-11
Page: 7.4-12	Page: 7.4-13	Page: 7.4-14	Page: 7.4-15	Page: 7.4-16
Page: 7.4-4				

Table: 3B-1 Sheet: 29	Table: 3B-1 Sheet: 19	Table: 7.1-2 Sheet: 9		
Table: 7.1-2 Sheet: 6	Table: 7.1-2 Sheet: 5	Table: 7.1-2 Sheet: 2		
Table: 7.1-2 Sheet: 1	Table: 7.5-2 Sheet: 1	Table: 3B-1 Sheet: 30		
Table: 7.5-2 Sheet: 2	Table: 3B-1 Sheet: 28	Table: 3B-1 Sheet: 27		
Table: 3B-1 Sheet: 26	Table: 3B-1 Sheet: 25	Table: 3B-1 Sheet: 24		
Table: 3B-1 Sheet: 23	Table: 3B-1 Sheet: 22	Table: 3B-1 Sheet: 21		
Table: 7.4-2 Sheet: 6	Table: 7.1-1 Sheet: 1	Table: 7.4-2 Sheet: 1		
Table: 3.2-3 Sheet: 6	Table: 7.4-2 Sheet: 4	Table: 7.4-2 Sheet: 3		
Table: 7.4-2 Sheet: 2	Table: 7.4-1.1 Sheet: 2	Table: 7.4-6 Sheet: 1		
Table: 7.4-5 Sheet: 1	Table: 7.1-2 Sheet: 10	Table: 7.4-3 Sheet: 1		
Table: 3B-1 Sheet: 18	Table: 7.4-1 Sheet: 1	Table: 7.4-1.2 Sheet: 1		
Table: 7.4-1.1 Sheet: 1	Table: 9.5A-1 Sheet: 3	Table: 9.3-10 Sheet: 27		
Table: 8.3-4 Sheet: 1	Table: 7A-3 Sheet: 3.3	Table: 7A-3 Sheet: 7.1		
Table: 7.5-2 Sheet: 3	Table: 7.4-4 Sheet: 1	Table: 3.6-4 Sheet: 15		
Table: 3.6-4 Sheet: 101	Table: 3B-1 Sheet: 20	Table: 3.6-4 Sheet: 35		
Table: 3.6-4 Sheet: 27	Table: 3.6-4 Sheet: 24	Table: 3.6-4 Sheet: 23		
Table: 3.6-4 Sheet: 20	Table: 7.4-2 Sheet: 7	Table: 3.6-4 Sheet: 16		
Table: 3.6-4 Sheet: 102	Table: 3.6-4 Sheet: 14	Table: 3.6-4 Sheet: 12		

USAR Change Request **Description**

Table: 3.6-4	Sheet: 11	Table: 3.6-4	Sheet: 10	Table: 3.6-4	Sheet: 9
Table: 3.6-4	Sheet: 4	Table: 3.6-4	Sheet: 3	Table: 3.6-4	Sheet: 2
Table: 3.6-4	Sheet: 1	Table: 3.6-4	Sheet: 17	Table: 3B-1	Sheet: 8
Table: 3B-1	Sheet: 17	Table: 3B-1	Sheet: 16	Table: 3B-1	Sheet: 15
Table: 3B-1	Sheet: 14	Table: 3B-1	Sheet: 13	Table: 3B-1	Sheet: 12
Table: 3B-1	Sheet: 11	Table: 3.6-4	Sheet: 37	Table: 3B-1	Sheet: 9
Table: 3.6-4	Sheet: 107	Table: 3B-1	Sheet: 7	Table: 3B-1	Sheet: 6
Table: 3B-1	Sheet: 5	Table: 3B-1	Sheet: 4	Table: 3B-1	Sheet: 3
Table: 3B-1	Sheet: 2	Table: 3B-1	Sheet: 1	Table: 3.6-4	Sheet: 109
Table: 3.6-4	Sheet: 108	Table: 3B-1	Sheet: 10	Table: 7.4-4	Sheet: 17
Table: 7.4-6	Sheet: 8	Table: 7.4-6	Sheet: 30	Table: 7.4-6	Sheet: 6
Table: 7.4-6	Sheet: 5	Table: 7.4-6	Sheet: 4	Table: 7.4-6	Sheet: 3
Table: 7.4-6	Sheet: 2	Table: 7.4-4	Sheet: 7	Table: 7.4-4	Sheet: 18
Table: 7.4-6	Sheet: 9	Table: 7.4-4	Sheet: 16	Table: 7.4-4	Sheet: 15
Table: 7.4-4	Sheet: 14	Table: 7.4-4	Sheet: 13	Table: 7.4-4	Sheet: 12
Table: 7.4-4	Sheet: 11	Table: 7.4-4	Sheet: 10	Table: 7.4-2	Sheet: 5
Table: 7.4-4	Sheet: 8	Table: 7.4-4	Sheet: 19	Table: 7.4-6	Sheet: 20
Table: 7.4-6	Sheet: 29	Table: 7.4-6	Sheet: 28	Table: 7.4-6	Sheet: 27
Table: 7.4-6	Sheet: 26	Table: 7.4-6	Sheet: 25	Table: 7.4-6	Sheet: 24
Table: 7.4-6	Sheet: 23	Table: 7.4-6	Sheet: 7	Table: 7.4-6	Sheet: 21
Table: 7.4-6	Sheet: 10	Table: 7.4-6	Sheet: 19	Table: 7.4-6	Sheet: 18
Table: 7.4-6	Sheet: 17	Table: 7.4-6	Sheet: 16	Table: 7.4-6	Sheet: 15
Table: 7.4-6	Sheet: 14	Table: 7.4-6	Sheet: 13	Table: 7.4-6	Sheet: 12
Table: 7.4-6	Sheet: 11	Table: 7.4-6	Sheet: 22	Table: 5.4A-1	Sheet: 2
Table: 5.4A-2	Sheet: 1	Table: 7.4-4	Sheet: 9	Table: 5.4A-1	Sheet: 9
Table: 5.4A-1	Sheet: 8	Table: 5.4A-1	Sheet: 7	Table: 5.4A-1	Sheet: 6
Table: 5.4A-1	Sheet: 5	Table: 7.4-4	Sheet: 6	Table: 5.4A-1	Sheet: 3
Table: 5.4A-2	Sheet: 2	Table: 5.4A-1	Sheet: 1	Table: 7.4-3	Sheet: 5
Table: 7.4-3	Sheet: 4	Table: 7.4-3	Sheet: 3	Table: 7.4-3	Sheet: 2
Table: 7.4-2	Sheet: 11	Table: 7.4-2	Sheet: 10	Table: 7.4-2	Sheet: 9
Table: 7.4-2	Sheet: 8	Table: 5.4A-1	Sheet: 4	Table: 5.4A-3	Sheet: 8
Table: 7.4-4	Sheet: 5	Table: 7.4-4	Sheet: 4	Table: 7.4-4	Sheet: 3
Table: 7.4-4	Sheet: 2	Table: 5.4A-3	Sheet: 13	Table: 5.4A-3	Sheet: 12
Table: 5.4A-3	Sheet: 11	Table: 5.4A-1	Sheet: 10	Table: 5.4A-3	Sheet: 9
Table: 5.4A-2	Sheet: 3	Table: 5.4A-3	Sheet: 7	Table: 5.4A-3	Sheet: 6
Table: 5.4A-3	Sheet: 5	Table: 5.4A-3	Sheet: 4	Table: 5.4A-3	Sheet: 3
Table: 5.4A-3	Sheet: 2	Table: 5.4A-3	Sheet: 1	Table: 5.4A-2	Sheet: 5
Table: 5.4A-2	Sheet: 4	Table: 5.4A-3	Sheet: 10		

USAR Change Request	Description

00-044 **REVISE THE USAR TO CORRECT FIGURES FOR ACCURACY AND CONSISTENCY WITH DESIGN DOCUMENTS AND THE FIRE HAZARDS ANALYSES.**

Figure: 9.5.1-2 Sheet: 4 Figure: 9.5.1-2 Sheet: 2

00-045 **REVISE THE USAR TO CORRECT FIGURE DESCRIPTIONS THAT DID NOT MATCH THE DETAIL DRAWINGS.**

Figure: 3.8-129 Sheet: 1 Figure: 3.8-128 Sheet: 1 Figure: 3.8-127 Sheet: 1
Figure: 3.8-126 Sheet: 1

00-046 **REVISE THE USAR TO REFLECT THE PHYSICAL LAYOUT OF THE NEW FUEL ELEVATOR DRIVE MECHANISM IN THE PLANT.**

Page: 9.1-42 Page: 9.1-41 Page: 9.1-34

Figure: 9.1-11 Sheet: 1

00-047 **REVISE THE USAR TO CORRECT A POSITION SWITCH ASSET NUMBER ON A CONTROLLED DRAWING THAT WAS INADVERTENTLY CHANGED BY A PREVIOUS DRAWING REVISION.**

Figure: 10.4-6 Sheet: 4

00-048 **REVISE THE USAR TO CORRECT A RETURN LINE NUMBER ON A CONTROLLED DRAWING THAT WAS INADVERTENTLY MISSED BY A PREVIOUS DRAWING REVISION.**

Figure: 9.4-2 Sheet: 2

00-049 **REVISE THE USAR TO CORRECT A MISLABELED EQUIPMENT NUMBER ON A CONTROLLED DRAWING THAT WAS INADVERTENTLY CHANGED BY A PREVIOUS REVISION.**

Figure: 9.5.7-1 Sheet: 2

00-050 **REVISE THE USAR TO REMOVE A VALVE IDENTIFIER AND CORRECT A LINE NUMBER ON A CONTROLLED DRAWING THAT WERE INCORRECT DUE TO MISTAKES MADE DURING PREVIOUS REVISIONS.**

Figure: 9.4-1 Sheet: 3

USAR Change Request	Description

00-051 **REVISE THE USAR TO CORRECT EDITORIAL ERRORS AND REMOVE (Q) INDICATORS ON A CONTROLLED DRAWING.**

Figure: 9.4-1 Sheet: 1

00-052 **REVISE THE USAR TO BRING DESIGN DOCUMENTATION UP TO DATE WITH CURRENT PLANT CONFIGURATION IN REGARDS TO REFUELING EQUIPMENT LAYDOWN AREAS.**

Figure: 1.2-14 Sheet: 1 Figure: 1.2-13 Sheet: 1

00-053 **REVISE THE USAR TO CORRECT A LINE NUMBER AND A LINE CLASS BREAK INDICATOR ON A CONTROLLED DRAWING THAT WERE INADVERTENTLY CHANGED DURING PREVIOUS REVISIONS.**

Figure: 5.4-7 Sheet: 1

00-054 **REVISE THE USAR TO CORRECT THE CONFIGURATION OF A SUCTION PIPE LINE ON A CONTROLLED DRAWING.**

Figure: 10.4-12 Sheet: 4

00-055 **REVISE THE USAR TO RESTORE THE CORRECT ASSET NUMBERS TO THE RESIDUAL HEAT REMOVAL PUMP "A" DISCHARGE ISOLATION VALVE AND AN INSTRUMENTATION CALL-OUT ON A CONTROLLED DRAWING.**

Figure: 5.4-7 Sheet: 1

00-056 **REVISE THE USAR TO CORRECT AN INADVERTENTLY MISLABELED DRAIN VALVE ON A FIGURE DURING CONVERSION OF THE HARD-COPY FIGURE TO AN ELECTRONIC FILE.**

Figure: 6.2.4-1 Sheet: 36

00-057 **REVISE THE USAR TO CORRECT AN ELECTRICAL LEAD CONTINUATION CALL-OUT ON A CONTROLLED DRAWING.**

Figure: 10.3-1 Sheet: 3

00-058 **REVISE THE USAR TO CORRECT AN ADMINISTRATIVE ERROR IN THE LABELING OF THE COUNTING ROOM.**

Page: 12.2-3

USAR Change Request	Description

00-059 **REVISE THE USAR TO DIFFERENTIATE WHETHER THE INOPERABLE FIRE BARRIER IS INSIDE OR OUTSIDE OF CONTAINMENT AND TO INCORPORATE INFORMATION MISSED BY A PREVIOUS CHANGE.**

Page: 9.5-33

00-060 **REVISE THE USAR TO INCORPORATE THE REVISION OF COLD OVERPRESSURE MITIGATION SYSTEM SETPOINTS AND HEATUP AND COOLDOWN CURVES.**

Page: 5.2-44 Page: 5.2-9

Table: 5.3-11 Sheet: 1

00-061 **REVISE THE USAR TO MAKE AN EDITORIAL CORRECTION TO A LINE NUMBER ON A CONTROLLED DRAWING.**

Figure: 5.4-7 Sheet: 1

00-062 **REVISE THE USAR TO REFLECT EDITORIAL CORRECTIONS MADE TO PIPING LINE NUMBERS ON A CONTROLLED DRAWING.**

Figure: 5.1-1 Sheet: 3

00-063 **REVISE THE USAR TO INDICATE WOLF CREEK'S COMMITMENT TO REG GUIDE 1.181, WHICH ENDORSES NEI GUIDANCE 98-03, AND MAKE CONSISTENCY CHANGES REGARDING REFERENCES TO TECHNICAL SPECIFICATIONS.**

Page: 5.4-19 Page: 5.2-26 Page: 3A-61 Page: 3A-31

00-064 **REVISE THE USAR TO CORRECT SEVERAL EDITORIAL AND TYPOGRAPHICAL ERRORS AND ADD NECESSARY CLARIFICATION.**

Page: 15.0-xvii Page: 15.2-26 Page: 15.0-xviii Page: 15.0-xvi Page: 15.0-xv

Page: 15.2-25 Page: 10.2-7

USAR Change Request	Description

00-065 **REVISE THE USAR TO PROVIDE CONSISTENCY BETWEEN USAR FIGURES AND ASSOCIATED DESIGN DRAWINGS THAT HAVE BEEN CONVERTED TO AN ALL VECTOR FORMAT.**

Figure:	9.3-5	Sheet:	9	Figure:	10.4-5	Sheet:	2	Figure:	9.3-5	Sheet:	4
Figure:	9.3-5	Sheet:	5	Figure:	9.3-5	Sheet:	6	Figure:	9.5.5-1	Sheet:	2
Figure:	9.3-5	Sheet:	8	Figure:	9.5.7-1	Sheet:	1	Figure:	9.3-5	Sheet:	10
Figure:	10.4-2	Sheet:	1	Figure:	10.4-2	Sheet:	2	Figure:	10.4-2	Sheet:	3
Figure:	10.4-2	Sheet:	5	Figure:	10.4-2	Sheet:	6	Figure:	9.5.4-1	Sheet:	0
Figure:	9.3-5	Sheet:	7	Figure:	9.5.10	Sheet:	3	Figure:	9.3-1	Sheet:	2
Figure:	9.3-1	Sheet:	3	Figure:	9.3-1	Sheet:	4	Figure:	9.3-1	Sheet:	5
Figure:	9.3-1	Sheet:	6	Figure:	9.5.6-1	Sheet:	2	Figure:	9.5.10	Sheet:	2
Figure:	10.4-5	Sheet:	3	Figure:	9.5.1-1	Sheet:	2	Figure:	9.5.1-1	Sheet:	3
Figure:	9.5.1-1	Sheet:	4	Figure:	9.5.1-1	Sheet:	5	Figure:	9.5.1-1	Sheet:	6
Figure:	9.5.1-1	Sheet:	7	Figure:	9.5.5-1	Sheet:	1	Figure:	9.5.10	Sheet:	1
Figure:	11.2-1	Sheet:	1	Figure:	9.4-3	Sheet:	3	Figure:	10.4-6	Sheet:	3
Figure:	9.4-6	Sheet:	1	Figure:	9.4-6	Sheet:	2	Figure:	6.2.6-1	Sheet:	0
Figure:	9.3-5	Sheet:	12	Figure:	9.4-6	Sheet:	4	Figure:	9.4-3	Sheet:	1
Figure:	11.2-1	Sheet:	2	Figure:	11.2-1	Sheet:	3	Figure:	11.2-1	Sheet:	4
Figure:	12.3-4	Sheet:	0	Figure:	9.3-1	Sheet:	1	Figure:	9.5.1-1	Sheet:	1
Figure:	9.5.6-1	Sheet:	1	Figure:	6.2.5-1	Sheet:	1	Figure:	10.4-6	Sheet:	8
Figure:	9.2-16	Sheet:	0	Figure:	10.2-1	Sheet:	5	Figure:	6.3-1	Sheet:	4
Figure:	9.5.9-1	Sheet:	2	Figure:	9.5.9-1	Sheet:	3	Figure:	9.4-7	Sheet:	0
Figure:	10.4-6	Sheet:	7	Figure:	9.4-3	Sheet:	5	Figure:	9.4-4	Sheet:	1
Figure:	9.4-4	Sheet:	2	Figure:	9.4-4	Sheet:	3	Figure:	9.4-4	Sheet:	4
Figure:	9.4-2	Sheet:	1	Figure:	9.4-1	Sheet:	2	Figure:	9.4-1	Sheet:	4
Figure:	10.4-10	Sheet:	1								

