



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

December 11, 2000

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

License Amendment Request dated December 11, 2000
Conversion to Improved Technical Specifications

- References:
1. Northern States Power Company letter to the Nuclear Regulatory Commission (NRC), dated September 26, 1997.
 2. NUREG-1431, "Standard Technical Specifications - Westinghouse Plants," Revision 1, dated April 1995 (ISTS).

Pursuant to Title 10, Code of Federal Regulations, Part 50, Section 90 (10CFR50.90), the Nuclear Management Company (NMC) proposes to amend Appendix A, Technical Specifications, for Facility Operating Licenses DPR-42 and DPR-60 for Prairie Island Nuclear Generating Plant (PI) Units 1 and 2.

In accordance with Reference 1, PI committed to revise the Current Technical Specifications (CTS) using the guidance of NUREG-1431, Revision 1 (Ref. 2) as amended by NRC and industry Technical Specification Task Force (TSTF) documents. The proposed License Amendment Request (LAR) to convert the PI CTS to the PI Improved Technical Specifications (ITS) enclosed with this letter fulfils the commitment to convert PI CTS as discussed in Reference 1. Use of the terms "NUREG-1431", "ISTS", and "the NUREG" in this letter, letter

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attachments and the proposed LAR refer to NUREG-1431, Revision 1 unless otherwise stated.

The subject LAR has been prepared in accordance with the guidance of Nuclear Energy Institute (NEI) NEI 96-06, "Improved Technical Specifications Conversion Guidance," dated August 1996. The detailed description and justification of this proposed LAR consists of nine volumes. A detailed description of the contents and organization of the nine volumes is included in Attachments 1 through 7 of this letter and are described below.

Attachment 1, "Synopsis of the Proposed License Amendment Request" describes the organization and content of this submittal.

Attachment 2, "Differences Between PI Units 1 and 2" lists the Technical Specification differences between the units.

Attachment 3, "Existing and Future License Amendment Requests (LARs) to be Incorporated into the PI ITS" provides a listing of all currently docketed and proposed LARs that have been or will be incorporated into this submittal.

Attachment 4, "ISTS Travelers (TSTFs)" provides a listing of the pending and proposed changes to the ISTS incorporated into this LAR.

Attachment 5, "Beyond Scope Changes" provides a listing of those changes that are different than both CTS and ISTS.

Attachment 6, "Beyond Scope Bracketed Changes" provides a listing of those changes to CTS parameters beyond those needed to conform with the ITS.

Attachment 7, "CTS Requirements Relocated to Other Licensee Controlled Documents" provides a listing of the CTS requirements relocated, the document in which the relocated item will reside, and the change control mechanism that will be applied to the relocated item.

Implementation of the PI ITS will require the performance of a number of new Surveillance Requirements. PI intends to treat these new requirements as being "met" at the time of implementation, with the first performance of these new Surveillance Requirements scheduled to be completed within the required Frequency from the date of implementation. In addition, Programs identified in the PI ITS will be allowed the $\pm 25\%$ schedule allowance as stated in PI ITS LCO 3.0.2, unless otherwise noted in the respective Program or NRC Regulation.

Any revisions to the PI Updated Final Safety Analysis Report (USAR) required as a result of this proposed LAR will be made in accordance with 10CFR50.71(e).

PI requests approval of this proposed LAR by June 2002 to support our implementation schedule.

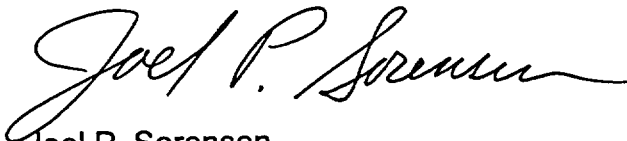
The proposed changes in this LAR have been reviewed by both the on-site and off-site review committees in accordance with PI procedures. PI has reviewed this proposed LAR in accordance with 10CFR50.92 and has determined that no significant hazards consideration exists. An Environmental Assessment has been completed and is included in Attachment 8.

PI is notifying the State of Minnesota of this LAR by transmitting a copy of this letter and attachment to the designated State Official.

Calculations supporting the Allowable Values presented in Section 3.3 have not been completed as of this date. In this letter we make the following new Nuclear Regulatory Commission commitment: ***Allowable Value supporting calculations will be complete in February 2001.***

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 PI 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.

PI requests a meeting at your earliest convenience to discuss a review schedule and contents of this LAR. Please address any comments or questions regarding this matter to myself or Mr. Dale Vincent at 1-651-388-1121.



Joel P. Sorensen
Site General Manager
Prairie Island Nuclear Generating Plant

(List of Copies and Attachments on the next page)

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

Attachments:

1. Synopsis of the Proposed License Amendment Request
2. Differences Between PI Units 1 and 2
3. Existing and Future License Amendment Requests (LARs) to be Incorporated into the PI ITS
4. ISTS Travelers (TSTFs)
5. Beyond Scope Changes
6. Beyond Scope Bracketed Changes
7. CTS Requirements Relocated to Other Licensee Controlled Documents
8. Environmental Assessment For Proposed Changes to Appendix A, Technical Specifications, of Facility Operating Licenses DPR-42 and DPR-60
9. Split Report

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

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

The Nuclear Management Company, LLC, a Wisconsin Corporation, requests authorization for changes to Appendix A of the Prairie Island Operating Licenses as shown in the attached Chapters/Sections 1.0, 2.0, 3.0, 3.1 through 3.9, 4.0, and 5.0. Each Chapter/Section contains Parts A through G and Cross-References. Part A contains a general description of the Prairie Island (PI) ITS conversion process. Part B contains a "clean" copy of the proposed PI Technical Specifications. Part C is a copy of the PI Current Technical Specifications annotated to show the proposed changes. The associated justifications, supporting safety evaluations, and significant hazards determinations are contained in Parts D, F, and G respectively. Part E is a copy of the NUREG-1431, Revision 1 that is also annotated showing the necessary changes in order for this guidance document to more accurately reflect the PI design.

This letter contains no restricted or other defense information.

NUCLEAR MANAGEMENT COMPANY, LLC

BY

Joel P. Sorensen
Joel P. Sorensen
Site General Manager
Prairie Island Nuclear Generating Plant

State of Minnesota

County of Goodhue

On this 11th day of December 2000 before me a notary public in and for said County, personally appeared Joel P. Sorensen, Site General 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.

Marlys E. Davis



ATTACHMENT 1

SYNOPSIS OF THE
PROPOSED LICENSE AMENDMENT REQUEST

SYNOPSIS OF THE IMPROVED TECHNICAL SPECIFICATIONS SUBMITTAL

Attachment 1 to LAR dated December 11, 2000

Pursuant to 10 CFR Part 50, Sections 50.59 and 50.90, the holders of Operating Licenses DPR-42 and DPR-60 hereby propose the following changes to the Facility Operating Licenses and Appendix A, Technical Specifications:

Background

Over the past several years the nuclear industry and the NRC have jointly developed Improved Standard Technical Specifications (ISTS). The NRC has encouraged licensees to implement the ISTS as a means for improving plant safety through the more operator-oriented Technical Specifications (TS), improved and expanded Bases, reduced action statement induced plant transients, and more efficient use of NRC and industry resources.

This License Amendment Request (LAR) is submitted to conform the Prairie Island Nuclear Generating Plant (PI) Current Technical Specifications (CTS) to NUREG-1431, Improved Standard Technical Specifications, Westinghouse plants, Revision 1 issued April 1995 (ISTS). The resulting new TS for PI are referenced throughout this submittal as the PI ITS or just ITS which incorporates the PI plant specific information.

NUREG-1431 is based on a hypothetical four loop Westinghouse plant. PI is a two loop Westinghouse plant similar in design and vintage to the R.E. Ginna Nuclear Power Plant, which has already completed conversion to the ITS.

This ITS conversion LAR has been prepared in 14 Chapters/Section packages following the Chapter/Section outline of the ISTS as follows: Table of Contents, 1.0, 2.0, 3.0, 3.1 . . . 3.9, 4.0 and 5.0. Each Chapter/Section is supported by Parts A through G as discussed below.

PART A provides a basic introduction and summary of how the PI ITS was prepared.

PART B contains the proposed, "clean" copy of the PI ITS LCOs and Bases.

PART C is the CTS mark-up copy as related to the proposed PI ITS. Part C is an annotated copy of the CTS pages which show the disposition of existing requirements into the proposed PI ITS. The pages are generally arranged in ITS order.

The mark-up of the CTS is provided to show where current requirements are placed in the ITS, to show the major changes resulting from the conversion process, and to allow reviewers to evaluate significant differences between the CTS and ISTS. The CTS Bases are not included in the CTS mark-up packages since they have been rewritten in their entirety.

The CTS addressed by the associated ITS Chapter/Section are cross-referenced in the left margin to the new ITS location by Specification number and type (SL-Safety Limit, LCO-Limiting Condition for Operation or SR-Surveillance Requirements). Those portions of each CTS page which are not addressed in the associated ITS Chapter/Section are shadowed (electronic) or clouded and crossed out (by hand) and in the right margin is the comment, "Addressed Elsewhere".

The CTS are marked-up to incorporate the substance of NUREG-1431, Revision 1. It is not the intent to mark every nuance required to make the format change from CTS to ITS.

In general, only technical changes have been identified. However, some non-technical changes have also been included when the changes cannot easily be determined to be non-technical by a reviewer, or if an explanation is required to demonstrate that the change is non-technical.

Some apparent changes result from the different conventions and philosophies used in the ITS. Generally these apparent changes will not be marked-up in the CTS if there is no resulting change in plant operating requirements.

Changes are identified by a change number in the right margin which map the changed requirement to Part D, "DOC to PI CTS" and Part G, "No Significant Hazards Determination (NSHD)" and the indicated change category. The change number form is R3.4-02 where the letter(s) indicate the change category, the first two numbers, 3.4 in this example, refer to ITS Chapter/Section number 3.4, and the second number, 02 in this example, is a sequentially assigned number for changes within that Chapter/Section, starting with 01. For CTS changes this is also the NSHD category.

The change categories defined below conveniently group the type of changes for consideration of the effect of the change on the current plant license in Part D and are also useful for efficient discussion in Part G the "No Significant Hazards Determination (NSHD)" section. These categories are:

- A - Administrative changes - Editorial in nature that do not involve technical issues. These include reformatting, renaming (terminology changes), renumbering, and rewording of requirements.
- L - Less restrictive changes - Requirements included in the PI ITS in order to conform to the guidance of NUREG-1431. Generally these are technical changes to the CTS which may include items such as extending Completion Times or reducing Surveillance Frequencies (extended time interval between surveillances). Each DOC for a Less restrictive change is provided with its specific NSHD.

