NMC
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Nuclear Management Company, LLC
Prairie Island Nuclear Generating Plant
1717 Wakonade Dr. East
Welch MN 55089

March 6, 2002

10 CFR Part 50
Section 50.90

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

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
Docket Nos. 50-282 License Nos. DPR-42
50-306 DPR-60

Supplement to License Amendment Request dated December 11, 2000
Conversion to Improved Technical Specifications (ITS)

By letter dated, December 11, 2000, Prairie Island submitted a License Amendment Request (LAR) to convert the current Technical Specifications (CTS) using the guidance of NUREG-1431, Revision 1 as amended by NRC and industry Technical Specification Task Force (TSTF) documents. This letter supplements the subject LAR.

By letter dated January 8, 2002, the NRC Staff sent NMC requests for additional information (RAIs) regarding our LAR dated December 11, 2000 to convert to Improved Technical Specifications. Attachment 1 to this letter contains the NRC RAIs for ITS Section 3.7 and the Nuclear Management Company (NMC) answers to these RAIs.

Attachment 2, Page List by RAI Q, provides a cross-reference of RAIs and other sources of page changes to the pages that they changed.

Attachment 3 to this letter contains Revision 11 change pages which implement answers to Section 3.7 RAIs. Changes to the Revision 11 pages are sidelined in the right margin beside the line(s) which have been revised. Change Pages from Parts A, B, D, F, G or Cross-References are dated 2/2/02. Change Pages from Parts C and E are marked as Revision 11 with a small textbox below the revision sideline which contains "R-11".

A001

The Significant Hazards Determinations and Environmental Assessments, as presented in the original December 11, 2000 submittal and as supplemented March 6, 2001, July 3, 2001, August 13, 2001, November 12, 2001, December 12, 2001, January 25, 2002, January 31, 2002, February 14, 2002, February 15, 2002, February 16, 2002 and by the Part G change pages in Attachment 3 of this letter, bound the proposed license amendment.

NMC is notifying the State of Minnesota of this LAR supplement by transmitting a copy of this letter and attachments to the designated State Official.

To the best of my knowledge and belief, the statements contained in this document are true and correct. In some respects these statements are not based on my personal knowledge, but on information furnished by other Prairie Island Nuclear Generating Plant (PINGP) and NMC employees, contractor employees, and/or consultants. Such information has been reviewed in accordance with company practice, and I believe it to be reliable.

In this letter NMC has not made any new or revised any Nuclear Regulatory Commission commitments. Please address any comments or questions regarding this matter to myself or Mr. Dale Vincent at 1-651-388-1121.

Mano K. Nazar
Site Vice President
Prairie Island Nuclear Generating Plant

C: Regional Administrator - Region III, NRC
Senior Resident Inspector, NRC
NRR Project Manager, NRC
James Bernstein, State of Minnesota
J E Silberg

Attachments:
Affidavit
1. NRC RAIs for Section 3.7 and NMC Responses.
2. Page List by RAI Q
3. Revision 11 Change Pages

UNITED STATES NUCLEAR REGULATORY COMMISSION

NUCLEAR MANAGEMENT COMPANY, LLC

PRAIRIE ISLAND NUCLEAR GENERATING PLANT DOCKET NO. 50-282
50-306

REQUEST FOR AMENDMENT TO
OPERATING LICENSES DPR-42 & DPR-60

SUPPLEMENT TO LICENSE AMENDMENT REQUEST DATED DECEMBER 11, 2000
CONVERSION TO IMPROVED TECHNICAL SPECIFICATIONS (ITS)

By letter dated March 6, 2002, Nuclear Management Company, LLC, a Wisconsin corporation, is submitting additional information in support of the License Amendment Request originally submitted December 11, 2000.

This letter contains no restricted or other defense information.

NUCLEAR MANAGEMENT COMPANY, LLC

By _____
Michael D. Werner
Plant Manager
Prairie Island Nuclear Generating Plant

State of Minnesota

County of Goodhue

On this 7th day of March 2002 before me a notary public acting in said County, personally appeared Michael D Werner, Plant Manager, Prairie Island Nuclear Generating Plant, and being first duly sworn acknowledged that he is authorized to execute this document on behalf of Nuclear Management Company, LLC, that he knows the contents thereof, and that to the best of his knowledge, information, and belief the statements made in it are true.

_____
1/31/2005

CATHERINE S. MCEATHRON
NOTARY PUBLIC - MINNESOTA
My Commission Expires 1/31/2005

TRANSMITTAL MANIFEST
Nuclear Management Company, LLC
PRAIRIE ISLAND NUCLEAR GENERATING PLANT

Supplement to License Amendment Request Dated December 11, 2000

Conversion to Improved Technical Specifications (ITS)

Correspondence Date: 3/6/2002 **ITS LAR 12/11/00**

USNRC:

Document Control Desk
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Sr. Resident Inspector
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PITC Library
Ronnie Lingle
Ruth VanTassel orig. attac
Scott Marty - Manifest Only
Scott Northard RSQ-10
Steve Frost
Ted Amundson
Tom Webb

Manifest Date: 3/7/2002 ***RMS - DOC Type:*** 3.113

Comments: **Distributed as indicated on the attached ITS Submittal Copies sheet.**
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TS History	1			1
PI Records	1			1
Betty Underwood (OSRC)	1			
Totals	**45**	**4**	**46**	**16**

Prairie Island Nuclear Generating Plant

Attachment 1

to
Supplement dated March 6, 2002
to License Amendment Request dated December 11, 2000
Conversion to Improved Technical Specifications (ITS)

NRC RAIs for Section 3.7 and NMC Responses

Prairie Island 1 & 2 Improved Technical Specifications Review Comments
ITS Section 3.7, Plant Systems

General Comments

Note: These comments are general in that they may reflect issues affecting more than one, and perhaps all sections of the ITS submittal. Accordingly, responses should address the full scope of the resolution, not just the specific case noted in the comment. Some of these general comments may duplicate or overlap comments from reviewers for other ITS sections. In such cases, in the response, reference the previous comment(s).

G3.7-1 Attachment 1 of ITS submittal cover letter dated 12/11/00, page 3, states that deleted specifications from CTS that duplicate regulatory requirements are categorized as R-type changes. Such deletions should be designated as L-type changes because they are "deleted", not relocated to licensee controlled documents such as the TRM.

NMC RESPONSE

Parts affected by this change:
None

In accordance with NEI 96-06, dated August 1996, Section 2.5.1, Less Restrictive items are changes to requirements that are relaxed, or those where new flexibility is provided. This category does not include Relocated changes. Relocated Specifications are those which do not meet the 10CFR50.36 selection criteria and may be relocated to licensee controlled documents. Those CTS requirements that are duplicative to regulatory regulations are not less restrictive changes. The regulations, requirements, frequencies, reporting instructions or other specifics of the regulation are not relaxed nor any new flexibility provided. The only change is the location of the reference of the requirement. Instead of the requirement being located in the CTS, procedure, and the regulatory document, i.e. 10CFR50, it is now located in the procedure and regulatory document. Nothing in the regulation has changed. Since the only thing that has taken place is relocating the requirements, these changes are considered as Relocations in the CTS. This philosophy is consistent throughout the PI ITS submittal and is also consistent with other industry submittals.

G3.7-2 Why no A-type DOC submitted for SRs 3.7.7.2, 3.7.7.3, 3.7.8.5, and 3.7.8.6? See Supplemental submittal of Jul 3, '01, Table entitled "Review of ITS submittal 24 month SRs", page 7.

NMC RESPONSE

Parts affected by this change:
Part C: CTS markup
Part D: DOC A3.4-113
Part G: NSHD

The CTS has been revised to change the phrase "refueling outage" or "refueling shutdown" to 24 months. As a result, DOC A3.4-113 was generated to justify this change. Throughout the ITS submittal, all SRs which are intended to be performed during refueling shutdown or refueling outage interval performance have a required Frequency of 24 months. The intent of the ITS is to allow PI operating cycles to extend up to 24 months. CTS 4.0.A.2 states that SRs with a "refueling shutdown" Frequency may not be performed at an interval exceeding to 24 months. ITS SR 3.0.2 retains CTS flexibility by allowing SR testing interval to be adjusted by 25%. CTS restrictions on this flexibility have also been retained in that ITS SR 3.0.2 states, " ... the specified Frequency for each SR is met, except for SRs with a specified Frequency of 24 months, if the Surveillance is performed within 0.75 to 1.25 times the interval specified ... ." ITS SR 3.0.2 further reinforces this limitation by later stating, "The specified Frequency is met for each SR with a specified Frequency of 24 months if the Surveillance is performed within 24 months ... ." The proposed ITS does not intend for any SRs with 24 month Frequency to exceed 24 months and thus default PI operating cycles are limited to 24 months. Since the intent of the CTS Frequencies of "refueling outage" or Refueling Shutdown" are the same as the ITS, discussed above, this is considered to be an Administrative change.

G3.7-3 DOCs LR3.7-045 and LR3.7-047 say the requirements of CTS 3.3.D.2.a(1) and (2) and CTS 3.3.D.2.b(1) and (2) are relocated to the SFDP. You can't relocate stuff to the SFDP. Each of these changes should either be an L-type DOC or an A-type DOC, depending upon whether or not ITS is more restrictive than CTS in the event (a) two CL safeguards pumps are inoperable, or (b) one CL header is inoperable with the horizontal CL pump operable. (See page 23 of Attachment 7 to the 12/11/00 submittal cover letter.)

NMC RESPONSE

Parts affected by this change:
Part C: CTS markup
Part D: DOC A3.7-45 and A3.7-47
Part G: NSHD

DOC LR3.7-45 and LR3.7-47 have been changed to A3.7-45 and A3.7-47. The CTS contains various requirements for the CL system which includes cross train checks and support/supported relationships. As a result of performing these evaluations, OPERABILITY and loss of function determinations are determined.

G3.7-4 The specification relocated as described by DOC R3.7-069 appears to be information related to spent fuel storage in ITS Section 4.0; why is it not addressed there? (See page 26 of Attachment 7 to the 12/11/00 submittal cover letter.)

NMC RESPONSE

Parts affected by this change:
None

Regardless if CTS 3.8.C is discussed here or in 4.0, the result is the same. The only reason 3.8.C Small Spent Fuel Pool Restrictions is addressed here is that in the CTS this section follows 3.8.B Fuel Handling Operations (ITS LCO 3.7.16) and 3.8.D Spent Fuel Pool Special Ventilation (ITS 3.7.13). It was easier addressing 3.8.C here rather than to address it elsewhere.

G3.7-5 DOC R3.7-079 says the ISI program contains testing requirements for snubbers; isn't the IST program the location of these test requirements that are duplicative of CTS 3.12, 4.13, and Table 4.13-1? (See page 26 of Attachment 7 to the 12/11/00 submittal cover letter.)

NMC RESPONSE

Parts affected by this change:
None

Snubbers are considered part of both the ISI and IST programs at PI. The ISI contains the requirements for inspecting the snubber attachments, whereas the IST Program, required by 10CFR50.55a, provides the requirements for snubber testing. Therefore, PI feels that DOC R3.7-079 is correct as is.

G3.7-6 DOC LR3.7-100 indicates that changes to the ODCM are governed by 10 CFR 50.59. This is incorrect. Changes to the ODCM is governed by administrative control Specification 5.5.1. (See page 29 of Attachment 7 to the 12/11/00 submittal cover letter.)

NMC RESPONSE

Parts affected by this change:
None

DOC R3.7-100 is correct as stated. This DOC states that the ODCM is a program required by ITS Section 5.5 (ITS 5.5.1). ITS 5.5.1 provides requirements of what is to be contained in the ODCM, how changes to the ODCM are to be handled, and how any changes are to be submitted to the NRC. In addition, changes to the ODCM must also go through a safety evaluation in accordance with 10CFR50.59. An annual 10CFR50.59 report is submitted to the NRC which contains all safety evaluations performed at PI which would include any ODCM changes. Since the DOC states that the ODCM must be in accordance with ITS 5.5 and under 10CFR50.59 it is correct as stated.

G3.7-7 DOC LR3.7-102 considers the movement of VFTP details from the LCO/SR sections to the Administrative Controls section of the TS as a "relocation". This is incorrect. It is only an administrative change in presentation of CTS requirements, and should be designated as an A-type change. (See page 30 of Attachment 7 to the 12/11/00 submittal cover letter.)

NMC RESPONSE

Parts affected by this change:
None

DOC LR3.7-102 references multiple CTS sections containing various requirements and surveillances for ventilation filter testing. Many of these requirements were relocated within ITS Section 5.5.9, "Ventilation Filter Testing Program (VTFP). Moving these specific requirements would be considered to be an Administrative change between the CTS and ITS. However, not all of CTS requirements were moved to ITS 5.5.9. ITS 5.5.9 is not the specific VTFP, it provides the requirements and basics for the actual Program. In fact, ITS 5.5.9 states, "A program shall be established to implement the following required testing of the Engineered Safety Feature (ESF) filter ventilation systems ... ." This alone references the Program and shows that ITS 5.5.9 is not the entire Program. Based on this, some of the CTS ventilation filter testing requirements were not moved to ITS 5.5.9, but relocated to the actual VTFP which is based on the ITS. In accordance with the industry Writer's Guide for ITS, if a specific change contains multiple DOCs (i.e., an A and LR within the same DOC) than a choice can be made as to which DOC category will be the main one. In this case, since there could be an A DOC and a LR DOC, PI chose this to be a LR DOC.

G3.7-8 DOC R3.7-106 fails to state the purpose of the surveillance requirement for the auxiliary building crane lifting devices prior to handling heavy loads. Specifically, why it is not germane to the analyzed fuel handling accident? The DOC should also state that an operability requirement (i.e., LCO) for the AB crane is implied by virtue of the SR, thus making an R-type designation appropriate. Otherwise, an LR-type designation seems more appropriate. Please state what WCAP-11618 is, and how it supports relocating this SR. (See page 30 of Attachment 7 to the 12/11/00 submittal cover letter.)

NMC RESPONSE

Parts affected by this change:
None

The AB crane is not analyzed in PI USAR as an accident. The CTS does provide testing requirements for the crane, however it does not contain operability requirements. There are several surveillances for various equipment in the CTS that do not provide operability requirements. In the conversion process to the ITS, these requirements are either relocated "R" to a Licensee Controlled Document or they are classified as a removed detail "LR". NEI 96-06, "Improved Technical Specifications Conversion Guidance" Section 2.5.1 provides guidance for the common groupings used for the conversion process. In that section, a description of what constitutes a LR and R is defined. An R DOC is for relocating an entire CTS specification which does not meet the NRC selection criteria in 10CFR50.36(c)(2)(ii). An LR is for details or parts of CTS that can be relocated to a Licensee Controlled Document. Based on the above, PI is maintaining this as a R DOC.

In addition, Reference to WCAP-11618 is not applicable for page 30 of Attachment 7 to the 12/11/00 submittal cover letter

G3.7-9 Why is CTS 3/4.4.C corresponding to STS 3.7.18, not retained, but relocated?

NMC RESPONSE

Parts affected by this change:
None

STS 3.7.18 was retained as ITS 3.7.14. The RAI is not clear as to which CTS requirement it is refering. PI CTS does not use the numbering annotation of 3/4. NMC has looked at CTS 3.4.C which is the Steam Exclusion System Tech Spec. which was relocated to the TRM as discussed by DOC R3.7-32. The associated SR for the Steam Exclusion System is CTS 4.8.C which was also relocated to the TRM in accordance with DOC R3.7-32.

NEI 96-06, "Improved Technical Specifications Conversion Guidance" Section 2.5.1 provides guidance for the common groupings used for the conversion process. In that section, a

description of what constitutes a LR and R is defined. An R DOC is for relocating an entire CTS specification which does not meet the NRC selection criteria in 10CFR50.36(c)(2)(ii). An LR is for details or parts of CTS that can be relocated to a Licensee Controlled Document. In the case of CTS 3.4.C, it does not meet the selection criteria in addition of relocating a total specification. Thus, meeting the criteria of an R DOC. In addition, another plant with the same system submitted Technical Specifications for which the NRC told them to withdraw their request and that a Specification was not needed. Based on the above, PI is maintaining this as an R DOC.

G3.7-10 In general, the submittal does not refer to CTS action requirements and ITS action requirements with terminology commonly used in converting to ITS from CTS, consistent with STS.

NMC RESPONSE

Parts affected by this change:
None.

PI had two different meetings with NRC TS Branch Chief and his staff to identify the ground rules that would be used for the conversion process. As a result of that meeting, PI developed Attachment A which accompanied our submittal dated December 11, 2000. PI has developed our ITS submittal in accordance with Attachment A. In addition, PI has used consistent terminology as other plants of our vintage.

G3.7-11 JFD CL3.7-125
ITS 3.7.4 Applicability and Required Action C.2
JFD CL3.7-129
JFD CL3.7-133
ITS 3.7.5 Applicability, Conditions B and D, and ACTION E
JFD CL3.7-143
ITS 3.7.6 Applicability and Required Action B.2

ITS 3.4.6, RCS Loops - Mode 4, requires decay heat removal capability via the steam generators when RHR system is not in service. Therefore, the systems necessary for this to occur should be required operable in Mode 4 as long as the SG is relied upon for heat removal. Therefore, the ITS should adopt the STS Mode 4 Applicability of STS 3.7.4, 3.7.5, and 3.7.6, and associated action requirements, as noted above.

NMC RESPONSE

Parts affected by this change:
None

NMC believes that the PI submittal for the subject Specification Applicablilities are correct as submitted and in accordance with PI CTS and CLB. ISTS 3.7.4 Applicability was revised to be consistent with CTS. PI CTS only requires the SG PORVs to be OPERABLE in Modes 1, 2, and 3. Therefore, the Applicability and Required Action C.2 were revised accordingly. CTS requires the unit to be placed in Mode 4 within 12 hours in the event the inoperable PORV cannot be restored to OPERABLE within the associated Completion Times.

ISTS 3.7.5 Applicability was revised to be consistent with PI CTS and CLB. The AFW system is requried to be OPERABLE in Modes 1, 2, and 3. Therefore, the Mode 4 Applicability is not included.

ISTS 3.7.6 Applicability was revised to be consistent with PI CTS and CLB. The CSTs are only required to be OPERABLE in Modes 1, 2, and 3. Therefore, Mode 4 OPERABILITY requirements are not included in the PI ITS.

The safety analysis reason for 3.4.6 in Mode 4 is to increase the time available for mitigation of a boron dilution event. Based on the above, and in accordance with PI CTS, no changes are being made as a result of this RAI.

G3.7-12 JFD TA3.7-150
STS 3.7.5 ACTIONS A and B, 10-day Completion Time

Adopt the STS convention of a 10-day Completion Time to limit continuous operation within the Modes of Applicability to 10 days with the LCO not met. Note, the JFD cited appears to be an example of a general approach to not adopt such STS Completion Times; thus address this issue on a submittal-wide basis, including in ITS Section 1.3.

NMC RESPONSE

Parts affected by this change:
None

PI adopted the ISTS conversion of the 10 day Completion Time as noted above. The associated changes for Chapter/Sections 1.0, 3.6 and 3.8 (except 3..8.9) were submitted by NMC letter dated February 16, 2002.

G3.7-13 ITS 3.7.6 - proposed Actions Note
JFD CL3.7-141

The proposed Actions Note is unnecessary. Remove it. This is a global comment for all such proposed notes for all shared systems at PI included in ITS.

NMC RESPONSE

Parts affected by this change:
Part B: Final ITS pages
Part E: ISTS markup
Part F: JFD CL3.7-141

ITS LCO 3.7.6 Actions and associated Bases have been revised by deleting the Note "Conditions and Required Actions applicable to both units."

G3.7-14 DOC M3.7-46, 49, 51, and 52

Adding a 4-hour allowance to establish a condition that permits continued plant operation for a specified time period, when no time was previously specified for establishing that condition, is less restrictive, not more restrictive. Revise the designation of the referenced DOCs accordingly.

NMC RESPONSE

Parts affected by this change:
None

The CTS does not provide any Completion Times for the subject systems annotated by these DOCs. Therefore, the CTS Completion Times are undefined or indefinite. The ISTS places a 4 hour Completion Time on the same systems. NMC considers this to be a more restrictive change. Since PI does not have a specified Completion Time, any time would be more limiting or restrictive than the CTS.

G3.7-15 DOC LR3.7-81

The CTS Table 4.1-2A Equipment 11 functional test of the turbine stop, governor and intercept valves implies an operability requirement in CTS for these valves - thus, instead of an LR designation, the relocation of this specification could be treated as an R-type change.

NMC RESPONSE

Parts affected by this change:
Part C: CTS markup
Part D: DOC LR3.7-81
Part G: NSHD

DOC LR3.7-81 has been revised to R3.7-81.

G5.0-1 DOC LR5.0-02 considers the movement of the CTS IST requirements from the LCO/SR sections to the Administrative Controls section of the TS as a "relocation". This is incorrect. It is only an administrative change in presentation of CTS requirements, and should be designated as an A-type change. (See page 41 of Attachment 7 to the 12/11/00 submittal cover letter.) Similar mis-categorizations exist for DOCs LR5.0-03; 04; 05; and 22. All internal movement of CTS requirements within TS should be treated as A-type changes; check all such LR-type DOCs in the submittal. See similar comment G3.7-7 above.