00-066 **REVISE THE USAR TO CAPTURE THE AS-BUILT CONDITIONS IN THE CHLORINE BUILDING.**

Figure: 9.2-5 Sheet: 2

00-067 **REVISE THE USAR TO DELETE REACTOR VESSEL CLOSURE HEAD BOLTING MATERIAL PROPERTIES.**

Page: 5.3-12

Table: 5.3-6 Sheet: 1

USAR Change Request	Description
00-068	**REVISE THE USAR TO MAKE AN EDITORIAL CORRECTION TO THE MATERIAL CLASS CODE CALLOUT ON A CONTROLLED DRAWING.**

Figure: 9.5.9-1 Sheet: 2

USAR Change Request	Description

00-069 **REVISE THE USAR TO REFLECT DESIGN CHANGES MADE DURING THE SPENT FUEL POOL RERACK.**

Page: 9.1A-3	Page: 9.1-48	Page: 9.1A-11	Page: 9.1A-10	Page: 9.1A-9
Page: 9.1A-8	Page: 9.1A-7	Page: 9.1A-6	Page: 9.1A-13	Page: 9.1A-4
Page: 9.1A-14	Page: 9.1A-2	Page: 9.1A-1	Page: 9.1-72	Page: 9.1-71
Page: 9.1-54	Page: 9.1-53	Page: 9.1-52	Page: 9.1-50	Page: 9.0-xxv
Page: 9.1A-5	Page: 9.1A-25	Page: 9.1A-34	Page: 1.2-6	Page: 9.1A-32
Page: 9.1A-31	Page: 9.1A-30	Page: 9.1A-29	Page: 9.1A-28	Page: 9.1A-12
Page: 9.1A-26	Page: 9.1-45	Page: 9.1A-24	Page: 9.1A-23	Page: 9.1A-22
Page: 9.1A-21	Page: 9.1A-20	Page: 9.1A-19	Page: 9.1A-18	Page: 9.1A-17
Page: 9.1A-16	Page: 9.1A-15	Page: 9.1A-27	Page: 4.1-1	Page: 9.1-11
Page: 9.1-49	Page: 9.1-9	Page: 9.1-8	Page: 9.1-7	Page: 9.1-6
Page: 9.1-3	Page: 9.1A-35	Page: 6.3-4	Page: 9.1-12	Page: 3.11(B)-23
Page: 3.8-73	Page: 3.8-68	Page: 3.8-67	Page: 3.8-61	Page: 3.8-30
Page: 3.1-47	Page: 3.1-46	Page: 3.1-45	Page: 1.2-21	Page: 6.3-36
Page: 9.1-24	Page: 9.1-44	Page: 9.1-42	Page: 9.1-37	Page: 9.1-31
Page: 9.1-30	Page: 9.1-28	Page: 9.1-27	Page: 9.1-10	Page: 9.1-25
Page: 9.1-13	Page: 9.1-23	Page: 9.1-22	Page: 9.1-21	Page: 9.1-20
Page: 9.1-19	Page: 9.1-18	Page: 9.1-17	Page: 9.1-16	Page: 9.1-15
Page: 9.1-14	Page: 9.1-26	Page: 9.4-28	Page: 9.3-75	Page: 11.2-13
Page: 9.5B-164	Page: 9.5B-161	Page: 9.5B-159	Page: 9.5B-7	Page: 9.5-45
Page: 12.1-8	Page: 9.4-29	Page: 12.2-4	Page: 9.4-27	Page: 9.4-26
Page: 9.4-24	Page: 9.4-23	Page: 9.4-22	Page: 9.4-21	Page: 9.4-20
Page: 9.4-19	Page: 9.1A-33	Page: 9.4-30	Page: 9.5-42	Page: 9.0-xxiv
Page: 9.0-xxiii	Page: 9.0-xxii	Page: 9.0-xvi	Page: 9.0-xv	Page: 9.0-iii
Page: 9.0-ii	Page: 12.0-iv	Page: 9.5-44	Page: 9.3-42	Page: 15.7-15
Page: 15.7-12	Page: 15.7-11	Page: 15.7-10	Page: 15.7-9	Page: 12.4-3
Page: 12.3-21	Page: 12.3-12	Page: 12.2-7	Page: 12.2-6	Page: 9.0-i
Page: 9.1A-47	Page: 9.1A-56	Page: 9.4-18	Page: 9.1A-54	Page: 9.1A-53
Page: 9.1A-52	Page: 9.1A-51	Page: 9.1A-50	Page: 9.1A-36	Page: 9.1A-48
Page: 9.1A-57	Page: 9.1A-46	Page: 9.1A-45	Page: 9.1A-44	Page: 9.1A-43
Page: 9.1A-42	Page: 9.1A-41	Page: 9.1A-40	Page: 9.1A-39	Page: 9.1A-38
Page: 9.1A-37	Page: 9.1A-49	Page: 9.2-35	Page: 9.3-30	Page: 9.3-29
Page: 9.3-25	Page: 9.3-16	Page: 9.3-15	Page: 9.3-7	Page: 9.2-44
Page: 9.1A-55	Page: 9.2-36	Page: 9.1A-58	Page: 9.2-34	Page: 9.2-33
Page: 9.2-32	Page: 9.2-31	Page: 9.2-19	Page: 9.2-18	Page: 9.2-12
Page: 9.2-8	Page: 9.2-5	Page: 9.2-3	Page: 9.2-39	

Table: 9.2-13	Sheet: 1	Table: 1.1-1	Sheet: 2	Table: 9.1-2	Sheet: 1
Table: 12.4-1	Sheet: 2	Table: 12.3-2	Sheet: 1	Table: 12.2-11	Sheet: 3

USAR Change Request **Description**

Table: 12.2-11	Sheet: 2	Table: 12.2-11	Sheet: 1	Table: 12.2-7	Sheet: 1
Table: 9.5B-2	Sheet: 24	Table: 9.5A-1	Sheet: 71	Table: 9.4-7	Sheet: 1
Table: 9.1-4	Sheet: 2	Table: 9.2-23	Sheet: 2	Table: 9.1-6	Sheet: 1
Table: 9.2-10	Sheet: 2	Table: 9.2-3	Sheet: 2	Table: 9.2-2	Sheet: 2
Table: 7.5-2	Sheet: 3	Table: 7.3-5	Sheet: 1	Table: 4.1-1	Sheet: 5
Table: 3.11(B)-1	Sheet: 5	Table: 3.10(B)-1	Sheet: 1	Table: 3.9(B)-15	Sheet: 1
Table: 3.2-1	Sheet: 20	Table: 3.2-1	Sheet: 6	Table: 1.3-3	Sheet: 3
Table: 1.1-1	Sheet: 4	Table: 9.4-6	Sheet: 1	Table: 9.1A-8	Sheet: 1
Table: 9.1A-21	Sheet: 1	Table: 9.1A-20	Sheet: 1	Table: 9.1A-19	Sheet: 1
Table: 9.1A-18	Sheet: 1	Table: 9.1A-17	Sheet: 1	Table: 9.1A-16	Sheet: 1
Table: 9.1A-15	Sheet: 1	Table: 9.1A-14	Sheet: 1	Table: 9.1A-13	Sheet: 1
Table: 9.1A-12	Sheet: 1	Table: 9.1A-11	Sheet: 1	Table: 9.1-4	Sheet: 1
Table: 9.1A-9	Sheet: 1	Table: 9.1A-22	Sheet: 1	Table: 9.1A-7	Sheet: 4
Table: 9.1A-7	Sheet: 3	Table: 9.1A-7	Sheet: 2	Table: 9.1A-7	Sheet: 1
Table: 9.1A-6	Sheet: 1	Table: 9.1A-5	Sheet: 1	Table: 9.1A-4	Sheet: 1
Table: 9.1A-3	Sheet: 1	Table: 9.1A-2	Sheet: 1	Table: 9.1A-1	Sheet: 1
Table: 7.1-2	Sheet: 5	Table: 7.1-2	Sheet: 2	Table: 7.1-2	Sheet: 1
Table: 7.4-5	Sheet: 1	Table: 9.1A-10	Sheet: 1		

Figure: 9.1A-1	Sheet: 1	Figure: 1.2-20	Sheet: 1	Figure: 9.1A-10	Sheet: 1
Figure: 9.1A-9	Sheet: 1	Figure: 9.1A-8	Sheet: 1	Figure: 9.1A-7	Sheet: 1
Figure: 9.1A-6	Sheet: 1	Figure: 9.1A-5	Sheet: 1	Figure: 9.1A-4	Sheet: 1
Figure: 9.1A-12	Sheet: 1	Figure: 9.1A-2	Sheet: 1	Figure: 9.1A-13	Sheet: 1
Figure: 9.1-9	Sheet: 1	Figure: 9.1-8	Sheet: 1	Figure: 9.1-3	Sheet: 1
Figure: 9.1-2	Sheet: 3	Figure: 9.1-2	Sheet: 2	Figure: 9.1-2	Sheet: 1
Figure: 3.8-95	Sheet: 1	Figure: 3.8-94	Sheet: 1	Figure: 1.2-22	Sheet: 1
Figure: 1.2-21	Sheet: 1	Figure: 9.1A-3	Sheet: 1	Figure: 9.1A-24	Sheet: 1
Figure: 12.3-2	Sheet: 4	Figure: 12.3-2	Sheet: 3	Figure: 9.1A-31	Sheet: 1
Figure: 9.1A-30	Sheet: 1	Figure: 9.1A-30	Sheet: 1	Figure: 9.1A-29	Sheet: 1
Figure: 9.1A-28	Sheet: 1	Figure: 9.1A-27	Sheet: 1	Figure: 9.1A-11	Sheet: 1
Figure: 9.1A-25	Sheet: 1	Figure: 12.3-2	Sheet: 4	Figure: 9.1A-23	Sheet: 1
Figure: 9.1A-22	Sheet: 1	Figure: 9.1A-21	Sheet: 1	Figure: 9.1A-20	Sheet: 1
Figure: 9.1A-19	Sheet: 1	Figure: 9.1A-18	Sheet: 1	Figure: 9.1A-17	Sheet: 1
Figure: 9.1A-16	Sheet: 1	Figure: 9.1A-15	Sheet: 1	Figure: 9.1A-15	Sheet: 1
Figure: 9.1A-14	Sheet: 1	Figure: 9.1A-26	Sheet: 1		

USAR Change Request	Description

00-070 **REVISE THE USAR TO CORRECT DISCREPANCIES BETWEEN USAR FIGURES AND CONTROLLED DRAWINGS.**

Page: 6.3-24 Page: 6.3-22

Table: 6.3-8 Sheet: 1

Figure: 5.4-8 Sheet: 1 Figure: 7.6-3 Sheet: 3 Figure: 7.6-3 Sheet: 2

00-071 **REVISE THE USAR TO CORRECT FLOOD/WIND GENERATED WAVE INFORMATION AND ADD CLARIFICATION.**

Table: 3.4-3 Sheet: 1 Table: 3.4-1 Sheet: 1 Table: 2.4-16 Sheet: 1

00-072 **REVISE THE USAR TO REFLECT THE ASSUMPTIONS ASSOCIATED WITH THE CURRENT ANALYSIS OF INADVERTENT BORON DILUTION TRANSIENTS.**

Page: 15.4-23 Page: 15.4-22

Table: 15.0-7 Sheet: 1

Figure: 15.0-20 Sheet: 1

00-073 **REVISE THE USAR TO PROVIDE FLEXIBILITY FOR VALVE MAINTENANCE.**

Figure: 9.3-1 Sheet: 1

00-076 **REVISE THE USAR TO REFLECT THE ELIMINATION OF THE INDEPENDENT SAFETY ENGINEERING GROUP (ISEG) AND THE TRANSFER OF THE ISEG FUNCTIONS TO ENGINEERING.**

Page: 18.1-17 Page: 18.1-16 Page: 17.2-53 Page: 17.2-7 Page: 17.0-i

Page: 13.1-14 Page: 13.1-5

Table: 18.1-1 Sheet: 2 Table: 18.1-1 Sheet: 1

00-077 **REVISE THE USAR TO INCORPORATE INFORMATION ORIGINALLY LOCATED IN THE TECHNICAL SPECIFICATIONS.**

Page: 2.1-2 Page: 9.1-18 Page: 9.5-55

Figure: 2.1-6 Sheet: 1

00-078 **REVISE THE USAR TO CORRECT THE SERVICE WATER SYSTEM COMPONENT DESCRIPTION AS PART OF THE ICING EVENT RESOLUTION.**

Page: 1.2-22 Page: 9.2-7 Page: 9.2-2

USAR Change Request	Description

00-080 **REVISE THE USAR TO CORRECT INACCURATE COORDINATES ON A DRAWING.**

Figure: 9.3-8 Sheet: 2

00-081 **REVISE THE USAR TO REFLECT THE RELOCATION OF A VOLUME CONTROL TANK LEVEL TRANSMITTER.**

Page: 9.5B-33 Page: 9.5B-3

Table: 3.11(B)-3 Sheet: 22 Table: 9.5B-2 Sheet: 5

00-082 **REVISE THE USAR TO MAKE AN EDITORIAL CORRECTION TO A DRAWING THAT WAS IDENTIFIED DURING THE CONVERSION OF THE DRAWING TO AN ALL VECTOR FORMAT.**

Figure: 10.4-6 Sheet: 5

00-083 **REVISE THE USAR TO MAKE EDITORIAL CORRECTIONS THAT WERE IDENTIFIED DURING THE CONVERSION OF ESSENTIAL DRAWINGS TO AN ALL VECTOR FORMAT.**

Figure: 9.2-1 Sheet: 2 Figure: 9.3-1 Sheet: 7 Figure: 10.4-12 Sheet: 3
Figure: 9.4-3 Sheet: 2 Figure: 9.4-3 Sheet: 1

00-084 **REVISE THE USAR TO MAKE STATEMENTS CONCERNING THE SITE SPECIFIC CIVIL STRUCTURAL DESIGN CRITERIA CONSISTENT THROUGHOUT THE USAR.**

Page: 2.5-247 Page: 2.5-175 Page: 2.5-228 Page: 2.5-231 Page: 2.5-233
Page: 2.5-235 Page: 1.2-3 Page: 2.5-246 Page: 3.7(S)-3 Page: 2.5-249
Page: 2.5-250 Page: 2.5-277 Page: 2.5-278 Page: 3.0-xxxii Page: 3.0-xxxiii
Page: 3.7(S)-1 Page: 2.5-236