- LR - Less restrictive - Removal of details and information from otherwise retained Specifications which are removed from the CTS and placed in the Bases, Technical Requirements Manual (TRM), Updated Safety Analysis Report (USAR) or other licensee controlled documents. These changes include details of system design and function, procedural details or methods of conducting surveillances, or alarm or indication-only instrumentation. Each is provided with its own specific NSHD.
- M - More restrictive changes - Requirements included in the PI ITS in order to provide a complete set of Specifications conforming to the guidance of NUREG-1431. Changes in this category may be completely new requirements or they may be technical changes made to current requirements in the CTS.
- R - Relocation - Current Specifications that are relocated to other controlled documents or deletion of current Specifications which duplicate existing regulatory requirements.

Current requirements in the LCOs or SRs that do not meet the 10 CFR 50.36 selection criteria and may be relocated to the Bases, USAR, Core Operating Limits Report (COLR), Operational Quality Assurance Plan (OQAP), plant procedures or other licensee controlled documents. Relocating requirements to these licensee controlled documents does not eliminate the requirement, but rather, places them under more appropriate regulatory controls, such as 10 CFR 50.54 (a)(3) and 10 CFR 50.59, to manage their implementation and future changes. Maintenance of these requirements in the TS commands resources which are not commensurate with their importance to safety and distracts resources from more important requirements. Relocation of these items will enable more efficient maintenance of requirements under existing regulations and reduce the need to request TS changes for issues which do not affect public safety.

Deletion of Specifications which duplicate regulations eliminates the need to change Technical Specifications when changes in regulations occur. By law, licensees shall meet applicable requirements contained in the Code of Federal Regulations, or have NRC approved exemptions; therefore, restatement in the Technical Specifications is unnecessary.

The methodology for marking-up the CTS changes is as follows:

As discussed above, Administrative changes may not be marked-up in detail. Portions of the Specifications which are no longer included are identified by use of the electronic strike-out feature (or crossed out by hand). Information being added is inserted into the

Specification in the appropriate location and is identified by use of shading features (or handwritten/insert pages).

PART D contains the DOCs which describe each proposed change to the CTS as discussed above in Part C.

PART E contains a mark-up of NUREG-1431, Revision 1, LCOs and Bases. This mark-up shows the deviations from NUREG-1431 in order to meet PI CTS plant specific requirements. Where the proposed PI ITS LCO or Bases requirement differs from NUREG-1431, individual details of the change are annotated with alpha-numeric designators which relate to the appropriate Justification for Difference (JFD). The JFD provides a justification for the change. The JFDs are located in Part F of this LAR. The differences are separated into the following categories:

| <u>Designator</u> | <u>Category</u> |
|-------------------|--|
| CL | CURRENT LICENSING BASIS (CLB) - Issues that have been previously licensed for PI and have been retained in the PI ITS. This includes Specifications dictated by plant design features or the design basis. Since no plant modifications have been or will be made to accommodate conversion to ITS, the plant design basis features shall be incorporated into the PI ITS. |
| PA | PLANT, ADMINISTRATIVE - Plant specific wording preference or minor editorial improvements made to facilitate operator understanding. |
| TA | TRAVELER, APPROVED - Deviations made to incorporate an industry traveler which has been approved by the NRC. |
| TP | TRAVELER, PROPOSED - Deviations made to incorporate a proposed industry traveler which, as of the time of submittal, has not been approved by the NRC. |
| X | OTHER - Deviation from the NUREG (ISTS) for any other reason than those given above. |

Material which is deleted from the ISTS is identified by use of the WordPerfect strike-out feature (or crossed out by hand). Information being added to the ISTS to generate the PI ITS, due to any of the deviations discussed above, is identified by use of WordPerfect redline (shading) features (or handwritten/inserted pages).

Bracketed Information

Many parameters, conditions, notes, Surveillance Requirements, and portions of Sections are bracketed in the ISTS recognizing that plant specific values are likely to vary from the "generic" values provided in the ISTS.

If the bracketed value applies to PI, then the "generic" information is retained without any special indication and the brackets are marked using the WordPerfect strike-out feature. Generally, no change number or justification is provided for use of bracketed material unless there are special considerations which need to be discussed. In some cases, the bracketed material is not discussed. If bracketed material is discussed, a change number is provided which includes the appropriate prefix as described above. When bracketed "generic" material is not incorporated, the bracketed material and brackets are marked with the WordPerfect strike-out feature (or crossed out by hand), the plant specific information is substituted for the bracketed information and a change number is provided which would include the appropriate prefix. Information added is indicated by the WordPerfect redline (shading) feature (or handwritten/insert pages).

Optional Sections

Due to differing Westinghouse plant designs and methodologies, some ISTS Section numbers include a letter suffix indicating that only one of these Sections is applicable to any specific plant. The appropriate Section is indicated in the Table of Contents, the suffix letter is deleted, and justification, if required, is included in the appropriate Chapter/Section package.

BASES, Improved Standard Technical Specifications (NUREG-1431, Rev. 1)

The ISTS Bases have been marked-up to support the plant specific PI ITS and allow reviewers to identify changes from NUREG-1431. To the extent possible, the words of NUREG-1431, Rev. 1 are retained to maximize standardization. Where the existing words in the NUREG are incorrect or misleading with respect to PI, they have been revised. In addition, descriptions have been added to cover plant specific portions of the Specifications. Change numbers have been provided for the ISTS Bases with the same format as the ISTS Specification mark-up. In some instances, the same change number is used to describe the change.

Material which is deleted from the ISTS Bases is identified by use of the strike-out feature of WordPerfect (or crossed out by hand). Information being added to the ISTS Bases to generate the PI ITS is identified by use of the redline (shading) feature of WordPerfect (or handwritten/insert pages).

Bracketed Material

Many parameters and portions of Bases are bracketed in the ISTS recognizing that plant specific values and discussions are likely to vary from the "generic" information provided in the standard.

If the bracketed information applies to PI, then the "generic" information is retained without any special indication and the brackets are marked using the WordPerfect strike-out feature.

When bracketed "generic" Bases material is not incorporated, the bracketed material and brackets are marked with the WordPerfect strike-out feature (or crossed out by hand) and the plant specific information substituted for the bracketed information is indicated by the WordPerfect redline (shading) feature (or handwritten/insert pages). A change number with the same format as those used for the ISTS Specification mark-up is provided.

PART F contains the JFDs which describe the differences from the NUREG-1431, Revision 1 LCOs and Bases.

PART G contains the No Significant Hazards Determinations (NSHD) required by 10CFR50.91(a) supporting a finding of no significant hazards consideration. Generic NSHDs have been written for each category of changes except Category "L". The NSHDs supporting a finding of no significant hazards are ordered as follows: A, M, R, LR, and L. Each evaluation is annotated to correspond to the DOC addressed in the NSHD.

Additionally, information in support of the conclusion that this LAR satisfies the categorical exclusion specified in 10 CFR 51.22 (c)(9) to perform an Environmental Assessment or Environmental Impact Statement is provided as Attachment 8 to the submittal letter.

ATTACHMENT 2

DIFFERENCES BETWEEN PI UNITS 1 AND 2

Differences Between PI Units 1 and 2
Attachment 2 to LAR dated December 11, 2000

| ITS SECTION | ITS LCO AND BASES | DESCRIPTION OF DIFFERENCES |
|----------------|--------------------------------------|---|
| 3.0 | LCO 3.0.9 | Specification added noting Unit differences. |
| 3.4 | Bases 3.4.15 | Bases PIVs numbers for Units 1 and 2 are different and so noted. |
| 3.5 | 3.5.1, SR 3.5.2.1, and 3.5.2.7 | Valve number differences between Units. Unit valve numbers are specifically identified for the specific Unit. |
| 3.7 | Bases 3.7.1 | MSSVs valve number differences between Units. |
| 3.7 | LCO 3.7.8 | Notes for Cooling Water specify specific Unit DGs. |
| 3.8 | 3.8.3 Required Actions | Unit 1 and Unit 2 Diesel Generators have different fuel oil storage requirements. |
| 3.8 | Bases Table 3.8.9 | Differences are noted in electrical panels, MCCs, etc., by Unit number. |
| 3.8 | Bases 3.8.10 | Bases Background Section specifies Unit specific panel numbers (e.g., 117 and 217). |

ATTACHMENT 3

EXISTING AND FUTURE LICENSE AMENDMENT
REQUESTS (LARs) TO BE
INCORPORATED INTO THE PI ITS

EXISTING AND FUTURE LARs TO BE INCORPORATED INTO THE PI ITS

Attachment 3 to LAR dated December 11, 2000

| LICENSE AMENDMENT REQUEST (Letter Title, Letter Date, Abbreviated Subject) | AFFECTED ISTS/PI ITS LOCATION | AFFECTED CTS SPEC(S) | ASSOCIATED DOC(s) AND JFD(s) |
|--|-------------------------------|--|---|
| One time TS change to support installation of MCC Transfer Switches, 15 May 2000, One time change to allow de-energizing MCC 1T1 and MCC 1T2. | N/A | 3.7.B.6.a and b | N/A |
| Removal of BAST from the SI System, 17 April 2000, Remove CTS Sections 3.2, 4.5.B.3, and associated Bases. | N/A | 3.2, 3.3, 4.5, Tables 3.5-2B, 4.1-1C, 4.1-2B, Bases pages B.4.5-3, 3.2-1, 3.5-1, and 3.5-4 | A1.0-114 A3.3-50 A3.5-20 CL3.5-36 |
| Extend Fuel Cycle from 18 to 24 months, not yet submitted, estimated submittal first quarter 2001, Extend SR intervals to allow 24 month refueling cycles. | Various | Various | X3.3-172 X3.4-107 X3.4-136 X3.4-187 X3.5-44 X3.6-108 X3.7-137 X3.8-126 X3.9-61 L3.3-83 L3.4-86 L3.5-25 L3.7-91 L3.7-101 L3.7-103 A3.8-35 |

| LICENSE AMENDMENT REQUEST (Letter Title, Letter Date, Abbreviated Subject) | AFFECTED ISTS/PI ITS LOCATION | AFFECTED CTS SPEC(S) | ASSOCIATED DOC(s) AND JFD(s) |
|---|--|--|---|
| Remove High Steam Flow Signal from input to MSLI Logic, not yet submitted, estimated submittal second quarter 2001, Remove high steam flow signal. | ISTS - Table 3.3.2-1, Function 4g | 1.0; Table 3.5-1, Function 5; Table 3.5-2B Function 5d; Table 4.1-1B, Function 5d; 6.6.E | A1.0-05 A3.3-20 X3.3-239 A5.0-28 |
| Accumulator AOT extension, not yet submitted, estimated submittal first quarter 2001, Extend ECCS accumulator AOT to 24 hours. | 3.5.1 | 3.3.A.2.e | A3.5-307 X3.5-34 |
| Control Room Special Ventilation System, not yet submitted, estimated submittal second quarter 2001, This change to implement TSTF-287, Revision 5. | 3.7.10 | 3.13-1 and associated Bases | N/A |

ATTACHMENT 4
ISTS TRAVELERS (TSTFs)

**ISTS Travelers
(TSTFs)**

Attachment 4 to LAR dated December 11, 2000

Note: TSTFs are Revision 0 unless stated otherwise in the discussion of TSTF use.