NMC RESPONSE

Parts affected by this change:
None

Reference RAI response G3.7-7. Not all of the CTS has been moved to within the ITS, some of the CTS requirements have been relocated to Licensee Controlled Documents. Therefore, these are considered to be LR DOCs. It is not cost beneficial to PI to re-review all the LR DOCs just for a possible DOC category change.

G5.0-2 PI proposes not to include a secondary water chemistry program in ITS. This affects disposition of CTS Table 4.1-2B Item 16 and Note (6), which is proposed to be moved to the TRM per DOC LR3.7-112. This issue is for tracking purposes pending outcome of not adopting this program.

NMC RESPONSE

Parts affected by this change:
None

ISTS 5.5.10 Secondary Water Chemistry Program was deleted based on JFD CL5.0-56 which was reviewed and approved by the responsible ITS reviewer. JFD CL5.0-56 states that changes have been made to this paragraph to make it consistent with CTS LAR 141/132. A License

Amendment was submitted on December 14, 1995 which proposed to conform the PI Administrative Controls TS to NUREG-1431 Chapter 5.0. Deviations from NUREG-1431 were proposed as appropriate to accommodate PI specific requirements. Likewise, changes were also incorporated to address NRC revised requirements at that time. The NRC issued LA-141/132 on December 7, 1998 approving PI's proposed conformance to NUREG-1431 Chapter 5.0 as revised. Based on the above, no changes were made to our submittal.

ITS 3.7.1, MSSVs

3.7.1-1 DOC L3.7-03
CTS 3.0.3
ITS 3.7.1 Action A

DOC L3.7-03 states the 4-hour Completion Time for restoring one inoperable MSSV to operability is based on "engineering judgement in accordance with WCAP 11618." After reviewing the development of this Completion Time from the previous Westinghouse Standard TS 3/4.7.1 ACTION a, as marked up in (draft Commanche Peak Unit 1 TS) WCAP 11618, it appears that a more explicit statement of the basis for the 4 hours is warranted. How does this time apply to a two-loop plant design?

Revise DOC L3.7-03 and the ITS Bases for Required Action A.1 with an explicit statement supporting its Completion Time. That the STS Bases does not contain such a statement is insufficient reason to omit it.

NMC RESPONSE

Parts affected by this change:
Part B: Final ITS pages
Part D: DOC L3.7-03
Part E: ISTS markup
Part F: JFD CL3.7-11
Part G: NSHD L3.7-03

PI has provided additional justification for the 4 hour Completion Time associated with Required Action. As a result, the above documents were revised to support the additional justification.

ITS 3.7.2, MSIVs

3.7.2-1 JFD CL3.7-115
ITS LCO 3.7.2 Applicability
STS LCO 3.7.2 Applicability
CTS 4.7
DOCs L3.7-33 and A3.7-34
CTS Table 3.5-2B Note c for Functional Unit 5.a and Table 4.1-1B Note 23 for Functional Unit 5.a, Manual Steam Line Isolation

a. Does the referenced JFD mean that it is impossible to remotely open an MSIV unless it is first manually bypassed because (1) the operator on the MSIV has insufficient torque to overcome the differential pressure induced friction on the MSIV disk, (2) opening the MSIV, without first equalizing pressure by opening the bypass, could damage the valve and/or valve operator, or (3) the operating procedure requires opening the manual bypass before opening the MSIV?

b. Suggest adopting the word "deactivated" in the Applicability, or explain why it is not appropriate in addition to saying it is not in CTS.

NMC RESPONSE

Parts affected by this change:
None

(a) PI plant procedures require the MSIV bypass to be opened prior to opening the MSIV.

(b) The word "deactivated" is a bracketed term in the ISTS meaning that if the information within the brackets is not applicable then the Licensee can either insert the correct information or delete is if it does not apply.

3.7.2-2 JFD CL3.7-114
ITS 3.7.2 Condition C
STS 3.7.2 Condition C Note
CTS 4.7

The STS note for STS 3.7.2 Condition C, allowing separate Condition entry for each MSIV, is appropriate for a two loop design and should be adopted. For example, assume the unit has operated in Mode 2 in Condition C with one inoperable and closed MSIV for more than 8 hours. In the event a second MSIV becomes inoperable, 8 hours would be allowed to accomplish Required Action C.1 only because of the extension permitted by ITS 1.3; however, LCO 3.0.3 would apply and govern placing the unit in Mode 4, despite the 8-hour extension, because there

is not a stated Condition for two inoperable MSIVs. Were the note adopted, there would be no question about LCO 3.0.3 applying. In addition, Condition C should say "One or both MSIVs inoperable in Mode 2 or 3."

NMC RESPONSE

Parts affected by this change:
Part B: ITS Final pages
Part C: CTS markup
Part D: DOC L3.7-114 and L3.7-119
Part E: ISTS markup
Part F: JFD PA3.7-114
Part G: NSHD

ITS LCO 3.7.2 Condition C has been revised to incorporate a Note stating that separate Condition entry is allowed for each MSIV. As a result, the associated Bases and CTS markup have been revised. In addition, the Condition statement has been further revised to state one or more MSIVs inoperable in MODE 2 or 3.

3.7.2-3 ITS SR 3.7.2.2 Frequency
JFD X3.7-137
CTS 4.7

This is a placeholder for the beyond scope change to relax the CTS 4.7 MSIV automatic actuation surveillance requirement frequency from 18 months ("during Refueling") to 24 months. No response required.

NMC RESPONSE

Parts affected by this change:
None

No response is required at this time.

3.7.2-4 CTS Table 3.5-2B ACTION 27 for Functional Unit 5.a, Manual Steam Line Isolation
DOC M3.7-40
STS 3.3.2, Table 3.3.2-1, Function 4.a
CTS Table 4.1-1B Functional Unit 5.a, Functional Test
CTS 4.7
ITS SRs 3.7.2.1 and 3.7.2.2

In the event an MSIV manual steam line isolation (SLI) switch is inoperable (both channels), the STS would require entry into LCO 3.0.3, because STS 3.3.2 contains no ACTION for this condition. For the equivalent situation at PI (inability to manually close all MSIVs), CTS allow 48 hours to restore operability of the switch before taking action to shutdown the unit. ITS proposes to exclude the manual SLI function from ITS 3.3.2, and consider it an integral part of the operability of the associated MSIV itself - which appears consistent with the referenced CTS action statement. (However, the ITS 3.7.2 Bases do not explicitly say that the manual switch function must be operable for the MSIV to be considered operable; reliance on the definition of operability is insufficient in this case.) Including the manual instrumentation function in ITS 3.7.2 entails reducing the time allowed to restore the switch to the time proposed for restoring the associated MSIV, regardless of the reason the MSIV is inoperable. Thus the proposed action requirement is more restrictive than CTS (48 to 8 hours) but less restrictive than STS (1 hour of LCO 3.0.3 vs. 8 hours).

a. Staff considers that the manual SLI function is part of the PI ESFAS instrumentation design. Therefore, staff prefer that PI include the manual SLI function in Table 3.3.2-1 and explicitly specify an 8-hour action statement along with the associated shutdown actions, in keeping with the NUREG-1431, Rev. 2, approach to instrumentation action requirements. Because of the nature of the PI manual SLI function design, staff agrees that 8-hours is an appropriate Completion Time.

b. The CTS also specify a "Functional Test" each refueling for the manual SLI function; but it is unclear what CTS require this test include compared to what the ITS will require; specifically, which SR in ITS corresponds to this CTS test? Is it SR 3.7.2.1 or SR 3.7.2.2?

NMC RESPONSE

Parts affected by this change:
None

(a) There is no logic involved with the SLI function, only a manual switch. Therefore, it is inappropriate to include it in the instrumentation section of the ITS.

(b) ITS SR 3.7.2.1 is the correct SR.

STS 3.7.3, MFIVs and MFRVs and Associated Bypass Valves

no comments

ITS 3.7.4, SG PORVs

3.7.4-1 DOC A3.7-01
JFD CL3.7-124
LCO 3.7.4 and 3.7.4 ACTIONS A and B

STS 3.7.4 requires the line (flowpath) associated with each SG PORV (ADV) to be operable; this includes block valve operability.

Comment: Adopt the STS presentation.

NMC RESPONSE

Parts affected by this change:
None

ITS LCO 3.7.4 provides Conditions, Required Actions, and Surveillances for SG PORVs. The subject RAI has requested PI to adopt ISTS 3.7.4 presentation. ISTS 3.7.4, which is for Atmospheric Dump Valves (ADVs), is not applicable to PI. In accordance with PI design, CLB, and CTS, the ADV LCO was replaced with SG PORVs. PI design is such that the ADVs are downstream of the MSIVs. In the event a MSIV isolation signal is received, the MSIVs close and isolate the rest of the flowpath including the ADVs. The SG PORV lines branch off the main steam lines upstream of the MSIVs, therefore, a MSIV signal will not result in the isolation of the flowpath to the PORVs. There is a SG PORV for each main steam line which is capable of releasing the sensible and core decay heat to the atmosphere. These valves are automatically controlled by pressure or may be manually operated from the control room. Discharge from each PORV is carried to the atmosphere through an individual vent stack. Based on PI design, CLB, and CTS, the SG PORVs are the correct valves to include Tech. Spec, not the ADVs.

3.7.4-2 DOC L3.7-07
CTS 3.4.A.2.a; 3.0.3
ITS 3.7.4 Action B

The STS assumes a four-loop design; so the likelihood that all four PORV flowpaths are inoperable is remote. Thus it is unclear whether the loss of function condition on a two-loop design warrants a 24-hour Completion Time.

Comment: See resolution of this action requirement in ITS for Point Beach, which had similar CTS action requirements and has a similar SG ADV design. Staff will not accept a 24-hour Completion time for loss of both PORV flow paths. Propose a 1-hour Completion time.

NMC RESPONSE

Parts affected by this change:
Part B: Final ITS pages
Part C: CTS markup
Part D: DOC L3.7-07
Part E: ISTS markup
Part F: JFD
Part G: NSHD

ITS 3.7.4, Required Action B Completion Time has been changed to 1 hour. As a result the above Parts to this submittal have also been revised to reflect this change.

3.7.4-3 JFD CL3.7-126
STS SR 3.7.4.2
JFD X3.7-130 & ITS SR 3.7.4.1 Frequency

As recommended in the STS, the SG PORV manual block valves should be cycled every 18 months to demonstrate they can be manually shut if a SG PORV is stuck open, to demonstrate operability of the associated line or flowpath.

Comment: Adopt STS SR 3.7.4.2, but insert the word "manual" before the word "cycle," which is how Point Beach (also has manual block valves) ITS states this SR. Since block valve cycling is already done during the PORV quarterly SR (as stated in the JFD), this should not be an additional burden on plant operations.

NMC RESPONSE

Parts affected by this change:
Part B: Final ITS pages
Part C: CTS markup
Part D: DOC M3.7-116
Part E: ISTS markup
Part F: JFD X3.7-137
Part G: NSHD

ISTS SR 3.7.4.2 has been incorporated into the ITS. The SR has also been revised to require "manually" cycling the SG PORVs and changed the Frequency to 24 months consistent with other refueling outage testing.

3.7.4-4 DOC L3.7-95
CTS 4.8.B
ITS SR 3.7.4.1

The DOC first sentence incorrectly seems to say the entire SR is moved to the IST program; this is not the case. Only the Frequency. Actually, this change is only about relaxing the Frequency from monthly to quarterly, with the actual time stated in the IST program.

NMC RESPONSE

Parts affected by this change:
Part D: DOC L3.7-95

DOC L3.7-95 has been revised to more accurately reflect that the IST Program contains the testing requirements and associated Frequencies, however, the main existence of the DOC is to discuss the Frequency change from monthly to quarterly.

ITS 3.7.5, AFW

3.7.5-1 DOC L3.7-011
CTS 3.4.B.1.c
JFD CL3.7-128
ITS LCO 3.7.5 Note

The ITS note includes the entire train and not just the motor driven valves and piping as the CTS provision does. The DOC fails to discuss in detail why this relaxation is acceptable, except to say it incorporates a condition in a TS interpretation letter from 1997 - implying the TS has not been updated in the interim. Comment: Provide explicit detailed justification for the relaxation.

NMC RESPONSE

Parts affected by this change:
Part E: ISTS markup

The ISTS has been revised by documenting the subject Note being revised consistent with TSTF-245 Rev. 1. In addition, the reviewer was correct in that PI did not provide a CTS change at the time of the NRC SER agreeing with the PI interpretation letter from 1997. PI and the NRC agreed that since PI was going to convert to ITS, that change would be incorporated at that time instead of making a separate Licensee Amendment Request. DOC L3.4-11 was not revised since it referenced the NRC agreement of the interpretation which provides the detail for the change. This change is acceptable since the ITS incorporated and bounds the CTS interpretation. Adopting NUREG-1431 further ensures that neither the industry, NRC nor NMC find this change be an unreviewed safety question and does not reduce the margin of safety based on the PI accident analysis.

3.7.5-2 See G3.7-12

NMC RESPONSE

Parts affected by this change:
Part B: Final ITS pages
Part C: CTS markup
Part D: Revise L3.7-22, add M3.7-109
Part E: ISTS markup
Part F: Delete CL3.7-131
Part G: NSHDs

Specification 3.7.5 was revised to include the 10 day Completion Time limit.

3.7.5-3 DOC LR3.7-19
CTS 3.4.B.2.a (markup page 3 of 50)
3.7.5 Bases
JFD PA3.7-255 & CL3.7-258
SR 3.7.5.2 Bases

a. Point out exactly where each of the indicated details appear in the Bases. Provide a specific reference for deferral of the IST-required quarterly flow test. In the STS markup, the phrase in parentheses "(only required at 3 month intervals)" is not adopted, apparently because of this deferral. Keep the phrase, but modify it to account for the deferral.

b. The disposition of the phrase in CTS 3.4.B.2.a, first sentence of the second paragraph, "and/or associated system valves," is unclear. It is not included in ITS SR 3.7.5.2 or its Bases discussion - and thus does not appear to be covered by DOC A3.7-21. Explain the disposition of this phrase.

NMC RESPONSE

Parts affected by this change:
None

a. PI has re-looked at the proposed relocated CTS information and feels that it is adequately stated in the ITS Bases for SR 3.7.5.2. Reference to the 3 months interval was not included since these intervals are included in the IST Program as required by ASME Section XI. Not including the 3 month interval makes the Bases consistent with Frequency of SR 3.7.5.2. General rules of development of the ITS was not to repeat various requirements or Frequencies as mandated by other NRC Regulations. This is consistent throughout the ITS conversion process.

b. DOC A3.7-21 is not the correct DOC. DOC LR3.7-19 discusses startup of the unit may continue without demonstration of the AFW pump and associated valve operability. As noted in the DOC, some of the CTS details about the conditions of inoperability have been relocated to the Bases. The subject valve operability will be demonstrated by the performance of SRs 3.7.5.1 and 3.7.5.3. Also, in accordance with the NUMARC 93-03, Writer's Guide Section 3.1.1.h, page 3-1, "The term "and/or" is to be avoided." PI has complied with this guidance in this particular case. In addition, PI has complied with the wording of NUREG-1431. The LCO and Bases are explicit as to the meaning of the Specification and no other discussion is needed.

3.7.5-4 JFD CL3.7-246
3.7.5 Bases background

Explain the normal lineup of the motor driven AFW pumps - and the capability to supply the opposite unit SGs. How does this capability relate to action requirement in CTS 3.4.B.2, the phrase in parenthesis?

NMC RESPONSE

Parts affected by this change:
Part C: CTS markup
Part D: DOC M3.7-08

The PI AFW system description is contained in USAR Section 10 and will not be elaborated on here. As a result of the subject RAI, PI revised CTS 3.4.B.2 by deleting the parenthetical statement. As discussed in DOC M3.7-08, PI design allowed the motor driven AFW pump of a shutdown unit to be crosstied to the operating unit in the event that the motor driven AFW pump in the operating unit was inoperable for some reason. In this case the CTS provided Required Actions. In the conversion process, PI has eliminated this flexibility afforded by the CTS. The ITS provides specific Required Actions on an unit basis, thus not needing the CTS phraseology.

3.7.5-5 ITS 3.7.5 Bases

Comments on Bases not associated with Specification comments:

SR 3.7.5.1 (from STS markup) Last two paragraphs in reverse order from STS; correct typo in last sentence of misplaced close-parenthesis.

NMC RESPONSE

Parts affected by this change:
None

In reviewing other Bases SR Sections, it can be seen that within the NUREG, the description of the location of the Notes is not consistent. ITS SR 3.7.1.1, 3.7.2.1, 3.7.5.2, and 3.7.5.3 all have the Note description below the discussion of the Frequency, whereas SR 3.7.7.7 and 3.7.8.1 have the discussion about the Note above the discussion of the Frequency. Based on the inconsistency within the NUREG itself, no changes will be made. The subject paragraph, inserted by TSTF-245, Rev.1, has also been revised by replacing the reactor conditions with the specific MODES as defined in ITS 1.0.

3.7.5-6 CTS 3.4.B.2.e
DOC LR3.7-29

The 72-hour provisional action statement for inoperable [control room?] valve position monitor lights [for the AFW block and flow regulatory valves?] is considered by CTS to be necessary for AFW train operability - is this the case in ITS? The ITS Bases for 3.7.5 do not explicitly require control room indication and the STS definition of Operability also does not help, because it is unclear whether the STS considers such indication "necessary." Thus, the basis for simply relocating the action requirement to the TRM is not adequately explained.

NMC RESPONSE

Parts affected by this change:
Part D: DOC LR3.4-29

DOC LR3.4-29 has been revised to discuss the 4 NRC criteria in 10CFR50.36(c)(2)(ii) justifying that the valve position monitor lights can be relocated to TRM. The subject lights are not necessary for OPERABILITY, they only presented another means of ensuring that the valves were in their correct position.

3.7.5-7 DOC L3.7-91
ITS SR 3.7.5.3 and SR 3.7.5.4

a. The change to a 24-month Frequency is beyond scope. This part of comment is for tracking purposes only. No response required to this part of the comment.

b. The last sentence about the 24-hour allowance before testing the turbine driven AFW pump should be addressed in its own A-type DOC. Also, the CTS markup (page 30 of 50) seems to indicate this note applies to SR 3.7.5.4 - but the NUREG markup shows this provision deleted. Resolve this discrepancy.

NMC RESPONSE

Parts affected by this change:
Part B: Final ITS pages
Part C: CTS markup
Part D: Revise L3.7-91
Part E: ISTS markup

(a) No response required.

(b) DOC A3.7-94 discusses the 24 hour allowance before testing the turbine AFW pump. In addition, SR 3.7.5.4 Note was revised to be consistent with SR 3.7.5.2 and JFD CL3.7-134 providing the justification.

3.7.6, CSTs

3.7.6-1 ITS LCO 3.7.6 & Bases
DOC LR3.7-028
CTS 3.4.B.2.d
JFD CL3.7-141
ITS SR 3.7.6.1

(a) The LCO statement is ambiguous. With both units operating in Mode 1, 2, or 3, does it require two tanks or three tanks with 200,000 gallons available, or is either of these acceptable? And if only one unit is operating, is just one tank with 100,000 gallons available required to supply the operating unit, or could two or three tanks each have half or a third of this volume each? Further, assuming the event started with just 100,000 gallons divided between three tanks, with only a few thousand gallons remaining, would there still be adequate NPSH for the AFW pumps, and adequate control room tank level indication - to permit switchover to the backup water source without having to stop the AFW pump(s)? Is 100,000 gallons per unit the correct volume considering level indication uncertainty and NPSH requirements?

(b) See G3.7-13

NMC RESPONSE

Parts affected by this change:
Part B: Final ITS pages
Part E: ISTS markup

The ISTS SR 3.7.6.1 and associated Bases have been revised to make the CST volume requirements per unit clearer.

3.7.7, CC System

3.7.7-1 ITS SR 3.7.7.2 Frequency and SR 3.7.7.3 Frequency
JFD CL3.7-116
CTS 4.5.A.4.a

This change relaxes the CTS 4.5.A.4.a component cooling system automatic actuation surveillance requirement frequency from 18 months ("during each reactor refueling shutdown") to 24 months. It appears that CTS markup page numbered 37 of 50 fails to indicate a DOC for this relaxation. Provide a DOC and correct the markup. Otherwise, this comment is a placeholder for this beyond scope change. No response to the relaxation itself is required.

NMC RESPONSE

Parts affected by this change:

Part C: CTS markup
Part D: DOC A3.7-113

Reference response to RAI G3.7-2.

3.7.7-2 DOC A3.7-31
CTS 3.3.C.1.b
ITS 3.7.7 ACTION A

In CTS, either one CC pump or one CC heat exchanger may be inoperable for 72 hours; in ITS, both may be inoperable at the same time for 72 hours, provided they are in the same train. This is less restrictive. Thus the referenced DOC should have an L-designation.

NMC RESPONSE

Parts affected by this change:
Part C: CTS markup
Part D: DOC A3.7-31
Part G: NSHD

DOC A3.7-31 has been changed to L3.7-117 with an associated NSHD developed.

3.7.7-3 JFD CL3.7-140
ITS SR 3.7.7.2 Note

The proposed note would appear to represent a generic difference from the NUREG. Give examples of non-safety related CC system automatic valves "in the flow path" that automatically actuate, and state the actuation signal. This would help support the need for the note on a plant specific basis, obviating the appropriateness of a TSTF. Also, the change may be beyond scope, depending upon the response.