Table: 1.2-1 Sheet: 3

Figure: 3.7(S)-1 Sheet: 1 Figure: 3.7(S)-1 Sheet: 1 Figure: 3.7(S)-2 Sheet: 1
Figure: 3.7(S)-1 Sheet: 1 Figure: 2.5-107 Sheet: 1 Figure: 2.5-107 Sheet: 1
Figure: 2.5-107f Sheet: 1 Figure: 2.5-107 Sheet: 1 Figure: 2.5-107 Sheet: 1
Figure: 2.5-107 Sheet: 1 Figure: 2.5-107 Sheet: 1

00-086 **REVISE THE USAR TO MAKE EDITORIAL CORRECTIONS ON A DRAWING.**

Figure: 9.3-5 Sheet: 12

USAR Change Request	Description

00-088 **REVISE THE USAR TO MAKE AN EDITORIAL CORRECTION TO A REFERENCE LINE NUMBER ON A DRAWING.**

Figure: 10.4-8 Sheet: 3

00-089 **REVISE THE USAR TO REFLECT THE INSTALLATION OF A TEMPERATURE INDICATING CONTROLLER TO CONTROL HYDROGEN TEMPERATURE IN THE TURBINE GENERATOR HYDROGEN COOLERS.**

Figure: 9.2-1 Sheet: 2

00-093 **REVISE THE USAR TO ADD ADMINISTRATIVE CONTROLS WHEN DESCRIBING THE MEASURES TO PREVENT INTERCONNECTING THE ONSITE AUXILIARY POWER SYSTEM WITH THE SWITCHYARD OR BURLINGTON NORMAL SOURCE.**

Page: 8.3-2

00-096 **REVISE A USAR FIGURE TO REMOVE REFERENCES TO THE PSAR AND FSAR.**

Figure: 8.3-1 Sheet: 1

00-100 **REVISE THE USAR TO CORRECT INCONSISTENCIES AND PROVIDE CLARIFICATION FOR ITEMS IDENTIFIED DURING THE USAR FIDELITY REVIEW.**

Page: 9.3-9 Page: 10.4-44 Page: 10.4-41 Page: 10.4-36 Page: 10.4-40
Page: 10.4-39 Page: 10.4-38

Table: 10.4-9 Sheet: 3 Table: 3.2-1 Sheet: 10

00-102 **REVISE THE USAR TO CLARIFY THE DESCRIPTION OF HOW FILTER ADSORBER HIGH TEMPERATURE ALARMS ARE RECEIVED IN THE CONTROL ROOM, ELIMINATE THE 400 F ALARM SETPOINT, AND RESOLVE OTHER ITEMS IDENTIFIED DURING THE USAR FIDELITY REVIEW.**

Page: 9.4-74 Page: 9.4-43 Page: 9.4-27 Page: 9.4-26 Page: 9.4-12
Page: 9.4-10 Page: 9.4-8

Figure: 9.4-1 Sheet: 2

00-113 **REVISE THE USAR TO REFLECT THE RE-ROUTING OF THE PIPING OF THE AUXILIARY STEAM CHEMICAL ADDITION SYSTEM FROM THE DISCHARGE SIDE OF THE AUXILIARY STEAM FEEDWATER PUMPS TO THE INLET SIDE OF THE PUMPS.**

Figure: 9.5.9-1 Sheet: 2

USAR Change Request	Description

01-005 **REVISE THE USAR TO REFLECT A CHANGE THAT WAS NOT INCORPORATED PROPERLY IN A PREVIOUS USAR CHANGE REQUEST (INCORPORATED IN REV. 13).**

Table: 3.11(B)-1 Sheet: 4

01-006 **REVISE THE USAR TO REFLECT A CHANGE THAT WAS NOT INCORPORATED PROPERLY IN A PREVIOUS USAR CHANGE (INCORPORATED IN REV. 13).**

Page: 9.5-36

01-008 **REVISE THE USAR TO REFLECT THE PARAMETERS USED IN THE ACCIDENT ANALYSIS TO SUPPORT THE POWER RERATE FROM 3411 TO 3565 MEGAWATTS THERMAL, TECHNICAL SPECIFICATION AMENDMENT NUMBER 69.**

Table: 15A-1 Sheet: 2 Table: 6.5-1 Sheet: 1

01-009 **REVISE THE USAR TO REFLECT THE ABANDONMENT OF THE BORON CONCENTRATION MEASUREMENT SYSTEM.**

Page: 9.3-43 Page: 9.3-39 Page: 9.3-34 Page: 7.7-23

Table: 7.7-2 Sheet: 1

Figure: 9.3-8 Sheet: 2 Figure: 7.7-13 Sheet: 1 Figure: 7.7-12 Sheet: 1
Figure: 7.7-11 Sheet: 1 Figure: 7.7-10 Sheet: 1

01-011 **REVISE THE USAR TO PROVIDE CONSISTENCY BETWEEN USAR FIGURES AND ASSOCIATED DESIGN DRAWINGS THAT HAVE BEEN CONVERTED TO AN ALL VECTOR FORMAT.**

Figure: 9.2-14 Sheet: 0 Figure: 10.4-6 Sheet: 4 Figure: 9.4-5 Sheet: 2
Figure: 9.4-5 Sheet: 1 Figure: 9.4-9 Sheet: 2 Figure: 11.3-1 Sheet: 1
Figure: 9.5.9-1 Sheet: 1 Figure: 11.3-1 Sheet: 2 Figure: 9.2-1 Sheet: 2
Figure: 9.2-1 Sheet: 1 Figure: 10.4-3 Sheet: 0 Figure: 10.2-1 Sheet: 6
Figure: 10.4-4 Sheet: 0 Figure: 10.4-5 Sheet: 1 Figure: 10.4-6 Sheet: 6
Figure: 9.4-9 Sheet: 1 Figure: 9.3-2 Sheet: 1 Figure: 9.3-5 Sheet: 13
Figure: 10.4-7 Sheet: 2 Figure: 10.4-7 Sheet: 1 Figure: 10.4-6 Sheet: 5
Figure: 18.2-15 Sheet: 0 Figure: 9.4-6 Sheet: 3 Figure: 9.3-3 Sheet: 0
Figure: 9.3-5 Sheet: 17 Figure: 9.3-5 Sheet: 16 Figure: 9.3-5 Sheet: 15
Figure: 9.3-5 Sheet: 14 Figure: 9.3-5 Sheet: 11 Figure: 11.4-1 Sheet: 4
Figure: 11.4-1 Sheet: 3 Figure: 11.3-1 Sheet: 3 Figure: 9.3-2 Sheet: 2

USAR Change Request	Description

01-012 **REVISE THE USAR TO SHOW THE UPGRADE OF INSTRUMENTATION IN THE TURBINE BUILDING PROCESS SAMPLING ROOM AND REVISE THE MEASURED RANGES AND ALARM SET POINTS FOR THE PLANT SAMPLING SYSTEM PROCESS STREAMS.**

Page: 9.3-12 Page: 9.3-9

Table: 9.3-5 Sheet: 2 Table: 9.3-5 Sheet: 1

Figure: 9.3-4 Sheet: 3 Figure: 9.3-4 Sheet: 2 Figure: 9.3-4 Sheet: 1

01-013 **REVISE THE USAR TO SHOW THE ROUTING OF THE PROCESS SAMPLE LINES TO THE ION CHROMATOGRAPH FOR SAMPLE ANALYSIS.**

Figure: 9.3-4 Sheet: 2 Figure: 9.3-4 Sheet: 1

01-014 **REVISE THE USAR TO REFLECT THE ADDITION OF AN ALTERNATE SUPPLY LINE TO FILL HYDRAZINE STORAGE TANKS AND TO CHANGE REFERENCES TO THE AMMONIUM HYDROXIDE STORAGE ROOM TO THE OXYGEN CONTROL AND PH CONTROL CHEMICAL STORAGE ROOM.**

Page: 9.4-54 Page: 9.4-51 Page: 9.4-50 Page: 9.4-49 Page: 9.4-47

Page: 2.2-9 Page: 2.2-4

Table: 9.4-10 Sheet: 7

Figure: 10.4-7 Sheet: 2 Figure: 10.4-7 Sheet: 1 Figure: 9.5.9-1 Sheet: 4

01-015 **REVISE THE USAR TO REFLECT THE INSTALLATION OF A NEW VALVE IN THE SAMPLE COOLER RELIEF VALVE DISCHARGE HEADER.**

Figure: 9.3-4 Sheet: 2 Figure: 9.3-4 Sheet: 1

01-016 **REVISE THE USAR TO DELETE THE REFERENCE TO MOTORIZED FLOW CONTROL DAMPERS AND TO SHOW THE FLOW CONTROL DAMPERS AS OPPOSED BLADE TYPE.**

Page: 9.4-22

Figure: 9.4-2 Sheet: 2 Figure: 9.4-2 Sheet: 1

USAR Change Request	Description

01-017 **REVISE THE USAR TO REFLECT CHANGES TO THE BORON RECYCLE SYSTEM, LIQUID RADWASTE SYSTEM, AND SECONDARY LIQUID WASTE SYSTEM.**

Page: 9.3-75	Page: 1.2-26	Page: 10.4-54	Page: 10.4-53	Page: 10.4-42
Page: 10.4-18	Page: 9.5-85	Page: 9.3-81	Page: 9.3-80	Page: 9.3-79
Page: 9.3-78	Page: 10.4-56	Page: 9.3-76	Page: 10.4-57	Page: 9.3-74
Page: 9.2-47	Page: 9.2-46	Page: 9.2-45	Page: 9.2-44	Page: 9.2-43
Page: 2.4-69	Page: 2.4-68	Page: 2.4-67	Page: 2.4-59	Page: 2.4-46
Page: 1.2-27	Page: 9.3-77	Page: 11.3-3	Page: 11.0-v	Page: 11.0-iv
Page: 9.3-19	Page: 9.3-73	Page: 15.7-9	Page: 15.7-7	Page: 15.7-6
Page: 15.7-5	Page: 11.5-9	Page: 11.5-8	Page: 10.4-55	Page: 11.4-4
Page: 11.0-vi	Page: 11.2-15	Page: 11.2-13	Page: 11.2-12	Page: 11.2-11
Page: 11.2-9	Page: 11.2-8	Page: 11.2-6	Page: 11.2-4	Page: 11.2-2
Page: 11.1A-1	Page: 11.1-1	Page: 10.4-60	Page: 10.4-58	Page: 11.4-5

Table: 11.1-6	Sheet: 7	Table: 11.1-6	Sheet: 16	Table: 11.1-2	Sheet: 2
Table: 11.1-6	Sheet: 1	Table: 11.1-6	Sheet: 2	Table: 11.1-6	Sheet: 3
Table: 11.1-6	Sheet: 4	Table: 10.4-15	Sheet: 7	Table: 11.1-6	Sheet: 6
Table: 10.4-15	Sheet: 1	Table: 11.1-6	Sheet: 8	Table: 11.1-6	Sheet: 9
Table: 11.1-6	Sheet: 10	Table: 11.1-6	Sheet: 11	Table: 11.1-6	Sheet: 12
Table: 11.1-6	Sheet: 13	Table: 11.1-6	Sheet: 14	Table: 2.4-37	Sheet: 1
Table: 11.1-6	Sheet: 5	Table: 9.2-4	Sheet: 1	Table: 2.4-37	Sheet: 2
Table: 3.2-1	Sheet: 8	Table: 3.2-1	Sheet: 13	Table: 3.2-1	Sheet: 14
Table: 3.2-1-NOTE	Sheet: 5	Table: 9.2-1	Sheet: 2	Table: 11.1-2	Sheet: 1
Table: 9.2-2	Sheet: 2	Table: 11.1-6	Sheet: 17	Table: 9.2-4	Sheet: 2
Table: 9.2-9	Sheet: 2	Table: 9.2-10	Sheet: 2	Table: 9.2-23	Sheet: 1
Table: 9.2-23	Sheet: 3	Table: 9.3-13	Sheet: 1	Table: 9.3-13	Sheet: 2
Table: 9.3-13	Sheet: 3	Table: 9.5.9-1	Sheet: 1	Table: 9.2-2	Sheet: 1
Table: 11.4-2	Sheet: 1	Table: 11.2-8	Sheet: 1	Table: 11.1-6	Sheet: 15
Table: 11.2-10	Sheet: 1	Table: 11.2-10	Sheet: 2	Table: 11.2-11	Sheet: 1
Table: 11.3-2	Sheet: 1	Table: 15.7-6	Sheet: 1	Table: 11.3-4	Sheet: 1
Table: 11.2-7	Sheet: 1	Table: 11.4-2	Sheet: 2	Table: 11.4-3	Sheet: 1
Table: 11.4-3	Sheet: 2	Table: 11.4-3	Sheet: 3	Table: 11.4-4	Sheet: 1
Table: 11.4-4	Sheet: 2	Table: 11.5-1	Sheet: 1	Table: 15.7-5	Sheet: 1
Table: 15.7-5	Sheet: 2	Table: 11.3-3	Sheet: 1	Table: 11.1A-2	Sheet: 2
Table: 11.1-6	Sheet: 18	Table: 11.1-6	Sheet: 19	Table: 11.1-6	Sheet: 20
Table: 11.1-6	Sheet: 21	Table: 11.1-6	Sheet: 22	Table: 11.1-6	Sheet: 23
Table: 11.2-9	Sheet: 1	Table: 11.1A-2	Sheet: 1	Table: 11.2-6	Sheet: 1
Table: 11.1A-5	Sheet: 1	Table: 11.1A-5	Sheet: 2	Table: 11.2-2	Sheet: 2
Table: 11.2-3	Sheet: 1	Table: 11.2-4	Sheet: 1	Table: 11.2-5	Sheet: 1

USAR Change Request	Description

Table: 11.2-5 Sheet: 2 Table: 11.2-5 Sheet: 3 Table: 11.2-5 Sheet: 4

Table: 11.1-6 Sheet: 24

Figure: 11.4-1 Sheet: 1 Figure: 11.1A-2 Sheet: 4A Figure: 11.1A-2 Sheet: 4

Figure: 11.1A-2 Sheet: 3A Figure: 11.1A-2 Sheet: 3 Figure: 11.1A-2 Sheet: 2

Figure: 11.1A-1 Sheet: 1 Figure: 10.4-12 Sheet: 4 Figure: 10.4-12 Sheet: 1

Figure: 9.5.9-1 Sheet: 3 Figure: 9.3-11 Sheet: 3 Figure: 9.3-11 Sheet: 2

Figure: 9.3-1 Sheet: 3

01-018 **REVISE THE USAR TO MAKE EDITORIAL CORRECTIONS THAT WERE IDENTIFIED DURING THE CONVERSION OF ESSENTIAL DRAWINGS TO AN ALL VECTOR FORMAT.**

Figure: 9.3-4 Sheet: 2 Figure: 9.3-4 Sheet: 1 Figure: 9.3-5 Sheet: 3

Figure: 9.3-5 Sheet: 2 Figure: 9.3-5 Sheet: 1 Figure: 9.3-9 Sheet: 2

Figure: 9.3-9 Sheet: 1 Figure: 9.2-17 Sheet: 2 Figure: 9.2-17 Sheet: 1

Figure: 10.4-12 Sheet: 2 Figure: 9.3-11 Sheet: 2 Figure: 9.3-11 Sheet: 1

Figure: 10.4-1 Sheet: 3 Figure: 10.4-1 Sheet: 1

01-019 **REVISE THE USAR TO ADDRESS DISCREPANCIES IDENTIFIED DURING THE USAR FIDELITY REVIEW.**

Page: 9.5B-63 Page: 9.5B-54 Page: 9.5B-51 Page: 9.5B-34 Page: 9.5-85

Figure: 9.3-5 Sheet: 11

01-020 **REVISE THE USAR TO REFLECT THE INSTALLATION OF A TEMPORARY MODIFICATION THAT WAS PUT IN PLACE TO ENHANCE THE WASTE PROCESSING SYSTEM.**