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|----------------|------|--------|---|---------------|
| 1.1 | 19 | A | The requirement to perform inplace cross calibration is not included in the definition for CHANNEL CALIBRATION. This change has been made because current TS, plant procedures and practices do not require inplace cross calibration. With respect to CETs, PI does not intend to replace any due to ALARA considerations unless the upper internals are replaced; therefore, this would be a meaningless requirement. (PI has replaced upper internals once and will unlikely replace them again in the life of the plant.) Although this change appears the same as TSTF-19, Revision 1, PI is not implementing TSTF-19 because it removes the inplace cross calibration requirement from the definition but reintroduces it in Bases 3.3.1 and 3.3.3. | CL1.0-33 |
| 1.1 | 52 | A | This definition is not contained in the Prairie Island Current Technical Specifications. The definition of L_a is contained in the Containment Leakage Rate Testing Program required by Specification 5.5.15; therefore, it is not included in Definitions section of the new Technical Specifications. This change is also consistent with approved TSTF-52, Revision 3 which deleted the definition of L_a from NUREG-1431. | CL1.0-38 |
| 1.1 | 205 | A | TSTF-205, Revision 3 was incorporated. | TA1.0-32 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|----------------|-------|--------|---|---------------|
| 1.1 | 233 | A | This change incorporates the intent of TSTF-233. This TSTF allows the low temperature overpressure protection (LTOP) arming temperature to be relocated to the Pressure and Temperature Limits Report (PTLR). Since at PI the system which provides LTOP protection is the Over Pressure Protection System (OPPS), the phrase has been modified to "and the OPPS arming temperature". | TA1.0-42 |
| 1.4 | 284 | A | TSTF-284, Revision 3 was incorporated. | TA1.0-55 |
| 2.1.1 | 339 | A | Approved TSTF-339, Revision 1 was not incorporated since PI does not have NRC approval for a methodology to generate the Safety Limits curves. It is NMCs intent to submit methodology for NRC review and approval the next time these curves require revision. | CL2.0-11 |
| 2.2 | 5, 65 | A | TSTF-5, Revision 1 was incorporated. NRC approved TSTF-65, Revision 1 was not incorporated into this chapter since the changes were entirely superceded by the TSTF-5 changes. | TA2.0-12 |
| 3.0.1 | 6 | A | TSTF-6, Revision 1 was incorporated. | TA3.0-21 |
| 3.0.1 | 8 | A | TSTF-8, Revision 2 was incorporated. | TA3.0-52 |
| 3.0.2 | 52 | A | TSTF-52, Revision 3 was incorporated. | TA3.0-54 |
| 3.0.4 | 104 | A | TSTF-104 was incorporated. | TA3.0-23 |
| 3.0.5 | 165 | A | TSTF-165 was incorporated. | TA3.0-46 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|---|------|--------|--|---------------|
| 3.0.6 | 166 | A | TSTF-166 was incorporated. | TA3.0-24 |
| 3.0.6 | 273 | A | TSTF-273, Revision 2 was incorporated. | TA3.0-47 |
| 3.0.7 | 12 | A | TSTF-12, Revision 1 was incorporated. | TA3.0-27 |
| 3.0.7 | 136 | A | TSTF-136 was incorporated. | TA3.0-26 |
| 3.1.1, 3.1.4, 3.1.5, 3.1.6, 3.1.8 | 9 | A | TSTF-9, Rev. 1 was incorporated. The PI ITS wording differs from the TSTF in that "is" is used in lieu of "to be" to make the requirements read better in Specifications 3.1.1, 3.1.4, 3.1.5, 3.1.6 and 3.1.8 and their Bases. | TA3.1-77 |
| 3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.1.5, 3.1.6, 3.1.8 | 136 | A | TSTF-136 was incorporated. | TA3.1-76 |
| 3.1.2 | 142 | A | TSTF-142 was incorporated. | TA3.1-79 |
| 3.1.3 | 13 | A | Approved TSTF-13, Revision 1 has not been incorporated, since it is incompatible with the changes made to ISTS SR 3.1.4.2 to accommodate PI current practices. | PA3.1-85 |
| 3.1.4 | 15 | A | TSTF-15 was incorporated. | TA3.1-172 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|-----------------|------|--------|---|------------|
| 3.1.4 | 107 | A | TSTF-107 was incorporated. The logical connector "AND" format is not used since this is not consistent with the description of Logical Connectors provided in ISTS Section 1.2. | TA3.1-86 |
| 3.1.4, 3.1.6 | 110 | A | TSTF-110, Revision 2 was incorporated. | TA3.1-97 |
| 3.1.4 | 240 | P | Required Action B.1 was not included in the PI ITS since, in accordance with the Writer's Guide, 4.1.6.g, "A Required Action which requires restoration, such that the condition is no longer met, is considered superfluous. It is only included if it would be the only Required Action for the Condition or it is needed for presentation clarity." The logic of these Required Actions is simplified by not including B.1. This change is also consistent with proposed TSTF-240. | PA3.1-88 |
| 3.1.4 | 314 | A | TSTF-314 was incorporated. | TA3.1-90 |
| 3.1.4 | 331 | A | TSTF-331 was incorporated. Some changes were not incorporated since there are unique PI design features which need to be presented to support the LCO statement. | TA3.1-164 |
| 3.1.5 | 239 | A | TSTF-239 was incorporated. | TA3.1-94 |
| 3.1.6 | 238 | A | TSTF-238 was incorporated. | TA3.1-95 |
| 3.1.7 | 89 | A | TSTF-89 was incorporated. | TA3.1-102 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|----------------|------------|--------|--|---------------|
| 3.1.7 | 234 | A | TSTF-234, Revision 1 was incorporated. This is an editorial change which deletes the modifying clauses "per group" and "per bank". These terms are unnecessary since these limitations are defined in the applicable Conditions. | TA3.1-99 |
| 3.1.8 | 12, 136 | A | This change incorporates both TSTF-12, Revision 1 and TSTF-136 which result in the Specification number changing from ISTS 3.1.10 to ITS 3.1.8. | TA3.1-103 |
| 3.1.8 | 14 | A | TSTF-14, Revision 1 was incorporated. | TA3.1-105 |
| 3.1.8 | 108 | A | TSTF-108 was incorporated. | TA3.1-107 |
| 3.1.8 | 154 | A | TSTF-154, Revision 2 was incorporated. | TA3.1-243 |
| 3.1.8 | 249 | A | TSTF-249 was not incorporated. The discussion of the Bases for this SR was modified to be consistent with the reactivity effects considered at PI and the point in time at which the activities are performed. Since "Isothermal temperature coefficient (ITC)" has been removed from the list of items considered, approved TSTF-249, which elaborated on ITC, has not been incorporated. | CL3.1-247 |
| 3.1.8 | 256 | A | TSTF-256 was incorporated. | TA3.1-106 |
| 3.1.8 | 315 | A | TSTF-315 was incorporated. The reference to LCO 3.3.1, Function 18.e has been changed to 16.e to be consistent with the PI ITS. | TA3.1-111 |
| 3.2.1 | 95 | A | TSTF-95 was incorporated. | TA3.2-64 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|-----------------|------|--------|---|---------------|
| 3.2.1 | 97 | A | TSTF-97 was incorporated. | TA3.2-65 |
| 3.2.1 | 136 | A | TSTF-136 was incorporated. | TA3.2-84 |
| 3.2.1, 3.2.4 | 241 | A | TSTF-241, Revision 4 was incorporated. The traveler changes relating to reducing the OPAT setpoints were not included since PI CTS do not require these setpoints to be reduced. See change CL3.2-66. | TA3.2-63 |
| 3.2.1 | 290 | A | <p>TSTF-290 was incorporated. This traveler introduces a third methodology which is the most appropriate for PI. The traveler changes relating to reducing the OPAT setpoints were not included since PI CTS do not require these setpoints to be reduced. See change CL3.2-66.</p> <p>TSTF-290 introduces a new Condition B with Required Actions and Completion Times similar to those in Condition A. The Completion Times for Condition B have been corrected to include the changes from TSTF-241 which did not recognize the existence of the new Condition B and therefore did not include the appropriate changes. Also Insert Note B was corrected to reference Condition B rather than Condition A.</p> | TA3.2-62 |
| 3.2.2 | 240 | P | Required Action A.1.1 is not included since restoration of compliance with the LCO is always an option and is not normally included per the Writer's Guide. Associated numbering changes and Bases changes have also been made. This change is consistent with proposed TSTF-240. | PA3.2-68 |
| 3.2.3 | 24 | A | TSTF-24, Revision 1 was incorporated. | TA3.2-77 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|-----------------|------|--------|---|---------------|
| 3.2.3, 3.2.4 | 110 | A | TSTF-110, Revision 2 was incorporated. The paragraph relocated from the Bases SR to Background was modified to include the plant option of manually logging AFD. Also, the discussion does not include THERMAL POWER = 90%, so, > 90% was changed to $\geq 90\%$. | TA3.2-76 |
| 3.2.3 | 112 | A | NUREG-1431 Condition D is not included. AFD is allowed to be outside the target band with THERMAL POWER less than 50% power since penalty time is accumulated which prevents resumption of power operation above 50% power. Therefore the plant is maintained in a safe condition and further power reduction is not necessary. Since all of D is omitted, approved TSTF-112 is not included in the PI ITS. | CL3.2-74 |
| 3.2.3 | 164 | A | TSTF-164, Revision 1 was incorporated. | TA3.2-72 |
| 3.2.4 | 109 | A | TSTF-109 was incorporated. | TA3.2-80 |
| 3.2.4 | 314 | A | TSTF-314 was incorporated. | TA3.2-75 |
| 3.3.1 | 135 | A | TSTF-135 was incorporated. Also, Bases 3.3.1 Condition F and G introductory sentences were edited to agree with the change in the Conditions. | TA3.3-151 |
| 3.3.1 | 169 | P | NUREG-1431 Bases 3.3.1, Applicable Safety Analysis, LCO, and Applicability Section 10 has been revised by adding sentences regarding the relationship of the low flow trips and permissives P-7 and P-8 and the resultant range of protection. These sentences are added to provide clarity and additional information about how the plant operates. This change is consistent with the PI CLB and TSTF-169 Revision 1. | CL3.3-373 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|----------------|------|--------|---|---------------|
| 3.3.1 | 242 | A | NUREG-1431 requires this SR to be performed when power is reduced below P-10 and P-6. Performance of this SR at these times is not included since CTS does not require this SR to be performed at these times. Since performance of this SR at these times is not included, the changes proposed in TSTF-242, Revision 1 are not included. | CL3.3-166 |
| 3.3.1 | 246 | A | TSTF-246 was incorporated. | TA3.3-154 |
| 3.3.1 | 286 | A | TSTF-286, Revision 2 was incorporated. | TA3.3-159 |
| 3.3.1 | 310 | P | The CTS equation equalities have been included in the OTΔT and OPΔT equations. This means the changes in proposed TSTF-310 have not been incorporated. The negative sign in the $f(\Delta I)$ equation has not been included since this penalty always decreases the setpoint and negative value along with a negative equation would increase the setpoint. | CL3.3-215 |
| 3.3.1 | 311 | A | TSTF-311 was incorporated. The specified Frequency has been modified to include CTS provisions which only require performance of the SR when the plant has been shutdown for more than 2 days. | TA3.3-175 |