NMC RESPONSE

Parts affected by this change:
None

SR 3.7.7.2 Note provides clarification if there are automatic valves that actuate for reasons other than to support the injection or recirculation phase of emergency core cooling, then these valves are not required to be tested. NMC cannot speak to the designs of other plants therefore, not obviating the appropriateness of a TSTF. PI CC testing is discussed in USAR 10.4.2. The USAR also lists systems or components that use CC for heat removal. Based on the USAR and PI design, the ITS Note for SR 3.7.7.2 is applicable.

3.7.7-4 JFD CL3.7-267
ITS LCO 3.3.7 Bases

a. The Bases omit reference to the surge tank because the surge tank is not "associated" with a particular CC pump. The Bases should state the need of the surge tank for operability consistent with the PI design.

b. Explain why the phrase "not required for safety" is omitted.

NMC RESPONSE

Parts affected by this change:
None

(a) PI USAR Section 10.4.2 discusses the CC system and the relationship of the surge tank. The ITS Bases deleted the requirement that the associated surge tank must be OPERABLE for a train to be considered OPERABLE. As stated in the USAR, there is one surge tank for the entire unit. Since PI only has one surge tank for both trains per unit, the ISTS Bases statement is not correct for PI and therefore deleted. In addition, tests have demonstrated that CC system

operation with low volume in the surge tank allows adequate time for operator action. Therefore the surge tank is not required for system operability and is not required in the Bases.

(b) The Bases statement was deleted due to it being too limiting. The ISTS Bases infers that isolating a safety related component or system would make the CC System inoperable. This inference is not correct since the typical design of CC systems is such that a safety related system or non-safety related system may be isolated and would not make the CC System inoperable. By deleting this statement, the ITS is more inclusive. Therefore, LCO 3.7.7 Bases was not changed.

3.7.8, Cooling Water System

3.7.8-1 ITS 3.7.8 Action D and SR 3.7.8.3

a. The proposed action and surveillance requirements for the CL pumps 12 and 22 address only the available diesel fuel oil volume, not the fuel oil properties. Actions related to fuel oil properties not within limits are addressed in ITS 3.8.3; however ITS 3.8.3 does not require declaring the CL pumps 12 and 22 inoperable in the event the fuel oil properties are not restored to within limits in 7 days. Doing so is appropriate because the ITS 3.8.3 proposed Actions require declaring the emergency diesel generators inoperable and the fuel oil comes from the same tanks. Either add appropriate action requirements to ITS 3.8.3, or add corresponding action and surveillance requirements to ITS 3.7.8.

b. See comment 3.8-01 regarding CTS 3.7.A.5(a) and DOC L3.8-12. The bases for ITS 3.8.3 should explicitly state that the specified fuel oil volume includes that for the diesel driven cooling water pumps 12 and 22. The Bases for ITS 3.7.8 should explicitly state that the fuel oil for CL pumps 12 and 22 comes from the same tanks as the fuel oil for the diesel generators, and is thus subject to the same testing and quality as required by the ITS administrative controls diesel fuel oil program.

c. The diesel driven safeguards CL pumps are supported by starting air receivers. Establish within ITS 3.7.8 appropriate surveillance and action requirements, such as given in STS 3.8.3. Alternatively, establish a separate specification for the CL pump fuel oil and starting air.

d. The increase in the required fuel oil volume to 19,500 gallons for the CL pumps should be described in its own M-type DOC; not buried in DOC L3.7-50 regarding the 48-hour completion time.

NMC RESPONSE

Parts affected by this change:
Part B: Final ITS pages
Part C: CTS markup
Part D: DOC L3.7-50 and M3.7-115
Part E: ISTS markup
Part F: JFD
Part G: NSHD

(a) LCO 3.8.3, Required Action and associated Bases have been revised by a Note to enter the applicable Conditions and Required Actions of LCO 3.7.8, "CL Systems" when Condition D is entered as a result of fuel oil tank properties not within limits. In the event the storage tanks for diesel fuel oil are not with in limits per the Diesel Oil Testing Program in ITS 5.5.11, and not restored to within limits in 7 days, the associated EDG and diesel driven CL pump are to be declared inoperable.

(b) Bases SR 3.7.8.3 has been revised to include a statement that the specified fuel oil inventory for the CL water pump is in addition to the fuel oil inventory specified for the Unit 1 emergency DG (LCO 3.8.3) that must be available in the Unit 1 DG storage system. In addition, a statement was made stating that the CL water pumps' diesel fuel oil is supplied from the common fuel oil tanks shared by the Unit 1 diesel generators,and the testing and the quality of the fuel oil is controlled by TS 5.5.11, "Diesel Fuel Oil Testing Program."

(c) PI deleted, and NRC concurred, that the ISTS LCO 3.8.3 requirements for the lube oil and starting air systems do not need to be included in the PI ITS. NMC believes that the same justifications apply to the CL diesels. In addition, NMC believes that the starting air receivers are part of the CL diesels and therefore are covered under the definition of OPERABILITY. Thus, if the supporting equipment is inoperable, the entire CL diesel is inoperable and the appropriate Condition entered.

(d) PI has revised the CTS markup and developed an associated DOC M3.7-115 justifying the increased volume of fuel oil from 19,000 to 19,500 gallons.

3.7.8-2 Which CL header supplies Unit 1 DG cooling, and at what points are the DG supply lines attached? Recommend the Bases explicitly describe this and any flexibility in lineup that the design and plant operating practice permit.

NMC RESPONSE

Parts affected by this change:
None

This information is contained in the USAR, system descriptions, and various training materials and does not need to be duplicated in the Bases of the ITS. PI has put in the level of detail in the Bases consistent with that of NUREG-1431.

3.7.8-3 DOC LR3.7-47
ITS 3.7.8 Actions A and B
CTS 3.3.D.1.a
CTS 3.3.D.2.a
CTS 3.3.D.2.b
DOC LR3.7-43

a. CTS 3.3.D.2.b allows one CL header to be inoperable for 72 hours provided (1) the motor driven safeguards pump, (2) the opposite train/header diesel generator, (3) the opposite train diesel driven safeguards pump, and (4) the opposite train horizontal pump are all operable (i.e., the opposite train contains no inoperabilities). Corresponding ITS 3.7.8 Action B only requires verifying (1) the motor driven safeguards pump operable. This less restrictive change is not justified in the DOC LR3.7-47, which mistakenly relies on the SPDP. Either the opposite train diesel pump, the opposite train DG, and the opposite train horizontal pump are also required to justify the 72 hours or they are not. Explain why not, or revise the action requirements to retain the CTS requirements.

b. (1) DOC LR3.7-43 states that the CTS requirements for the horizontal CL pumps are moved to the Bases. It does not appear this is the case; the horizontal CL pumps are only mentioned in the system description in the Bases background discussion, but are omitted from the components considered part of a CL system train. CTS 3.3.D.1.a require at least one of these to meet the LCO, and CTS 3.3.D.2.a specifies 7 days to restore an inoperable required horizontal CL pump to operable status; these requirements are not discussed in the Bases; even so, they should be retained in ITS 3.7.8.

(2) Also, the omission of the requirement for the traveling screens in CTS 3.3.D.1.c, although apparently addressed in ITS 3.7.9, is not justified by this DOC LR3.7-43, as indicated in the CTS markup.

NMC RESPONSE

Parts affected by this change:
Part B: Final ITS pages
Part D: DOC LR3.7-43 and A3.7-47
Part E: ISTS markup
Part F: JFD

(a) DOC LR3.7-47 has been revised to delete the reference to the SFDP. In addition, DOC LR3.7-43 has been referenced in the subject DOC discussing the elimination of the horizontal CL pump since it is not safety related equirpment. ITS 3.7.8 Condition B has been revised adding in the CTS requirements to verify the opposite train diesel driven safeguards pump is OPERABLE. The requirement for the diesel generators is a Note in Condition C.

(b) DOC LR3.7-43 has been revised to state that the horizontal CL pumps are being relocated to the TRM. As justified in the subject DOC, the horizontal CL pumps are not safety related and do not meet the criteria of 10CFR50.36(c)(2)(ii) for inclusion in the ITS.

The CTS markup has been revised moving the traveling screens to ITS 3.7.9.

3.7.8-4 ITS 3.7.8 Required Actions A.2 and B.2, and D.1

In accordance with STS convention, the Required Actions A.2 and B.2 should also specify a Completion Time of "10 days from discovery of failure to meet the LCO". Required Action D.1 should also specify a Completion Time of "9 days from discovery of failure to meet the LCO" (this action requirement could be in a separate specification - see comment 3.7.8-1.c).

NMC RESPONSE

Parts affected by this change:
Part B: Final ITS pages
Part C: CTS markup
Part D: DOC Revise L3.7-50, add M3.7-110
Part E: ISTS markup
Part F: JFD PA-348
Part G: NSHD

The ITS has been revised to incorporate the subject ISTS Completion Time.

3.7.8-5 ITS 3.7.8 Required Action C.1 Note
JFD CL3.7-149

This note is unnecessary; so delete it. Also, attempting to shut down both units simultaneously may not be a good idea; the STS does not consider such a scenario. Other plants have specified a staggered or sequential shutdown in such cases - e.g., Point Beach. See G3.7-13.

NMC RESPONSE

Parts affected by this change:
Part B: Final ITS pages
Part E: ISTS markup
Part F: JFD Delete CL3.7-149

PI revised the ITS to delete the Note and subject JFD.

3.7.9, Emergency CL Supply (STS 3.7.9, UHS)

3.7.9-1 ITS 3.7.9 Actions Note
JFD CL3.7-155

The note is unnecessary, so delete it. With respect to Action D, see comments 3.7.8-5 and G3.7-13

NMC RESPONSE

Parts affected by this change:
Part B: Final ITS pages
Part C: CTS markup
Part D: DOC
Part E: ISTS markup
Part F: JFD
Part G: NSHD

PI revised the ITS to delete the Note and subject JFD.

3.7.9-2 ITS Required Action A.1 Note

The less than sign should be less than or equal than to match CTS 3.3.D.2.c. Also check that the format of Required Action A.1 is consistent with STS Rev. 2 convention.

NMC RESPONSE

Parts affected by this change:
Part B: Final ITS pages
Part E: ISTS markup

The ITS has been change to "≤ 24 hours" which is consistent with the CTS.

3.7.9-3 ITS 3.7.9 Bases

a. Explain why the Bases state that the traveling screens are not required for safeguards CL pump operability, but are required for the operability of equipment supplied by the CL system. (See LCO and Applicability discussions.)

b. The Bases for the Note to Required Action A.1 should explain why the CTS provision exempting compliance with the action to open a sluice gate for testing for periods of less than or equal to 24 hours is acceptable. Also, see comment 3.7.9-2, and revise Bases accordingly.

c. Please state the Bases the other water sources alluded to in the Bases for Required Actions C.1 and C.2.

d. Is quarterly the current plant practice regarding the frequency of doing the proposed SR 3.7.9.1 as indicated in JFD PA3.7-158?

NMC RESPONSE

Parts affected by this change:
Part B: Final ITS pages
Part E: ISTS markup

(a) As stated in the Bases and PI USAR, the subject screens are only taken credit for following a Design Basis Earthquake (DBE) that destroys Dam No. 3. In order to be able to meet our design basis, the emergency Cooling Water Screens are to be OPERABLE in Modes 1, 2, 3, and 4. If these screens become inoperable during these Modes, with no earthquake, then PI

does not depend upon them to supply water to the Cooling Water System. During normal operations, the make up cooling water to the Safeguards Bay is supplied from the Circulating Water Bay through one of two sluice gates. The safeguards traveling screens and the emergency cooling water supply only provide an alternate supply of water to the Safeguards Bay. Again, the Emergency Cooling Water traveling screens are used to screen debris from the river only in the event of a DBE.

(b) CTS 3.3.D.2 provides a provision exempting compliance with the action to open a sluice gate for periods of less than or equal to 24 hours for periodic testing of the emergency intake line testing. The 24 hours is consistent with CTS which allows sufficient time to adequately perform this test.

(c) The ITS Bases have been revised to specifically state that the other water source available for the CL system, in the event that an Emergency CL Line is inoperable, would be the normal water supply from the Circ Water Bay through the sluice gates. Either one of the two sluice gates or one of the two Safeguards Traveling screens will adequately supply any of the three emergency cooling water pumps.

(d) SR 3.7.9.1 is a new SR which was added to the CTS. The addition of this SR is a more restrictive change since it is not in the CTS. The addition of this SR ensures OPERABILITY of the screens. PI does perform a quarterly test on the safeguards traveling screens.

3.7.9-4 JFD CL3.7-161
STS SR 3.7.9.2

Explain why no temperature limit on CL water intake is necessary for inclusion in ITS, and thus why the referenced SR need not be adopted. The justification in the JFD is insufficient.

NMC RESPONSE

Parts affected by this change:
None

The SR is a bracketed value in the ISTS. In accordance with the rules of conversion, bracketed information can be deleted if it is not applicable to the specific plant or a plant specific value is to replace the bracketed value.

The Mississippi River is the source of cooling water. PI USAR 10.4.1.1 states that the design maximum temperature for the Cooling Water System is 85 degrees F. The value is that temperature that is not expected to be exceeded more than 1% of the time. Safeguards components are operable with cooling water inlet temperature up to 95 degrees F. Thus, it is acceptable to continue plant operation with cooling water inlet temperature up to 95 degrees F,

when external conditions (e.g., several hot, humid days) cause cooling water inlet temperature to wxceed 85 degrees F. NMC is not aware of the water inlet temperature exceeding 95 degrees F during the operation of the plant. NMCI currently monitors this temperature through approved plant procedures and does not have any CTS limits. Therefore, NMCI will maintain CLB and not put this limit in the ITS. As noted earlier, the rules of conversion to the ISTS allow a Licensee to maintain CLB.

3.7.10, Control Room Special Ventilation System (CRSVS) (STS 3.7.10, CREFS)

3.7.10-1 ITS 3.7.10, LCO Note and Actions

a. ITS 3.7.10 Actions note is unnecessary, so delete it. See comment G3.7-13.

b. DOC M3.7-55 says ITS LCO 3.0.3 does not allow an additional hour to initiate shutdown. Revise the DOC as this is not true.

c. DOC M3.7-58 implies that Action A includes the option to place remaining CRSVS train in service with one train inoperable. But the LCO Bases (item d) says a CRSVS train is operable when it is aligned to perform its safety function *and is operating* (PA3.7-296), in spite of its radiation monitoring automatic actuation function being inoperable. Suggest specifying this option explicitly in ACTION A itself, consistent with the CTS 3.13.A.2, not by a description of this situation in the Bases. The description of the CTS to ITS transition in this case is confusing, and should be clarified.

d. LCO 3.7.10 Note, added by TSTF-287, Rev 5, allowing intermittent opening of control room boundary under administrative control, along with the associated 24-hour action requirement and Bases changes, should be adopted. The Bases statement at the end of the LCO discussion is insufficient to adopt TSTF-287, R.5, even if it meets the "intent" as conjectured in JFD PA3.7-297.

NMC RESPONSE

Parts affected by this change:
Part B: Final ITS pages
Part C: CTS markup
Part D: DOC M3.7-55
Part E: ISTS markup
Part F: JFD
Part G: NSHD

(a) The subject Note has been deleted in the ITS and associated Bases.

(b) DOC M3.7-58 does not imply Condition A includes an option. DOC M3.7-58 applies to Conditions C and D. Condition D contains an option of placing the CRSVS in emergency mode or suspend the movement of irradiated fuel assemblies. In addition, DOC M3.4-55 has been corrected eliminating the statement about LCO 3.0.3 not allowing an additional hour to initiate shutdown.

(c) DOC M3.7-58 is correct as is. Condition A applies to one CRSV inoperable when the unit is in Mode 1, 2, 3, or 4. While in any of these Modes, if the CRSV cannot be restored to OPERABLE than a unit shut down in accordance with Condition C is initiated. If the unit is not in Mode 1, 2, 3, or 4, and one CRSV is inoperable, than the OPERABLE CRSV is immediately placed in emergency mode or movement of irradiated fuel assemblies is immediately suspended which is consistent with CTS. There are two ITS Conditions involved; 1) when one or both units are in Mode 1, 2, 3, or 4 or 2) irradiated fuel is being handled. NMCI believes the Conditions and Required Actions are correct as stated in the ITS.

(d) The ITS has been changed to include TSTF 287, Rev. 5.

3.7.10-2 DOC L3.7-103
ITS SR 3.7.10.4

Extension of Frequency for CRSV fan testing to 24 months in addition to adopting the STAGGERED TEST BASIS provision of the STS, is a beyond scope change. This comment is for tracking purposes only. No response required.

NMC RESPONSE

Parts affected by this change:
None

No response required.

3.7.11, Safeguards Chilled Water System [control room cooling included]

3.7.11-1 ITS 3.7.11 Bases - Background and Applicable Safety Analyses discussions

The description of the various safeguards room unit coolers serviced by the SCWS is misleading because of a missing comma; only one Unit 1 4160 switchgear room is supported by SCWS (which is it, bus 15 or 16?). All other rooms containing safeguards equipment, for both trains, are serviced by the associated SCWS loop/train. How are the other 4160 Vac switchgear rooms 25, 26, and 27 (and 15 or 16) cooled?

NMC RESPONSE

Parts affected by this change:
None

Bus 15 and 16 are both Unit 1 4160 switchgear and their rooms are supported by SCWS. Switchgear rooms 25, 26, and 27 are cooled by an independent, separate, non-Tech Spec support system.

3.7.11-2 ITS 3.7.11 Actions Note
JFD PA3.7-171

The note is unnecessary, so delete it. Also, the Bases for Required Actions B.1 and B.2 and C.2 use units in place of unit. Each unit's operations staff should read the TS from a single unit perspective, and take the specified action; however, it would seem prudent to specify in ACTION B a sequential shutdown in this case. See comments 3.7.8-5 and G3.7-13. ACTION E to enter LCO 3.0.3 immediately with both SCWS loops inoperable if in Modes 1, 2, 3, or 4, presents a difficult problem regarding specifying a sequential shutdown; therefore, it is suggested that the shutdown action be included explicitly in ITS 3.7.11 ACTION E, instead of relying on LCO 3.0.3.

NMC RESPONSE

Parts affected by this change:
Part B: Final ITS pages
Part E: ISTS markup
Part F: JFD PA3.7-171

ITS 3.7.11 and associated Bases have been revised to delete the subject Note and make the noted corrections about using the plural of unit. NMC has evaluated the reviewer's comment concerning a sequential shutdown. PI is designed to be able to shutdown both units at the same time and does not need a sequential shutdown requirement.

3.7.11-3 DOC M3.7-59

The SCWS supports unit coolers for a number of safeguards equipment rooms, as well as supporting the control room special ventilation system (for which ITS 3.7.10 specifies a 7-day Completion Time for one train); currently, degradation in the SCWS system must be evaluated to determine the effect on supported equipment operability. If operability is found to not be supported, the appropriate action requirements would apply. Hence, while 3.7.11 is a new explicit support system specification, its addition to TS is not necessarily entirely more restrictive; rather, it may be much less restrictive given the allowed outage times currently specified for the several systems it supports. In this light, the proposed 30-day Completion Time for restoring one inoperable train requires additional justification. Just because STS 3.7.11 ACTION A specifies 30 days to restore one CREATCS train to operable status does not necessarily transfer to the SCWS, which supports more things than keeping control room temperature within limits.

NMC RESPONSE

Parts affected by this change:
None

NMCs position is that adding LCO 3.7.11 is a more restrictive change. This change adds associated Required Actions, Completion Times, and associated SRs, which are not in the PI CTS. In addition, requiring a possible plant shutdown, if one SCWS cannot be restored to OPERABLE status within the 30 days, is a more restrictive change.

3.7.11-4 ITS SR 3.7.11.1 Frequency
DOC M3.7-61
JFD X3.7-170

ITS proposes a frequency of 24 months for the SCWS loop automatic actuation surveillance requirement. What is the existing test interval by plant procedure? Explain why 24 months is acceptable given the current practice and past test results.

NMC RESPONSE

Parts affected by this change:
None

ITS SR 3.7.11.1 requires that each SCWS loop actuates on an actual or simulated actuation signal. This SR is best performed on a 24 month, or refueling basis since actuating equipment could result in an unnecessary unit trip or transient. The chilled water system provides ambient air cooling to essential areas, including the control room, safeguards bus, RHR pump pits, relay room, and event monitoring equipment room. PI performs this SR with the Integrated SI Test which is performed during a refueling outage since it requires actuation of various equipment including the SCWS. Actuating the SCWS for testing purposes while the unit is in MODES 1, 2, 3, or 4 could also result in cycling equipment supported by this system and resulting in a loss of function.

3.7.12, Auxiliary Building Special Ventilation System (ABSVS) [STS ECCS PREACS]

3.7.12-1 ITS 3.7.12 Bases

a. On STS markup page B 3.7.12-4, at the top of the page, the phrase "coincident with loss of offsite power" is not adopted. Doesn't PI assume during a LOCA that a single failure occurs with a coincident LOOP?

b. DOC PA3.7-323 says that ABSVS operability is not necessarily only tied to ECCS operability to justify omitting information contained in the STS 3.7.12 Bases discussions of Applicability and Required Action A.1. Recommend listing all the supported systems that determine when the ABSVS is needed to be operable. Also, if ABSVS is a direct support system for ECCS, then is a 7 day Completion Time appropriate?

c. It appears that the numbering of the Bases for SR 3.7.12.3 and SR 3.7.12.4 in the STS Bases markup are opposite to the numbering of these SRs in the STS markup. Also, DOC A3.7-105 does not explicitly retain CTS 4.4.E, though the Bases as proposed seem to include it - thus it may be that this is an LR-type change.