Figure: 11.4-1 Sheet: 1 Figure: 11.2-1 Sheet: 3 Figure: 11.2-1 Sheet: 2

01-023 **REVISE THE USAR TO ADDRESS FIDELITY ISSUES REGARDING EXISTING APPROVED PLANT PROCEDURES.**

Page: 9.3-63 Page: 9.3-62 Page: 9.3-58 Page: 9.3-57 Page: 9.3-56

Page: 9.1-47

01-025 **REVISE THE USAR TO REFLECT THE REMOVAL FROM SERVICE OF THE REMAINING ANNUNCIATOR SYSTEM IN THE SOLIDIFICATION CONTROL PANEL IN THE SOLID RADWASTE SYSTEM.**

Figure: 11.4-1 Sheet: 2 Figure: 11.4-1 Sheet: 1

USAR Change Request	Description

01-027 **REVISE THE USAR TO UPDATE TABLE OF CONTENT ENTRIES AND SECTION 1.7 TABLE INFORMATION DUE TO CHANGES INCORPORATED INTO REVISION 14 OF THE USAR.**

Page: 18.0-v Page: 18.0-iv Page: 9.0-vi Page: 8.0-i

Table: 1.7-3 Sheet: 3 Table: 1.7-3 Sheet: 2 Table: 1.7-3 Sheet: 1

Table: 1.7-2 Sheet: 7 Table: 1.7-2 Sheet: 6 Table: 1.7-2 Sheet: 5

Table: 1.7-2 Sheet: 4 Table: 1.7-2 Sheet: 3 Table: 1.7-2 Sheet: 2

Table: 1.7-2 Sheet: 1

99-048 **REVISE THE USAR ESSENTIAL SERVICE WATER SYSTEM FLOW AND COMPONENT COOLING WATER SYSTEM REQUIREMENTS POST-LOCA OPERATION TO CLARIFY RESIDUAL HEAT REMOVAL AND COMPONENT COOLING WATER HEAT EXCHANGER DUTIES AND CONTAINMENT AIR COOLER DUTIES.**

Table: 9.2-20 Sheet: 1 Table: 9.2-11 Sheet: 2 Table: 9.2-11 Sheet: 1

Table: 9.2-9 Sheet: 2 Table: 9.2-9 Sheet: 1 Table: 9.2-3 Sheet: 2a

Table: 9.2-3 Sheet: 2 Table: 9.2-3 Sheet: 1

99-108 **REVISE THE USAR TO UPDATE THE RADIOLOGICAL CONSEQUENCES OF A LOSS OF COOLANT ACCIDENT USING THE REVISED SOURCE TERMS PROVIDED BY WESTINGHOUSE.**

Page: 15.6-32 Page: 15A-10 Page: 15A-9 Page: 15A-8 Page: 15A-6

Page: 15A-5 Page: 15A-4 Page: 15A-3 Page: 15A-2 Page: 15A-1

Page: 15.6-31

Table: 15A-3 Sheet: 1 Table: 15A-1 Sheet: 2 Table: 15A-1 Sheet: 1

Table: 15.6-8 Sheet: 1 Table: 15.6-6 Sheet: 3 Table: 15.6-6 Sheet: 2

Table: 15.6-6 Sheet: 1

Figure: 15A-1 Sheet: 1

99-117 **REVISE THE USAR TO DELETE REFERENCES TO STATION BLACKOUT WHERE THEY ARE INAPPROPRIATE, ADD REFERENCES TO STATION BLACKOUT TO PROVIDE CLARIFICATION, AND ADD A NEW APPENDIX 8.3A TO DISCUSS STATION BLACKOUT.**

Page: 8.3A-7 Page: 8.3A-6 Page: 8.3A-5 Page: 8.3A-4 Page: 8.3A-3

Page: 8.3A-2 Page: 8.3A-1 Page: 730-4 Page: 15.3-5 Page: 15.0-xiii

Page: 7.7-28 Page: 7.4-2 Page: 3A-60

Table: 13.5-4 Sheet: 1 Table: 13.5-3 Sheet: 1 Table: 1.3-4 Sheet: 19

Figure: 15.0-12 Sheet: 1

USAR Change Request	Description

99-141 **REVISE THE USAR TO INDICATE ORGANIZATIONAL CHANGES IN THE SHIFT SUPERVISOR AND SUPERINTENDENT OPERATIONS POSITIONS.**

Page: 13.1-19 Page: 13.1-17

99-176 **REVISE THE USAR TO ADD A QUALIFICATION PARAGRAPH FOR M. A. JENKINS AND TO MAKE ENHANCEMENTS TO PARAGRAPH WORDING.**

Page: 13.1-19 Page: 13.1-18 Page: 13.1-17

REVISIONS TO THE TECHNICAL REQUIREMENTS MANUAL (TRM)

Document Revision Request 00-0148 (Revision 4)

Page B 3.1.9-1: The sentence "Two boric acid transfer pumps are provided for each BAT with one pump normally alligned with one boric acid tank and continuously running to provide recirculation for the Boric Acid System and the BAT." is revised to delete the words "for each BAT." Leaving these words in the sentence could be interpreted to mean that there are a total of four boric acid pumps when there are only two in the current plant design. Updated Safety Analysis Report (USAR) Section 9.3.4.2.2 and Table 9.3-9 indicate that there are only two boric acid transfer pumps. This change provides clarification that there are only two boric acid transfer pumps consistent with the design as described in the USAR.

Typographical, editorial, and formatting changes that have been identified since the issuance of Revision 3 on December 18, 1999. Revision 3 converted the TRM from the prose style of writing to the format similar to the post-Amendment No. 123 Technical Specification (TS) and NUMARC 93-03, "Writer's Guide for the Restructured Technical Specifications." These changes specifically correct typographical errors, are editorial in nature, or correct a formatting problem with the document.

Pages 3.4-3 and B 3.4.10-1 are revised to indicate that the Applicability is MODE 5, when the Reactor Coolant System (RCS) is not vented to atmosphere by a vent opening greater than or equal to 2 square inches instead of less than or equal to 2 square inches. Prior to Revision 3 to the TRM, this technical requirement specified a value of greater than or equal to 2 square inches. This is also consistent with TS 3.4.12, Low Temperature Overpressure Protection (LTOP) System, in which one of the pressure relief capabilities of the LTOP System is the RCS depressurized and an RCS vent of greater than or equal to 2 square inches. In the Technical Specification Surveillance Requirement (SR) 3.4.12.5 Bases, it indicates that a removed pressurizer safety valve or open manway suffices as a RCS vent of greater than or equal to 2 square inches. This change corrects a typographical error in the conversion to the new format from Revision 2 to Revision 3.

Page 3.1-8. Technical Surveillance Requirement (TSR) 3.1.10.3b. is revised to indicate that the boron solution concentration for the required BAT(s) is greater than 7000 ppm and less than 7700 ppm. This change provides for consistency between TSR 3.1.9.3 and TSR 3.1.10.3. Prior to Revision 3 of the TRM, this surveillance requirement (16.1.2.6) was specified as between 7000 and 7700 ppm. In Revision 3, there was no justification provided to change the value to greater than or equal to and less than or equal to. Therefore, it appears that the use of "equal to" was an oversight in the conversion of the TRM to the format consistent with the post Amendment No. 123 Technical Specifications.

Document Revision Request 00-0958 (Revision 5)

A new Technical Requirement (TR 3.7.23) was added to the TRM for the Class 1E Electrical Equipment air conditioning (A/C) trains. The Class 1E Electrical Equipment A/C trains provide a suitable environment for the Class 1E electrical equipment. These A/C trains provide temperature control for the Engineered Safety Features (ESF) switchgear room components, DC switchgear room components, and NK battery room components. TR 3.7.22, "Area Temperature Monitoring," Table TR 3.7.22-1, was revised to include the DC switchgear rooms and the NK battery rooms. Based on calculation GK-06-W, the maximum temperature specified

in Table TR 3.7.22-1 for the ESF switchgear rooms is revised from ≤ 117°F to ≤ 101°F. The values used in TRM Table TR 3.7.22-1 include an allowance for instrument error of ± 3 °F.

The Applicability of TR 3.7.19 was modified to state: "Whenever the temperature of primary or secondary coolant in associated steam generator (SG) is ≤ 70°F and the primary or secondary systems are capable of being pressurized." In addition, the TR 3.7.19 Bases was revised to describe when the primary and secondary systems are considered no longer capable of being pressurized (e.g., reactor vessel head removed and secondary system manways removed). The margin to brittle failure of the SGs is not impacted by this change and is considered acceptable. This TRM revision is further justified in that the TSs requirements associated with leakage (TS 3.4.13, "RCS Operational LEAKAGE") and RCS pressure/temperature limits (TS 3.4.1, "RCS Temperature, Pressure and Flow DNB Limits") continue to ensure that reactor coolant pressure boundary degradation is detected in a timely manner.

During the relocation of the Emergency Exhaust System (EES) requirements with regard to movement of crane or auxiliary hoist from TS (pre-Amendment No. 123) to the TRM, the Applicability was modified incorrectly. As stated in TRM 3.7.13 Discussion of Change (DOC) A.4 in DRR 99-1581 (TRM Revision 3), the actions of Current TS 3.9.13 specify "during crane operation with load over the fuel storage areas." However, the TRM Applicability, which was being modified for clarity (see TRM 3.7.13 DOC A.4), was modified to state, "During crane or auxiliary hoist operation over the spent fuel storage areas whenever..." This change inadvertently resulted in preventing crane or auxiliary hoist movement over the spent fuel storage area with no load, which is more restrictive. The TRM Applicability was modified to state, "During crane or auxiliary hoist operation with load over the spent fuel storage areas whenever irradiated fuel is stored in the fuel storage pool." This change is considered administrative and is acceptable since Technical Specifications previously allowed movement of crane and auxiliary hoist with no load over the spent fuel storage area with the EES inoperable. In addition, TRM 3.7.13 Applicability Bases was modified to include the reason the crane or auxiliary hoist can be moved over the spent fuel storage area with no load. This change provides clarification and is considered administrative.

Document Revision Request 00-1428 (Revision 6)

Revised TR 3.4.10, "Pressurizer Safety Valves - Shutdown," to incorporate changes based on Amendment No. 133. Amendment No. 133 revised TS 3.4.10, "Pressurizer Safety Valves," to reduce the safety valve set pressure in LCO 3.4.10 and decreases the setpoint in SR 3.4.10.1. The pressurizer safety valve setpoint and setpoint tolerance is changed from 2485 psig ± 1% to 2460 psig ± 2% in the TR. TSR 3.4.10.1 is revised to reflect the nominal lift setting of 2460 psig. The TRM is revised to reflect the changes to the TSs. The changes to the TRM are bounded by the NRC Safety Evaluation associated with Amendment No. 133.

Revised TRM Bases page B 3.4.17-2 to correct a format error. The word "operable" is revised to all capital letters as "OPERABLE" is a definition in Section 1.1 of the TS. TR 1.1 states that the definitions contained in the Technical Specifications Section 1.1, "Definitions," apply to the Technical Requirements in the TRM. A Note at the beginning of Section 1.1 of the TS states that "The defined terms of this section appear in capitalized type and are applicable throughout these Technical Specifications and Bases." Additionally, NUMARC 93-03, "Writer's Guide for the Restructured Technical Specifications," Section 4.1.1, specifies that all defined terms appear in all capitalized type throughout the TSs and Bases. "OPERABLE" and "OPERABILITY" is a

defined term in Section 1.1 of the TS. As such, "operable" on page B 3.4.17-2 should be capitalized. This is a format/editorial correction and as such is not considered a change.

Revised TR 5.8.1, "Training," to change "ISEG" to "Nuclear Safety Engineering." Pre-Amendment No. 123 Technical Specification 6.4.1b. stated "Training shall include familiarization with relevant industry operational experience identified by the ISEG or another plant group." Amendment No. 123 dated March 31, 1999, approved the conversion of the Current Technical Specifications (pre-Amendment No. 123) to the Improved Technical Speciations. Discussion of Change (DOC) 1-04-LG provided for the relocation of Current TS 6.4.1b. to a licensee controlled document (TRM). This statement was relocated to TR 5.8.1. Subsequent to Amendment No. 123, the Independent Safety Engineering Group (ISEG) organization was renamed Nuclear Safety Engineering. The TS maintained the name ISEG as a function and not as an organization. With the relocation of 6.4.1b. and with the redistribution of the organization function evaluated under Unreviewed Safety Question Determination 59 2000-0051, the function ISEG in TR 5.8.1 is changed to Nuclear Safety Engineering. As such, this change can be considered an editorial change.

Enclosure 2 to ET 01-0014

TRM Replacement Pages

TECHNICAL REQUIREMENTS

TABLE OF CONTENTS

3.1 REACTIVITY CONTROL SYSTEMS

3.1.10 Boration Injection System - Shutdown

TR 3.1.10 One boration injection subsystem shall be OPERABLE and capable of being powered from an OPERABLE emergency power source.

APPLICABILITY: MODES 4, 5, and 6.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Required boration injection subsystem inoperable in MODE 4. OR Required boration injection subsystem not capable of being powered from an OPERABLE emergency power source in MODE 4.	A.1 Initiate action to restore boration injection subsystem to OPERABLE status.	Immediately
B. Required boration injection subsystem inoperable in MODE 5 and 6. OR Required boration injection subsystem not capable of being powered from an OPERABLE emergency power source in MODE 5 or 6.	B.1 Suspend CORE ALTERATIONS. AND B.2 Suspend positive reactivity additions.	Immediately Immediately

TECHNICAL SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
TSR 3.1.10.1	Verify, for the required boration injection subsystem, the boron solution temperature for the: a. RWST is ≥ 37°F and ≤ 100°F; or b. Required boric acid storage tank(s) BATs) are ≥ 65 °F.	24 hours
TSR 3.1.10.2	Verify, for the required boration injection subsystem, the boron solution volume for the: a. RWST is: 1. ≥ 394,000 gallons in MODE 4; and 2. ≥ 55,416 gallons in MODES 5 and 6; or b. Combined BAT(s) volume is: 1. ≥ 17,658 gallons in MODE 4; and 2. ≥ 2,968 gallons in MODES 5 and 6.	7 days
TSR 3.1.10.3	Verify, for the required boration injection subsystem, the boron solution concentration for the: a. RWST is ≥ 2400 ppm; or b. Required BAT(s) are > 7000 ppm and < 7700 ppm.	7 days
TSR 3.1.10.4	Verify each required boration injection subsystem manual, power operated, and automatic valve that is not locked, sealed, or otherwise secured in position, is in its correct position.	31 days

(continued)

3.3 INSTRUMENTATION

3.3.15 Source Range Neutron Flux

TR 3.3.15 Two channels for the Source Range Neutron Flux function shall be OPERABLE.

APPLICABILITY: MODES 3, 4, and 5 with the Rod Control System not capable of rod withdrawal and all control rods fully inserted.

ACTIONS

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. One Source Range Neutron Flux channel inoperable.	A.1	Restore channel to OPERABLE status.	48 hours
B. Required Action and associated Completion Time not met.	B.1	Suspend operations involving positive reactivity changes.	1 hour
C. Both Source Range Neutron Flux channels inoperable.	C.1	Suspend operations involving positive reactivity changes.	Immediately
	AND		
	C.2	Verify SDM within the limits in the COLR.	1 hour AND Once per 12 hours thereafter

TECHNICAL SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
TSR 3.3.15.1	Perform CHANNEL CHECK.	12 hours
TSR 3.3.15.2	Perform COT.	92 days
TSR 3.3.15.3	----------NOTE---------- Neutron detectors may be excluded from CHANNEL CALIBRATION. ----------	
	Perform CHANNEL CALIBRATION.	18 months

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.10 Pressurizer Safety Valves - Shutdown

TR 3.4.10 One pressurizer code safety valve shall be OPERABLE with a lift setting of ≥ 2411 psig and ≤ 2509 psig.