| 3.3.1 | 339 | A | The NUREG-1431 equations for OTΔT and OPΔT have been replaced by the CTS equations from CTS 2.3.A.2.d. This results in changing values for some variables and deleting others. Also, PI design provides the same $f(\Delta I)$ penalty to both OTΔT and OPΔT. The equation constants have not been relocated to the COLR in accordance with approved TSTF-339. PI does not currently have approved methodology to determine these values; therefore they have been retained in the ITS. | CL3.3-214 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|---------------------------|------|--------|---|---------------|
| 3.3.1, 3.3.2, 3.3.5 | 355 | A | <p>TSTF-355 was incorporated. In accordance with the reviewer's note the "Allowable Values" column is included in the PI ITS and the "Trip Setpoint" column is not included. Likewise, Table 3.3.5-1 includes Allowable Values for the applicable instrumentation. In addition the Bases has been revised, replacing "trip setpoint" or "LSSS" with "Allowable Value" where appropriate, changing "Trip Setpoint" to lower case, and using "actual setting" where appropriate, to improve consistency and minimize confusion of the terms in instances not included in TSTF 355.</p> <p>The term "Nominal Trip Setpoint" is not used or defined in PI CTS or ITS. Therefore the last parts of TSTF-355 Inserts 1, 2, 5 and 8 relating to NTS or to "nominal" values were not incorporated in the ITS Bases.</p> | TA3.3-176 |
| 3.3.2 | 328 | A | <p>The PI design does not include steam line isolation actuation instrumentation for steam line pressure, high steam flow in two steam lines coincident with low-low T_{ave}, nor high steam flow in two steam lines coincident with low steam line pressure. Therefore, these Functions and supporting notes are not included in the ITS. Approved TSTF-328 is not incorporated since it applies only to these Functions.</p> | CL3.3-255 |
| 3.3.3 | 37 | A | <p>The guidance for submitting a report to the NRC is included in this specification, 3.3.3, which is consistent with CTS requirements. This format facilitates operator use of the ITS. Bases 3.3.3 Actions C.1 and J.1 have also been revised to be consistent with the subject change. Since reference to Chapter 5 is not included, approved TSTF-37, Revision 2 is not applicable and is not included.</p> | CL3.3-284 |
| 3.3.3 | 295 | A | TSTF-295 was incorporated. | TA3.3-294 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|----------------|--------------------|--------|--|---------------|
| 3.3.3 | 244 | P | The Surveillance Requirements Note requires SR 3.3.3.1 and 3.3.3.2 to apply to all EM (PAM) functions. However, these SRs are not applicable to the Containment Isolation Valve Position instrumentation. NUREG-1431 which applies to the Westinghouse plants defines a separate SR, the TADOT, for this type of equipment. Thus, the Surveillance Requirements Note has been modified and SR 3.3.3.3 has been included to require performance of a TADOT on the Containment Isolation Valve Position instrumentation. This change is consistent with proposed TSTF-244. | PA3.3-287 |
| 3.3.4 | 365 | A | TSTF-365 was incorporated. The traveler has been modified to be consistent with the PI Specification title and the PI system design. | TA3.3-324 |
| ISTS 3.3.4 | 19, 205, 266 | A | NUREG-1431 Specification 3.3.4 and associated Bases are not included in the PI ITS. The PI CTS do not contain any requirements for the remote shutdown system. PI uses local stations throughout the plant for safe shutdown outside the control room. The safe shutdown systems at PI are designed to meet AEC draft GDC 11 requirements and have been inspected by the NRC in Fire Protection Program inspections. As a result of this deletion, approved travelers TSTF-19, TSTF-205, and TSTF-266 have not been incorporated. | CL3.3-353 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|----------------|-------------|--------|--|---------------|
| 3.3.5 | 52, 161 | A | This change incorporates TSTF-161, Revision 1 in that the Applicable Modes or Other Specified Conditions are specified in the Table. However, for PI the Containment Ventilation Isolation Instrumentation is not required to be operable when the Containment Inservice Purge System is blind flanged. Thus, the Manual Containment Isolation, Safety Injection and Manual Containment Spray Function input to Containment Ventilation Isolation is not required when the Containment Inservice Purge System is blind flanged. Therefore the "all" has been removed from the Note referencing to LCO 3.3.2 and the appropriate Applicable Modes or Other Specified Conditions are specified in the Table. Approved TSTF-52, Rev. 2 has not been incorporated, since plant evaluations and commitments require the Containment Ventilation Isolation Instrumentation to be operable during CORE ALTERATIONS. | TA3.3-332 |
| ISTS 3.3.7 | 161, 205 | A | NUREG-1431 Specification 3.3.7, Control Room Emergency Filtration System Actuation Instrumentation, is not included in the PI ITS. The PI control ventilation system does not have an instrumentation system with concomitant logic that fills this Function; thus this Specification is unnecessary and would not serve a useful purpose. Since this Specification is not included, the applicable portions of approved travelers TSTF-161 and 205 are not incorporated. | CL3.3-352 |
| ISTS 3.3.8 | 205 | A | NUREG-1431 Specification 3.3.8, Fuel Building Air Cleanup System Actuation Instrumentation, is not included in the PI ITS. The PI spent fuel pool special ventilation system does not have an instrumentation system with concomitant logic that fills this Function; thus this Specification is unnecessary and would not serve a useful purpose. Since this Specification is not included, the applicable portions of approved traveler TSTF-205 are not incorporated. | CL3.3-354 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|-------------------------------------|-------------|--------|--|---------------|
| ISTS 3.3.9 | 135, 205 | A | NUREG-1431 Specification 3.3.9, Boron Dilution Protection System Actuation Instrumentation, is not included in the PI ITS. PI does not have an automatic system which performs this Function; thus this Specification is unnecessary. Since this Specification is not included, the applicable portions of approved travelers TSTF-135 and 205 are not incorporated. | CL3.3-355 |
| 3.4.1, 3.4.2 | 136 | A | TSTF-136 was incorporated. | TA3.4-213 |
| 3.4.1 | 339 | A | This change incorporates approved TSTF-339, Revision 1 except for the RCS flow which is already in the COLR per CTS. This is addressed in CL3.4-102. Since PI ITS retains the SL curves in Section SL 2.1.1, changes in the 3.4.1 Bases, Applicability, last paragraph, are not included. | TA3.4-109 |
| 3.4.2 | 26 | A | TSTF-26 was incorporated. | TA3.4-108 |
| 3.4.2 | 27 | A | TSTF-27, Revision 3 was incorporated. | TA3.4-111 |
| 3.4.5, 3.4.9 | 87 | A | TSTF-87, Revision 2 was incorporated. | TA3.4-118 |
| 3.4.5, 3.4.6, 3.4.7, 3.4.8 | 153 | A | TSTF-153 was incorporated. | TA3.4-116 |
| 3.4.5, 3.4.6, 3.4.7, 3.4.8 | 265 | A | TSTF-265, Revision 2 was incorporated. | TA3.4-125 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|-------------------------------------|------|--------|--|------------|
| 3.4.5, 3.4.6, 3.4.7, 3.4.8 | 286 | A | TSTF-286, Revision 2 was incorporated. | TA3.4-115 |
| 3.4.7 | 114 | A | TSTF-114 was incorporated. | TA3.4-246 |
| 3.4.7, 3.4.10, 3.4.12 | 233 | A | TSTF-233 was incorporated. The specific phrase that has been inserted is modified to include PI specific terminology for the LTOP system, "Over Pressure Protection System (OPPS)." | TA3.4-119 |
| 3.4.9 | 94 | A | Since no specific power capacity is specified in the CTS, this requirement has been deleted. Approved TSTF-94 was not incorporated since the changes were not applicable to PI. PI CTS require two groups of heaters to be operable and this requirement is retained in the ITS. | CL3.4-134 |
| 3.4.9 | 162 | A | TSTF-162 was incorporated. | TA3.4-256 |
| 3.4.10, 3.4.12 | 352 | A | TSTF-352, Revision 1 was incorporated. | TA3.4-139 |
| 3.4.11 | 151 | A | TSTF-151 was incorporated. Bases Action 3.4.11 C is edited to delete "the power will be restored and". The Action does not require removal of power, and such removal may not be necessary to effect restoration. | TA3.4-267 |
| 3.4.11 | 247 | A | TSTF-247 was incorporated. The portions of this TSTF which relate to a plant with three block valves were not included since PI has two PORVs and two block valves. | TA3.4-144 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|------------------------------|---|--------|--|---------------|
| 3.4.11, 3.4.12 | 284 | A | TSTF-284, Revision 3 was incorporated. | TA3.4-157 |
| 3.4.11 | 309 | A | TSTF-309, Revision 2 was incorporated with minor modifications to make it correct with approved TSTF-247. | TA3.4-148 |
| 3.4.12, 3.4.16, 3.4.18 | 205 | A | TSTF-205, Revision 3 was incorporated. | TA3.4-313 |
| 3.4.12 | 243 | A | TSTF-243 was incorporated. | TA3.4-165 |
| 3.4.12 | 285 | A | The Applicability Note was relocated to the LCO and reworded consistent with the guidance of approved TSTF-285, Revision 1. Since PI does not have restrictions on charging pump operation at low temperatures, the other portions of TSTF-285 are not applicable and have not been incorporated. | TA3.4-166 |
| 3.4.13 | 205, 233, 243, 271, 280, 284, 285 | A | A new Specification is included to incorporate CTS requirements that below the SI pump disable temperature (currently 218 F) both SI pumps shall be incapable of injecting into the RCS when it is intact and capable of maintaining pressure. All subsequent Specifications have been renumbered to incorporate this new Specification. This new Specification includes applicable portions of approved TSTF-205 Revision 3, TSTF-233, TSTF-243, TSTF-271 Revision 1; TSTF-280 Revision 1, TSTF-284 Revision 3 and TSTF-285 Revision 1. | CL3.4-172 |
| 3.4.14 | 54 | A | TSTF-54, Revision 1 was incorporated. | TA3.4-302 |
| 3.4.14 | 61 | A | TSTF-61 was incorporated. | TA3.4-177 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|----------------|------|--------|---|---------------|
| 3.4.14 | 116 | A | TSTF-116, Revision 2 was incorporated. "Equilibrium xenon" has been included in the Bases list of considerations for "steady state operating condition", since at PI this is a significant consideration affecting the RCS water inventory balance. | TA3.4-176 |
| 3.4.16 | 60 | A | TSTF-60 was incorporated. Some minor changes have been made to use PI terminology. | TA3.4-194 |
| 3.4.17 | 28 | A | TSTF-28 was incorporated. | TA3.4-201 |
| 3.4.17 | 137 | A | TSTF-137 was incorporated. | TA3.4-314 |
| 3.4.18 | 108 | A | TSTF-108, Revision 1 was incorporated. | TA3.4-206 |
| 3.4.18 | 154 | A | TSTF-154, Revision 2 was incorporated. | TA3.4-316 |
| 3.5.1 | 117 | A | TSTF-117 was incorporated to correct inaccuracy in wording. | TA3.5-31 |
| 3.5.1 | 316 | A | TSTF-316, Revision 1 was incorporated. | TA3.5-67 |