NMC RESPONSE

Parts affected by this change:
None

(a) No, PIs accident analysis does not assume a loss of offsite power coincident with a single failure as noted in JFD CL3.7-317.

(b) USAR Section 10.3.4 contains those systems supported by the auxiliary building special ventilation. In addition, in conforming to the format of the ISTS, those systems supported by

similar ventilation systems do not provide such a list. The 7 days is PI CLB and is in the CTS. The SR Frequency of 7 days is already part of the PI CTS which is approved by the NRC.

(c) The subject SRs are correct. In revising the Bases, the SR Bases descriptions were editorially rearranged to be in sequential order. The SRs and Bases are correct as is. PI has marked up the CTS for 4.4.E consistent with our entire submittal. The SR requirements identified in CTS 4.4.E translate into both SR 3.7.12.4 and its associated Bases. Since CTS 4.4.E markup is consistent with the rest of the PI submittal, no further changes are being made.

3.7.12-2 ITS 3.7.12 Actions Note
JFD PA3.7-173

a. The note is unnecessary, so delete it.

b. The ACTIONS Bases discussion, first paragraph ends with the phrase, "thus ABSVS train inoperability can affect either or both units." This is confusing, as it appears any inoperability of a train will affect both units, never just one.

c. The Bases for Required Actions A.1, and C.1 and C.2 use units in place of unit. Each unit's operations staff should read the TS from a single unit perspective, and take the specified action; however, it would seem prudent to specify in ACTION C a sequential shutdown in this case. See comments 3.7.8-5 and G3.7-13.

d. The Bases discussion for Required Action A.1 states that both trains inoperable would require entering LCO 3.0.3 immediately. With both ABSVS trains inoperable, it is suggested that a sequential shutdown action be included explicitly in ITS 3.7.12, instead of relying on LCO 3.0.3.

NMC RESPONSE

Parts affected by this change:
Part B: Final ITS pages
E: ISTS markup
Part F: JFD PA3.7-173

(a) The ITS has been revised to delete the subject Note and associated JFD.

(b) The subject Bases statement has been deleted. The statement was only trying to explain that the ABSVS was a shared system that if inoperable could affect both units.

(c) ITS LCO 3.7.12 Required Actions B.1, C.1 and C.2 have been revised using unit instead of units.

(d) PI is analyzed to safely shut down both units as the same time. In the event both units were to enter LCO 3.0.3 at the same time, LCO 3.0.3 allows 1 hour to initiate shutdown, place the unit in Mode 3 in 7 hours, Mode 4 in 13 hours, and Mode 5 in 37 hours. This should be sufficient time to shutdown both units in a safe and efficient manner.

3.7.12-3 ITS LCO 3.7.12 Bases
JFD LR3.7-64
CTS 3.6.F.1

The proposed Bases paragraph regarding the requirement to be able to deenergize the turbine building roof exhauster within 30 minutes following a LOCA does not exactly reflect the CTS requirement. This Bases paragraph should be put in the location of the deleted paragraph shown in the STS markup page B 3.7.12-4, which begins "ECCS PREACS is considered operable . . .", and revised to clearly state that this capability is a condition of operability for the ABSVS.

NMC RESPONSE

Parts affected by this change:
Part B: Final ITS pages
Part E: ISTS markup

ITS Bases 3.7.12 has been revised by moving the subject paragraph as noted. In addition, the subject paragraph has been revised to state, "In order for the ABSVS to be considered OPERABLE, the Turbine Building roof exhauster fans must be capable of being de-energized within 30 minutes following a loss of coolant accident."

3.7.12-4 ITS SR 3.7.12.4 Frequency
DOC L3.7-101
JFD X3.7-137
CTS 4.15.B.3.c (?)

This is a placeholder for the beyond scope change to relax the CTS 4.15.B.3.c (?) ABSVS train automatic actuation surveillance requirement frequency from 18 months ("during Refueling") to 24 months. No response required. See CTS markup, page 41 of 50.

NMC RESPONSE

Parts affected by this change:
None

No response required.

3.7.13, Spent Fuel Pool Special Ventilation (SFPSVS) (STS 3.7.13, FBACS)

3.7.13-1 ITS 3.7.13 ACTION B
DOC L3..7-72

The action requirements contained in ACTION B are not explicitly discussed in the referenced DOC.

NMC RESPONSE

Parts affected by this change:
Part D: DOC L3.7-72

DOC L3.7-72 has been revised to provide additional justification for Condition B.

3.7.13-2 ITS SR 3.7.13.3 and SR 3.7.13.4
DOC L3.7-103

Extension of Frequency for SFPSVS train actuation and fan flow testing to 24 months are beyond scope changes. This comment is for tracking purposes only. No response required.

NMC RESPONSE

Parts affected by this change:
None

No response required.

3.7.14, Secondary Specific Activity (STS 3.7.18)

no comments

3.7.15, Spent Fuel Storage Pool Water Level

no comments

3.7.16, Spent Fuel Storage Pool Boron Concentration

no comments

3.7.17, Spent Fuel Pool Storage

no comments

Prairie Island Nuclear Generating Plant

Attachment 2

to
Supplement dated March 6, 2002
to License Amendment Request dated December 11, 2000
Conversion to Improved Technical Specifications (ITS)

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3.7.12-02	3.7	E	B 3.7.12-5
3.7.12-02	3.7	E	B 3.7.12-6
3.7.12-02	3.7	E	B 3.7.12-7
3.7.12-02	3.7	F	20
3.7.12-03	3.7	B	B 3.7.12-2
3.7.12-03	3.7	B	B 3.7.12-3
3.7.12-03	3.7	E	B 3.7.12-4
3.7.12-03	3.7	E	B 3.7.12-5
3.7.13-01	3.7	D	34
3.7-02	3.7	C	37 of 50
3.7-02	3.7	C	38 of 50
3.7-02	3.7	C	39 of 50
3.7-02	3.7	D	54
3.7-02	3.7	G	1
3.7-03	3.7	C	11 of 50
3.7-03	3.7	D	21
3.7-03	3.7	D	22
3.7-03	3.7	G	1
3.7-03	3.7	G	7
3.7-12	3.7	B	3.7.5-1
3.7-12	3.7	B	3.7.5-2
3.7-12	3.7	B	B 3.7.5-6

RAI Q #	Package #	Part	Page #
3.7-12	3.7	B	B 3.7.5-7
3.7-12	3.7	C	3 of 50
3.7-12	3.7	D	51
3.7-12	3.7	E	3.7.5-2
3.7-12	3.7	E	B 3.7.5-8
3.7-12	3.7	E	B 3.7.5-9
3.7-12	3.7	F	7
3.7-12	3.7	G	3
3.7-13	3.0	B	3.0-4
3.7-13	3.0	B	B 3.0-12
3.7-13	3.0	C	4 of 6
3.7-13	3.0	E	3.0-5
3.7-13	3.0	E	3.0-5
3.7-13	3.0	E	B 3.0-14
3.7-13	3.7	B	3.7.6-1
3.7-13	3.7	B	B 3.7.6-3
3.7-13	3.7	E	3.7.6-1
3.7-13	3.7	E	B 3.7.6-5
3.7-13	3.7	F	10
3.7-15	3.7	C	27 of 50
3.7-15	3.7	D	38
3.7-15	3.7	G	5
3.7-15	3.7	G	7
Repagination	3.7	B	3.7.8-4
Repagination	3.7	B	3.7.8-5
Repagination	3.7	B	3.7.10-3
Repagination	3.7	B	B 3.7.2-6
Repagination	3.7	B	B 3.7.2-7
Repagination	3.7	B	B 3.7.5-8
Repagination	3.7	B	B 3.7.5-9
Repagination	3.7	B	B 3.7.5-10
Repagination	3.7	B	B 3.7.5-11
Repagination	3.7	B	B 3.7.8-13
Repagination	3.7	B	B 3.7.8-15
Repagination	3.7	B	B 3.7.8-16
Repagination	3.7	B	B 3.7.8-17
Repagination	3.7	B	B 3.7.10-8
Repagination	3.7	D	6

RAI Q #	Package #	Part	Page #
Repagination	3.7	D	7
Repagination	3.7	D	8
Repagination	3.7	D	9
Repagination	3.7	D	11
Repagination	3.7	D	12
Repagination	3.7	D	16
Repagination	3.7	D	17
Repagination	3.7	D	18
Repagination	3.7	D	19
Repagination	3.7	D	23
Repagination	3.7	D	25
Repagination	3.7	D	26
Repagination	3.7	D	28
Repagination	3.7	D	29
Repagination	3.7	D	30
Repagination	3.7	D	31
Repagination	3.7	D	32
Repagination	3.7	D	33
Repagination	3.7	D	35
Repagination	3.7	D	36
Repagination	3.7	D	37
Repagination	3.7	D	39
Repagination	3.7	D	40
Repagination	3.7	D	41
Repagination	3.7	D	42
Repagination	3.7	D	44
Repagination	3.7	D	46
Repagination	3.7	D	47
Repagination	3.7	D	48
Repagination	3.7	D	49
Repagination	3.7	D	50
Repagination	3.7	D	53
Repagination	3.7	E	3.7.8-3
Repagination	3.7	E	3.7.8-6
Repagination	3.7	E	3.7.8-7
Repagination	3.7	E	3.7.10-4
Repagination	3.7	E	3.7.12-2
Repagination	3.7	E	B 3.7.8-14

RAI Q #	Package #	Part	Page #
Repagination	3.7	E	B 3.7.8-16
Repagination	3.7	E	B 3.7.8-17
Repagination	3.7	E	B 3.7.10-10
Repagination	3.7	E	B 3.7.10-11
Repagination	3.7	G	53
Repagination	3.8	B	B 3.8.3-5
Repagination	3.8	B	B 3.8.3-6
Repagination	3.8	E	B 3.8.3-9
Repagination	3.8	E	B 3.8.3-10
Repagination	3.8	E	B 3.8.3-11
Repagination	3.8	E	B 3.8.3-12
Repagination	3.8	E	B 3.8.3-13

Prairie Island Nuclear Generating Plant

Attachment 3

to
Supplement dated March 6, 2002
to License Amendment Request dated December 11, 2000
Conversion to Improved Technical Specifications (ITS)

Revision 11 Change Pages

Improved Technical Specifications
Supplement dated 3/6/02

Revision 11 Change Page List

UPDATING INSTRUCTIONS

Remove				Insert			
Chapter/ Section	**Part**	**Page**	**Revision/ Date**	**Chapter/ Section**	**Part**	**Page**	**Revision/ Date**
3.0	B	3.0-4	12/11/00	3.0	B	3.0-4	2/2/02
		B 3.0-12	12/11/00			B 3.0-12	2/2/02
3.0	C	4 of 6		3.0	C	4 of 6	11
3.0	E	3.0-5		3.0	E	3.0-5	11
		B 3.0-14				B 3.0-14	11
3.7	B	3.7.2-1	12/11/00	3.7	B	3.7.2-1	2/2/02
		3.7.4-1	12/11/00			3.7.4-1	2/2/02
		3.7.4-2	12/11/00			3.7.4-2	2/2/02
		3.7.5-1	12/11/00			3.7.5-1	2/2/02
		3.7.5-2	12/11/00			3.7.5-2	2/2/02
		3.7.5-3	12/11/00			3.7.5-3	2/2/02
		3.7.5-4	12/11/00			3.7.5-4	2/2/02
		3.7.6-1	12/11/00			3.7.6-1	2/2/02
		3.7.6-2	12/11/00			3.7.6-2	2/2/02
		3.7.8-1	12/11/00			3.7.8-1	2/2/02
		3.7.8-2	12/11/00			3.7.8-2	2/2/02
		3.7.8-3	12/11/00			3.7.8-3	2/2/02
		3.7.8-4	12/11/00			3.7.8-4	12/11/00
		3.7.8-5	---			3.7.8-5	12/11/00

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Revision 11 Change Page List

UPDATING INSTRUCTIONS

Remove				Insert			
Chapter/ Section	Part	Page	Revision/ Date	Chapter/ Section	Part	Page	Revision/ Date
3.7	B	3.7.9-1	12/11/00	3.7	B	3.7.9-1	2/2/02
		3.7.10-1	12/11/00			3.7.10-1	2/2/02
		3.7.10-2	12/11/00			3.7.10-2	2/2/02
		3.7.10-3	12/11/00			3.7.10-3	12/11/00
		3.7.11-1	12/11/00			3.7.11-1	2/2/02
		3.7.12-1	12/11/00			3.7.12-1	2/2/02
		B 3.7.1-3	12/11/00			B 3.7.1-3	2/2/02
		B 3.7.2-5	12/11/00			B 3.7.2-5	2/2/02
		B 3.7.2-6	12/11/00			B 3.7.2-6	12/11/00
		B 3.7.2-7	12/11/00			B 3.7.2-7	12/11/00
		B 3.7.4-3	12/11/00			B 3.7.4-3	2/2/02
		B 3.7.4-4	12/11/00			B 3.7.4-4	2/2/02
		B 3.7.5-6	12/11/00			B 3.7.5-6	2/2/02
		B 3.7.5-7	12/11/00			B 3.7.5-7	2/2/02
		B 3.7.5-8	12/11/00			B 3.7.5-8	12/11/00
		B 3.7.5-9	12/11/00			B 3.7.5-9	12/11/00
		B 3.7.5-10	12/11/00			B 3.7.5-10	12/11/00
		B 3.7.5-11	12/11/00			B 3.7.5-11	12/11/00
		B 3.7.5-12	12/11/00			B 3.7.5-12	2/2/02
		B 3.7.6-1	12/11/00			B 3.7.6-1	2/2/02

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Revision 11 Change Page List

UPDATING INSTRUCTIONS

Remove				Insert			
Chapter/ Section	Part	Page	Revision/ Date	Chapter/ Section	Part	Page	Revision/ Date
3.7	B	B 3.7.6-2	12/11/00	3.7	B	B 3.7.6-2	2/2/02
		B 3.7.6-3	12/11/00			B 3.7.6-3	2/2/02
		B 3.7.6-4	12/11/00			B 3.7.6-4	2/2/02
		B 3.7.8-8	12/11/00			B 3.7.8-8	2/2/02
		B 3.7.8-9	12/11/00			B 3.7.8-9	2/2/02
		B 3.7.8-10	12/11/00			B 3.7.8-10	2/2/02
		B 3.7.8-11	12/11/00			B 3.7.8-11	2/2/02
		B 3.7.8-12	---			B 3.7.8-12	2/2/02
		B 3.7.8-13	---			B 3.7.8-13	12/11/00
		B 3.7.8-14	---			B 3.7.8-14	2/2/02
		B 3.7.8-15	---			B 3.7.8-15	12/11/00
		B 3.7.8-16	---			B 3.7.8-16	12/11/00
		B 3.7.8-17	---			B 3.7.8-17	12/11/00
		B 3.7.9-3	12/11/00			B 3.7.9-3	2/2/02
		B 3.7.9-4	12/11/00			B 3.7.9-4	2/2/02
		B 3.7.9-5	12/11/00			B 3.7.9-5	2/2/02
		B 3.7.10-4	12/11/00			B 3.7.10-4	2/2/02
		B 3.7.10-5	12/11/00			B 3.7.10-5	2/2/02
		B 3.7.10-6	12/11/00			B 3.7.10-6	2/2/02
		B 3.7.10-7	12/11/00			B 3.7.10-7	2/2/02

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UPDATING INSTRUCTIONS

Remove				Insert			
Chapter/ Section	**Part**	**Page**	**Revision/ Date**	**Chapter/ Section**	**Part**	**Page**	**Revision/ Date**
3.7	B	B 3.7.10-8	---	3.7	B	B 3.7.10-8	12/11/00
		B 3.7.11-3	12/11/00			B 3.7.11-3	2/2/02
		B 3.7.11-4	12/11/00			B 3.7.11-4	2/2/02
		B 3.7.12-2	12/11/00			B 3.7.12-2	2/2/02
		B 3.7.12-3	12/11/00			B 3.7.12-3	2/2/02
		B 3.7.12-4	12/11/00			B 3.7.12-4	2/2/02
		B 3.7.12-5	12/11/00			B 3.7.12-5	2/2/02
3.7	C	1 of 50	2	3.7	C	1 of 50	11
		3 of 50				3 of 50	11
		7 of 50				7 of 50	11
		8 of 50	2			8 of 50	11
		10 of 50				10 of 50	11
		11 of 50				11 of 50	11
		14 of 50	2			14 of 50	11
		15 of 50				15 of 50	11
		27 of 50				27 of 50	11
3.7	C	30 of 50				30 of 50	11
		31 of 50				31 of 50	11
		37 of 50	2			37 of 50	11

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UPDATING INSTRUCTIONS

Remove				Insert			
Chapter/ Section	**Part**	**Page**	**Revision/ Date**	**Chapter/ Section**	**Part**	**Page**	**Revision/ Date**
3.7	C	38 of 50		3.7	C	38 of 50	11
		39 of 50				39 of 50	11
3.7	D	2	12/11/00	3.7	D	2	2/2/02
		4	12/11/00			4	2/2/02
		5	12/11/00			5	2/2/02
		6	12/11/00			6	12/11/00
		7	12/11/00			7	12/11/00
		8	12/11/00			8	12/11/00
		9	12/11/00			9	12/11/00
		10	12/11/00			10	2/2/02
		11	12/11/00			11	12/11/00
		12	12/11/00			12	12/11/00
		13	12/11/00			13	2/2/02
		14	12/11/00			14	2/2/02
		15	12/11/00			15	2/2/02
		16	12/11/00			16	12/11/00
		17	12/11/00			17	12/11/00
		18	12/11/00			18	12/11/00
		19	12/11/00			19	12/11/00
		20	12/11/00			20	2/2/02

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UPDATING INSTRUCTIONS

Remove				Insert			
Chapter/ Section	Part	Page	Revision/ Date	Chapter/ Section	Part	Page	Revision/ Date
3.7	D	21	12/11/00	3.7	D	21	2/2/02
		22	12/11/00			22	2/2/02
		23	12/11/00			23	12/11/00
		24	12/11/00			24	2/2/02
		25	12/11/00			25	12/11/00
		26	12/11/00			26	12/11/00
		27	12/11/00			27	2/2/02
		28	12/11/00			28	12/11/00
		29	12/11/00			29	12/11/00
		30	12/11/00			30	12/11/00
		31	12/11/00			31	12/11/00
		32	12/11/00			32	12/11/00
		33	12/11/00			33	12/11/00
		34	12/11/00			34	2/2/02
		35	12/11/00			35	12/11/00
		36	12/11/00			36	12/11/00
		37	12/11/00			37	12/11/00
		38	12/11/00			38	2/2/02
		39	12/11/00			39	12/11/00
		40	12/11/00			40	12/11/00

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UPDATING INSTRUCTIONS

Remove				Insert			
Chapter/ Section	**Part**	**Page**	**Revision/ Date**	**Chapter/ Section**	**Part**	**Page**	**Revision/ Date**
3.7	D	41	12/11/00	3.7	D	41	12/11/00
		42	12/11/00			42	12/11/00
		43	12/11/00			43	2/2/02
		44	12/11/00			44	12/11/00
		45	12/11/00			45	2/2/02
		46	12/11/00			46	12/11/00
		47	12/11/00			47	12/11/00
		48	12/11/00			48	12/11/00
		49	---			49	12/11/00
		50	---			50	12/11/00
		51	---			51	2/2/02
		52	---			52	2/2/02
		53	---			53	12/11/00
		54	---			54	2/2/02
		55	---			55	2/2/02
		56	---			56	2/2/02
		57	---			57	2/2/02
3.7	E	3.7.2-1		3.7	E	3.7.2-1	11
		3.7.4-1				3.7.4-1	11
		3.7.4-2				3.7.4-2	11

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UPDATING INSTRUCTIONS

Remove				Insert			
Chapter/ Section	**Part**	**Page**	**Revision/ Date**	**Chapter/ Section**	**Part**	**Page**	**Revision/ Date**
3.7	E	3.7.5-1		3.7	E	3.7.5-1	11
		3.7.5-2				3.7.5-2	11
		3.7.5-6				3.7.5-6	11
		3.7.6-1				3.7.6-1	11
		3.7.6-2				3.7.6-2	11
		3.7.8-1				3.7.8-1	11
		3.7.8-2				3.7.8-2	11
		3.7.8-3				3.7.8-3	None
		3.7.8-4				3.7.8-4	11
		3.7.8-5	2			3.7.8-5	11
		3.7.8-6	---			3.7.8-6	None
		3.7.8-7	---			3.7.8-7	2
		3.7.9-1				3.7.9-1	11
		3.7.10-1				3.7.10-1	11
		3.7.10-2				3.7.10-2	11
		3.7.10-3				3.7.10-3	11
		3.7.10-4				3.7.10-4	None
		3.7.11-1				3.7.11-1	11
		3.7.12-1				3.7.12-1	11
		3.7.12-2				3.7.12-2	None