----------NOTE----------
The lift setting is not required to be within the TR limits during MODES 4 and 5 for the purpose of setting the pressurizer safety valves under ambient (hot) conditions provided a preliminary cold setting was made prior to heatup.

APPLICABILITY: MODE 4,
MODE 5, when the RCS is not vented to atmosphere by a vent opening ≥ 2 square inches.

ACTIONS

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. Required pressurizer code safety valve inoperable.	A.1	Suspend operations involving positive reactivity changes.	Immediately
	AND		
	A.2	Initiate action to place an OPERABLE residual heat removal loop into operation in the shutdown cooling mode.	Immediately

TECHNICAL SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
TSR 3.4.10.1	Verify required pressurizer safety valve is OPERABLE in accordance with the Inservice Testing Program. Following testing, lift settings shall be within ± 1% of the nominal lift setting of 2460 psig.	In accordance with the Inservice Testing Program

3.7 PLANT SYSTEMS

3.7.13 Emergency Exhaust System (EES) for Crane Operation – Fuel Building

TR 3.7.13 Two EES trains shall be OPERABLE.

---NOTE---
Fuel building boundary may be opened intermittently under administrative controls.

APPLICABILITY: During crane or auxiliary hoist operation with load over the spent fuel storage areas whenever irradiated fuel is stored in the fuel storage pool.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One EES train inoperable.	---NOTE--- Required Action does not apply when both EES trains are inoperable and Condition B is entered. --- A.1 Place OPERABLE EES train in fuel building ventilation isolation signal (FBVIS) mode of operation.	Immediately
B. Two EES trains inoperable due to inoperable fuel building boundary.	B.1 Place at least one EES train in FBVIS mode of operation. AND B.2 Restore fuel building boundary to OPERABLE status.	Immediately 24 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. Two EES trains inoperable for reasons other than Condition B. OR Required Action and associated Completion Time of Condition B not met.	C.1 Suspend crane and auxiliary hoist operations over the spent fuel storage areas.	Immediately

TECHNICAL SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
TSR 3.7.13.1	For each EES train to be OPERABLE, the following Surveillance Requirements (SRs) specified in Technical Specification 3.7.13, "Emergency Exhaust System (EES)," are applicable: SR 3.7.13.1 SR 3.7.13.3 (FBVIS mode only) SR 3.7.13.2 SR 3.7.13.5.	In accordance with applicable SRs

3.7 PLANT SYSTEMS

3.7.17 Crane Travel - Spent Fuel Storage Facility

TR 3.7.17 Crane and auxiliary hoist loads > 2250 pounds shall be prohibited from travel over fuel assemblies in the spent fuel storage facility.

APPLICABILITY: During crane or auxiliary hoist operation whenever fuel assemblies are in the spent fuel storage facility.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Requirements of the TR not met.	A.1 Suspend crane and auxiliary hoist operations.	Immediately

TECHNICAL SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
TSR 3.7.17.1	Verify, for each crane or auxiliary hoist in use, that the crane/hoist cannot travel over fuel assemblies in the spent fuel storage facility when loaded > 2250 pounds.	7 days

3.7 PLANT SYSTEMS

3.7.19 Steam Generator (SG) Pressure and Temperature (P/T) Limits

TR 3.7.19 The pressure of the primary and secondary coolants in each required SG shall be ≤ 200 psig.

APPLICABILITY: Whenever the temperature of primary or secondary coolant in associated SG is ≤ 70°F and the primary or secondary systems are capable of being pressurized.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. ----------NOTE---------- Required Action A.2 must be completed whenever this Condition is entered. ---------- Requirements of TR not met.	A.1 Restore required SG pressure to within limits. AND A.2 Determine structural integrity of the SG is acceptable for continued operation.	30 minutes Prior to entering MODE 4
B. Required Action and associated Completion Time not met.	B.1 Initiate Performance Improvement Request.	Immediately

TECHNICAL SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
TSR 3.7.19.1	Verify the primary and secondary coolant pressure in each required SG is ≤ 200 psig.	1 hour

TECHNICAL SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
TSR 3.7.22.1	Verify the required area temperatures specified in Table TR 3.7.22-1 are within allowable limit.	12 hours

Table TR 3.7.22-1 (page 1 of 2)
Area Temperature Monitoring

	AREA	ALLOWABLE TEMPERATURE (°F)	MAXIMUM TEMPERATURE (°F)
1.	Essential Service Water Pump Room A	≤ 119	≤ 149
2.	Essential Service Water Pump Room B	≤ 119	≤ 149
3.	Auxiliary Feedwater Pump Room A	≤ 119	≤ 149
4.	Auxiliary Feedwater Pump Room B	≤ 119	≤ 149
5.	Turbine Driven Auxiliary Feedwater Pump Room	≤ 147	≤ 177
6.	Engineered Safety Feature Switchgear Room I	≤ 87	≤ 101
7.	Engineered Safety Feature Switchgear Room II	≤ 87	≤ 101
8.	Switchgear Room No. 1	≤ 87	≤ 101
9.	Switchgear Room No. 3	≤ 87	≤ 101
10.	Switchgear Room No. 2	≤ 87	≤ 101
11.	Switchgear Room No. 4	≤ 87	≤ 101
12.	Battery Room No. 1	≤ 87	≤ 101
13.	Battery Room No. 3	≤ 87	≤ 101
14.	Battery Room No. 2	≤ 87	≤ 101
15.	Battery Room No. 4	≤ 87	≤ 101
16.	Residual Heat Removal Pump Room A	≤ 119	≤ 149
17.	Residual Heat Removal Pump Room B	≤ 119	≤ 149
18.	Containment Spray Pump Room A	≤ 119	≤ 149
19.	Containment Spray Pump Room B	≤ 119	≤ 149
20.	Safety Injection Pump Room A	≤ 119	≤ 149
21.	Safety Injection Pump Room B	≤ 119	≤ 149
22.	Centrifugal Charging Pump Room A	≤ 119	≤ 149

(continued)

Table TR 3.7.22-1 (page 2 of 2)
Area Temperature Monitoring

	AREA	ALLOWABLE TEMPERATURE (°F)	MAXIMUM TEMPERATURE (°F)
23.	Centrifugal Charging Pump Room B	≤ 119	≤ 149
24.	Electrical Penetration Room A	≤ 101	≤ 131
25.	Electrical Penetration Room B	≤ 101	≤ 131
26.	Component Cooling Water Room A	≤ 119	≤ 149
27.	Component Cooling Water Room B	≤ 119	≤ 149
28.	Diesel Generator Room A	≤ 119	≤ 149
29.	Diesel Generator Room B	≤ 119	≤ 149
30.	Control Room	≤ 84	≤ 114

3.7 PLANT SYSTEMS

3.7.23 Class 1E Electrical Equipment Air-Conditioning (A/C)

TR 3.7.23 Two Class 1E Electrical Equipment A/C trains shall be OPERABLE.

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

ACTIONS

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. One Class 1E Electrical Equipment A/C train inoperable.	A.1	Establish compensatory measures to the affected train.	2 hours
	AND		
	A.2	Perform TSR 3.7.22.1 for the affected rooms.	4 hours
	AND		
	A.3	Restore Class 1E Electrical Equipment A/C train to OPERABLE status.	7 days
B. Two Class 1E Electrical Equipment A/C trains inoperable. OR Required Actions and associated Completion Time not met.	B.1	Declare affected equipment inoperable.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
TSR 3.7.23.1	Verify each Class 1E Electrical Equipment A/C train has the capability to remove the assumed heat load.	18 months

TR 5.0 ADMINISTRATIVE CONTROLS

TR 5.8 Training

5.8.1 A retraining and replacement training program for the unit staff shall be maintained under the direction of the Manager Training and shall meet or exceed the requirements and recommendations of Section 5 of ANSI/ANS 3.1-1978 with the following exceptions:

a. The training program for Licensed Operators and Senior Operators shall meet or exceed the requirements and recommendations of Section 5 of ANSI/ANS 3.1-1981 as endorsed by Regulatory Guide 1.8, Revision 2, and 10 CFR 55.

b. Training shall include familiarization with relevant industry operational experience identified by Nuclear Safety Engineering or another plant group.

PAGE [1]	REVISION NO. [2]	CHANGE DOCUMENT [3]	DATE EFFECTIVE/ IMPLEMENTED [4]
TAB – Title Page TRM			
Title Page			
TAB – Table of Contents			
i	5	DRR 00-0958	8/17/00
ii	5	DRR 00-0958	8/17/00
iii	5	DRR 00-0958	8/17/00
TAB – 1.0 USE AND APPLICATION			
1.0-1	3	DRR 99-1581	12/18/99
TAB – 3.0 APPLICABILTY			
3.0-1	3	DRR 99-1581	12/18/99
3.0-2	3	DRR 99-1581	12/18/99
3.0-3	3	DRR 99-1581	12/18/99
3.0-4	3	DRR 99-1581	12/18/99
TAB – 3.1 REACTIVITY CONTROL SYSTEMS			
3.1-1	3	DRR 99-1581	12/18/99
3.1-2	3	DRR 99-1581	12/18/99
3.1-3	3	DRR 99-1581	12/18/99
3.1-4	3	DRR 99-1581	12/18/99
3.1-5	3	DRR 99-1581	12/18/99
3.1-6	3	DRR 99-1581	12/18/99
3.1-7	3	DRR 99-1581	12/18/99
3.1-8	4	DRR 00-0148	4/24/00
3.1-9	3	DRR 99-1581	12/18/99
TAB – 3.3 INSTRUMENTATION			
3.3-1	3	DRR 99-1581	12/18/99
3.3-2	3	DRR 99-1581	12/18/99
3.3-3	3	DRR 99-1581	12/18/99
3.3-4	3	DRR 99-1581	12/18/99
3.3-5	3	DRR 99-1581	12/18/99
3.3-6	3	DRR 99-1581	12/18/99
3.3-7	3	DRR 99-1581	12/18/99
3.3-8	3	DRR 99-1581	12/18/99
3.3-9	3	DRR 99-1581	12/18/99
3.3-10	3	DRR 99-1581	12/18/99
3.3-11	3	DRR 99-1581	12/18/99
3.3-12	3	DRR 99-1581	12/18/99
3.3-13	3	DRR 99-1581	12/18/99
3.3-14	3	DRR 99-1581	12/18/99
3.3-15	3	DRR 99-1581	12/18/99
3.3-16	3	DRR 99-1581	12/18/99
3.3-17	3	DRR 99-1581	12/18/99
3.3-18	3	DRR 99-1581	12/18/99
3.3-19	4	DRR 00-0148	4/24/00
3.3-20	3	DRR 99-1581	12/18/99
3.3-21	3	DRR 99-1581	12/18/99
3.3-22	3	DRR 99-1581	12/18/99

PAGE [1]	REVISION NO. [2]	CHANGE DOCUMENT [3]	DATE EFFECTIVE/ IMPLEMENTED [4]
TAB – 3.3 INSTRUMENTATION (continued)			
3.3-23	3	DRR 99-1581	12/18/99
3.3-24	3	DRR 99-1581	12/18/99
3.3-25	3	DRR 99-1581	12/18/99
3.3-26	3	DRR 99-1581	12/18/99
3.3-27	3	DRR 99-1581	12/18/99
TAB – 3.4 REACTOR COOLANT SYSTEM (RCS)			
3.4-1	3	DRR 99-1581	12/18/99
3.4-2	3	DRR 99-1581	12/18/99
3.4-3	6	DRR 00-1428	10/12/00
3.4-4	6	DRR 00-1428	10/12/00
3.4-5	3	DRR 99-1581	12/18/99
3.4-6	3	DRR 99-1581	12/18/99
3.4-7	3	DRR 99-1581	12/18/99
3.4-8	3	DRR 99-1581	12/18/99
3.4-9	3	DRR 99-1581	12/18/99
3.4-10	3	DRR 99-1581	12/18/99
3.4-11	3	DRR 99-1581	12/18/99
TAB – 3.5 EMERGENCY CORE COOLING SYSTEMS (ECCS)			
3.5-1	3	DRR 99-1581	12/18/99
TAB – 3.6 CONTAINMENT SYSTEMS			
3.6-1	3	DRR 99-1581	12/18/99
3.6-2	3	DRR 99-1581	12/18/99
3.6-3	3	DRR 99-1581	12/18/99
TAB – 3.7 PLANT SYSTEMS			
3.7-1	3	DRR 99-1581	12/18/99
3.7-2	3	DRR 99-1581	12/18/99
3.7-3	5	DRR 00-0958	8/17/00
3.7-4	3	DRR 99-1581	12/18/99
3.7-5	3	DRR 99-1581	12/18/99
3.7-6	5	DRR 00-0958	8/17/00
3.7-7	3	DRR 99-1581	12/18/99
3.7-8	3	DRR 99-1581	12/18/99
3.7-9	3	DRR 99-1581	12/18/99
3.7-10	3	DRR 99-1581	12/18/99
3.7-11	3	DRR 99-1581	12/18/99
3.7-12	3	DRR 99-1581	12/18/99
3.7-13	3	DRR 99-1581	12/18/99
3.7-14	3	DRR 99-1581	12/18/99
3.7-15	3	DRR 99-1581	12/18/99
3.7-16	3	DRR 99-1581	12/18/99
3.7-17	3	DRR 99-1581	12/18/99
3.7-18	3	DRR 99-1581	12/18/99
3.7-19	3	DRR 99-1581	12/18/99
3.7-20	3	DRR 99-1581	12/18/99
3.7-21	3	DRR 99-1581	12/18/99
3.7-22	5	DRR 00-0958	8/17/00

PAGE [1]	REVISION NO. [2]	CHANGE DOCUMENT [3]	DATE EFFECTIVE/ IMPLEMENTED [4]
TAB – 3.7 PLANT SYSTEMS (continued)			
3.7-23	5	DRR 00-0958	8/17/00
3.7-24	5	DRR 00-0958	8/17/00
3.7-25	5	DRR 00-0958	8/17/00
TAB – 3.8 ELECTRICAL POWER SYSTEMS			
3.8-1	3	DRR 99-1581	12/18/99
3.8-2	3	DRR 99-1581	12/18/99
3.8-3	3	DRR 99-1581	12/18/99
3.8-4	3	DRR 99-1581	12/18/99
TAB – 3.9 REFUELING OPERATIONS			
3.9-1	3	DRR 99-1581	12/18/99
3.9-2	3	DRR 99-1581	12/18/99
3.9-3	3	DRR 99-1581	12/18/99
TAB – 3.10 EXPLOSIVE GAS AND STORAGE TANK RADIOACTIVITY MONITORING			
3.10-1	3	DRR 99-1581	12/18/99
3.10-2	3	DRR 99-1581	12/18/99
3.10-3	3	DRR 99-1581	12/18/99
3.10-4	3	DRR 99-1581	12/18/99
3.10-5	3	DRR 99-1581	12/18/99
3.10-6	3	DRR 99-1581	12/18/99
TAB – 5.0 ADMINISTRATIVE CONTROLS			
5.0-1	3	DRR 99-1581	12/18/99
5.0-2	3	DRR 99-1581	12/18/99
5.0-3	3	DRR 99-1581	12/18/99
5.0-4	3	DRR 99-1581	12/18/99
5.0-5	3	DRR 99-1581	12/18/99
5.0-6	3	DRR 99-1581	12/18/99
5.0-7	6	DRR 00-1428	10/12/00

Note 1 The page number is listed on the center of the bottom of each page.

Note 2 The revision number is listed in the lower right hand corner of each page. The Revision number will be page specific.