| 3.5.2 | 153 | A | TSTF-153 was incorporated which relocates the Applicability Note to the LCO. | TA3.5-37 |
| 3.5.2 | 233 | A | The PI LTOP enable temperature is 310 °F; thus the SI pumps will be allowed to operate in MODE 3 without LTOP restrictions. Therefore this note is not applicable and has not been included. Since this note is not included, approved TSTF-233 which modifies this note has not been incorporated. | CL3.5-39 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|-----------------|------|--------|---|------------|
| 3.5.2 | 325 | A | TSTF-325 was incorporated. | TA3.5-40 |
| 3.5.3 | 90 | A | TSTF-90, Revision 1 was incorporated. | TA3.5-47 |
| 3.6.1, 3.6.2 | 52 | A | These changes incorporate CTS requirements which include a Containment Leakage Rate Testing Program in accordance with 10 CFR 50 Appendix J, Option B. This change also incorporates the provisions of TSTF-52, Revision 3 as appropriate. | CL3.6-102 |
| 3.6.2 | 17 | A | TSTF-17, Revision 2 was incorporated. The Bases justification for the 24 month Frequency was revised to read better. | TA3.6-107 |
| 3.6.3 | 30 | A | TSTF-30, Revision 3 was incorporated. The Bases do not include reference to Standard Review Plan (SRP) 6.2.4 since PI is not committed to this SRP. | TA3.6-122 |
| 3.6.3 | 45 | A | TSTF-45, Revision 2 was incorporated. | TA3.6-132 |
| 3.6.3 | 46 | A | TSTF-46, Revision 1 was incorporated. | TA3.6-134 |
| 3.6.3 | 269 | A | TSTF-269, Revision 2 was incorporated. | TA3.6-119 |
| 3.6.10 | 18 | A | TSTF-18, Revision 1 was incorporated. | TA3.6-183 |
| 3.7.1 | 235 | A | This change is consistent with the guidance of approved TSTF-235, Revision 1. In general, TSTF-235 has not been incorporated into the ITS since PI has not been analyzed for continued operation with less than five MSSVs per steam generator operable. Thus many of the changes introduced by TSTF-235 are not applicable to the PI ITS and have not been incorporated. | TA3.7-202 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|----------------|------|--------|--|------------|
| 3.7.2, 3.7.3 | 289 | A | SR 3.7.2.1 and SR 3.7.3.1 are revised to separate the closure time testing and the actuation signal testing into separate surveillances. These changes incorporate TSTF-289. | TA3.7-117 |
| 3.7.5 | 101 | A | TSTF-101 was incorporated. | TA3.7-135 |
| 3.7.5 | 245 | A | TSTF- 245, Revision 1 was incorporated. The Bases SR discussion of the SR Note was modified to specifically state the Modes during which the AFW system is operated to avoid confusing the operators. | TA3.7-136 |
| 3.7.5 | 340 | A | TSTF-340, Revision 3 was incorporated. Modification of the Bases inserts have been made to reflect the PI AFW system design features. | TA3.7-150 |
| 3.7.6 | 140 | A | This change incorporates approved traveler TSTF-140 which requires the CSTs to be operable rather than specifying tank contents. | TA3.7-142 |
| 3.7.6 | 174 | A | TSTF-174 was incorporated. | TA3.7-262 |
| 3.7.10, 3.7.11 | 51 | A | The applicability of CORE ALTERATIONS has been deleted in accordance with TSTF-51, Revision 2. The option of making the Specification and Bases only applicable to "recently" irradiated fuel is not included since PI has not performed analyses to support excluding the older fuel. | TA3.7-165 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|--------------------------------------|------|--------|---|---------------|
| 3.7.13 | 36 | A | TSTF-36, Revision 4 was incorporated. Since plant shutdown does not remove the plant from a condition of Applicability, LCO 3.0.3 is not applicable to this specification. The Bases Actions Note discussion was modified to conform to the format of other Actions Note discussions. | TA3.7-183 |
| 3.7.14 | 173 | A | TSTF-173 was incorporated. | TA3.7-341 |
| 3.7.15 | 139 | A | TSTF-139, Revision 1 was incorporated. | TA3.7-343 |
| 3.7.17 | 255 | A | TSTF-255, Revision 1 was incorporated. | TA3.7-194 |
| 3.8.1 | 8 | A | NUREG-1431, Rev. 1, ITS SRs 3.8.1.10 (PI 3.8.1.7), 3.8.1.13 (PI 3.8.1.8), 3.8.1.14 (PI 3.8.1.9), 3.8.1.19 (PI 3.8.1.10), SR 3.8.4.6 (PI 3.8.4.2) and SR 3.8.4.7(PI 3.8.4.3). Notes and associated Bases have been revised by deleting the statement, "However, credit may be taken for unplanned events that satisfy this SR". Deleting this sentence is consistent with approved TSTF-8, Revision 1. | TA3.8-123 |
| 3.8.1 | 37 | A | TSTF 37, Revision 2 was incorporated. | TA3.8-137 |
| 3.8.1 | 163 | A | TSTF-163, Revision 2 was incorporated. | TA3.8-120 |
| 3.8.2, 3.8.5, 3.8.8, 3.8.10 | 286 | A | TSTF-286, Revision 2 was incorporated. | TA3.8-117 |
| 3.8.3 | 2 | A | TSTF-2, Revision 1 was incorporated. | TA3.8-156 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|--------------|--------|--------|--|------------|
| 3.8.4, 3.8.6 | 360 | P | TSTF-360 was incorporated. TSTF-360 has been revised in several places to be consistent with PI CLB and design. | TP3.8-160 |
| 3.8.8 | 204 | A | NUREG-1431, Rev. 1, LCO 3.8.8 and associated Bases have been revised consistent with the guidance of TSTF-204, Revision 3. PI has modified TSTF-204 as applicable to our design and operations. This change clarifies the Inverter Shutdown LCO to reflect more specific requirements for each subsystem. As written, the NUREG LCO requirements imply that a battery backed inverter is required for both divisions or trains. The requirements for the second subsystem should be relaxed to require either DC input or regulated AC input. This level of inverter requirements will continue to assure that sufficient power is available to support the response to events postulated during shutdown conditions in the event of a loss of offsite power or a single failure. This change is consistent with the initial philosophy of the ISTS. | TA3.8-175 |
| 3.9.1 | 9, 136 | A | These changes implement TSTF-9 and TSTF-136 which changes the Shutdown Margin specification to 3.1.1 and corrects the title to reflect that actually used in Section 3.1. | TA3.9-83 |
| 3.9.1 | 272 | A | Incorporates TSTF-272, Revision 1. This change clarifies that the refueling cavity boron concentration is only required to meet this Specification when it is relied upon to maintain core reactivity. In particular, if the refueling cavity is not connected to the RCS or is not filled with water, it would not be expected to meet this Specification. The implementation of this TSTF has been modified to read correctly by deleting "the refueling canal" since PI does not have a design feature by this name. | TA3.9-52 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|-----------------|------|--------|--|------------------------|
| 3.9.2 | 20 | A | TSTF-20 was incorporated. | TA3.9-56 |
| ISTS 3.9.2 | 23 | A | TSTF-23, Revision 3 was incorporated. PI has analyzed the boron dilution accident and concluded that there is adequate time for operator action to mitigate the event. Therefore this Specification is not applicable to PI and is not included. | TA3.9-53 |
| 3.9.2, 3.9.4 | 51 | A | This change incorporates approved TSTF-51, Revision 2. The accidents postulated to occur during core alteration, in addition to fuel handling accidents, are: inadvertent criticality (due to a control rod removal error or continuous rod withdrawal error during refueling or boron dilution) and the inadvertent loading of, and subsequent operation with a fuel assembly in an improper location. These events have been analyzed at PI and do not result in fuel cladding integrity damage. Since the only accident postulated to occur during CORE ALTERATIONS that results in a significant radioactive release is the fuel handling accident, this Specification is revised to only apply during fuel handling. This TSTF also includes an option of limiting the Specification to only apply to "recently discharged" irradiated fuel. PI has not performed the calculations to support this limitation and thus this option is not included with the incorporation of this TSTF. | TA3.9-66, CL3.9-105 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|---------------------------|------|--------|--|---------------|
| 3.9.3 | 23 | A | An LCO statement, action statement and supporting Bases requiring an operable audible neutron flux countrate circuit are included to retain the CTS requirements. The audible countrate circuit is necessary because PI depends on operator action to mitigate the consequences of a boron dilution event. The installed source range neutron detectors are the instruments which provide the audible countrate. Also, approved TSTF-23, Revision 3 requires audible countrate indication and an associated action statement. The logical connector "AND" format is not used since this is not consistent with the description of Logical Connectors provided in ISTS Section 1.2. | CL3.9-58 |
| 3.9.3 | 96 | A | TSTF-96, Revision 1 was incorporated. | TA3.9-59 |
| 3.9.3, 3.9.5, 3.9.6 | 286 | A | TSTF-286, Revision 2 was incorporated. Changes have been made to the Bases discussion for clarification, accuracy and to make it read correctly. These changes are required to provide operator guidance on acceptable activities when Required Actions are entered. | TA3.9-94 |
| 3.9.4 | 68 | A | CTS LA 119/112 allows CORE ALTERATIONS with the containment air lock doors open. Changes to NUREG-1431 Specifications and Bases preserve this capability and include the CTS requirement for two containment fan coil unit fans to be capable of operating in high speed. This change is also consistent with the intent of approved TSTF-68, Revision 2. This LAR demonstrated that the fission product release from the containment following a fuel handling accident will be within regulatory limits under the assumed containment penetration and air lock status. | CL3.9-62 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|-------------|------|--------|---|------------|
| 3.9.4 | 284 | A | TSTF-284, Revision 3 was incorporated. | TA3.9-67 |
| 3.9.5 | 153 | A | TSTF-153 was incorporated. | TA3.9-68 |
| 3.9.5 | 197 | A | TSTF-197, Revision 2 was incorporated. This change provides more definitive guidance to the operators for the actions which must be taken. The changes also include plant specific terminology for further clarification. See PA3.9-116 for further discussion of exceptions to TSTF-197. | TA3.9-69 |
| 5.0 | 258 | A | TSTF-258, Revision 4 was incorporated. | TA5.0-54 |
| 5.1, 5.2 | 65 | A | Throughout the ITS, titles have been changed to be consistent with the PI CTS or to implement TSTF-65, Revision 1. PI LA - 141/132 generally used generic titles to eliminate specific job titles from the TS. The ITS continues to implement the intent of approved TSTF-65, Revision 1 by using generic job titles. | CL5.0-51 |
| 5.5.6 | 237 | A | TSTF-237, Revision 1 was incorporated. The PI reactor coolant pump flywheels are made of SA 533B material; thus the provisions of this TSTF and WCAP 14535 on which it is based are directly applicable to PI. | TA5.0-62 |
| 5.5.7 | 279 | A | TSTF-279 was incorporated. | TA5.0-63 |
| 5.5.10 | 364 | A | TSTF-364 was incorporated. | TA5.0-58 |
| 5.5.11 | 118 | A | TSTF-118 was incorporated. | TA5.0-67 |