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UPDATING INSTRUCTIONS

Remove				Insert			
Chapter/ Section	**Part**	**Page**	**Revision/ Date**	**Chapter/ Section**	**Part**	**Page**	**Revision/ Date**
3.7	E	B 3.7.1-4		3.7	E	B 3.7.1-4	11
		B 3.7.2-7				B 3.7.2-7	11
		B 3.7.4-4				B 3.7.4-4	11
		B 3.7.4-6				B 3.7.4-6	11
		B 3.7.5-6				B 3.7.5-6	11
		B 3.7.5-8				B 3.7.5-8	11
		B 3.7.5-9				B 3.7.5-9	11
		B 3.7.5-14				B 3.7.5-14	11
		B 3.7.5-15				B 3.7.5-15	11
		B 3.7.6-1				B 3.7.6-1	11
		B 3.7.6-3				B 3.7.6-3	11
		B 3.7.6-4				B 3.7.6-4	11
		B 3.7.6-5				B 3.7.6-5	11
		B 3.7.6-6				B 3.7.6-6	11
		B 3.7.8-8				B 3.7.8-8	11
		B 3.7.8-9				B 3.7.8-9	11
		B 3.7.8-10				B 3.7.8-10	11
		B 3.7.8-11				B 3.7.8-11	11
		B 3.7.8-12				B 3.7.8-12	11
		B 3.7.8-13	8			B 3.7.8-13	11

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Revision 11 Change Page List

UPDATING INSTRUCTIONS

Remove				Insert			
Chapter/ Section	**Part**	**Page**	**Revision/ Date**	**Chapter/ Section**	**Part**	**Page**	**Revision/ Date**
3.7	E	B 3.7.8-14		3.7	E	B 3.7.8-14	8
		B 3.7.8-15	2			B 3.7.8-15	11
		B 3.7.8-16				B 3.7.8-16	2
		B 3.7.8-17	---			B 3.7.8-17	2
		B 3.7.9-5				B 3.7.9-5	11
		B 3.7.9-6				B 3.7.9-6	11
		B 3.7.9-7				B 3.7.9-7	11
		B 3.7.10-5				B 3.7.10-5	11
		B 3.7.10-6				B 3.7.10-6	11
		B 3.7.10-7				B 3.7.10-7	11
		B 3.7.10-8				B 3.7.10-8	11
		B 3.7.10-9				B 3.7.10-9	11
		B 3.7.10-10				B 3.7.10-10	None
		B 3.7.10-11	---			B 3.7.10-11	None
		B 3.7.11-4				B 3.7.11-4	11
		B 3.7.11-5				B 3.7.11-5	11
		B 3.7.12-4				B 3.7.12-4	11
		B 3.7.12-5				B 3.7.12-5	11
		B 3.7.12-6				B 3.7.12-6	11
		B 3.7.12-7				B 3.7.12-7	11

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Revision 11 Change Page List

UPDATING INSTRUCTIONS

Remove				Insert			
Chapter/ Section	**Part**	**Page**	**Revision/ Date**	**Chapter/ Section**	**Part**	**Page**	**Revision/ Date**
3.7	F	1	12/11/00	3.7	F	1	2/2/02
		2	5/1/01			2	2/2/02
		6	12/11/00			6	2/2/02
		7	12/11/00			7	2/2/02
		10	12/11/00			10	2/2/02
		13	12/11/00			13	2/2/02
		15	12/11/00			15	2/2/02
		17	12/11/00			17	2/2/02
		20	12/11/00			20	2/2/02
		49	12/11/00			49	2/2/02
		50	---			50	2/2/02
3.7	G	1	5/1/01	3.7	G	1	2/2/02
		3	12/11/00			3	2/2/02
		5	12/11/00			5	2/2/02
		7	12/11/00			7	2/2/02
		9	12/11/00			9	2/2/02
		10	12/11/00			10	2/2/02
		11	12/11/00			11	2/2/02
		47	12/11/00			47	2/2/02

Improved Technical Specifications
Supplement dated 3/6/02

Revision 11 Change Page List

UPDATING INSTRUCTIONS

Remove				Insert			
Chapter/ Section	**Part**	**Page**	**Revision/ Date**	**Chapter/ Section**	**Part**	**Page**	**Revision/ Date**
3.7	G	48	---	3.7	G	48	2/2/02
		49	---			49	2/2/02
		50	---			50	2/2/02
		51	---			51	2/2/02
		52	---			52	2/2/02
		53	---			53	12/11/00
3.8	B	3.8.3-2	12/11/00	3.8	B	3.8.3-2	2/2/02
		B 3.8.3-4	1/2/02			B 3.8.3-4	2/2/02
		B 3.8.3-5	7/2/01			B 3.8.3-5	7/2/01
		B 3.8.3-6	---			B 3.8.3-6	12/11/00
	C	5 of 12	4	3.8	C	5 of 12	11
3.8	D	37	12/11/00	3.8	D	37	2/2/02
3.8	E	3.8.3-3		3.8	E	3.8.3-3	11
		B 3.8.3-7				B 3.8.3-7	11
		B 3.8.3-8	8			B 3.8.3-8	11
		B 3.8.3-9	3			B 3.8.3-9	None
		B 3.8.3-10				B 3.8.3-10	3
		B 3.8.3-11				B 3.8.3-11	None

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Revision 11 Change Page List

UPDATING INSTRUCTIONS

Remove				Insert			
Chapter/ Section	**Part**	**Page**	**Revision/ Date**	**Chapter/ Section**	**Part**	**Page**	**Revision/ Date**
3.8	E	B 3.8.3-12	3	3.8	E	B 3.8.3-12	3
		B 3.8.3-13				B 3.8.3-13	None
3.8	F	53	---	3.8	F	53	2/2/02
3.8	G	1	9/4/01	3.8	G	1	2/2/02

3.0 LCO APPLICABILITY (continued)

LCO 3.0.9 Unless specifically noted, all the information provided in the LCO including the associated ACTION requirements shall apply to each unit individually. Whenever certain portions of a specification refer to systems, components, operating parameters, setpoints, etc., which are different for each unit, this will be identified in parentheses or notes or in the Applicability section as appropriate.

BASES (continued)

LCO 3.0.9

LCO 3.0.9 is provided to clarify the unit applicability of parameters or equipment designations which are specific to one unit.

In the Specifications and Bases, parentheses and footnotes may be used to identify system, component, operating parameter, setpoints, etc. specific to one unit. These are considered an integral part of the LCO's and SRs with which compliance is required for the specified unit.

~~TS 3.0-1~~
~~REV 91 10/27/89~~

~~Overflow (continued)~~

LCO 3.0.8 (continued)	Non-Technical Specification Support System	Delay Time	A3.0-09
	Snubbers	72 hours	

A3.0-13

LCO 3.0.9 Unless specifically noted, all the information provided in the LCO including the associated ACTION requirements shall apply to each unit individually. Whenever certain portions of a specification refer to systems, components, operating parameters, setpoints, etc., which are different for each unit, this will be identified in parentheses or notes or in the Applicability section as appropriate.

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	Non-Technical Specification Support System	Delay Time
LCO 3.0.8 (continued)	Snubbers	72 hours

PA3.0-31

LCO 3.0.9 Unless specifically noted, all the information provided in the LCO including the associated ACTION requirements shall apply to each unit individually. Whenever certain portions of a specification refer to systems, components, operating

R-11

3.0 LCO APPLICABILITY

PA3.0-31

LCO 3.0.9 (continued) parameters, setpoints, etc., which are different for each unit, this will be identified in parentheses or notes or in the Applicability section as appropriate.

3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

SR 3.0.1 SRs shall be met during the MODES or other specified conditions in the Applicability for individual LCOs, unless otherwise stated in the SR. Failure to meet a Surveillance, whether such failure is experienced during the performance of the Surveillance or between performances of the Surveillance, shall be failure to meet the LCO. Failure to perform a Surveillance within the specified Frequency shall be failure to meet the LCO except as provided in SR 3.0.3. Surveillances do not have to be performed on inoperable equipment or variables outside specified limits.

(continued)

LCO 3.0.9

LCO 3.0.9 is provided to clarify the unit applicability of parameters or equipment designations which are specific to one unit. In the Specifications and Bases, parentheses and footnotes may be used to identify system, component, operating parameter, setpoints, etc. specific to one unit. These are considered an integral part of the LCO's and SRs with which compliance is required for the specified unit.

PA3.0-31

R-11

(continued)

3.7 PLANT SYSTEMS

3.7.2 Main Steam Isolation Valves (MSIVs)

LCO 3.7.2 Two MSIVs shall be OPERABLE.

APPLICABILITY: MODE 1,
MODES 2 and 3 except when both MSIVs are closed.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One MSIV inoperable in MODE 1.	A.1 Restore MSIV to OPERABLE status.	8 hours
B. Required Action and associated Completion Time of Condition A not met.	B.1 Be in MODE 2.	6 hours
C. ----------NOTE---------- Separate Condition entry is allowed for each MSIV. ---------- One or more MSIV inoperable in MODE 2 or 3.	C.1 Close MSIV. AND C.2 Verify MSIV is closed.	8 hours Once per 7 days

3.7 PLANT SYSTEMS

3.7.4 Steam Generator (SG) Power Operated Relief Valves (PORVs)

LCO 3.7.4 Two SG PORVs shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One SG PORV inoperable.	A.1 ----------NOTE---------- LCO 3.0.4 is not applicable. ---------- Restore SG PORV to OPERABLE status.	7 days
B. Two SG PORVs inoperable.	B.1 Restore one SG PORV to OPERABLE status.	1 hour
C. Required Action and associated Completion Time not met.	C.1 Be in MODE 3. AND C.2 Be in MODE 4.	6 hours 12 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.4.1	Verify one complete cycle of each SG PORV.	In accordance with the Inservice Testing Program
SR 3.7.4.2	Verify one complete manual cycle of each SG PORV block valve.	24 months

3.7 PLANT SYSTEMS

3.7.5 Auxiliary Feedwater (AFW) System

LCO 3.7.5 Two AFW trains shall be OPERABLE.

----------NOTE----------
AFW train(s) may be considered OPERABLE during alignment and operation for steam generator level control if it is capable of being manually realigned to the AFW mode of operation.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One steam supply to turbine driven AFW pump inoperable. OR ----------NOTE---------- Only applicable if MODE 2 has not been entered following refueling. --- One turbine driven AFW pump inoperable in MODE 3 following refueling.	A.1 Restore affected equipment to OPERABLE status.	7 days AND 10 days from discovery of failure to meet the LCO.

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. One AFW train inoperable for reasons other than Condition A.	B.1 Restore AFW train to OPERABLE status.	72 hours AND 10 days from discovery of failure to meet the LCO.
C. Required Action and associated Completion Time for Condition A or B not met.	C.1 Be in MODE 3. AND C.2 Be in MODE 4.	6 hours 12 hours
D. Two AFW trains inoperable.	D.1 ----------NOTE---------- LCO 3.0.3 and all other LCO Required Actions requiring MODE changes are suspended until one AFW train is restored to OPERABLE status. ---------- Initiate action to restore one AFW train to OPERABLE status.	 Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.5.1	----------NOTE---------- AFW train(s) may be considered OPERABLE during alignment and operation for steam generator level control if it is capable of being manually realigned to the AFW mode of operation. ----------	
	Verify each AFW manual, power operated, and automatic valve in each water flow path, and in both steam supply flow paths to the steam turbine driven pump, that is not locked, sealed, or otherwise secured in position, is in the correct position.	31 days
SR 3.7.5.2	----------NOTE---------- Not required to be performed for the turbine driven AFW pump until prior to exceeding 10% RTP or within 72 hours after RCS temperature > 350°F. ----------	
	Verify the developed head of each AFW pump at the flow test point is greater than or equal to the required developed head.	In accordance with the Inservice Testing Program

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.7.5.3	----------NOTE---------- AFW train(s) may be considered OPERABLE during alignment and operation for steam generator level control, if it is capable of being manually realigned to the AFW mode of operation. ---------- Verify each AFW automatic valve that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal.	24 months
SR 3.7.5.4	----------NOTE---------- 1. Not required to be performed for the turbine driven AFW pump until prior to exceeding 10% RTP or within 72 hours after RCS temperature > 350°F. 2. AFW train(s) may be considered OPERABLE during alignment and operation for steam generator level control, if it is capable of being manually realigned to the AFW mode of operation. ---------- Verify each AFW pump starts automatically on an actual or simulated actuation signal.	24 months

3.7 PLANT SYSTEMS

3.7.6 Condensate Storage Tanks (CSTs)

LCO 3.7.6 The CSTs shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. CSTs inoperable.	A.1 Verify by administrative means OPERABILITY of backup water supply.	4 hours AND Once per 12 hours thereafter
	AND	
	A.2 Restore CSTs to OPERABLE status.	7 days

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3. AND B.2 Be in MODE 4.	6 hours 12 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.6.1	Verify CSTs useable contents ≥ 100,000 gal per operating unit.	12 hours

3.7 PLANT SYSTEMS

3.7.8 Cooling Water (CL) System

LCO 3.7.8 Two CL trains shall be OPERABLE.

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

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. No safeguards CL pumps OPERABLE for one train.	----------NOTES---------- 1. Unit 1 enter applicable Conditions and Required Actions of LCO 3.8.1, "AC Sources-MODES 1, 2, 3, and 4," for emergency diesel generator made inoperable by CL System. 2. Both units enter applicable Conditions and Required Actions of LCO 3.4.6, "RCS Loops-MODE 4," for residual heat removal loops made inoperable by CL System. 3. This Condition may not exist > 7 days in any consecutive 30 day period. ----------	

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. (continued)	A.1 Restore one safeguards CL pump to OPERABLE status.	7 days AND 10 days from discovery of failure to meet the LCO
B. One CL supply header inoperable.	----------NOTES---------- 1. Unit 1 enter applicable Conditions and Required Actions of LCO 3.8.1, "AC Sources-MODES 1, 2, 3, and 4," for emergency diesel generator made inoperable by CL System. 2. Both units enter applicable Conditions and Required Actions of LCO 3.4.6, "RCS Loops-MODE 4," for residual heat removal loops made inoperable by CL System. ---------- B.1 Verify vertical motor driven CL pump OPERABLE. AND	4 hours

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. (continued)	B.2 Verify opposite train diesel driven CL pump OPERABLE. AND B.3 Restore CL supply header to OPERABLE status.	4 hours 72 hours AND 10 days from discovery of failure to meet the LCO
C. Required Action and associated Completion Time not met.	C.1 Be in MODE 3. AND C.2 Be in MODE 5.	6 hours 36 hours
D. Diesel driven CL pumps stored fuel oil supply < 19,500 gal and > 17,000 gal.	D.1 Restore fuel oil supply to within limits.	48 hours AND 9 days from discovery of failure to meet the LCO

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. Diesel driven CL pumps stored fuel oil supply < 17,000 gal. OR Required Action and associated Completion Time of Condition D not met.	E.1 Declare diesel driven CL pumps inoperable.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.8.1	----------NOTE---------- Isolation of CL flow to individual components does not render the CL System inoperable. ---------- Verify each CL System manual, power operated, and automatic valve in the flow path servicing safety related equipment, that is not locked, sealed, or otherwise secured in position, is in the correct position.	31 days
SR 3.7.8.2	Verify each diesel driven CL pump starts and assumes load within one minute.	31 days

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.7.8.3	Verify stored diesel driven CL pumps fuel oil supply ≥ 19,500 gal.	31 days
SR 3.7.8.4	Verify OPERABILITY of vertical motor driven CL pump.	92 days
SR 3.7.8.5	Verify each CL System automatic valve required to mitigate accidents that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal.	24 months
SR 3.7.8.6	Verify the diesel driven and vertical motor driven CL pumps start automatically on an actual or simulated actuation signal.	24 months

3.7 PLANT SYSTEMS

3.7.9 Emergency Cooling Water (CL) Supply

LCO 3.7.9 The Emergency CL supply shall be OPERABLE.

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

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One safeguards traveling screen inoperable.	A.1 ----------NOTE---------- Not applicable during periods of testing for ≤ 24 hours. ---------- Verify one emergency bay sluice gate open.	4 hours
	AND	
	A.2 Restore safeguards traveling screen to OPERABLE status.	90 days

3.7 PLANT SYSTEMS

3.7.10 Control Room Special Ventilation System (CRSVS)

LCO 3.7.10 Two CRSVS trains shall be OPERABLE.

----------NOTE----------
The control room boundary may be opened intermittently under administrative control.

APPLICABILITY: MODES 1, 2, 3, and 4,
During movement of irradiated fuel assemblies.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One CRSVS train inoperable.	A.1 Restore CRSVS train to OPERABLE status.	7 days
B. Two CRSVS trains inoperable due to inoperable control room boundary in MODES 1, 2, 3, or 4.	B.1 Restore control room boundary to OPERABLE status.	24 hours

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. Required Action and associated Completion Time of Condition A not met in MODE 1, 2, 3, or 4.	C.1 Be in MODE 3. AND C.2 Be in MODE 5.	6 hours 36 hours
D. Required Action and associated Completion Time of Condition A not me during movement of irradiated fuel assemblies.	D.1 Place OPERABLE CRSVS train in emergency mode. OR D.2 Suspend movement of irradiated fuel assemblies.	Immediately Immediately
E. Two CRSVS trains inoperable during movement of irradiated fuel assemblies.	E.1 Suspend movement of irradiated fuel assemblies.	Immediately
F. Two CRSVS trains inoperable in MODE 1, 2, 3, or 4 for reasons other than Condition B.	F.1 Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.10.1	Operate each CRSVS train ≥ 15 minutes.	31 days
SR 3.7.10.2	Perform required CRSVS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with VFTP
SR 3.7.10.3	Verify each CRSVS train actuates on an actual or simulated actuation signal.	24 months
SR 3.7.10.4	Verify the CRSVS fan in each train delivers 3600 to 4400 cfm.	24 months on a STAGGERED TEST BASIS

3.7 PLANT SYSTEMS

3.7.11 Safeguards Chilled Water System (SCWS)

LCO 3.7.11 Two SCWS loops shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4,
During movement of irradiated fuel assemblies.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One SCWS loop inoperable.	A.1 Restore SCWS loop to OPERABLE status.	30 days
B. Required Action and associated Completion Time of Condition A not met in MODE 1, 2, 3, or 4.	B.1 Be in MODE 3. AND B.2 Be in MODE 5.	6 hours 36 hours

3.7 PLANT SYSTEMS

3.7.12 Auxiliary Building Special Ventilation System (ABSVS)

LCO 3.7.12 Two ABSVS trains shall be OPERABLE.

---NOTE---
The ABSV boundary may be opened under administrative control.

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

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One ABSVS train inoperable.	A.1 Restore ABSVS train to OPERABLE status.	7 days
B. Two ABSVS trains inoperable due to inoperable ABSVS boundary.	B.1 Restore ABSVS boundary to OPERABLE status.	24 hours

BASES

LCO (continued)

This LCO provides assurance that the MSSVs will perform their designed safety functions to mitigate the consequences of accidents that could result in a challenge to the RCPB or Main Steam System integrity.

APPLICABILITY

In MODES 1, 2, and 3, five MSSVs per steam generator are required to be OPERABLE to prevent Main Steam System overpressurization.

In MODES 4, 5, and 6, there are no credible transients requiring the MSSVs.

The energy content in the steam generators is sufficiently low in MODES 5 and 6 that they cannot be overpressurized; there is no requirement for the MSSVs to be OPERABLE in these MODES.

ACTIONS

A.1

With one MSSV inoperable, restore OPERABILITY of the inoperable MSSV within 4 hours. The 4 hours is a reasonable time due to the low probability of an event or transient occurring during this time requiring MSSV operation.

Continued operation with less than all five MSSVs OPERABLE for each steam generator is not permitted since safety analyses supporting such operation have not been performed.

B.1 and B.2

If the MSSV cannot be restored to OPERABLE status within the associated Completion Time, the unit must be placed in a MODE in which the LCO does not apply. To achieve this status, the unit must be placed in at least MODE 3 within 6 hours, and in MODE 4 within 12 hours.

BASES

ACTIONS (continued)

B.1

If the MSIV cannot be restored to OPERABLE status within 8 hours, the unit must be placed in a MODE in which the LCO does not apply. To achieve this status, the unit must be placed in MODE 2 within 6 hours and Condition C would be entered unless both MSIVs are closed. The Completion Times are reasonable, based on operating experience, to reach MODE 2 in an orderly manner without challenging unit systems.

C.1 and C.2

Condition C is modified by a note indicating that separate Condition entry is allowed for each MSIV.

Since the MSIVs are required to be OPERABLE in MODES 2 and 3, the inoperable MSIV may either be restored to OPERABLE status or closed. When closed, the MSIVs are already in the position required by the assumptions in the safety analysis.

The 8 hour Completion Time is consistent with that allowed in Condition A for one MSIV inoperable.

For an inoperable MSIV that cannot be restored to OPERABLE status within the specified Completion Time, but is closed, the inoperable MSIV must be verified on a periodic basis to be closed. This is necessary to ensure that the assumptions in the safety analysis remain valid. The 7 day Completion Time is reasonable, based on engineering judgment, in view of MSIV status indications available in the control room, and other administrative controls, to ensure that these valves are in the closed position.

BASES

ACTIONS (continued)

D.1 and D.2

If the MSIVs cannot be restored to OPERABLE status or are not closed within the associated Completion Time, the unit must be placed in a MODE in which the LCO does not apply. To achieve this status, the unit must be placed at least in MODE 3 within 6 hours, and in MODE 4 within 12 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from MODE 2 conditions in an orderly manner and without challenging unit systems.