Note 3 The change document will be the document requesting the change. Therefore, the change document should be a DRR number in accordance with AP 26A-002.

Note 4 The date effective or implemented is the date the Technical Requirement pages are to be issued by Document Control.

TABLE OF CONTENTS

TECHNICAL REQUIREMENTS BASES

TABLE OF CONTENTS

TABLE OF CONTENTS

B 3.1 REACTIVITY CONTROL SYSTEMS

TR B 3.1.9 Boration Injection System - Operating

BASES

BACKGROUND

The Boration Injection System is a subsystem of the Chemical and Volume Control System (CVCS). This system is capable of reliably controlling the rate of reactivity changes (including xenon burnout) to assure acceptable fuel design limits are not exceeded and capable of holding the reactor core subcritical during cold shutdown conditions. The CVCS regulates the concentration of chemical neutron absorber (boron) in the Reactor Coolant System (RCS) to control reactivity changes. The Boration Injection System ensures that negative reactivity control is available during each MODE of facility operation. The amount of boric acid stored in the borated water sources always exceeds the amount required to borate the RCS to cold shutdown concentration assuming that the control assembly with the highest reactivity worth is stuck in its fully withdrawn position. This amount of boric acid also exceeds the amount required to bring the reactor to hot shutdown and to compensate for subsequent xenon decay. The shutdown reactivity requirements are specified in Technical Specifications LCO 3.1.1, "SHUTDOWN MARGIN (SDM)," LCO 3.1.5, "Shutdown Bank Insertion Limits," LCO 3.1.6, "Control Bank Insertion Limits," and LCO 3.9.1, "Boron Concentration."

The components required to perform this function include: (1) borated solution sources, (2) centrifugal charging pumps (CCPs), (3) redundant flow paths, and 4) boric acid transfer pumps.

Boric acid is stored in two boric acid tanks (BATs). Each BAT has a total volume of 27,755 gallons, with a 100% level indication equaling 26,045 gallons (Ref. 1). Two boric acid transfer pumps are provided with one pump normally aligned with one boric acid tank and continuously running to provide recirculation for the Boric Acid System and the BAT. On a demand signal by the Reactor Makeup Control System, the boric acid transfer pumps are aligned to the CVCS and delivers boric acid to the suction header of the CCPs (Ref. 2).

The Refueling Water Storage Tank (RWST) is also credited with being a required borated solution source. The CCPs and RWST are available to support the core cooling function in the event of a loss of coolant accident. Two CCPs may be manually aligned, as necessary, to inject borated solution from the RWST to the RCS for negative reactivity control. OPERABILITY of the CCPs, the RWST, and appropriate core cooling flow

BASES

BACKGROUND (continued)

paths are required as part of the Emergency Core Cooling System (ECCS). The Technical Specifications in Section 3.5 address the ECCS core cooling requirements.

In addition, the charging/letdown line normally provides adequate letdown flow. With the charging/letdown line out of service, a limited backup letdown flowpath may be provided to the reactor coolant drain tank or the pressurizer relief tank (PRT). Letdown to the PRT via an excess letdown path is considered adequate when borating from the BATs and this excess letdown flowpath is safety related. The excess letdown flowpath has two pair of series valves arranged in two parallel flowpaths to ensure adequate letdown flow can be established in the event of an active single failure. The two parallel paths combine into one common path to the PRT.

APPLICABLE SAFETY ANALYSES

The Boration Injection System is not assumed to be OPERABLE to mitigate the consequences of a design basis accident (DBA) or transient. However, the Boration Injection System satisfies, in part, General Design Criteria 26. In the event of a malfunction of the CVCS, which may cause a boron dilution event, manual operator action is to ensure the primary water makeup control valves in the Reactor Makeup System are closed (Refs. 3 and 4). The ability to reach cold shutdown conditions is achieved using only safety-related equipment assuming the loss of offsite power and the most limiting single failure (Ref. 5).

In the determination of the required combination of boration flow rate and boron concentration, there is no unique requirement that must be satisfied. Since it is imperative to raise the boron concentration of the RCS as soon as possible, the boron concentration should be a highly concentrated solution, such as that normally found in the BAT or the RWST. The operator should borate with the best source available for the plant conditions. One boration injection subsystem is sufficient to provide SDM, considering expected operating conditions, within the limits of the COLR (typically 1.3% $\Delta k/k$ after xenon decay and cooldown to 200°F). The maximum expected boration injection capability requirement is based on core end-of-cycle from full power equilibrium xenon conditions and requires 17,658 gallons of 7000 ppm borated solution from the BATs or 83,754 gallons of 2400 ppm boron solution from the RWST. The RWST solution volume calculation is conservatively based on a boron solution concentration of 2000 ppm.

B 3.4 REACTOR COOLANT SYSTEM

TR B 3.4.3 Pressurizer Pressure/Temperature (P/T) Limits

BASES

BACKGROUND

The pressurizer is an ASME Section III, vertical vessel with hemispherical top and bottom heads constructed of carbon steel. The vessel is clad with austenitic stainless steel on all surfaces exposed to the reactor coolant. The surge line nozzle and removable electric heaters are installed in the bottom head. Spray line nozzles, relief and safety valves are located in the top head of the vessel.

A small continuous spray is provided through a manual bypass valve around the power-operated spray valves. The temperature, and hence the pressure are controlled by varying the power input to selected heater elements. The pressurizer is designed to withstand the effects of cyclic loads due to pressure and temperature changes. These loads are introduced by startup and shutdown operations, power transients and reactor trips. During startup and shutdown, the rate of temperature change is controlled by the operator. Heatup rate is controlled by the input to the heater elements, and cooldown is controlled by spray. When the pressurizer is filled with water, i.e., during initial system heatup, and near the end of the second phase of plant cooldown, Reactor Coolant System (RCS) pressure is maintained by the letdown flow rate via the Residual Heat Removal System.

This TR establishes the operating limits and these Bases address the control of the rate of change of temperature and the effect of the thermal cycling on critical areas of the pressure boundary of the pressurizer. The Reactor Coolant Pressure Boundary, which includes the pressurizer, is defined in 10 CFR 50, Section 50.2 (Ref. 1). General rules for design and fabrication are provided in 10 CFR 50.55a (Ref. 2). These design and fabrication rules are based on the ASME Boiler and Pressure Vessel Code.

APPLICABLE SAFETY ANALYSES

The limits on the rate of change of temperature for the heatup and cooldown of the pressurizer are not derived from Design Basis Accident analyses. The limits are prescribed during normal operation to limit the cyclic, thermal loading on critical areas in the pressure boundary. The limits on the rate of change of temperature have been established, using approved methodology, to preclude operation in an unanalyzed condition.

The temperature and pressure changes during heatup and cooldown are limited to be consistent with the requirements given in the ASME Boiler and Pressure Vessel Code, Section III, Appendix G.

BASES

APPLICABLE SAFETY ANALYSES (continued)

Although the pressurizer operates in temperature ranges above those for which there is reason for concern of nonductile failure, operating limits are provided to assure compatibility of operation with the fatigue analysis performed in accordance with the ASME Code requirements.

TR

TR 3.4.3 specifies the acceptable rates of heatup and cooldown of the pressurizer as well as the maximum spray water temperature differential. These limits define allowable operating regions and permit a large number of operating cycles while providing a wide margin to cyclic induced failure in the pressure boundary of the pressurizer.

The pressurizer heatup rate shall not exceed 100°F/hr in any 1-hour period. The pressurizer cooldown rate shall not exceed 100°F/hr in any 1-hour period (Ref. 5). The spray water temperature differential shall not exceed 583°F.

APPLICABILITY

The limits on the rate of change of temperature provide a definition of acceptable operation to limit cyclic temperature loading to analyzed conditions. Although these limits were developed to provide rules for operation during heatup and cooldown (MODES 3, 4, and 5), they are applicable at all times.

ACTIONS

A.1 and A.2

If either the rate of change of temperature is outside the limits, or the spray water temperature differential exceed its limit, the affected parameter must be restored to within limits in 30 minutes. The Completion Time of 30 minutes reflects the urgency of restoring the parameters to within the analyzed range. Most violations will not be severe, and the corrective actions can be accomplished in this time in a controlled manner. In addition to restoring operation to within limits, an engineering evaluation of the structural integrity of the pressurizer is required within 72 hours to determine if operation may continue. This may require event-specific stress analyses or inspections. A favorable evaluation must be completed before continuing operation. The Completion Time of 72 hours is consistent with that allowed in Technical Specification 3.4.3, "RCS Pressure and Temperature Limits."

A Note is provided to clarify that Required Action A.2 must be completed whenever this Condition is entered. The Note emphasizes the need to perform the engineering evaluation of the effects of the excursion outside the allowable limits. Restoration to within limits is insufficient without the evaluation of the structural integrity of the pressure boundary of the pressurizer.

B 3.4 REACTOR COOLANT SYSTEM (RCS)

TR B 3.4.10 Safety Valves, Shutdown

BASES

BACKGROUND	The Background section for Technical Specification Bases 3.4.10, "Pressurizer Safety Valves," is applicable to these Bases.
APPLICABLE SAFETY ANALYSES	The required pressurizer safety valve protects the RCS from being pressurized above the RCS pressure Safety Limit and serves as a backup to the Low Temperature Overpressure Protection (LTOP) System. However, the pressurizer safety valves are not assumed to function to mitigate a DBA or transient in MODES 4 and 5 (Ref. 1).
TR	This requirement is provided to ensure continuity in the restructuring of Standard Technical Specifications. Reactor Coolant System overpressure protection is provided in MODES 4 and 5 by the LTOP System covered by LCO 3.4.12. A Note modifies this TR to indicate that the lift setting of the pressurizer code safety valves can be outside the required lift setting when in MODE 4 for the purpose of setting at hot ambient conditions. Safety valves can lift at a slightly different pressure as the valve temperature vary. Therefore, setting the safety valve for nominal operating conditions in MODE 1 may result in a lift pressure drifting outside the required tolerance limits as the plant is shutdown to MODE 5. This exception is allowed for entry and operation into and exit from MODES 4 and 5 provided a preliminary cold setting was made prior to heatup.
APPLICABILITY	The OPERABILITY of one pressurizer Code safety valve ensures that overpressure protection is provided in MODE 4 and MODE 5, when the RCS is not vented to atmosphere by a vent opening $\geq$ 2 square inches. OPERABILITY of Code safety valves is not required in MODE 6. Code safety valve OPERABILITY requirements for MODES 1, 2, and 3 are covered in Technical Specification 3.4.10, "Pressurizer Safety Valves."

BASES

ACTIONS

A.1

With the required pressurizer safety valve inoperable, the plant must be placed in a condition which minimizes the risk of a pressure spike large enough to actuate a safety valve. This is done by suspending operations involving positive reactivity changes. The immediate Completion Time for performance of Required Action A.1 shall not preclude completion of actions to establish a safe condition.

A.2

In addition to Required Action A.1, action shall be immediately initiated to place an OPERABLE residual heat removal loop in operation in the shutdown cooling mode. This provides overpressure protection through the residual heat removal suction and discharge relief valves. The immediate Completion Time requires an operator to initiate actions to place the loop in shutdown cooling. Once actions are initiated, they must be continued until the loop is in the shutdown cooling mode.

TECHNICAL SURVEILLANCE REQUIREMENTS

TSR 3.4.10.1

TSR 3.4.10.1 requires verification that the required pressurizer safety valve is OPERABLE in accordance with the Inservice Testing Program described in Technical Specification 5.5.8. Pressurizer safety valves are to be tested in accordance with the requirements of Section XI of the ASME Code (Ref. 2), which provides the activities and Frequencies necessary to satisfy the TSR.

REFERENCES

1. WCAP-11618, "MERITS Program-Phase II, Task 5, Criteria Applciation," including Addendum 1 dated April 1989.

2. ASME, Boiler and Pressure Vessel Code, Section XI.

B 3.4 REACTOR COOLANT SYSTEM

TR B 3.4.17 Structural Integrity

BASES

BACKGROUND

The quality group classification for each water- and steam- containing pressure component is shown in USAR Table 3.2-1. The components are classified according to their safety significance as dictated by service and functional requirements and by the consequences of their failure. The quality group classifications and code requirements for the quality of plant process systems meet the intent of Regulatory Guides 1.26 and 1.143 (Ref. 1).

The design, fabrication, inspection, and testing requirements of each classification provide the required degree of conservatism in assuring component pressure integrity and OPERABILITY (Ref. 1).

The Code requirements applicable to each quality group classification are identified in USAR Table 3.2-2. The quality group classifications and the interfaces between classifications in a system having components of different classifications are indicated on the piping and instrumentation diagram or flow diagram of that system (Ref. 1).

APPLICABLE SAFETY ANALYSES

Certain components which are designed and manufactured to the requirements of specific sections of the ASME Boiler and Pressure Vessel Code are part of the primary success path and function to mitigate DBAs and transients. However, the OPERABILITY of these components is addressed in the relevant specifications that cover individual components.

TR

TR 3.4.17 requires the structural integrity of ASME Code Class 1, 2, and 3 components be maintained. Structural integrity is the functional capability (i.e., pressure retaining capability) of ASME Code Class 1, 2, and 3 systems during all design and operational conditions. In those areas where conflict may exist between the Technical Requirements and the ASME Boiler and Pressure Vessel Code, the Technical Requirements Manual takes precedence.

APPLICABILITY

The structural integrity of the ASME Code Class 1, 2, and 3 components is required during MODES 1, 2, 3, 4, 5, and 6. This TR applies whenever Code Class 1, 2, or 3 components are OPERABLE, not just during the performance of inservice inspection examinations.

BASES

ACTIONS

A Note has been added to the ACTIONS to clarify the application of Completion Time rules. The Conditions of this Requirement may be entered independently for each component. The Completion Time(s) for the inoperable component will be tracked separately for each component starting from the time the Condition was entered for that component.

A.1 and A.2

Condition A applies to one or more ASME Code Class 1, 2, and 3 components in a degraded or nonconforming condition. A degraded condition is a condition of a system, structure or component (SSC) in which there has been any loss of quality or functional capability (Ref. 2). A nonconforming condition is a condition of an SSC in which there is failure to meet requirements or licensee commitments (Ref. 2). Degraded or nonconforming conditions discovered during conduct of inservice inspection, maintenance or refueling activities, or during plant operation shall be considered to determine the affect on structural integrity.

Required Action A.1 stipulates a determination be performed within 48 hours to determine that structural integrity is still maintained in the degraded or nonconforming condition. Depending on the type of degraded or nonconforming condition, structural integrity is determined in accordance with either ASME Section III design rules, Section XI acceptance standards or Section XI IWB-3600 analytical evaluation procedures. In addition, NRC Generic Letter (GL) 91-18 (Ref. 2) Sections 6.13 (Piping and Pipe Support Requirements), 6.14 (Flaw Evaluation), and 6.15 (Operational Leakage) contain specific NRC guidance and acceptable evaluation procedures to be used in determining structural integrity and OPERABILITY for ASME Code Class 1, 2, and 3 components. The amendment to the NRC Regulations to add 10 CFR 50.55a(b)(2)(xiii) (Ref. 3) modifies a portion of the previous guidance contained in GL 91-18, and is therefore discussed below.

Since ASME Section XI did not have provisions for evaluation of through-wall pressure boundary leaks, the NRC provided guidance in GL 91-18 for addressing degraded and nonconforming conditions consisting of through-wall pressure boundary leaks. In GL 91-18, Section 6.15, the NRC stated that "Upon discovery of leakage from a Class 1, 2, or 3 component pressure boundary (i.e., pipe wall, valve body, pump casing, etc.) the licensee should declare the component inoperable. The only exception is for Class 3 moderate energy piping as discussed in Generic letter 90-05. For Class 3 moderate energy piping, the licensee may treat the system containing the through-wall flaw(s), evaluated and found to meet the acceptance criteria in Generic Letter 90-05, as OPERABLE until

B 3.7 PLANT SYSTEMS

TR B 3.7.13 Emergency Exhaust System (EES) for Crane Operation – Fuel Building

BASES

BACKGROUND

A description of the EES is provided in the Bases for Technical Specification 3.7.13, "Emergency Exhaust System," (Ref. 1).