| ITS Section | TSTF | Status | Discussion of TSTF Use | JFD Number |
|----------------|------|--------|--|---------------|
| 5.5.13 | 273 | A | TSTF-273, Revision 2 was incorporated. | TA5.0-71 |
| 5.5.14 | 52 | A | The CTS program requirements for Containment Leakage Rate Testing have been included in the ITS. This change is consistent with the guidance of TSTF-52, Revision 3. | CL5.0-73 |
| 5.6.1 | 152 | A | TSTF-152 was incorporated. | TA5.0-74 |
| 5.6.6 | 233 | A | TSTF-233 was incorporated. | TA5.0-77 |
| ISTS 5.6.7 | 37 | A | CTS do not require this report; therefore it is not included in the ITS. This change is also consistent with approved TSTF-37, Revision 2. | CL5.0-81 |

ATTACHMENT 5
BEYOND SCOPE CHANGES

Beyond Scope Changes
Attachment 5 LAR dated December 11, 2000

| LCO JFD | ITS SECTION | CTS SECTION | EXPLANATION OF CHANGE | CTS DOC |
|---|-------------------------|---|---|---|
| X3.3-172 X3.4-86 X3.4-107 X3.4-136 X3.4-187 X3.5-44 X3.6-108 X3.6-137 X3.7-137 X3.8-126 X3.9-61 | Various | Various | The SR interval is increased from 18 months to 24 months to support the proposed PI refueling cycle. This LAR is anticipated to be submitted first quarter 2001. | L3.3-83 L3.4-86 L3.5-25 L3.7-91 L3.7-101 L3.7-103 A3.8-35 |
| X3.C-239 | 3.3.2 Function 4c | 1.0; Table 3.5-1, Function 5; Table 3.5- 2D Function 5d; Table 4.1- 1B, Function 5d; 6.6.E | The high steam flow portion of this function has been deleted from CTS in accordance with proposed LAR entitled, "Remove High Steam Flow Signal from Input to MSLI Logic." The Low-Low functional requirements have been moved ahead of the Safety Injection requirements to make this Function consistent with proposed CTS presentation. This LAR is anticipated to be submitted second quarter 2001. | LAR to be submitted |
| X3.5-34 | 3.5.1 | 3.3.A.2.e | LAR extending Accumulator AOT from 1 hour to 24 hours. This LAR is anticipated to be submitted first quarter 2001. | A3.5-307 |

ATTACHMENT 6
BEYOND SCOPE BRACKETED CHANGES

Beyond Scope Bracketed Changes
Attachment 6 LAR dated December 11, 2000

| | ITS SECTION | CTS SECTION | EXPLANATION OF CHANGE | CTS DOC |
|----------|-------------------------|----------------|--|------------|
| X3.4-121 | 3.4.5 3.4.6 3.4.7 | NA | PI provided a value of 60% for the Steam Generator secondary side water level indication. PI CTS does not require any level indication: therefore, the 60% is a new number and considered to be a bracketed out of scope number. | NA |