SURVEILLANCE REQUIREMENTS

SR 3.7.2.1

This SR verifies that MSIV closure time is ≤ 5 seconds. The MSIV isolation time is assumed in the accident and containment analyses. This Surveillance is normally performed upon returning the unit to operation following a refueling outage. The MSIVs should not be tested at power, since even a part stroke exercise increases the risk of valve closure when the unit is generating power. As the MSIVs are not tested at power, they are deferred from the ASME Code (Ref. 5) requirements during operation in MODE 1 or 2. Since this test is performed by manually closing the valve, this test also verifies that the MSIV manual switches are functional.

The Frequency is in accordance with the Inservice Testing Program.

This test is conducted in MODE 3 with the unit at operating temperature and pressure. This SR is modified by a Note that allows entry into and operation in MODE 3 prior to performing the SR. This allows a delay of testing until MODE 3, to establish conditions consistent with those under which the acceptance criterion was generated.

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.7.2.2

This SR verifies each MSIV can close on an actual or simulated main steam isolation signal. This Surveillance is normally performed upon returning the plant to operation following a refueling outage.

The Frequency of MSIV testing is every 24 months. The 24 month Frequency for testing is based on the refueling cycle. Operating experience has shown that these components usually pass the Surveillance when performed. Therefore, the Frequency is acceptable from a reliability standpoint.

REFERENCES

1. USAR, Section 11.7.
2. USAR, Section 14.5.
3. License Amendment 133/125, issued November 18, 1997, "Voltage-based Steam Generator Tube Repair Criteria."
4. 10 CFR 100.11.
5. ASME, Boiler and Pressure Vessel Code, Section XI.

BASES

ACTIONS

A.1 (continued)

The 7 day Completion Time allows for the redundant capability afforded by the remaining OPERABLE SG PORV, Steam Dump System, and MSSVs.

Required Action A.1 is modified by a Note indicating that LCO 3.0.4 does not apply.

B.1

With two SG PORVs inoperable, action must be taken to restore one SG PORV to OPERABLE status. Since the block valve can be closed to isolate a SG PORV, some repairs may be possible with the unit at power.

The 1 hour Completion Time allows time to plan an orderly shutdown of the unit and is reasonable, based on the availability of the Steam Dump System and MSSVs, and the low probability of an event occurring during this period that would require the SG PORV.

C.1 and C.2

If the SG PORV cannot be restored to OPERABLE status within the associated Completion Time, the unit must be placed in a MODE in which the LCO does not apply. To achieve this status, the unit must be placed in at least MODE 3 within 6 hours, and in MODE 4 within 12 hours.

The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

BASES (continued)

SURVEILLANCE REQUIREMENTS

SR 3.7.4.1

This SR ensures that the SG PORVs are tested through a full control cycle in accordance with the Inservice Testing Program. The SG PORV is isolated by the block valve for this test. Performance of inservice testing or use of a SG PORV during a unit cooldown may satisfy this requirement.

Operating experience has shown that these components usually pass the Surveillance when performed in accordance with the Inservice Testing Program. The Frequency is acceptable from a reliability standpoint.

SR 3.7.4.2

The function of the block valve is to isolate a failed open SG PORV. Manually cycling the block valve both closed and open demonstrates its capability to perform this function. Performance of inservice testing or use of the block valve during unit cooldown may satisfy this requirement.

Operating experience has shown that these components usually pass the Surveillance when performed. The Frequency is acceptable from a reliability standpoint.

REFERENCES

1. USAR, Section 11.4.
2. USAR, Section 14.

BASES

ACTIONS

A.1 (continued)

a. For the inoperability of a steam supply to the turbine driven AFW pump, the 7 day Completion Time is reasonable since there is a redundant steam supply line for the turbine driven pump;

b. For the inoperability of a turbine driven AFW pump while in MODE 3 immediately subsequent to a refueling outage, the 7 day Completion Time is reasonable due to the minimal decay heat levels in this situation; and

c. For both the inoperability of a steam supply line to the turbine driven pump and an inoperable turbine driven AFW pump while in MODE 3 immediately following a refueling outage, the 7 day Completion Time is reasonable due to the availability of the redundant OPERABLE motor driven AFW pump, and due to the low probability of an event requiring the use of the turbine driven AFW pump.

The second Completion Time for Required Action A.1 establishes a limit on the maximum time allowed for any combination of Conditions to be inoperable during any continuous failure to meet this LCO.

The 10 day Completion Time provides a limitation time allowed in this specified Condition after discovery of failure to meet the LCO. This limit is considered reasonable for situations in which Conditions A and B are entered concurrently. The AND connector between 7 days and 10 days dictates that both Completion Times apply simultaneously, and the more restrictive must be met.

BASES

ACTIONS

A.1 (continued)

Condition A is modified by a Note which limits the applicability of the Condition when the unit has not entered MODE 2 following a refueling. Condition A allows one AFW train to be inoperable for 7 days vice the 72 hour Completion Time in Condition B. This longer Completion Time is based on the reduced decay heat following refueling and prior to the reactor being critical.

B.1

With one of the required AFW trains (pump or flow path) inoperable for reasons other than Condition A, action must be taken to restore OPERABLE status within 72 hours. This Condition includes the loss of two steam supply lines to the turbine driven AFW pump. The 72 hour Completion Time is reasonable, based on redundant capabilities afforded by the AFW System, time needed for repairs, and the low probability of a DBA occurring during this time period.

The second Completion Time for Required Action B.1 establishes a limit on the maximum time allowed for any combination of Conditions to be inoperable during any continuous failure to meet this LCO.

The 10 day Completion Time provides a limitation time allowed in this specified Condition after discovery of failure to meet the LCO. This limit is considered reasonable for situations in which Conditions A and B are entered concurrently. The AND connector between 72 hours and 10 days dictates that both Completion Times apply simultaneously, and the more restrictive must be met.

BASES

ACTIONS (continued)

C.1 and C.2

When Required Action A.1 or B.1 cannot be completed within the required Completion Time, the unit must be placed in a MODE in which the LCO does not apply. To achieve this status, the unit must be placed in at least MODE 3 within 6 hours, and in MODE 4 within 12 hours.

The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

D.1

If both AFW trains are inoperable, the unit is in a seriously degraded condition with no safety related means for conducting a cooldown, and only limited means for conducting a cooldown with nonsafety related equipment. In such a condition, the unit should not be perturbed by any action, including a power change, that might result in a trip. The seriousness of this condition requires that action be started immediately to restore one AFW train to OPERABLE status.

Required Action D.1 is modified by a Note indicating that all required MODE changes or power reductions are suspended until one AFW train is restored to OPERABLE status. In this case, LCO 3.0.3 is not applicable because it could force the unit into a less safe condition.

SURVEILLANCE REQUIREMENTS

SR 3.7.5.1

This SR verifies the correct alignment for manual, power operated, and automatic valves in the AFW System water and steam supply flow paths thereby providing assurance that the proper flow paths

BASES

SURVEILLANCE REQUIREMENTS

SR 3.7.5.1 (continued)

will exist for AFW operation. This SR does not apply to valves that are locked, sealed, or otherwise secured in position, since they are verified to be in the correct position prior to locking, sealing, or securing. This SR also does not apply to valves that cannot be inadvertently misaligned, such as check valves.

This Surveillance does not require any testing or valve manipulation; rather, it involves verification that those valves capable of being mispositioned are in the correct position.

The 31 day Frequency is based on engineering judgment, is consistent with the procedural controls governing valve operation, and ensures correct valve positions.

This SR is modified by a Note that states one or more AFW trains may be considered OPERABLE during alignment and operation for steam generator level control, if it is capable of being manually (i.e., remotely or locally, as appropriate) realigned to the AFW mode of operation, provided it is not otherwise inoperable. This exception allows the system to be out of its normal standby alignment and temporarily incapable of automatic initiation without declaring the train(s) inoperable. Since AFW may be used during MODES 2, 3 and 4 operations for steam generator level control, and these manual operations are an accepted function of the AFW system, OPERABILITY (i.e., the intended safety function) continues to be maintained.

SR 3.7.5.2

Verifying that each AFW pump's developed head at the flow test point is greater than or equal to the required developed head ensures that AFW pump performance has not degraded during the cycle. Differential pressure is a normal test of centrifugal pump

BASES

SURVEILLANCE REQUIREMENTS

SR 3.7.5.2 (continued)

performance required by Section XI of the ASME Code (Ref. 2). Because it is undesirable to introduce cold AFW into the steam generators while they are operating, this testing is performed on recirculation flow. This test confirms one point on the pump design curve and is indicative of overall performance. Such inservice tests confirm component OPERABILITY, trend performance, and detect incipient failures by indicating abnormal performance. Performance of inservice testing discussed in the ASME Code, Section XI (Ref. 2) satisfies this requirement. The Inservice Testing Program specifies the Frequency for testing each pump. This test is considered satisfactory if control board indication and subsequent visual observation of the equipment demonstrate that all components have operated properly.

This SR is modified by a Note indicating that the SR should be deferred until suitable test conditions are established. This deferral is required because there is insufficient steam pressure to perform the test. This deferral is based on the inservice testing requirements not met; all other requirements for OPERABILITY must be satisfied.

SR 3.7.5.3

This SR verifies that AFW can be delivered to the appropriate steam generator by demonstrating that each automatic valve in the flow path actuates to its correct position on an actual or simulated safety injection signal. This Surveillance is not required for valves that are locked, sealed, or otherwise secured in the required position under administrative controls. This test is considered satisfactory if control board indication and subsequent visual observation of the equipment demonstrate that all components have operated properly. The 24 month Frequency is based on the need to perform this Surveillance under the conditions that apply during a unit outage and

BASES

SURVEILLANCE REQUIREMENTS

SR 3.7.5.3 (continued)

the potential for an unplanned transient if the Surveillance were performed with the reactor at power. The 24 month Frequency is acceptable based on operating experience and the design reliability of the equipment.

This SR is modified by a Note that states one or more AFW trains may be considered OPERABLE during alignment and operation for steam generator level control, if it is capable of being manually (i.e., remotely or locally, as appropriate) realigned to the AFW mode of operation, provided it is not otherwise inoperable. This exception allows the system to be out of its normal standby alignment and temporarily incapable of automatic initiation without declaring the train(s) inoperable. Since AFW may be used during MODES 2, 3 and 4 operations for steam generator level control, and these manual operations are an accepted function of the AFW system, OPERABILITY (i.e., the intended safety function) continues to be maintained.

SR 3.7.5.4

This SR verifies that the AFW pumps will start when required by demonstrating that each AFW pump starts automatically on an actual or simulated AFW pump start signal. Since this test is performed during unit shutdown, the turbine driven AFW pump is not actually started, but the components necessary to assure it starts on an actual or simulated AFW pump start signal are demonstrated to be OPERABLE. This test is considered satisfactory if control board indication and subsequent visual observation of the equipment demonstrate that all components have operated properly. The 24 month Frequency is based on the need to perform this Surveillance under the conditions that apply during a unit outage and the potential for an unplanned transient if the Surveillance were performed with the reactor at power.

BASES

SURVEILLANCE REQUIREMENTS

SR 3.7.5.4 (continued)

This SR is modified by two Notes. Note 1 indicates that the SR be deferred until suitable test conditions are established. This deferral is required because there is insufficient steam pressure to perform the test. Note 2 states that one or more AFW trains may be considered OPERABLE during alignment and operation for steam generator level control, if it is capable of being manually (i.e., remotely or locally, as appropriate) realigned to the AFW mode of operation, provided it is not otherwise inoperable. This exception allows the system to be out of its normal standby alignment and temporarily incapable of automatic initiation without declaring the train(s) inoperable. Since AFW may be used during MODES 2, 3 and 4 operations for steam generator level control, and these manual operations are an accepted function of the AFW system, OPERABILITY (i.e., the intended safety function) continues to be maintained.

REFERENCES

1. USAR, Section 11.9.
2. ASME, Boiler and Pressure Vessel Code, Section XI.
3. USAR, Section 14.4.

B 3.7 PLANT SYSTEMS

B 3.7.6 Condensate Storage Tanks (CSTs)

BASES

BACKGROUND

Three 150,000 gallon CSTs (total) are shared via a common header between the 2 units. Unit 1 has 1 tank (11) and Unit 2 has 2 tanks (21 and 22). The CSTs provide a nonsafety grade source of water to the steam generators for removing decay and sensible heat from the Reactor Coolant System (RCS).

A backup safety grade source of water is provided by the safety-related portion of the Cooling Water (CL) System (LCO 3.7.8) via either the Emergency Cooling Water Line or the emergency bay sluice gates.

Since water supplied from the CL System is of lower purity, its use is considered less desirable under normal conditions than the higher purity condensate water from the CSTs. However, if needed, the operator can lineup the Cooling Water supply by opening the associated CL supply motor operated valve (MOV) and closing the associated CST supply MOV for each auxiliary feedwater pump.

The CSTs provide a passive flow of water, by gravity, to the Auxiliary Feedwater (AFW) System (LCO 3.7.5). The steam produced is released to the atmosphere by the main steam safety valves, the steam generator power operated relief valves or the atmospheric dump valve. Each AFW pump operates with a continuous recirculation to a CST.

When the main steam isolation valves are open, the preferred means of heat removal is to discharge steam to the condenser by the nonsafety grade path of the steam dump valve. The condensed steam may be returned to the CSTs by the condensate pump. This has the advantage of conserving condensate while minimizing releases to the environment.

BASES

BACKGROUND (continued)

Although the CSTs are a principal secondary side water source for removing residual heat from the RCS, they are not designed to withstand earthquakes and other natural phenomena, including missiles that might be generated by natural phenomena. However, the backup CL safety-related source is designed to withstand such phenomena.

A description of the CSTs is found in the USAR (Ref. 1).

APPLICABLE SAFETY ANALYSES

The CSTs may provide high purity cooling water to remove decay heat and to cool down the unit following events in the accident analysis as discussed in the USAR (Ref. 2).

The 100,000 gallon CSTs useable volume requirement for each unit in MODE 1, 2, or 3 is sufficient to:

a. Remove the decay heat generated by one reactor in the first 12 hours after shutdown; and

b. Ensure sufficient water is available to cool down a reactor from 547°F to 350°F using natural circulation at 25°F/hour; or

c. Ensure sufficient water is available to hold the unit in Mode 3 for 2 hours, followed by a cooldown to RHR entry conditions within the next 6 hours.

These calculations take into account the decay heat and reactor coolant system stored energy (Ref. 1).

The CST satisfies Criteria 2 and 3 of 10 CFR 50.36(c)(2)(ii).

BASES (continued)

LCO

The CSTs are considered OPERABLE when the CSTs' contents have at least 100,000 gallons useable per operating unit (MODES 1, 2, or 3).

This basis is established in Reference 2 and exceeds the volume required by the accident analysis.

The OPERABILITY of the CSTs is determined by maintaining the tank level at or above the minimum required level.

APPLICABILITY

In MODES 1, 2, and 3 the CSTs are required to be OPERABLE.

In MODES 4, 5, or 6, the CSTs are not required because the AFW System is not required.

ACTIONS

A.1 and A.2

If the CSTs are not OPERABLE (e.g., level is not within limits), the OPERABILITY of the backup safety-related portion of the CL supply should be verified by administrative means within 4 hours and once every 12 hours thereafter. OPERABILITY of the backup safety-related portion of the CL supply must include verification that the flow paths from the backup water supply to the AFW pumps are OPERABLE in accordance with LCO 3.7.8. The CSTs must be restored to OPERABLE status within 7 days.

The 4 hour Completion Time is reasonable, based on operating experience, to verify the OPERABILITY of the backup safety-related portion of the Cooling Water supply. Additionally, verifying the backup water supply every 12 hours is adequate to ensure the backup water supply continues to be available. The 7 day Completion Time is reasonable, based on an OPERABLE backup safety-related portion of the CL supply being available, and the low probability of an event occurring during this time period requiring the CSTs.

BASES

ACTIONS (continued)

B.1 and B.2

If the CSTs cannot be restored to OPERABLE status within the associated Completion Time, the unit must be placed in a MODE in which the LCO does not apply.

To achieve this status, the unit must be placed in at least MODE 3 within 6 hours, and in MODE 4, without reliance on the steam generator for heat removal, within 12 hours.

The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

SURVEILLANCE REQUIREMENTS

SR 3.7.6.1

This SR verifies that the CSTs contain the required useable volume of cooling water. The 12 hour Frequency is based on operating experience and the need for operator awareness of unit evolutions that may affect the CST inventory between checks.

Also, the 12 hour Frequency is considered adequate in view of other indications in the control room, including alarms, to alert the operator to abnormal deviations in the CST level.

REFERENCES

1. USAR, Section 11.9.
2. USAR, Section 14.4.

BASES

ACTIONS

A.1 (continued)

The second Completion Time for Required Action A.1 establishes a limit on the maximum time allowed for combinations of Conditions A and B to be inoperable during any continuous failure to meet this LCO for these Conditions.

The 10 day Completion Time provides a limitation time allowed in this specified Condition after discovery of failure to meet the LCO. This limit is considered reasonable for situations in which Conditions A and B are entered concurrently. The AND connector between 7 days and 10 days dictates that both Completion Times apply simultaneously, and the more restrictive must be met.

Required Action A.1 is modified by 3 notes. Note 1 requires Unit 1 entry into the applicable Conditions and Required Actions of LCO 3.8.1, "AC Sources-Operating," for an emergency diesel generator made inoperable by the CL system. For Unit 1, the diesel generators are major heat loads supplied by the CL system. Thus, inoperability of two safeguards CL pumps will affect at least the heat loads on one CL header, including one Unit 1 diesel generator. Inability to adequately remove the heat from the diesel generator will render it inoperable.

Note 2 requires entry into the applicable Conditions and Required Actions of LCO 3.4.6, "RCS Loops-MODE 4", for both units for the RHR loops made inoperable by the CL System. If either unit is in MODE 4, inoperability of two safeguards CL pumps may affect all the heat loads on one CL header, including a CC train and subsequently one RHR heat exchanger on each unit. Inability to adequately remove the heat from a RHR heat exchanger will render it inoperable.

BASES

ACTIONS

A.1 (continued)

Note 3 specifies that the Condition with no safeguard CL pumps OPERABLE for one train may not exist for more than 7 days in any consecutive 30 day period. If such a condition occurs, Condition C must be entered with the specified Required Action taken because the equipment reliability is less than considered acceptable.

B.1, B.2 and B.3

If one CL supply header is inoperable, action must be taken to verify the vertical motor driven CL pump and the opposite train diesel driven CL pump are OPERABLE within 4 hours, and restore the inoperable CL header to OPERABLE status within 72 hours.

Verification of vertical motor driven CL pump OPERABILITY does not require the pump to be aligned and may be performed by administrative means. Verification of the opposite train diesel driven CL pump may be performed by administrative means. Completion of the CL pump surveillance tests is not required.

Conditions may occur in the CL System piping, valves, or instrumentation downstream of the supply header (e.g., closed or failed valves, failed piping, or instrumentation in a return header) that can result in the supply header being considered inoperable. In such cases, Condition B and related Required Actions shall apply.

In this Condition, the remaining OPERABLE CL header is adequate to perform the heat removal function. However, the overall redundancy is reduced because only a single CL train remains OPERABLE.

BASES

ACTIONS

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

Required Action B.1 ensures that the 121 CL pump may be used to provide redundancy for the safeguards CL pump on the OPERABLE header. Required Action B.3 assures adequate system reliability is maintained.

The second Completion Time for Required Action B.3 establishes a limit on the maximum time allowed for combinations of Conditions A and B to be inoperable during any continuous failure to meet this LCO for these Conditions.

The 10 day Completion Time provides a limitation time allowed in this specified Condition after discovery of failure to meet the LCO. This limit is considered reasonable for situations in which Conditions A and B are entered concurrently. The AND connector between 7 days and 10 days dictates that both Completion Times apply simultaneously, and the more restrictive must be met.

Required Actions B.1 B.2 and B.3 are modified by two Notes.

The first Note indicates that the applicable Conditions and Required Actions of LCO 3.8.1, "AC Sources-Operating," should be entered for Unit 1 since an inoperable CL train results in an inoperable emergency diesel generator.

The second Note indicates that the applicable Conditions and Required Actions of LCO 3.4.6, "RCS Loops-MODE 4," should be entered if an inoperable CL train results in an inoperable decay heat removal train. This is an exception to LCO 3.0.6 and ensures the proper actions are taken for these components.

BASES

ACTIONS

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

The 4 and 72 hour Completion Times are based on the redundant capabilities afforded by the OPERABLE train, and the low probability of a DBA occurring during this time period. In addition, the 4 hour Completion Time for Required Actions B.1 and B.2 is within the time period anticipated to verify OPERABILITY of the required CL pump by administrative means.

C.1 and C.2

If at least one safeguards CL pump for a train or a CL supply header cannot be restored to OPERABLE status within the associated Completion Time, the units must be placed in a MODE in which the LCO does not apply. To achieve this status the units must be placed in at least MODE 3 within 6 hours and in MODE 5 within 36 hours.