APPLICABLE SAFETY ANALYSES

The EES has a design function to filter radioactive particles which have been released as a result of a fuel handling accident. The OPERABILITY of the EES with respect to a fuel handling accident is addressed by Technical Specification 3.7.13 (Ref. 1). The dose consequences of dropping of a light load (i.e, load $\leq$ 2250 pounds) into the spent fuel pool storage area, which may result in partial damage to one or more irradiated fuel assembly(s) is less than the dose consequences of a fuel handling accident. Therefore, since the potential for damage exists which would result in the release of radioactive material, it is necessary for operational requirements to be in place to protect against the inadvertent release of radioactive materials to the environment. Heavy loads (i.e., loads in excess of 2250 pounds) are prevented from being moved over fuel assemblies in the spent fuel storage facility by crane travel interlocks and physical stops. OPERABILITY requirements for crane travel interlocks and physical stops are specified in TR 3.7.17, "Crane Travel - Spent Fuel Storage Facility," (Ref. 2).

TR

Two independent and redundant trains of the EES are required to be OPERABLE to ensure that at least one train is available, assuming a single failure that disables the other train, coincident with the loss of offsite power. Total system failure could result in the atmospheric release from the fuel building. Such a release is not expected to exceed the guideline limits of 10 CFR 100 for the situation addressed by this TR.

The EES is considered OPERABLE when the individual components necessary to control releases from the individual components necessary to control releases from the fuel building are OPERABLE in both trains. An EES train is considered OPERABLE when its associated:

a. Fan is OPERABLE;

b. HEPA filter and charcoal adsorber are not excessively restricting flow, and are capable of performing their filtration function; and

BASES

TR (continued)

c. Heater, ductwork, and dampers are OPERABLE, and air circulation can be maintained.

In addition, the fuel building boundary must be maintained, including the integrity of the walls, floors, ceilings, ductwork, and access doors.

The TR is modified by a Note allowing the fuel building boundary to be opened intermittently under administrative controls. For entry and exit through doors, the administrative control of the opening is performed by the person(s) entering or exiting the area. For other openings, these controls consist of stationing a dedicated individual at the opening who is in continuous communication with the control room. This individual will have a method to rapidly close the opening when a need for fuel building isolation is indicated.

APPLICABILITY

During crane or auxiliary hoist operation with load over the fuel storage areas when irradiated fuel is stored in the spent fuel pool, the EES is required to be OPERABLE in the fuel building ventilation isolation signal (FBVIS) mode of operation to mitigate the consequences of an event as a result of the dropping of a load on to or into a fuel storage area. However, no DBA or transient assumes the EES to be OPERABLE during crane operation with load over the fuel storage areas (Ref. 3). During crane or auxiliary hoist operation with no loads or when there is no irradiated fuel in the spent fuel storage pool, the EES is not required to be OPERABLE in the FBVIS mode since the potential of radioactive release due to dropping a load on an irradiated fuel assembly is unlikely.

ACTIONS

A.1

With one EES train inoperable, the OPERABLE EES train may be placed in the FBVIS mode. This action ensures that this remaining train is OPERABLE, that no failures that would prevent automatic actuation will occur, and that any active failure will be readily detected.

The Required Action has been modified by a Note to ensure that only the Required Action and associated Completion Time of Condition B are required if both EES trains are inoperable due to an inoperable fuel building boundary. With both EES trains inoperable, an OPERABLE EES train is not available to operate in the FBVIS mode. Required Action B.1 is the appropriate remedial action. The exception does not affect tracking the Completion Time from the initial entry into Condition A; only the requirement to comply with the Required Action.

B 3.7 PLANT SYSTEMS

TR B 3.7.19 Steam Generator (SG) Pressure/Temperature (P/T) Limits

BASES

BACKGROUND

Limits on steam generator pressure and temperature are established based on material toughness considerations. Material toughness varies with temperature and is lower at room temperature than at operating temperature. One indicator of the temperature effect on ductility is the nil-ductility temperature (NDT). Therefore, a nil-ductility reference temperature (RT_{NDT}) has been determined by experimental means. The RT_{NDT} is that temperature below which brittle (non-ductile) fracture may occur. The limitations of 70°F and 200 psig are based on a SG RT_{NDT} of 60°F and are sufficient to prevent brittle fracture. The 70°F temperature must be established before the pressure is increased to 200 psig. This limitation on steam generator pressure and temperature, ensures that the pressure-induced stresses in the steam generators do not exceed the maximum allowable fracture toughness stress limits.

APPLICABLE SAFETY ANALYSES

The RT_{NDT} limit is not derived from the Design Basis Accident analyses. The RT_{NDT} limit is imposed during normal operation to avert encountering P/T combinations which are not analyzed as part of the SG design. Unanalyzed P/T combinations could cause propagation of minor, undetected flaws, which could cause brittle failure of the pressure boundary. Because the RT_{NDT} limit is related to normal operation, the RT_{NDT} limit is not a consideration in designing the accident sequences for theoretical hazard evaluations (Ref. 1).

TR

This TR requires that the pressure of the primary and the secondary coolant in the steam generators be maintained $\leq$ 200 psig when the primary or secondary coolant temperature of the associated SG is $\leq$ 70°F. The pressure induced stress when SG temperature is $\leq$ 70°F is low enough to be insignificant with SG pressure $\leq$ 200 psig.

APPLICABILITY

The operating requirements which must be observed to avoid a condition, which could lead to brittle failure of the SG carbon steel components, is not strictly limited to specific MODES. Hence, in general, temperature monitoring of the SG components should be at all times. However, it is unlikely that these limits will be violated in MODES 1, 2, 3, and 4 due to the high operating temperature of the primary coolant as well as the secondary coolant in the associated SG. Accordingly, the pressure limit is most easily violated at low SG temperature during shutdown and startup of the plant when the primary or secondary systems are capable

BASES

APPLICABILITY (continued)

of being pressurized. As such, the Applicability is limited to whenever the temperature of the primary or the secondary coolant of the associated SG is $\leq 70°F$ and the primary or secondary systems are capable of being pressurized. For the purposes of this TR, the primary and secondary systems are considered no longer capable of being pressurized following depressurization to atmospheric conditions with a vent path of ≥ 2 square inches (e.g., reactor vessel head removed for the primary system and SG manways removed for the secondary system.

ACTIONS

A.1 and A.2

Operation outside the SG P/T limits must be corrected so that the SG is returned to a condition that is sufficient to prevent brittle fracture.

The Completion Time reflects the urgency of restoring the parameters to within the analyzed range.

Besides restoring the SG pressure to within limits, an engineering evaluation is required to determine if SG operation is allowed. This evaluation must verify that the SG integrity is acceptable and must be completed before entering MODE 4. Several methods may be used, including comparison with pre-analyzed transients, new analyses, or inspection of the components.

Condition A is modified by a Note requiring Required Action A.2 be completed whenever the Condition is entered. The Note emphasizes the need to perform the evaluation of the effects of the excursion outside the allowable limits. Restoration alone per Required Action A.1 is insufficient because the higher pressure-induced stresses must be evaluated against the maximum allowable fracture toughness stress limits.

B.1

If the Required Actions cannot be performed within the associated Completion Time, Required Action B.1 requires initiation of a Performance Improvement Request (PIR) immediately. As part of the initiation of the PIR, action shall be implemented in a timely manner to place the unit in a safe condition as determined by plant management. The PIR should provide as accurate description of the problem, the Required Action and associated Completion Time not complied with. The intent of this Required Action is to utilize the corrective action program to assure prompt attention and adequate management oversight to minimize the additional time the SG P/T limits are not met.

BASES

TECHNICAL SURVEILLANCE REQUIREMENTS	TSR 3.7.19.1 This TSR verifies that the pressure of the primary and the secondary coolants of each SG is within limits when the associated SG temperature is $\leq$ 70°F. This verification ensures adequate margin to RT_{NDT} is maintained. The Frequency is based on engineering judgment.
REFERENCES	1. WCAP-11618, "MERITS Program-Phase II, Task 5, Criteria Application," including Addendum 1 dated April, 1989.

BASES

ACTIONS

A Note has been added to the ACTIONS to clarify the application of Completion Time rules. The Conditions of this Technical Requirement may be entered independently for each affected system. The Completion Time(s) of the inoperable snubber will be tracked separately for each affected system starting from the time the Condition was entered for that system as a result of discovery of an inoperable snubber.

A.1.1, A.1.2, and A.2

If one or more required snubbers have been declared inoperable, the snubber(s) must be restored to OPERABLE status within 72 hours. Alternatively, the snubber(s) must be replaced in the 72 hours. Condition A is modified by a Note that requires that Required Action A.2 be completed whenever Condition A is entered. Thus, if the snubber is restored to OPERABLE status, the Condition will require the completion of an engineering evaluation per section 5 of Table TR 3.7.20-4.

The engineering evaluation is performed to:

a) Determine the cause of the failure

As a result of this evaluation, the need for testing other snubbers will be considered. The results from the testing will be used to consider expanded functional testing and cause examination with consideration of manufacturing and design deficiency.

b) Determine the impact on the supported component

This evaluation shall determine if the inoperable snubber has adversely affected the attached component.

The 72 hours is based on engineering experiences and is reasonable, considering the time it will take to identify the problem and take the proper corrective actions.

B.1

If the plant has experienced an unexpected, potentially damaging snubber transient, an inspection per Table TR 3.7.20-1 is performed on all snubbers attached to sections of systems that have experienced the transient. The potential impact of the transient is assessed by reviewing operating data and by visually inspecting the associated system. In addition to the visual inspection, the freedom-of-motion of the mechanical snubber(s) is verified per Table TR 3.7.20-1.

BASES

ACTIONS

B.1 (continued)

The Completion Time of 6 months has been assigned based upon industry practice.

C.1

If Required Actions and associated Completion Times of Condition A or B are not met, the supported system or component is immediately declared inoperable.

TECHNICAL SURVEILLANCE REQUIREMENTS

Surveillance Testing is performed in accordance with the applicable requirements of ASME Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components" (Ref. 1).

Permanent or other exemptions from the surveillance program for individual snubbers may be granted by the Commission if a justifiable basis for exemption is presented and, if applicable, snubber life destructive testing was performed to qualify the snubber for the applicable design conditions at either the completion of their fabrication or at a subsequent date. Snubbers so exempted shall be listed in the list of individual snubbers indicating the extent of the exemptions.

In order to establish the inspection frequency for each type of snubber on a safety related system, it was assumed that the frequency of snubber failures and initiating events is constant with time and that the failure of any snubber could cause the system to be unprotected and to result in failure during an assumed initiating event. Inspections performed before that interval has elapsed may be used as a new reference point to determine the next inspection. However, the results of such early inspections performed before the original required time interval has elapsed (nominal time less 25%) may not be used to lengthen the required inspection interval. Any inspection whose results require a shorter inspection interval will override the previous schedule.

TSR 3.7.20.1

TSR 3.7.20.1 comprises a visual inspection of the snubbers. A pre-fuel load visual inspection and functional test has been performed on each snubber using the acceptance criteria listed in Table TR 3.7.20-2. The baseline takes into account that the snubbers have experienced thermal cycling and normal operating service as a result of previous hot functional testing. The initial inservice inspection has been performed on the

B 3.7 PLANT SYSTEMS

TR B 3.7.23 Class 1E Electrical Equipment Air-Conditioning (A/C)

BASES

BACKGROUND

The Class 1E Electrical Equipment air-conditioning trains provide a suitable environment for the Class 1E electrical equipment. These air-conditioning trains provide temperature control for the Engineered Safety Features (ESF) switchgear room components, DC switchgear room components, and NK battery room components. The specific rooms supplied by the Class 1E Electrical Equipment A/C trains are:

SGK05A		SGK05B	
SWGR RM NO. 1	(3408)	SWGR RM NO. 4	(3404)
SWGR RM NO. 3	(3413)	SWGR RM NO. 2	(3410)
Battery RM NO. 1	(3407)	Battery RM NO. 4	(3405)
Battery RM NO. 3	(3414)	Battery RM NO. 2	(3411)
ESF SWGR RM NO. 1	(3301)	ESF SWGR RM NO. 2	(3302)

The Class 1E Electrical Equipment A/C trains consists of two independent trains that provide cooling of recirculated air in the rooms associated with that train. Each train consists of a prefilter, self-contained refrigeration system (using essential service water as a heat sink), centrifugal fans, instrumentation, and controls to provide for electrical equipment room temperature control.

The Class 1E Electrical Equipment A/C trains are emergency trains which also operate during normal unit operations. Each train is normally aligned to cool only the equipment associated with its emergency load group. The Class 1E Electrical Equipment A/C trains are operated in a continuous recirculation mode to maintain the ESF switchgear room, the battery rooms, and the DC switchgear rooms to a temperature of $\leq$ 87°F (Ref. 1). However, a single train is capable of cooling the equipment of both its associated train and the opposite train while maintaining room temperatures of $\leq$ 101°F under both normal and accident conditions. The temperature limits include an allowance for instrument error of $\pm$ 3°F.

APPLICABLE SAFETY ANALYSES

The design basis of the Class 1E Electrical Equipment A/C is to maintain temperature in the Class 1E electrical equipment rooms to assure OPERABILITY of associated electrical equipment. The associated electrical equipment is designed so that the single failure of an active component after a design basis accident (DBA) cannot impair the ability of the systems powered by the electrical equipment to fulfill their safety functions. (Ref. 2).

BASES

APPLICABLE SAFETY ANALYSES

During normal or emergency operations, each Class 1E Electrical Equipment A/C train maintains the temperature in its associated electrical equipment rooms at a temperature ≤ 87°F. A single active failure of a component of the Class 1E Electrical Equipment A/C would affect only one train and would not affect the OPERABILITY of the opposite train and associated electrical equipment required for accident mitigation and safe plant shutdown. Analyses have shown that one Class 1E Electrical Equipment A/C train is capable of cooling the electrical equipment in both redundant load groups provided compensatory measures are taken (Ref. 3). The Class 1E Electrical Equipment A/C is designed in accordance with Seismic Category I requirements.

TR

Two independent trains of Class 1E Electrical Equipment A/C are required to be OPERABLE to ensure adequate cooling to their associated electrical equipment rooms during normal operation.

Each Class 1E Electrical Equipment A/C train is considered to be OPERABLE when the individual components necessary to maintain associated electrical equipment room temperatures within acceptable limits are OPERABLE. These components include the refrigeration compressors, heat exchangers, fans and associated control instrumentation.

APPLICABILITY

In MODES 1, 2, 3, and 4, both Class 1E Electrical Equipment A/C trains must be OPERABLE to ensure that the temperature in the protected rooms will not exceed equipment operational or environmental qualification temperatures.

In MODES 5 or 6, the OPERABILITY requirements of the Class 1E Electrical Equipment A/C trains are determined by the systems it supports.

ACTIONS

A.1, A.2, and A.3

With one Class 1E Electrical Equipment A/C train inoperable, action must be taken to establish compensatory measures to maintain the room temperatures by means of cooling by the opposite train. The below compensatory measures are acceptable assuming that the OPERABLE Class 1E Electrical Equipment A/C train is capable of 100% rated cooling load. The compensatory actions to be established for Required Action A.1 include:

BASES

ACTIONS A.1, A.2, and A.3 (continued)

1. The interior doors listed below shall be opened and remain open with appropriate firewatches posted for the duration of the compensatory measures with one A/C train out of service.