ATTACHMENT 7

CTS REQUIREMENTS RELOCATED TO OTHER
LICENSEE CONTROLLED DOCUMENTS

CTS Requirements Relocated to Other Licensee Controlled Documents

Attachment 7 to LAR dated December 11, 2000

| Discussion Of Change | Issue Relocated | Document |
|----------------------|---|----------|
| LR1.0-03 | CTS definition of AUXILIARY BUILDING SPECIAL VENTILATION INTEGRITY. The definition for AUXILIARY BUILDING SPECIAL VENTILATION INTEGRITY was relocated to the Bases of new Technical Specifications 3.7.12 which is consistent with the guidance of NUREG-1431. This definition has not been relocated verbatim, but the substance of the definition in the context of the ITS requirements is included in the Bases. Since the Bases are under licensee control in accordance with Section 5.5, "Bases Control Program" this is a less restrictive change. This is acceptable since the Bases remain under regulatory control through use of a 10 CFR 50.59 type program. | Bases |
| LR1.0-07 | CTS definition for CONTAINMENT INTEGRITY. The definition for CONTAINMENT INTEGRITY was relocated to the Bases of new Technical Specifications 3.6.1 and 3.6.2 which is consistent with the guidance of NUREG-1431. This definition has not been relocated verbatim, but the substance of the definition in the context of the ITS requirements is included in the Bases. Since the Bases are under licensee control in accordance with Section 5.5, "Bases Control Program" this is a less restrictive change. This is acceptable since the Bases remain under regulatory control through use of a 10 CFR 50.59 type program. | Bases |
| LR1.0-14 | CTS definition of REPORTABLE EVENT. The definition for REPORTABLE EVENT has been relocated to the TRM which makes this a less restrictive change. This change is acceptable since this term is not used in the ITS and the requirements for REPORTABLE EVENTS are described in NRC regulations 10 CFR 50.72 and 50.73 which Prairie Island is required to meet. | TRM |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|--|----------|
| LR1.0-16 | CTS definition of SHIELD BUILDING INTEGRITY. The definition for SHIELD BUILDING INTEGRITY was relocated to the Bases of new Technical Specifications 3.6.10 which is consistent with the guidance of NUREG-1431. This definition has not been relocated verbatim, but the substance of the definition in the context of the ITS requirements is included in the Bases. Since the Bases are under licensee control in accordance with Section 5.5, "Bases Control Program" this is a less restrictive change. This is acceptable since the Bases remain under regulatory control through use of a 10 CFR 50.59 type program. | Bases |
| LR2.0-02 | CTS 2.1.A. The clarification that the thermal power is measured in ΔT on the curve has been relocated to the Bases to make the SL statement conform to the guidance of NUREG-1431. | Bases |
| LR2.0-03 | CTS 2.2.C, 2.2.E and 2.2.F. The CTS requires notification to the NRC of a Safety Limit violation in accordance with 10 CFR 50.72, a written report in accordance with 10 CFR 50.73 and cessation of operation until NRC authorization. The latter requirement is required by 10 CFR 50.36. These requirements have been relocated to the Technical Requirements Manual (TRM). Since these requirements will not be in TS this is a less restrictive change. These changes are acceptable since these activities are all controlled by existing regulations in 10 CFR 50.36, 10 CFR 50.72 and 10 CFR 50.73 which the plant is required to meet and do not need to be specified in TS. | TRM |
| LR2.0-04 | CTS 2.2.D. The CTS requires notification of corporate management and the chairman of the Safety Audit Committee with 24 hours. This requirement has been relocated to the TRM. Since this requirement will not be in TS, this is a less restrictive change. This change is acceptable since management personnel, by corporate structure and under ITS 5.2.1, are responsible for overseeing plant operations and events. Thus the TS do not need to specify that an event of this magnitude be reported to corporate management and the Safety Audit Committee. | TRM |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|---|----------|
| LR3.1-03 | <p>CTS 3.1.F.1 and 3.1.F.2. The term, "with all rods withdrawn" is relocated to the COLR which will define the conditions under which the specific limits apply. This change is consistent with the guidance of NUREG-1431. This change is acceptable since the COLR is governed by the requirements of the Administrative Controls Section 5.6. Since changes to the ITC may be made within the COLR without prior NRC approval, this change is less restrictive.</p> | COLR |
| LR3.1-07 | <p>CTS 3.1.F.3.b. Action Statements are provided in accordance with the guidance of NUREG-1431 which, along with the Bases and Use and Application Section, provide the necessary guidance for complying with conditions which deviate from the LCO. The details associated with the method of establishing compliance with the limit are not necessary to ensure restoration is accomplished in a timely manner and are not required to be in the TS to provide adequate protection of the public health and safety. Thus the guidance provided by this statement is relocated to the Bases. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) are licensee controlled and can be revised without prior NRC approval, this change is less restrictive.</p> | Bases |
| LR3.1-37 | <p>CTS 3.10.F.1. The statements which define the capabilities of the control rod position indication system have been relocated to the Bases. This change is consistent with the guidance of NUREG-1431. This change is acceptable since the definition will be available in the Bases and is not needed in the TS. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) are licensee controlled, this change is less restrictive.</p> | Bases |
| LR3.1-43 | <p>CTS 3.10.G.1. The CTS definition of an inoperable rod is not included in the ITS. The ITS Bases defines an inoperable rod for the associated Action Statements; therefore, the definition is not necessary in the TS. This change is consistent with the guidance of NUREG-1431. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) are licensee controlled, this change is less restrictive.</p> | Bases |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|--|----------|
| LR3.1-51 | <p>CTS 3.10.G.5. Both CTS and ITS require performance of safety analyses when a rod is misaligned. Specific CTS details for consideration in these analyses have been relocated to the Bases. There are many parameters that must be considered in these analyses of which only a few were included in the TS. This change is acceptable because it is sufficient in TS to require the analyses and an incomplete set of additional details such as those in CTS are unnecessary. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) are licensee controlled, this change is less restrictive. This change is consistent with the guidance of NUREG-1431.</p> | Bases |
| LR3.1-59 | <p>CTS 3.10.I.1 and Table 4.1-1.C, Functions 1, 2 and 4. The CTS requirements for instrument surveillances on the rod bank insertion limit monitor and rod position deviation monitor are relocated to the TRM. CTS provisions for additional logging of rod positions when these instruments are inoperable are also relocated to the TRM. This is acceptable since these alarms do not directly relate to any LCO limits. These alarms are for indication purposes only and there is no adverse effect in permitting the normal Surveillance Frequency to be used instead of the Frequency associated with these alarms. Since the TRM is part of the USAR, it is under licensee control in accordance with 10 CFR 50.59 and can be changed without prior NRC approval. Therefore this change is less restrictive. This change is consistent with the guidance of NUREG-1431 as modified by approved TSTF-110, Rev. 2.</p> | TRM |
| LR3.1-65 | <p>CTS Table 4.1-2A, Item 1. CTS requirements to measure rod drop times after each refueling or following maintenance or modification to the control rod drive system will be relocated to the TRM. Normal plant practices dictate that post-maintenance and post-modification testing is performed to assure the proper performance for the affected equipment. Thus, this change is acceptable because these details are unnecessary in the TS. Since the TRM is part of the USAR it is controlled under 10 CFR 50.59. Since changes to the TRM can be made without prior NRC approval, this change is less restrictive. This change is consistent with the guidance of NUREG-1431.</p> | TRM |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|--|----------|
| LR3.2-04 | <p>CTS 3.10.B.1, 3.10.B.2, 3.10.B.3(a), 3.10.B.3(b), 3.10.B.3(b)2 and 3.10.B.3(d)1. The hot channel factor specific equations for determining compliance with the limits have been relocated to the COLR in conformance with the guidance of NUREG-1431. These equations are not required in the TS since they are part of the NRC approved methodologies used to determine the limits in the COLR as required by Administrative Controls in ITS 5.5. Since the COLR limits can be changed without prior NRC approval, relocation of these equations to the COLR is a less restrictive change.</p> | COLR |
| LR3.2-34 | <p>CTS 3.10.B.9. The CTS requirements related to AFD monitor alarms are relocated to the TRM since the alarms themselves do not directly relate to the LCO limits. This change is consistent with the guidance of NUREG-1431 as modified by approved TSTF-110, Revision 2. As part of the TRM which by reference is part of the USAR, these requirements will continue to be under regulatory controls through 10 CFR 50.59. Since the TRM (USAR) can be changed without prior NRC approval, this change is less restrictive.</p> | TRM |
| LR3.2-47 | <p>CTS 3.10.C.4. The number of each type of instrument per quadrant for this SR has been relocated to the Bases. These specification details are unnecessary in the SR since they can be adequately controlled in the Bases. This change is consistent with the guidance of NUREG-1431. Since ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) is licensee controlled, relocation of CTS requirements to the Bases is a less restrictive change.</p> | Bases |
| LR3.2-48 | <p>CTS 3.10.I.2 and 3.10.I.3. The CTS requirements related to rod position deviation monitors and quadrant power tilt monitors are relocated to the TRM since these monitors themselves do not directly relate to the LCO limits. This change is consistent with the guidance of NUREG-1431 as modified by approved TSTF-110, Rev. 2. As part of the TRM which is part of the USAR, these requirements will continue to be under the regulatory controls through 10 CFR 50.59. Since the TRM can be changed without prior NRC approval, this change is less restrictive.</p> | TRM |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|--|----------|
| R3.2-49 | <p>CTS 3.11. CTS on Core Surveillance Instrumentation, 3.11, has been relocated to the TRM which is by reference a part of the USAR. This Specification has been relocated because it does not meet the NRC Policy Statement Technical Specification Selection Criteria for inclusion in the TS.</p> <p>The moveable detector and core thermocouple instrumentation systems are not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident. Thus these systems do not satisfy Criterion 1.</p> <p>The moveable detector and core thermocouple instrumentation systems are not a process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Thus these systems do not satisfy Criterion 2.</p> <p>The moveable detector and core thermocouple instrumentation systems are not a structure, system or component that is part of the primary success path which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Thus, these systems do not satisfy Criterion 3.</p> <p>As discussed in Section 4.0 (Appendix A, Page A-12) of WCAP-11618, the moveable detector system has not been identified as a significant risk contributor. NMC has reviewed this evaluation, considers it applicable to the PI plant and concurs with this assessment. The moveable detector system is not modeled in the PI site-specific PRA since it is a non-significant risk contributor. Likewise, the core thermocouple system is not modeled in the PI site-specific PRA since it is a not-significant risk contributor. Thus, these systems do not satisfy Criterion 4.</p> <p>For the reasons given, the moveable detector and core thermocouple instrumentation systems do not satisfy the screening criteria for inclusion in the TS and have been relocated to the TRM which by reference is part of the USAR. Changes to the TRM will be controlled under the provisions of 10 CFR 50.59.</p> | TRM |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|--|----------|
| LR3.3-003 | <p>CTS 2.3.C. Control Rod Stops are not instrumentation used to detect RCS leakage, they are not a design feature that assumes the failure of or presents a challenge to the integrity of a fission product barrier, they are not a system that is part of the primary success path to mitigate a design basis accident nor have they been shown to be significant to public health and safety. Since the control rod stops do not meet the TS Selection Criteria of 10 CFR 50.36, they have been relocated to the TRM. This is acceptable since the TRM is part of the USAR and therefore is under the regulatory controls of 10 CFR 50.59. Since the TRM is under licensee control, this is a less restrictive change. This change conforms to the guidance of NUREG-1431.</p> | TRM |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|--|----------|
| LR3.3-010 | <p>Table 3.5-1, Function 8 and Table 4.1-1C, Function 24. The Steam Exclusion System (SES) actuation instrumentation and the associated setpoint have been relocated to the TRM since the system does not meet the criteria of 10 CFR 50.36 for inclusion in the Technical Specifications.</p> <p>This Specification provides requirements for the plant Steam Exclusion System actuation instrumentation. The Steam Exclusion System LCO and SR requirements have been relocated to the TRM. This system is an installed system for preventing steam from high energy line breaks from reaching safeguards equipment; thus it does not meet 10 CFR 50.36 (c)(2)(ii) Criterion 1 or 2.</p> <p>The Steam Exclusion System actuation instrumentation is an installed system. However, it does not mitigate accidents and thus is not a primary success path for mitigating accidents. Therefore, the Steam Exclusion System actuation instrumentation does not meet 10CFR50.36(c)(2)(ii) Criterion 3.</p> <p>The Steam Exclusion System is not considered in the plant IPE and it is not a system which operating experience or probabilistic risk assessment has shown to be significant to public health and safety. Therefore, this system does not meet 10 CFR 50.36(c)(2)(ii) Criterion 4.</p> <p>This is acceptable because the TRM will require this instrumentation to be operable. Since the TRM is licensee controlled, this is a less restrictive change. Changes to the TRM will continue to be under the regulatory controls of 10 CFR 50.59.</p> | TRM |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|--|---------------------------------------|
| LR3.3-044 | Table 3.5-2B, Function 6c and Table 4.1-1B, Function 6c. The reactor trip with 2 of 4 low T_{ave} function is not included in the ITS which is consistent with the guidance of NUREG-1431. This change is acceptable since this function does not detect RCS leakage, it is not a design feature that is an initial condition of a design basis accident, it is not a component or design feature that is part of the primary success path to mitigate a design basis accident and it has not been shown to be significant to public health and safety. Since it does not meet these criteria for a TS as defined in 10 CFR 50.59 it will be relocated to the TRM where it will be under the regulatory controls of 10 CFR 50.59. Since this Function will be under licensee control, this is a less restrictive change. | TRM |
| LR3.3-046 | Table 3.5-2B and Table 4.1-1B, Function 7a. The AFW manual initiation Function is not included in the ITS which is consistent with the guidance of NUREG-1431. This change is acceptable since the manual AFW pump switch only starts the pump as opposed to actuating the system and manual operations of the pumps to support plant startup and cooldown will verify OPERABILITY of the switches. This Function will be relocated to the TRM where it will be under the regulatory controls of 10 CFR 50.59. Since this Function will be under licensee control, this is a less restrictive change. | TRM |
| LR3.3-075 | Table 4.1-1A, Function 2a. CTS requires monthly and quarterly calibration of this instrumentation under the Function of Neutron Flux Power Range - High Setpoint. ITS has relocated these SRs (SR 3.3.1.3 and 3.3.1.6) to Overtemperature ΔT (which is consistent with NUREG-1431) and Overpower ΔT Functions. This is more appropriate for the purpose of these SRs. This change is acceptable since the SR will continue to be performed as TS requirements. | Internal Relocation within the PI ITS |
| LR3.3-096 | Table 4.1-1A, Note 10. The CTS description of how the verification of permissives is performed is relocated to the Bases consistent with the guidance of NUREG-1431. This detail is not necessary in the Specifications and thus is relocated. Since less information is provided in the Specification, this change is less restrictive. | Bases |