The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

D.1

In this Condition, the 14 day fuel oil supply for the diesel driven CL pumps is not available. However, the Condition is restricted to fuel oil supply reductions that maintain at least a 12 day supply. This restriction allows sufficient time for obtaining the requisite replacement volume and performing the analyses required prior to addition of fuel oil to the tank(s). A period of 48 hours is considered sufficient to complete restoration of the required supply prior to declaring the diesel driven CL pumps inoperable. This period is acceptable based on the remaining 12 day fuel oil supply, the fact

BASES

ACTIONS

D.1 (continued)

that procedures will be initiated to obtain replenishment, availability of the vertical motor driven CL pump and the low probability of an event during this brief period.

The second Completion Time for Required Action D.1 establishes a limit on the maximum time allowed for combinations of Conditions A and D to be inoperable during any continuous failure to meet this LCO for these Conditions.

The 9 day Completion Time provides a limitation time allowed in this specified Condition after discovery of failure to meet the LCO. This limit is considered reasonable for situations in which Conditions A and D are entered concurrently. The AND connector between 48 hours and 9 days dictates that both Completion Times apply simultaneously, and the more restrictive must be met.

E.1

With the stored fuel oil supply not within the limits specified or Required Actions and associated Completion Times of Condition D not met, the diesel driven CL pumps may be incapable of performing their intended function and must be immediately declared inoperable.

SURVEILLANCE REQUIREMENTS

SR 3.7.8.1

This SR is modified by a Note indicating that the isolation of the CL System components or systems may render those components inoperable, but does not affect the OPERABILITY of the CL System.

BASES

SURVEILLANCE REQUIREMENTS

SR 3.7.8.1 (continued)

This SR verifies the correct alignment for manual, power operated, and automatic valves in the CL System flow path to assure that the proper flow paths exist for CL System operation. This SR does not apply to valves that are locked, sealed, or otherwise secured in position, since they are verified to be in the correct position prior to being locked, sealed, or secured. This SR does not require any testing or valve manipulation; rather, it involves verification that those valves capable of being mispositioned are in the correct position. Control room indication may be used to fulfill this SR. This SR does not apply to valves that cannot be inadvertently misaligned, such as check valves.

The 31 day Frequency is based on engineering judgment, is consistent with the procedural controls governing valve operation, and ensures correct valve positions.

SR 3.7.8.2

This SR verifies each diesel driven CL pump can be started and be up to operating speed and assumes load within one minute to provide assurance that equipment would perform as expected in the safety analysis.

Diesel CL pump start will normally be initiated by the manual start switch. Once per calendar year, start should be initiated by use of the low pressure header pressure switch.

The 31 day Frequency is based on the experience that the CL pump usually passes the Surveillance when performed at this Frequency.

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.7.8.3

This SR provides verification that there is an adequate inventory of fuel oil in the storage tanks to support the operation of one diesel driven CL pump for 14 days. The 14 day period is sufficient time to place the unit in a safe shutdown condition and to bring in replenishment fuel from an offsite location.

The specified fuel oil inventory for the diesel cooling water pumps is in addition to the fuel oil inventory specified for the Unit 1 emergency diesel generators (EDGs) (LCO 3.8.3) that must be available in the Unit 1 diesel fuel oil storage system. There are four Design Class I fuel oil storage tanks for the Unit 1 EDGs and two Design Class I fuel oil storage tanks for the diesel driven cooling water pumps. These six Design Class I tanks are interconnected such that any tank can be manually aligned to supply any Unit 1 EDG or diesel driven cooling water pump day tank. Any combination of inventory in these six tanks may be used to satisfy the inventory requirements for the diesel driven cooling water pumps and the Unit 1 EDGs. Since the fuel oil for the CL pumps comes from the common fuel oil tanks shared by the Unit 1 diesel generators, the testing and the quality of the fuel oil is controlled by Technical Specification 5.5.11, "Diesel Fuel Oil Testing Program."

The 31 day Frequency is adequate to ensure that a sufficient supply of fuel oil is available, since low level alarms are provided and plant operators would be aware of any large uses of fuel oil during this period.

SR 3.7.8.4

This SR verifies the vertical motor driven CL pump is OPERABLE to provide assurance that equipment, when lined up in the safeguards mode, will perform as expected in the safety analysis.

BASES

SURVEILLANCE REQUIREMENTS

SR 3.7.8.4 (continued)

For this test, an acceptable level of performance shall be:

a. Pump starts and reaches required developed head; and

b. Control board indications and visual observations indicate that the pump is operating properly for at least 15 minutes.

The 92 day Frequency is based on the Inservice Testing Program requirements (Ref. 3).

Under some plant conditions, the vertical motor driven CL pump is required to operate to provide additional CL flow. When this pump is operated to support plant operations, this test can not be performed and this pump is considered inoperable as a safeguards CL pump.

SR 3.7.8.5

This SR verifies proper automatic operation of the CL System valves on an actual or simulated safety injection actuation signal, including those valves that isolate nonessential equipment from the system. The CL System is a normally operating system that is shared between the two units and cannot be fully actuated as part of normal testing. This Surveillance is not required for valves that are locked, sealed, or otherwise secured in the required position under administrative controls.

These tests demonstrate the operation of the valves, pump circuit breakers, and automatic circuitry.

Unit 1 SI actuation circuits for Train A and Train B valves shall be tested during Unit 1 refueling outages. Unit 2 SI actuation circuits for Train A and Train B valves shall be tested during Unit 2 refueling outages.

BASES

SURVEILLANCE REQUIREMENTS

SR 3.7.8.5 (continued)

A test is considered satisfactory if control board indication and visual observations indicate that all components have operated satisfactorily and if cooling water flow paths required for accident mitigation have been established.

The 24 month Frequency is based on the need to perform this Surveillance under the conditions that apply during an outage of one unit (the other unit may be operating) and the potential for an unplanned transient in the unit affected by the tested components if the Surveillance were performed with that reactor at power. Operating experience has shown that these components usually pass the Surveillance when performed. Therefore, the Frequency is acceptable from a reliability standpoint.

SR 3.7.8.6

The safeguards CL pumps may be actuated by either a safety injection (SI) signal or system low pressure. This SR verifies proper automatic operation of the diesel driven and vertical motor driven CL pumps on an actual or simulated safety injection actuation signal and verifies proper automatic operation of these pumps on an actual or simulated low pressure actuation signal. The CL is a normally operating system that cannot be fully actuated in a safeguards mode as part of normal testing during normal operation. A test is considered satisfactory if control board indication and visual observations indicate that all components have operated satisfactorily.

The 24 month Frequency is based on the need to perform the SI signal portion of this Surveillance under the conditions that apply during a unit outage and the potential for an unplanned transient if the Surveillance were performed with the reactor at power.

BASES

SURVEILLANCE REQUIREMENTS

SR 3.7.8.6 (continued)

Operating experience has shown that these components usually pass the Surveillance when performed. Therefore, the Frequency is acceptable from a reliability standpoint.

REFERENCES

1. USAR, Section 10.4.
2. USAR, Section 6.
3. ASME, Boiler and Pressure Vessel Code, Section XI.

BASES

LCO (continued)

Safeguards traveling screen OPERABILITY is not required for OPERABILITY of the safeguards CL pumps (LCO 3.7.8).

The Emergency CL Line is OPERABLE when a flow path through the pipe exists.

APPLICABILITY

With either unit in MODES 1, 2, 3, and 4, the Safeguards Traveling Screens and Emergency CL Line are required to support the OPERABILITY of the equipment serviced by the CL System during the design basis condition and required to be OPERABLE in these MODES.

With both units in MODE 5 or 6, the OPERABILITY requirements of the Emergency CL Supply are determined by the systems it supports. The design basis does not include shutdown conditions.

ACTIONS

A.1 and A.2

If one safeguards traveling screen is inoperable, action must be taken to verify an emergency bay sluice gate is open within 4 hours, and restore that safeguards traveling screen to OPERABLE status within 90 days.

BASES

ACTIONS

A.1 and A.2 (continued)

In this Condition, the remaining OPERABLE safeguards traveling screen or open emergency bay sluice gate is adequate to provide the CL supply to any of the three vertical CL pumps during any design basis condition.

Required Action A.1 is modified by a Note which states the action is not required during testing periods of less than or equal to 24 hours.

The 4 hour Completion Time is based on the redundant capability afforded by the OPERABLE safeguards traveling screen.

The 90 day Completion Time is based on:

a. The redundant capability afforded by the remaining OPERABLE safeguards traveling screen;

b. The low risk impact of an inoperable safeguards traveling screen; and

c. The low probability of a high magnitude earthquake that could destroy Dam No. 3 during this time interval.

B.1 and B.2

If both safeguards traveling screens are inoperable, action must be taken to verify one emergency bay sluice gate is open within 1 hour, and restore one safeguards traveling screen to OPERABLE status within 7 days.

In this Condition, the open emergency bay sluice gate is adequate to perform the CL supply function except in those cases where use of the Emergency CL Line is needed. As a result, overall reliability is reduced.

BASES

ACTIONS

B.1 and B.2 (continued)

The 7 day Completion Time is based on the low probability of a design basis earthquake occurring during this time interval.

C.1 and C.2

If the Emergency CL Line is inoperable, action must be taken to verify one emergency bay sluice gate is open within 1 hour, and restore the Emergency CL Line to OPERABLE status within 7 days.

The 1 hour and 7 day Completion Times are reasonable based on the low probability of a design basis earthquake occurring during the 7 days that the Emergency CL Line is inoperable, the availability through the normal operating path and associated traveling screens, and the time required to reasonably complete the Required Actions.

D.1 and D.2

If the Emergency CL Line or Safeguards Traveling Screen(s) cannot be restored to OPERABLE status within the associated Completion Time, the units must be placed in a MODE in which the LCO does not apply. To achieve this status, the units must be placed in at least MODE 3 within 6 hours and in MODE 5 within 36 hours.

The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner without challenging unit systems.

BASES

LCO (continued)

Opening a door for personnel ingress or egress does not make the control room ventilation zone boundary inoperable. Blocking a door open (e.g., for maintenance) without a person present to close the door requires entry into an ACTION.

The LCO is modified by a Note allowing the control room 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 control room isolation is indicated.

APPLICABILITY

In MODES 1, 2, 3, and 4 for either unit, CRSVS must be OPERABLE to control operator exposure during and following a DBA.

In addition, during movement of irradiated fuel assemblies , the CRSVS must be OPERABLE to cope with the release from a fuel handling accident.

ACTIONS

A.1

When one CRSVS train is inoperable, action must be taken to restore OPERABLE status within 7 days.

In this Condition, the remaining OPERABLE CRSVS train is adequate to perform the control room protection function. However, the overall redundancy is reduced because only a single CRSVS train remains OPERABLE.

BASES

ACTIONS

A.1 (continued)

The 7 day Completion Time is based on the low probability of a DBA or fuel handling accident occurring during this time period, and ability of the remaining train to provide the required capability.

B.1

If the control room boundary is inoperable in MODES 1, 2, 3, and 4, the CRSVS train cannot perform their intended functions. Actions must be taken to restore an OPERABLE control room boundary within 24 hours. During the period that the control room boundary is inoperable, appropriate compensatory measures should be utilized to protect control room operators from potential hazards such as radioactive contamination, toxic chemicals, smoke, temperature and relative humidity, and physical security. Preplanned measures should be available to address these concerns for intentional and unintentional entry into the condition. The 24 hours Completion Time is reasonable based on the low probability of a DBA occurring during this time period, and the use of compensatory measures. The 24 hour Completion Time is a typically reasonable time to diagnose, plan and possibly repair, and test most problems with the control room boundary.

C.1 and C.2

In MODE 1, 2, 3, or 4, if the inoperable CRSVS train or control room boundary cannot be restored to OPERABLE status within the required Completion Time, both units must be placed in a MODE that minimizes accident risk. To achieve this status, the units must be placed in at least MODE 3 within 6 hours, and in MODE 5 within 36 hours.

BASES

ACTIONS

C.1 and C.2 (continued)

The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

D.1 and D.2

If the inoperable CRSVS train cannot be restored to OPERABLE status within the required Completion Time, Required Action D.1 must be taken to immediately place the OPERABLE CRSVS train in the emergency mode. This is a reasonable action, based on engineering judgement, to assure the control room air is filtered in the event of an accident.

An alternative to Required Action D.1 is to immediately suspend activities that could result in a release of radioactivity that might require isolation of the control room. Required Action D.2 places the plant in a condition that minimizes risk. This does not preclude the movement of fuel to a safe position.

E.1

If two CRSVS trains are inoperable during movement of irradiated fuel assemblies, action must be taken immediately to suspend activities that could result in a release of radioactivity that might enter the control room.

This places the plant in a condition that minimizes accident risk. This does not preclude the movement of fuel to a safe position.

BASES

ACTIONS (continued)

F.1

If both CRSVS trains are inoperable in MODE 1, 2, 3, or 4, for reasons other than inoperable control room boundary (i.e., Condition B) the CRSVS may not be capable of performing the intended function and the unit is in a condition outside the accident analyses. Therefore, LCO 3.0.3 must be entered immediately for both units.

SURVEILLANCE REQUIREMENTS

SR 3.7.10.1

Standby systems should be checked periodically to ensure that they function properly. As the environment and normal operating conditions on this system are not too severe, testing each train once every month provides an adequate check of this system. Each train must be operated for ≥ 15 minutes to demonstrate the system functions. The 31 day Frequency is based on the reliability of the equipment and the two train redundancy availability.

SR 3.7.10.2

This SR verifies that the required CRSVS filter testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The VFTP includes testing the performance of the HEPA filter, charcoal adsorber efficiency, minimum flow rate, and the physical properties of the activated charcoal. Specific test Frequencies and additional information are discussed in detail in the VFTP.

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.7.10.3

The CRSVS may be actuated by either a safety injection signal or a high radiation signal. This SR verifies that each CRSVS train starts and operates on an actual or simulated safety injection actuation signal and verifies each CRSVS train starts and operates on an actual or simulated high radiation signal. The Frequency of 24 months allows performance when a unit is shutdown.

SR 3.7.10.4

This SR verifies proper functioning of the CRSVS. During the emergency mode of operation, the CRSVS train is designed to provide 4000 ± 10% cfm .

The Frequency of 24 months on a STAGGERED TEST BASIS is consistent with industry component reliability experience.

REFERENCES

1. USAR, Section 10.3.
2. USAR, Section 14.9.
3. 10 CFR 50 Appendix A, GDC Criterion 19.

BASES (continued)

ACTIONS

A.1

With one SCWS loop inoperable, action must be taken to restore OPERABLE status within 30 days.

In this Condition, the remaining OPERABLE SCWS loop is adequate to provide cooling. However, the overall reliability is reduced because a single failure in the OPERABLE SCWS loop could result in loss of SCWS function.

The 30 day Completion Time is based on the low probability of an event requiring SCWS loop separation, the consideration that the remaining loop can provide the required protection, and that alternate safety or nonsafety related cooling means are available.

B.1 and B.2

In MODE 1, 2, 3, or 4, if the inoperable SCWS loop cannot be restored to OPERABLE status within the required Completion Time, the unit must be placed in a MODE that minimizes the risk.

To achieve this status, the unit must be placed in at least MODE 3 within 6 hours, and in MODE 5 within 36 hours.

The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

BASES

ACTIONS (continued)

C.1 and C.2

During movement of irradiated fuel, if the inoperable SCWS loop cannot be restored to OPERABLE status within the required Completion Time, the OPERABLE SCWS loop must be placed in operation immediately. This action ensures that the required cooling function is provided.

An alternative to Required Action C.1 is to immediately suspend activities that present a potential for releasing radioactivity that might require isolation of the control room. Required Action C.2 places the unit in a condition that minimizes accident risk. This does not preclude the movement of fuel to a safe position.

D.1

During movement of irradiated fuel assemblies, with two SCWS loops inoperable, action must be taken immediately to suspend activities that could result in a release of radioactivity that might require isolation of the control room.

This Action minimizes risk. This does not preclude the movement of fuel to a safe position.

E.1

If both SCWS loops are inoperable in MODE 1, 2, 3, or 4, the SCWS may not be capable of performing its intended function. Therefore, LCO 3.0.3 must be entered immediately.

BASES

BACKGROUND (continued)

The ABSVS would typically only be used for post accident atmospheric cleanup functions. The ABSVS and ABSV boundary are discussed in the USAR (References 1, 2 and 3).

APPLICABLE SAFETY ANALYSES

The design basis of the ABSVS is established by the large break LOCA. The potential leakage paths from the containment to the auxiliary building are discussed in Reference 1. The system evaluation assumes a passive failure of the ECCS outside containment, such as an RHR pump seal failure, during the recirculation mode (Ref. 4). In such a case, the system limits radioactive release to within the 10 CFR 100 (Ref. 5) limits. The analysis of the effects and consequences of a large break LOCA is presented in References 3 and 4. The ABSVS also actuates following a small break LOCA, in those cases where the ECCS goes into the recirculation mode of long term cooling, to clean up releases of smaller leaks, such as from valve stem packing.

The ABSVS satisfies Criterion 3 of 10 CFR 50.36(c)(2)(ii).

LCO

Two independent and redundant trains of the ABSVS are required to be OPERABLE to ensure that at least one is available, assuming that a single failure disables the other train.

This OPERABILITY requirement ensures that the atmospheric releases, in the event of a Design Basis Accident (DBA) in containment, from ECCS pump leakage and containment leakage which bypasses the shield building would not result in doses exceeding 10 CFR 100 limits (Ref. 5).

In order for the ABSVS to be OPERABLE, the Turbine Building roof exhauster fans must be capable of being de-energized within 30 minutes following a loss of coolant accident.

BASES

LCO (continued)

An ABSVS train is considered OPERABLE when its associated:

a. Fan is OPERABLE;

b. HEPA filter and charcoal adsorbers are capable of passing their design flow and performing their filtration functions; and

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

The ABSV boundary is OPERABLE if both of the following conditions can be met:

a. Openings in the ABSV boundary are under direct administrative control and can be reduced to less than 10 square feet within 6 minutes following an accident; and

b. Dampers and actuation circuits that isolate the Auxiliary Building Normal Ventilation System following an accident are OPERABLE or can be manually isolated within 6 minutes following an accident.

The LCO is modified by a Note allowing the ABSV boundary to be opened under administrative controls. As discussed above, openings must be closed to less than 10 square feet within 6 minutes following an accident.

APPLICABILITY

In MODES 1, 2, 3, and 4 for either unit, the ABSVS is required to be OPERABLE.

When both units are in MODE 5 or 6, the ABSVS is not required to be OPERABLE.

BASES (continued)

ACTIONS

A.1

With one ABSVS train inoperable, action must be taken to restore OPERABLE status within 7 days. During this time, the remaining OPERABLE train is adequate to perform the ABSVS function.

The 7 day Completion Time is appropriate because the ABSVS risk contribution is substantially less than that for the ECCS (72 hour Completion Time). The 7 day Completion Time is based on the low probability of a DBA occurring during this time period, and ability of the remaining train to provide the required capability.

Concurrent failure of two ABSVS trains would result in the loss of functional capability; therefore, LCO 3.0.3 must be entered immediately.

B.1

With both ABSVS trains inoperable due to an inoperable ABSV boundary, action must be taken to restore OPERABLE status within 24 hours.

The 24 hour Completion Time is reasonable based on the low probability of a DBA occurring during this time period, and the availability of the ABSVS to provide a filtered release (albeit with potential for some unfiltered leakage).

If the ABSV boundary cannot be restored to OPERABLE status within the associated Completion Time, the unit must be placed in a MODE in which the LCO does not apply.

BASES

ACTIONS (continued)

C.1 and C.2

If an ABSVS train cannot be restored to OPERABLE status or the ABSV boundary cannot be restored to OPERABLE status within the associated Completion Time, the unit must be placed in a MODE in which the LCO does not apply.

To achieve this status, the unit must be placed in at least MODE 3 within 6 hours, and in MODE 5 within 36 hours.

The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

SURVEILLANCE REQUIREMENTS

SR 3.7.12.1

This SR verifies that each ABSVS train can be manually started, the associated filter heater energizes, and the filter units remain sufficiently dried out to ensure they can perform their function.

Standby systems should be checked periodically to ensure that they function properly. As the environment and normal operating conditions on this system are not severe, testing each train once a month provides an adequate check on this system. Monthly heater operations, with air circulation through the filter, dries out any moisture that may have accumulated in the charcoal from humidity in the ambient air. Each ABSVS train must be operated ≥ 10 hours per month with the heaters energized. The 31 day Frequency is based on the known reliability of equipment and the two train redundancy available.

A3.7-00

3.4 STEAM AND POWER CONVERSION SYSTEM

R-2

~~Applicability~~

A3.7-01

~~Applies to the operating status of the steam and power conversion system.~~

~~Objective~~

A3.7-01

~~To specify minimum conditions of steam relieving capacity and auxiliary feedwater supply necessary to assure the capability of removing decay heat from the reactor, and to limit the concentration of activity that might be released by steam relief to the atmosphere.~~

Specification

A. Steam Generator Safety and Power Operated Relief Valves

A3.7-02

LCO3.7.1 Applic

1. A reactor shall not be in MODE 1, 2, and 3 ~~made or maintained critical nor shall reactor coolant system average temperature exceed 350°F~~ unless the following conditions are satisfied (except as specified in 3.4.A.2 below):

LCO3.7.1

a. Ten steam generator safety valves shall be OPERABLE with lift settings of 1077, 1093, 1110, 1120 and 1131 psig ±3% except during testing.