33011	34051	34081	34131
33023	34052	34082	34141
34041	34071	34101	
34042	34072	34111	

2. Verify XNN05 (480/120 V instrument transformer in Room 3408) and XNN06 (480/120 V instrument transformer in Room 3404) are de-energized, to reduce heat loads in the affected rooms.

With the interior doors opened as described above, portable fans may be installed to facilitate air circulation among rooms; however, this is not required based on operating experience. If available, the fan in the inoperable A/C train may be operated to help enhance air circulation.

The acceptability of taking the compensatory measures of opening doors between the Class 1E electrical equipment rooms is supported by the posting of fire watches. The de-energizing of XNN05 and XNN06 is acceptable because these are generally only used during plant outages and are only a backup system. Two independent trains of electrical equipment would remain OPERABLE to provide the function that XNN05 and XNN06 serve. The Completion Time of 2 hours to establish the compensatory measures is acceptable based on operating experience and the temperature in the affected rooms is not expected to significantly increase within this period of time.

With one Class 1E Electrical Equipment A/C train inoperable and the compensatory measures in Required Action A.1 completed, the temperatures in the ESF switchgear rooms, DC switchboard rooms, and NK battery rooms must not exceed a temperature that would render the supported electrical equipment inoperable. Thus, Required Action A.2 requires an initial check on temperatures by completing within 4 hours TSR 3.7.22.1 to ensure the electrical equipment rooms remain within acceptable limits. Maintaining electrical equipment room temperatures $\leq$ 87°F will ensure that the electrical equipment remains OPERABLE under normal operating conditions and a DBA. The Completion Time of 4 hours is acceptable based on the expected heat-up rate of the affected rooms. Periodic can continuing checks on temperature is accomplished by performing TSR 3.7.22.1 in accordance with its required Frequency of every 12 hours.

BASES

ACTIONS

A.1, A.2, and A.3 (continued)

With one Class 1E Electrical Equipment A/C train inoperable, action must be taken to restore OPERABLE status within 7 days. In this condition, and with the actions taken as specified in Required Action A.1, the remaining OPERABLE Class 1E Electrical Equipment A/C train is adequate to maintain the affected electrical equipment room temperatures within limits. However, the overall reliability of the cooling function is reduced and physical separation for the redundant electrical equipment is impaired. The 7-day Completion Time is based on the low probability of either (1) an event requiring electrical equipment operation to mitigate a DBA or (2) an event that challenges the physical separation criteria for the electrical equipment rooms and consideration that the remaining train can provide the required cooling function.

B.1

If the Required Actions and associated Completion Time for Condition A are not met, action must be taken immediately to declare the affected equipment inoperable. If both trains of Class 1E Electrical Equipment A/C are inoperable in MODES 1, 2, 3, or 4, the Class 1E Electrical Equipment may not be capable of performing its intended function. Therefore, action must be taken immediately to declare the affected equipment inoperable. The immediate Completion Time is consistent for actions to be performed without delay and in a controlled manner.

TECHNICAL SURVEILLANCE REQUIRMENTS

TSR 3.7.23.1

This SR verifies that the heat removal capability of the Class 1E Electrical Equipment A/C trains is adequate to remove the heat load assumed in the affected rooms during design basis accidents for both trains. This SR consists of verifying the heat removal capability of the condenser heat exchanger (either through performance testing or inspection) and verification of unit air flow capacity. This may include tube cleaning, eddy current testing and visual inspections. Each train of Class 1E Electrical Equipment A/C can remove both trains assumed heat loads if no more than 10% of the condenser heat exchanger tubes are plugged. Verification of proper operation of the trains is ensured since the trains are normally operating continuously. The 18 month Frequency is appropriate since significant degradation of the Class 1E Electrical Equipment A/C is not expected over this time period.

BASES

REFERENCES

1. USAR, Section 9.4.1.2.3.

2. USAR, Section 3.11(B).4

3. Configuration Change Package (CCP) 07905, Rev. 02, "SGK05A or B Out of Service."

PAGE [1]	REVISION NO. [2]	CHANGE DOCUMENT [3]	DATE EFFECTIVE/ IMPLEMENTED [4]
TAB – Table of Contents			
i	5	DRR 00-0958	8/17/00
ii	5	DRR 00-0958	8/17/00
iii	5	DRR 00-0958	8/17/00
TAB – B 3.0 APPLICABILTY			
B 3.0-1	3	DRR 99-1581	12/18/99
B 3.0-2	3	DRR 99-1581	12/18/99
B 3.0-3	3	DRR 99-1581	12/18/99
B 3.0-4	3	DRR 99-1581	12/18/99
B 3.0-5	3	DRR 99-1581	12/18/99
B 3.0-6	3	DRR 99-1581	12/18/99
B 3.0-7	3	DRR 99-1581	12/18/99
B 3.0-8	3	DRR 99-1581	12/18/99
B 3.0-9	3	DRR 99-1581	12/18/99
B 3.0-10	3	DRR 99-1581	12/18/99
B 3.0-11	3	DRR 99-1581	12/18/99
B 3.0-12	3	DRR 99-1581	12/18/99
TAB – B 3.1 REACTIVITY CONTROL SYSTEMS			
B 3.1.7-1	3	DRR 99-1581	12/18/99
B 3.1.7-2	3	DRR 99-1581	12/18/99
B 3.1.7-3	3	DRR 99-1581	12/18/99
B 3.1.8-1	3	DRR 99-1581	12/18/99
B 3.1.8-2	3	DRR 99-1581	12/18/99
B 3.1.9-1	4	DRR 00-0148	4/24/00
B 3.1.9-2	3	DRR 99-1581	12/18/99
B 3.1.9-3	3	DRR 99-1581	12/18/99
B 3.1.9-4	3	DRR 99-1581	12/18/99
B 3.1.9-5	3	DRR 99-1581	12/18/99
B 3.1.9-6	3	DRR 99-1581	12/18/99
B 3.1.9-7	3	DRR 99-1581	12/18/99
B 3.1.9-8	3	DRR 99-1581	12/18/99
B 3.1.10-1	3	DRR 99-1581	12/18/99
B 3.1.10-2	3	DRR 99-1581	12/18/99
B 3.1.10-3	3	DRR 99-1581	12/18/99
B 3.1.10-4	3	DRR 99-1581	12/18/99
TAB – B 3.3 INSTRUMENTATION			
B 3.3.3-1	3	DRR 99-1581	12/18/99
B 3.3.3-2	3	DRR 99-1581	12/18/99
B 3.3.3-3	3	DRR 99-1581	12/18/99
B 3.3.3-4	3	DRR 99-1581	12/18/99
B 3.3.3-5	3	DRR 99-1581	12/18/99
B 3.3.9-1	3	DRR 99-1581	12/18/99
B 3.3.9-2	3	DRR 99-1581	12/18/99
B 3.3.9-3	3	DRR 99-1581	12/18/99
B 3.3.9-4	3	DRR 99-1581	12/18/99
B 3.3.10-1	3	DRR 99-1581	12/18/99
B 3.3.10-2	3	DRR 99-1581	12/18/99

PAGE [1]	REVISION NO. [2]	CHANGE DOCUMENT [3]	DATE EFFECTIVE/ IMPLEMENTED [4]
TAB – B 3.3 INSTRUMENTATION (continued)			
B 3.3.10-3	3	DRR 99-1581	12/18/99
B 3.3.11-1	3	DRR 99-1581	12/18/99
B 3.3.11-2	3	DRR 99-1581	12/18/99
B 3.3.11-3	3	DRR 99-1581	12/18/99
B 3.3.11-4	3	DRR 99-1581	12/18/99
B 3.3.11-5	3	DRR 99-1581	12/18/99
B 3.3.12-1	3	DRR 99-1581	12/18/99
B 3.3.12-2	3	DRR 99-1581	12/18/99
B 3.3.12-3	3	DRR 99-1581	12/18/99
B 3.3.13-1	3	DRR 99-1581	12/18/99
B 3.3.13-2	3	DRR 99-1581	12/18/99
B 3.3.13-3	3	DRR 99-1581	12/18/99
B 3.3.13-4	3	DRR 99-1581	12/18/99
B 3.3.14-1	3	DRR 99-1581	12/18/99
B 3.3.14-2	3	DRR 99-1581	12/18/99
B 3.3.14-3	3	DRR 99-1581	12/18/99
B 3.3.14-4	3	DRR 99-1581	12/18/99
B 3.3.15-1	3	DRR 99-1581	12/18/99
B 3.3.15-2	3	DRR 99-1581	12/18/99
B 3.3.15-3	3	DRR 99-1581	12/18/99
B 3.3.15-4	3	DRR 99-1581	12/18/99
B 3.3.16-1	3	DRR 99-1581	12/18/99
B 3.3.16-2	3	DRR 99-1581	12/18/99
B 3.3.16-3	3	DRR 99-1581	12/18/99
B 3.3.16-4	3	DRR 99-1581	12/18/99
B 3.3.16-5	3	DRR 99-1581	12/18/99
B 3.3.17-1	3	DRR 99-1581	12/18/99
B 3.3.17-2	3	DRR 99-1581	12/18/99
B 3.3.17-3	3	DRR 99-1581	12/18/99
B 3.3.17-4	3	DRR 99-1581	12/18/99
B 3.3.17-5	3	DRR 99-1581	12/18/99
TAB – B 3.4 REACTOR COOLANT SYSTEM (RCS)			
B 3.4.3-1	4	DRR 00-0148	4/24/00
B 3.4.3-2	3	DRR 99-1581	12/18/99
B 3.4.3-3	3	DRR 99-1581	12/18/99
B 3.4.3-4	3	DRR 99-1581	12/18/99
B 3.4.10-1	4	DRR 00-0148	4/24/00
B 3.4.10-2	3	DRR 99-1581	12/18/99
B 3.4.16-1	3	DRR 99-1581	12/18/99
B 3.4.16-2	3	DRR 99-1581	12/18/99
B 3.4.16-3	3	DRR 99-1581	12/18/99
B 3.4.17-1	3	DRR 99-1581	12/18/99
B 3.4.17-2	6	DRR 00-1428	10/12/00
B 3.4.17-3	3	DRR 99-1581	12/18/99
B 3.4.17-4	3	DRR 99-1581	12/18/99
B 3.4.17-5	3	DRR 99-1581	12/18/99
B 3.4.18-1	3	DRR 99-1581	12/18/99
B 3.4.18-2	3	DRR 99-1581	12/18/99
B 3.4.18-3	3	DRR 99-1581	12/18/99

PAGE [1]	REVISION NO. [2]	CHANGE DOCUMENT [3]	DATE EFFECTIVE/ IMPLEMENTED [4]
TAB – B 3.5 EMERGENCY CORE COOLING SYSTEMS (ECCS)			
B 3.5.1-1	3	DRR 99-1581	12/18/99
B 3.5.1-2	3	DRR 99-1581	12/18/99
B 3.5.1-3	3	DRR 99-1581	12/18/99
TAB – B 3.6 CONTAINMENT SYSTEMS			
B 3.6.1-1	3	DRR 99-1581	12/18/99
B 3.6.1-2	3	DRR 99-1581	12/18/99
B 3.6.1-3	3	DRR 99-1581	12/18/99
B 3.6.1-4	3	DRR 99-1581	12/18/99
B 3.6.1-5	3	DRR 99-1581	12/18/99
B 3.6.1-6	3	DRR 99-1581	12/18/99
B 3.6.1-7	3	DRR 99-1581	12/18/99
B 3.6.1-8	3	DRR 99-1581	12/18/99
B 3.6.1-9	3	DRR 99-1581	12/18/99
TAB – B 3.7 PLANT SYSTEMS			
B 3.7.7-1	3	DRR 99-1581	12/18/99
B 3.7.7-2	3	DRR 99-1581	12/18/99
B 3.7.7-3	3	DRR 99-1581	12/18/99
B 3.7.7-4	3	DRR 99-1581	12/18/99
B 3.7.13-1	3	DRR 99-1581	12/18/99
B 3.7.13-2	5	DRR 00-0958	8/17/00
B 3.7.13-3	3	DRR 99-1581	12/18/99
B 3.7.17-1	3	DRR 99-1581	12/18/99
B 3.7.17-2	3	DRR 99-1581	12/18/99
B 3.7.17-3	3	DRR 99-1581	12/18/99
B 3.7.19-1	5	DRR 00-0958	8/17/00
B 3.7.19-2	5	DRR 00-0958	8/17/00
B 3.7.19-3	5	DRR 00-0958	12/18/99
B 3.7.20-1	3	DRR 99-1581	12/18/99
B 3.7.20-2	3	DRR 99-1581	12/18/99
B 3.7.20-3	4	DRR 00-0148	4/24/00
B 3.7.20-4	3	DRR 99-1581	12/18/99
B 3.7.20-5	3	DRR 99-1581	12/18/99
B 3.7.20-6	3	DRR 99-1581	12/18/99
B 3.7.20-7	3	DRR 99-1581	12/18/99
B 3.7.21-1	3	DRR 99-1581	12/18/99
B 3.7.21-2	3	DRR 99-1581	12/18/99
B 3.7.21-3	3	DRR 99-1581	12/18/99
B 3.7.21-4	3	DRR 99-1581	12/18/99
B 3.7.22-1	3	DRR 99-1581	12/18/99
B 3.7.22-2	3	DRR 99-1581	12/18/99
B 3.7.22-3	3	DRR 99-1581	12/18/99
B 3.7.22-4	3	DRR 99-1581	12/18/99
B 3.7.23-1	5	DRR 00-0958	8/17/00
B 3.7.23-2	5	DRR 00-0958	8/17/00
B 3.7.23-3	5	DRR 00-0958	8/17/00
B 3.7.23-4	5	DRR 00-0958	8/17/00
B 3.7.23-5	5	DRR 00-0958	8/17/00

PAGE [1]	REVISION NO. [2]	CHANGE DOCUMENT [3]	DATE EFFECTIVE/ IMPLEMENTED [4]
TAB – B 3.8 ELECTRICAL POWER SYSTEMS			
B 3.8.11-1	3	DRR 99-1581	12/18/99
B 3.8.11-2	3	DRR 99-1581	12/18/99
B 3.8.11-3	3	DRR 99-1581	12/18/99
B 3.8.11-4	3	DRR 99-1581	12/18/99
B 3.8.11-5	3	DRR 99-1581	12/18/99
TAB – B 3.9 REFUELING OPERATIONS			
B 3.9.7-1	3	DRR 99-1581	12/18/99
B 3.9.7-2	3	DRR 99-1581	12/18/99
B 3.9.9-1	3	DRR 99-1581	12/18/99
B 3.9.9-2	3	DRR 99-1581	12/18/99
B 3.9.9-3	3	DRR 99-1581	12/18/99
TAB – B 3.10 EXPLOSIVE GAS AND STORAGE TANK RADIOACTIVITY MONITORING			
B 3.10.1-1	3	DRR 99-1581	12/18/99
B 3.10.1-2	3	DRR 99-1581	12/18/99
B 3.10.1-3	3	DRR 99-1581	12/18/99
B 3.10.2-1	3	DRR 99-1581	12/18/99
B 3.10.2-2	3	DRR 99-1581	12/18/99
B 3.10.2-3	3	DRR 99-1581	12/18/99
B 3.10.3-1	3	DRR 99-1581	12/18/99
B 3.10.3-2	3	DRR 99-1581	12/18/99
B 3.10.3-3	3	DRR 99-1581	12/18/99
B 3.10.3-4	3	DRR 99-1581	12/18/99

Note 1 The page number is listed on the center of the bottom of each page.

Note 2 The revision number is listed in the lower right hand corner of each page. The Revision number will be page specific.

Note 3 The change document will be the document requesting the change. Therefore, the change document should be a DRR number in accordance with AP 26A-002.

Note 4 The date effective or implemented is the date the Technical Requirement Bases pages are issued by Document Control.