LCO3.7.4

b. Both steam generator power-operated relief valves for that reactor are OPERABLE.

LCO3.7.1 Cond A

One steam generator safety valve may be inoperable for 4 hours.

L3.7-03

A3.7-04

2. During MODEs 1, 2, and 3 ~~STARTUP OPERATION or POWER OPERATION~~, the following condition of inoperability may exist provided STARTUP OPERATION is discontinued until OPERABILITY is restored. ~~If~~ OPERABILITY is not restored within the time specified, be in at least

LCO3.7.1 Cond B

LCO3.7.4 Cond C

A3.7-05

MODE 3 ~~HOT SHUTDOWN~~ within the next 6 hours and Mode 4 ~~reduce reactor coolant system average temperature below 350°F~~ within 12 ~~the following 6~~ hours.

A3.7-06

LCO3.7.4 Cond A Cond B

a. One steam generator power-operated relief valve may be inoperable for 7 days, two SG PORVs may be inoperable for 1 ~~48~~ hours.

L3.7-07

R-11

3.4.B.1.d. A minimum of 100,000 gallons of water per unit is available in the condensate storage tanks ~~and a backup supply of river water is available through the cooling water system~~.

LCO3.7.6 M3.7-16 LR3.7-17

e. ~~Motor operated valves MV-32242 and MV-32243 (Unit 2 valves MV-32248 and MV-32249) shall have valve position monitor lights OPERABLE and shall be locked in the open position by having the motor control center supply breakers physically locked in the off position.~~

LR3.7-18

f. ~~Manual valves in the above systems that could (if one is improperly positioned) reduce flow below that assumed for accident analysis shall be locked in the proper position for emergency use. During POWER OPERATION, changes in valve position will be under direct administrative control.~~

LR3.7-18

g. ~~The condensate supply cross connect valve C-41-2, to the auxiliary feedwater pumps shall be blocked and tagged open. Any changes in position of this valve shall be under direct administrative control.~~

LR3.7-18

2. During MODES 1, 2, and 3 ~~STARTUP OPERATION or POWER OPERATION~~, ~~any one of the~~ following conditions of inoperability may exist for each unit provided STARTUP OPERATION is discontinued until OPERABILITY is restored. If OPERABILITY is not restored within the time specified, place the affected unit ~~(or either unit in the case of a motor driven AFW pump inoperability)~~ in MODE 3 ~~at least HOT SHUTDOWN~~ within the next 6 hours and MODE 4 ~~reduce reactor coolant system average temperature below 350°F~~ within 12 ~~the following 6~~ hours.

A3.7-04 A3.7-20 M3.7-08 A3.7-05 R-11 A3.7-06 L3.7-22

LCO3.7.5 Cond C
LCO3.7.6 Cond B

One steam supply to a turbine driven AFW pump may be inoperable 7 days and 10 days from discovery of failure to meet the LCO.

LCO3.7.5 Cond A M3.7-23

a. A ~~turbine driven~~ AFW train ~~pump, system valves and piping~~ may be inoperable for 72 hours and 10 days from discovery of failure to meet the LCO.

LCO3.7.5 Cond B M3.7-109 R-11

STARTUP OPERATION may continue without completing SRs which demonstrate OPERABILITY of a Turbine Driven AFW Pump and/or associated system valves ~~inoperable based solely on the In-Service testing requirements of TS section 4.2.A.2 and flow verification having not been met, provided all other requirements for operability are satisfied~~. The pump and/or associated system valves not required ~~to~~must be tested and operable until prior to exceeding 10% reactor power or within 72 hours after ~~from increasing~~ RCS temperature above 350°F.

SR3.7.5.2 Note LR3.7-19 A3.7-21

~~b. A motor driven AFW pump, system valves and piping may be inoperable for 72 hours.~~

LR3.7-24

Action Statements

ACTION 25: With the number of OPERABLE channels one less than the Total Number of Channels, restore the inoperable channel to OPERABLE status within 6 hours or be in at least HOT SHUTDOWN within the next 6 hours. Operation in HOT SHUTDOWN may proceed provided the main steam isolation valves are closed, if not, be in at least INTERMEDIATE SHUTDOWN within the following 6 hours. However, one channel may be bypassed for up to 8 hours for surveillance testing per Specification 4.1, provided the other channel is OPERABLE.

Addressed Elsewhere

ACTION 26: With the number of OPERABLE channels one less than the Total Number of Channels, declare the associated auxiliary feedwater pump inoperable and take the action required by specification 3.4.2.

ACTION 28: With the number of OPERABLE channels one less than the Total Number of Channels, restore the inoperable channel to OPERABLE status within 6 hours or be in at least HOT SHUTDOWN within the next 6 hours. However, one channel may be bypassed for up to 8 hours for surveillance testing per Specification 4.1, provided the other channel is OPERABLE.

ACTION 29: With the number of OPERABLE channels less than the Total Number of Channels, operation in the applicable MODE may proceed provided the following conditions are satisfied:

a. The inoperable channel(s) is placed in the tripped condition within 6 hours, and,

b. The Minimum Channels OPERABLE requirement is met; however, one inoperable channel may be bypassed at a time for up to 4 hours for surveillance testing of other channels per Specification 4.

~~ACTION 27:~~ With one MSIV inoperable (due to a manual switch) ~~the number of OPERABLE channels one less than the Total Number of Channels~~, restore the inoperable ~~valve~~channel ~~to~~ OPERABLE status within ~~48~~ hours or be in at least MODE 2~~HOT SHUTDOWN~~ within ~~the next 1~~6 hours and close the associated valve within 22 hours and verify closed once per 7 days.

LCO3.7.2

M3.7-40

LCO3.7.2 Cond C Note

L3.7-114

NOTE - Separate Condition entry is allowed for each MSIV

M3.7-119

LCO3.7.2 Cond D

Add Condition D

R-11

TABLE TS.3.5-2B
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A3.7-00

R-2

3.3.C. Component Cooling Water System

1. Single or Two Unit Operation

A3.7-36

A3.7-02

a. A reactor shall not be in MODE 1, 2, 3, or 4 ~~made or maintained critical nor shall reactor coolant system average temperature exceed 200°F~~, unless the following conditions are satisfied (except as specified in 3.3.C.1.b below):

LCO3.7.7 Appl.

M3.7-37

LCO3.7.7

(1) The two component cooling trains ~~pumps assigned to that unit~~ are OPERABLE.

LR3.7-38

~~(2) The two component cooling heat exchangers assigned to that unit are OPERABLE.~~

A3.7-04

b. During MODEs 1, 2, 3, and 4 ~~STARTUP OPERATION or POWER OPERATION~~, ~~any one of~~ the following conditions of inoperability may exist provided startup operation is discontinued until OPERABILITY is restored. If OPERABILITY is not restored within

LCO3.7.7 Cond B

L3.7-117

R-11

A3.7-05

the time specified, be in at least MODE 3 ~~HOT SHUTDOWN~~ within the next 6 hours and in MODE 5 ~~COLD SHUTDOWN~~ within ~~the following~~ 3630 ~~hours~~.

A3.7-06

M3.7-37

(1) One ~~of the assigned~~ component cooling train ~~pumps~~ may be inoperable for 72 hours.

LR3.7-38

~~(2) One of the assigned component cooling heat exchangers may be inoperable for 72 hours.~~

SR3.7.7.1

NEW SR, monthly verify each CC valve in the flow path to safety related equipment, that is not locked, sealed or otherwise secured in position, is in the correct position.

M3.7-39

3.3.D. Cooling Water System

A3.7-02

1. A reactor shall not be in MODES 1, 2, 3, and 4 ~~made or maintained critical nor shall reactor coolant system average temperature exceed 200°F~~, unless two cooling water system trains are OPERABLE

LCO3.7.8

M3.7-42

~~the following conditions are satisfied~~ (except as specified in 3.3.D.2 below).

LR3.7-43

~~a. Four of the five cooling water pumps are OPERABLE, and if one diesel driven cooling water pump is inoperable, then 121 cooling water pump shall be aligned as shown in the table below or apply 3.3.D.2.a. All changes in the valve positions shall be under direct administrative control.~~

~~Inoperable Pump~~	~~Valve Alignment~~	~~Power Supply to Bus 27 (#121 Cooling Water Pump)~~
~~#12 Cooling Water Pump~~	~~MV-32037 or MV-32036 closed; and associated Bkr Locked Off~~	~~Bus 25~~
	~~MV-32034 and MV-32035 open; and both Bkrs Locked Off~~	
~~#22 Cooling Water Pump~~	~~MV-32034 or MV-32035 closed; and the associated Bkr Locked Off~~	~~Bus 26~~
	~~MV-32037 and MV-32036 open; and both Bkrs Locked Off~~	

LCO3.7.9

b. Two safeguard traveling screens are OPERABLE.

LR3.7-43

M3.7-115

~~c. Two cooling water headers are OPERABLE.~~

L3.7-50

R-11

d. A fuel oil supply of 19,500~~19,000~~ gallons is available for the diesel-driven cooling water pumps in the interconnected Unit 1 diesel fuel oil storage tanks. If the fuel oil supply is less than 19,500 gallons and more than 17,000 gallons, restore the level within 48 hours and 9 days from discovery of failure to meet the LCO. If the level is not restored within 48 hours, or the level is less than 17,000 gallon, immediately declare the diesel driven CL pumps inoperable.

LCO3.7.8

R-11

~~Note that the 19,000 gallon requirement is included in the 70,000 gallon total diesel fuel oil requirement of Specification 3.7.A.5 for Unit 1.~~

SR3.7.8.3

New SR 3.7.8.3, stored diesel fuel oil supply greater than 19,500 gallons.

M3.7-60

A3.7-04

3.3.D.2. During MODES 1, 2, 3, and 4 ~~STARTUP OPERATION or POWER OPERATION~~, the following conditions of inoperability may exist provided STARTUP OPERATION is discontinued until OPERABILITY is restored. If OPERABILITY is not restored within the time specified, be in at least

LCO3.7.8 Cond D
LCO3.7.9 Cond D

R-11

MODE 3 ~~HOT SHUTDOWN~~ within the next 6 hours and in MODE 5 A3.7-05

~~COLD SHUTDOWN~~ within ~~the following~~ 3630 hours. A3.7-06

LCO3.7.8 Cond B

a. No safeguards ~~Two of the five~~ cooling water pumps ~~for one~~ A3.7-44 train may be OPERABLE ~~inoperable~~ for 7 days and 10 from M3.7-110 discovery of failure to meet the LCO with the following A3.7-44 stipulation: R-11

~~If the inoperable pumps are any two of these: #12 Cooling Water Pump, #22 Cooling Water Pump, and #121 Cooling Water Pump, the following conditions shall apply:~~

~~(1) the engineered safety features associated with the OPERABLE safeguards cooling water pump are OPERABLE; and~~ A3.7-45 R-11

~~(2) both paths from transmission grid to the unit 4 kV safeguards buses are OPERABLE (applicable to Unit 1 operation only); and~~

(3) this condition of inoperablity (i.e., two safeguards pumps inoperable simultaneously) may not exceed 7 days in any consecutive 30 day period.

M3.7-110

LCO3.7.8 Cond C

b. One of the two required cooling water headers may be inoperable for 72 hours and 10 from discovery of failure to meet the LCO provided:

A3.7-47

~~(1) the diesel-driven pump and the diesel generator associated with safety features on the OPERABLE header are OPERABLE.~~ R-11

M3.7-46

(2) verify within 4 hours the ~~horizontal motor-driven pump associated with the OPERABLE header and the~~ vertical A3.7-47 motor-driven pump is ~~are~~ OPERABLE. R-11

SR3.7.8.1

New SR, monthly verify each CL system valve in the flow path servicing safety related equipment, that is not locked, sealed or otherwise secured in position, is in the correct position. NOTE: isolation of CL system flow to individual components does not render the CL system inoperable. M3.7-48

~~3.13 CONTROL ROOM AIR TREATMENT SYSTEM~~

A3.7-00

~~Applicability~~

R-2

~~Applies to the OPERABILITY of the Control Room Special Ventilation System.~~

A3.7-01

~~Objective~~

~~To specify OPERABILITY requirements for the Control Room Special Ventilation System.~~

Specification

LCO3.7.10

A. Control Room Special Ventilation System

1. Both trains of the Control Room Special Ventilation System shall be OPERABLE ~~at all times.~~ in MODES 1, 2, 3, and 4 and during movement of irradiated fuel assemblies.

L3.7-54

NOTE - The control room boundary may be opened intermittently under administrative controls.

L3.7-118

LCO3.7.10 Cond F

If these conditions cannot be satisfied in MODES 1, 2, 3 and 4 (except as specified in 3.13.A.2 below), ~~within one hour~~ ~~initiate the action necessary to~~ place both units ~~in HOT SHUTDOWN, and be~~

M3.7-55

R-11

A3.7-05

in at least MODE 3 ~~HOT SHUTDOWN~~ within the next 6 hours and in MODE 5 ~~COLD SHUTDOWN~~

within ~~the following~~ 3630 ~~hours~~

A3.7-06

hours and ~~CORE ALTERATIONS/~~ for reasons other than Condition B

L3.7-56

A3.7-57

R-11

LCO3.7.10 Cond E

If these conditions cannot be satisfied during irradiated fuel handling operations (except as specified in 3.13.A.2 below)

irradiated fuel handling operations shall be terminated immediately ~~within two hours~~.

M3.7-58

R-11

2. With one train of the Control Room Special Ventilation System inoperable,

LCO3.7.10 Cond A

operation in MODE 1, 2, 3, or 4 ~~POWER OPERATION~~ or ~~CORE ALTERATIONS/~~ irradiated fuel handling operations are permissible only during the succeeding 7 days.

A3.7-04

L3.7-56

LCO3.7.10 Cond C

If OPERABILITY is not restored within 7 days when operating in MODE 1, 2, 3, or 4, place both units in at least MODE 3 ~~HOT SHUTDOWN~~ within the next 6 hours and in MODE 5 ~~COLD SHUTDOWN~~

A3.7-04

R-11

A3.7-05

within ~~the following~~ 3630 hours

A3.7-06

~~TS.3.13-1~~
~~Overflow~~

A3.7-57

LCO3.7.10 Cond D

If OPERABILITY is not restored within 7 days when handling irradiated fuel,
~~and CORE ALTERATIONS/~~ irradiated fuel handling operations shall be terminated

R-11

L3.7-56

immediately or the OPERABLE CRSVS train shall be placed in the emergency mode ~~within two hours~~.

M3.7-58

LCO3.7.11

NEW Specification, two safeguards chilled water system (SCWS) loops shall be OPERABLE whenever either unit is in MODE 1, 2, 3 or 4 or irradiated fuel is moved. Action Statements are provided as appropriate.

M3.7-59

SR3.7.11.1
SR3.7.11.2

NEW SRs, every 24 months verify each SCWS loop actuates on an actual or simulated actuation signal and verify SCWS components are OPERABLE per IST Program.

M3.7-61

LCO3.7.10 Cond B

L3.7-118

Two CRSVS trains inoperable due to inoperable control room boundary in MODES 1, 2, 3, or 4, restore control room boundary to OPERABLE status in 24 hours.

R-11

Table TS.4.1-2A (Page 2 of 2)

MINIMUM FREQUENCIES FOR EQUIPMENT TESTS

Equipment	Test	Frequency	FSAR Sect. Reference
8 Deleted			Addressed Elsewhere
9 Primary System Leakage	Evaluate	Daily	4
10 Deleted			
~~11. Turbine stop valves, governor valves, and intercept valves. (Part of turbine overspeed protection)~~	~~Functional~~	~~Turbine stop valves, governor valves and intercept valves are to be tested at a frequency consistent with the methodology presented in WCAP-11525 "Probabilistic Evaluation of Reduction in Turbine Valve test Frequency", and in accordance with the established NRC acceptance criteria for the probability of a turbine missile ejection incident of 1.0 x 10^{-5} per year. In no case shall the turbine valve test interval exceed one year.~~	

R3.3-81

R-11

~~TABLE TS.4.1-2A (Page 2 of 2) REV 123 5/21/96~~

L3.7-91

8. At least once every 24 ~~18~~ months during shutdown* verify that each pump starts as designed automatically and each automatic valve that is not locked, sealed, or otherwise secured in position in the flow path actuates to its correct position upon receipt of an actual or simulated actuation signal ~~each auxiliary feedwater actuation test signal~~.

SR3.7.5.3
SR3.7.5.4

L3.7-92

L3.7-93

SR3.7.5.2
SR3.7.5.4
Note

*If the test for a steam turbine-driven pump comes due during a reactor shutdown, the test shall be performed within 24 hours of entering MODE 1 ~~POWER OPERATION~~.

A3.7-94

R-11

4.8.B. Steam Generator Power Operated Relief Valves

SR3.7.4.1 Each steam generator power operated relief valve shall be isolated and tested in accordance with the IST Program ~~monthly~~. L3.7-95

SR3.7.4.2 Verify one complete manual cycle of each SG PORV block valve every 24 months M3.7-116

R-11

~~C. Steam Exclusion System~~

R3.7-32

~~Isolation dampers in each duct that penetrates rooms containing equipment required for a high energy line rupture outside of containment shall be tested for OPERABILITY once each month.~~

~~In addition, damper mating surfaces shall be examined visually once each year to assure that no physical change has occurred that could affect leakage.~~

Addressed Elsewhere

3. Containment Fan Coolers

Each fan cooler unit shall be tested during each reactor refueling shutdown to verify proper operation of all essential features including low motor speed, cooling water valves, and normal ventilation system dampers. Individual unit performance will be monitored by observing the terminal temperatures of the fan coil unit and by verifying a cooling water flow rate of greater than or equal to 900 gpm to each fan coil unit.

4.5.A.4. Component Cooling Water System

L3.7-93
A3.7-113

a. System tests shall be performed during each 24 months~~reactor refueling shutdown~~. Operation of the system will be initiated by an actual or simulated signal to the ~~tripping the~~ actuation instrumentation. Verify each automatic valve in the flow path that is not locked, sealed, or otherwise secured in position actuates to the correct position. Verify each pump starts automatically.

SR3.7.7.2
SR3.7.7.3

L3.7-92
R-11
A3.7-97
LR3.7-98

~~b. The test will be considered satisfactory if control board indication and visual observations indicate that all components have operated satisfactorily.~~

4.5.A.5. Cooling Water System

A3.7-113

a. System tests shall be performed at each 24 months~~refueling shutdown~~. Tests shall consist of an automatic start of each diesel engine, automatic start of the vertical motor-driven cooling water pump and automatic operation of valves required to mitigate accidents that are not locked, sealed, or otherwise secured in position

SR3.7.8.5

R-11
L3.7-92
LR3.7-98

~~including those valves that isolate non-essential equipment from the system~~. Operation of the system will be initiated by an actual or a simulated accident signal to the actuation instrumentation. ~~The tests will be considered satisfactory if control board indication and visual observations indicate that all components have operated satisfactorily and if cooling water flow paths required for accident mitigation have been established.~~

L3.7-93
LR3.7-98

~~b. At least once each 18 months, subject each diesel engine to a thorough inspection in accordance with procedures prepared in conjunction with the manufacturer's recommendations for this class of standby service.~~

LR3.7-99

B. Component Tests

1. Pumps

Addressed Elsewhere

a. The safety injection pumps, residual heat removal pumps and containment spray pumps shall tested pursuant to Specification 4.2. Acceptable levels of performance shall be that the pumps start and reach their required developed head on minimum recirculation flow and the control board indications and visual observations indicate that the pumps are operating properly for at least 15 minutes.

b. A test consisting of a ~~manually initiated~~ start of each diesel engine, and assumption of load within one minute, shall be conducted monthly. SR3.7.8.2 LR3.7-98

LR3.7-98

c. The vertical motor-driven cooling water pump shall be operated at quarterly intervals. ~~An acceptable level of performance shall be that the pump starts and reaches its required developed head and the control board indications and visual observations indicate that the pump is operating properly for at least 15 minutes.~~ SR3.7.8.4

2. Containment Fan Motors

The Containment Fan Coil Units shall be run on low motor speed for at least 15 minutes at intervals of one month. Motor current shall be measured and compared to the nominal current expected for the test conditions.

Addressed Elsewhere

3. Valves

a. The refueling water storage tank outlet valves shall be tested in accordance with Section 4.2.

b. The accumulator check valves will be checked for OPERABILITY during each refueling shutdown.

c. The boric acid tank valves to the Safety Injection System shall be tested in accordance with Section 4.2.

d. The spray chemical additive tank valves shall be tested in accordance with Section 4.2.

A3.7-113

e. Actuation circuits for Cooling Water System valves that isolate non-essential equipment from the system shall be tested each 24 months ~~refueling outage~~. ~~Unit 1 SI actuation circuits for Train A and Train B valves shall be tested during Unit 1 refueling outages. Unit 2 SI actuation circuits for Train A and Train B valves shall be tested during Unit 2 refueling outages.~~ SR3.7.8. R-11

LR3.7-98

~~TS.4.5-3~~
~~Overflow~~

Addressed Elsewhere

f. All motor-operated valves in the SIS, RHR, Containment Spray, Cooling Water, and Component Cooling Water System that are designed for operation during the safety injection or recirculation phase of emergency core cooling, shall be tested for OPERABILITY at each 24 months ~~refueling shutdown~~.

SR3.7.7.2

SR3.7.8.5

A3.7-113

R-11