| Discussion Of Change | Issue Relocated | Document |
|---------------------------------|--|-----------------|
| LR3.3-101 | Table 4.1-1A, Notes 13 and 14. These CTS Notes have been relocated to the Bases. These Notes provide details of "what and how" SRs are performed on the undervoltage and shunt trip mechanisms. These Notes are not necessary in the Specification for the proper performance of these SRs and consistent with the guidance of NUREG-1431, these Notes are relocated to the Bases. Since less information is provided in the Specifications, this is a less restrictive change. | Bases |
| LR3.3-102 | Table 4.1-1A, Note 18. CTS SR requirements for the quadrant power tilt monitor have been relocated to the TRM. This change is consistent with the guidance of NUREG-1431 which does not include any SRs for core monitoring equipment. This change is also consistent with approved TSTF-110. Rev. 2, which relocated core monitoring equipment from other NUREG-1431 Specifications. Since this change removes equipment from the TS, this is a less restrictive change. This change is acceptable since it will still be under the regulatory controls of 10 CFR 50.59 in the TRM. | TRM |
| LR3.3-112 | Table 4.1-1C, Function 6. The RHR pump flow function has been relocated to the TRM which is consistent with the guidance of NUREG-1431. The RHR pump is required to be OPERABLE in accordance with LCO 3.5.2 which includes instrumentation. Since this instrumentation is not a primary success path for mitigation of an accident, it is unnecessary to have this instrumentation listed separately in the TS. This instrumentation will continue to be under regulatory controls through 10 CFR 50.59. Since this instrumentation has been removed from TS controls, this is a less restrictive change. | TRM |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|---|----------|
| LR3.3-115 | Table 4.1-1C, Functions 13, 15, 16, 17, 19, 20, 26, 27, 28, 30, and 31. These instruments have been relocated to the TRM which is by reference part of the USAR. These instruments are not included in NUREG-1431 and thus this change is consistent with its philosophy and guidance. This change is acceptable since these instruments are not a primary success path for mitigation of an accident; therefore it is unnecessary to have these instrument SRs in the TS. These instruments will continue to be under regulatory controls through 10 CFR 50.59. Since these instruments have been removed from TS controls, this is a less restrictive change. | TRM |
| LR3.3-116 | Table 4.1-1C, Function 18. The instrumentation shift check and monthly functional test have been relocated to the TRM. This change is consistent with the guidance of NUREG-1431. This change is acceptable since this instrumentation usually passes these SRs when performed. Even though this instrumentation is removed from the TS, it will continue to be under the regulatory controls of 10 CFR 50.59 since the TRM is part of the USAR. Since these SRs are relocated from the TS, this is a less restrictive change. | TRM |
| LR3.3-118 | Table 4.1-1C, Function 29. The CTS Surveillance Requirements for the hydrogen monitors, which are more restrictive than NUREG-1431, have been relocated to the TRM which is by reference part of the USAR. The hydrogen monitors will continue to be included in the Event Monitoring Instrumentation Specification and the NUREG-1431 SRs will apply. This change is acceptable since the hydrogen monitors will continue to be required by ITS and will have TS required testing. The current Surveillance Requirements will be under the regulatory controls of 10 CFR 50.59. Since the current Surveillance Requirements have been removed from TS controls, this is a less restrictive change. | TRM |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|---|----------|
| LR3.4-01 | <p>CTS 3.10.J. The specific limits for RCS T_{ave} and pressurizer pressure have been relocated to the COLR. This is acceptable since these limits will continue to be met during plant operation. These limits may be changed by the licensee when they are in the COLR; therefore, this is a less restrictive change. However these limits can only be changed in accordance with approved methodology; therefore this change is acceptable. This change is consistent with NUREG-1431 as modified by approved TSTF-339.</p> | COLR |
| LR3.4-24 | <p>CTS 3.1.A.1.c(1), 3.1.A.1.c(2), 3.1.A.1.d(1) and 3.1.A.2.a(1). The CTS description of equipment required for system OPERABILITY has been relocated to the Bases which is consistent with the format and guidance of NUREG-1431. This change is acceptable since the system is required to be OPERABLE in accordance with the definition of OPERABILITY and details of the specific equipment are unnecessary in the Specification. Since the Bases are under licensee control, this is a less restrictive change.</p> | Bases |
| LR3.4-53 | <p>CTS 3.1.A.2.c(2) and 3.1.A.2.c(3). The specific status of associated equipment has been relocated to the Bases for consistency with NUREG-1431. These provisions are assumed to be part of the OPERABILITY requirement for the PORVs. Since ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) is licensee controlled, relocation of CTS requirements to the Bases is a less restrictive change.</p> | Bases |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|---|-------------|
| R3.4-56 | <p>CTS 3.1.A.3 and 4.18. The reactor vessel head vent system specifications, CTS 3.1.A.3 and associated Surveillance Requirements in TS 4.18, are not included in the PI ITS since this system does not meet the</p> <p>10 CFR 50.36 Technical Specification Selection Criteria. These vents are designed to exhaust noncondensable gases and steam from the RCS which could inhibit natural circulation following an accident with an extended loss of offsite power. However, if RCS pressure relief is required, these vents are not the primary success path and are only used by the operators if both pressurizer PORVs are unavailable. Credit for this vent system is not assumed in the safety analyses nor in the PI IPE. Therefore, the reactor vessel head vent does not meet the Technical Specification Selection Criteria and these requirements have been relocated to the TRM which is maintained under the regulatory controls of 10 CFR 50.59. This is consistent with the guidance of NUREG-1431 which does not include specifications for the reactor vessel head vent system.</p> | TRM |
| R3.4-66 | <p>CTS 3.1.B.2.c. In conformance with the guidance of NUREG-1431, the pressurizer heatup and cooldown specifications have been relocated from the TS to the PTLR. This change is acceptable since the Bases for Specification 3.4.3 states that the reactor pressure vessel is the most limiting component for brittle fracture; thus the requirements for the pressurizer have not been included in the ITS. The shutdown requirements associated with pressurizer heatup and cooldown limitations have been relocated to the TRM.</p> | PTLR TRM |
| R3.4-67 | <p>CTS 3.1.B.3. In conformance with the guidance of NUREG-1431, the Steam Generator pressure/temperature limits have been relocated to the PTLR. This operating restriction does not present a challenge to the integrity of a fission product barrier and this limit is not required for safe operation. These Specifications do not meet the Technical Specification Selection Criteria defined in 10 CFR 50.36. The shutdown requirements associated with this pressure/temperature limit have been relocated to the TRM.</p> | PTLR TRM |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|---|----------|
| LR3.4-74 | CTS 3.1.C.2.b. The requirement to evaluate the leakage for continued safe operation is a level of detail beyond that contained within NUREG-1431. Therefore this requirement has been relocated to the Bases. Since ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) is licensee controlled, this change is less restrictive. | Bases |
| LR3.4-94 | CTS Table 4.1-2B, Items 5 and 6, and Note 2. The purpose of Specification 3.4.17, RCS Specific Activity is to limit the offsite radioactivity dose consequences from a SGTR to a small fraction of 10 CFR 100. This change will relocate Items 5 and 6, RCS Radiochemistry and RCS Tritium activity, from CTS Table TS.4.1-2B to the TRM since these items are not significant in limiting SGTR offsite dose and therefore should not be in TS. This is less restrictive since the TRM is under licensee control. However this change is acceptable since the TRM is under the controls of 10 CFR 50.59. This change conforms the PI ITS to the guidance of NUREG-1431. | TRM |
| LR3.4-96 | CTS Table 4.1-2B, Item 8 and Note 4. RCS boron concentration measurement at power was not included in the ITS since RCS Chemistry does not meet the NRC Policy Statement for TS Screening Criteria and is not required to be addressed within the TS. This requirement is relocated to the TRM. While this is a less restrictive change since the TRM is under licensee control, this change is acceptable because the TRM is under the controls of 10 CFR 50.59. This change is consistent with the guidance of NUREG-1431. | TRM |
| LR3.4-97 | CTS 4.3. For consistency with NUREG-1431, the list of valves and the test methodology have been relocated to the Bases. This detailed information is not required in the TS to run the plant in a safe manner. Since ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) is licensee controlled, relocation of CTS requirements to the Bases is a less restrictive change. | Bases |

| Discussion Of Change | Issue Relocated | Document |
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| LR3.4-98 | CTS 4.6.C. The methodology for performing this surveillance has been relocated to the Bases. This detailed information is not required in the TS to run the plant in a safe manner. Since ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) is licensee controlled, relocation of CTS requirements to the Bases is a less restrictive change. | Bases |
| LR3.5-11 | CTS 3.3.A.1.f. Specific details on control of valve positions are relocated to the Bases. These details are not necessary in the TS since the LCO requirement that the systems are OPERABLE envelopes these requirements. This change is consistent with the guidance of NUREG-1431. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) and plant procedures are licensee controlled, this change is less restrictive. | Bases |
| LR3.5-12 | 3.3.A.1.g and 3.3.A.2.g. Specific details on position indication monitoring light and alarm OPERABILITY are relocated to the TRM. These details are not necessary in the TS since the LCO requirement that the systems are OPERABLE envelopes these requirements. This change is consistent with the guidance of NUREG-1431. Since the TRM is licensee controlled under the USAR 10 CFR 50.59 requirements, this change is less restrictive. | TRM |
| LR3.5-14 | CTS 3.3.A.2.a, 3.3.A.2.b, 3.3.A.2.c and 3.3.A.2.d. Specific details on system components which could be inoperable are relocated to the Bases. These details are not necessary in ITS since an Action Statement is provided which envelopes these conditions. This change is consistent with the guidance of NUREG-1431. Since the ITS Bases (under ITS Section 5.5, Programs) are licensee controlled, this change is less restrictive. | Bases |

| Discussion Of Change | Issue Relocated | Document |
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| LR3.5-21 | <p>CTS 4.5.A.1.a and 4.5.A.1.b. Specific test parameters, conditions and acceptance criteria have been relocated to the Bases. This level of detail is not consistent with the guidance of NUREG-1431. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) are licensee controlled, this change is less restrictive. The provision which allows the SI and RHR pumps to be inoperable when this test is performed has been deleted since it is contradictory to the requirements of ITS SR 3.5.2.6. This change reduces plant flexibility and is therefore more restrictive. This change is acceptable since it assures that these pumps will start as required and is consistent with current plant test practices.</p> | Bases |
| LR3.5-23 | <p>CTS 4.5.B.1.a and 4.5.B.3.b. The requirements to test specific components such as pumps and valves have been relocated to the IST Program (under the IST Program requirements in Section 5.5 of the ITS). This change is consistent with the guidance of NUREG-1431. Since the IST Program is licensee controlled, this change is less restrictive.</p> | IST Program |
| LR3.5-24 | <p>CTS 4.5.B.3.g.1 and 4.5.B.3.g.2. Requirements for verifying ECCS throttle valve stop position after each stroking or maintenance are relocated to the TRM. In accordance with NUREG-1431 guidance, post-maintenance test requirements have been completely removed from the PI ITS. This change is less restrictive since the TRM is under licensee control. However this change is acceptable since the TRM is under the controls of 10 CFR 50.59.</p> | TRM |
| LR3.5-26 | <p>CTS 4.5.B.3.h. Requirements for performing ECCS post-modification flow tests are relocated to the TRM. This change is consistent with the guidance of NUREG-1431. In accordance with this guidance, post-modification test requirements have been completely removed from the PI ITS. This change is less restrictive since the TRM is under licensee control. However this change is acceptable since the TRM is under the controls of 10 CFR 50.59.</p> | TRM |

| Discussion Of Change | Issue Relocated | Document |
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| LR3.6-01 | CTS 1.0, Definition of Containment Integrity. Specific details of containment integrity have been relocated to the Bases; thus this definition is not required. This change is consistent with the guidance of NUREG-1431. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) are licensee controlled, this change is less restrictive. | Bases |
| LR3.6-02 | CTS 1.0, Shield Building Integrity. Specific details of shield building integrity have been relocated to the Bases; thus this definition is not required. This change is consistent with the guidance of NUREG-1431. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) are licensee controlled, this change is less restrictive. | Bases |
| LR3.6-06 | CTS 3.3.B.1.c. Specific details of OPERABILITY requirements have been relocated to the Bases and are included in the applicable statement of SRs. The Specification requirement for the Spray Additive Tank to be OPERABLE envelopes these requirements; thus statement of these specific details is unnecessary. This change is consistent with the guidance of NUREG-1431. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) are licensee controlled, this change is less restrictive. | Bases |
| LR3.6-07 | CTS 3.3.B.1.d and 3.3.B.1e. Specific TS controls on containment cooling valve positions have been relocated to the Bases. These requirements for control of valve positions are unnecessary in the TS since the ITS LCO and associated SRs provide sufficient control to assure that the valves are maintained in the proper position. This change is consistent with the guidance of NUREG-1431. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) are licensee controlled, this change is less restrictive. | Bases |

| Discussion Of Change | Issue Relocated | Document |
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| LR3.6-16 | <p>CTS 3.6.B.1. Specific system components required for OPERABILITY have been relocated to the Bases. These Specification details are unnecessary in the TS because the Specification requirement that the vacuum breaker system shall be OPERABLE envelopes these requirements. This change is consistent with the guidance of NUREG-1431. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) are licensee controlled, this change is less restrictive.</p> | Bases |
| LR3.6-36 | <p>CTS 3.6.D.1, 3.6.D.2.a and 3.6.D.2.c. CTS requirements for the 36-inch containment purge system and 18-inch containment inservice purge system essentially require the system to be OPERABLE, including provision for the isolation valves to isolate, and meet containment leakage rate acceptance criteria, or the system is to be blind flanged. These provisions do not add any new requirements beyond those already imposed by PI ITS 3.6.3; thus these details have been relocated to the Bases. CTS 3.6.D.1 requirements for the 36-inch containment purge system is retained as SR 3.6.3.1 to assure that these lines have been blind flanged prior to startup. The leakage rate requirements of SR 3.6.1.1 must be met by these blind flanges. CTS 3.6.D.2.e is retained as SR 3.6.3.2 to assure that the 18-inch containment inservice purge system blind flanges are installed after each use of the system and they meet the Containment Leakage Rate Test Program acceptance criteria.</p> | Bases |
| LR3.6-56 | <p>CTS 4.4.B.1 and Figure 4.4-1. Specific details of how the SBVS quarterly test is to be conducted and the input assumptions are unnecessary in the TS. Thus these CTS requirements, including the referenced figure, are relocated to the TRM. Since the TRM is under the control of 10 CFR 50.59, these requirements remain under regulatory controls. These changes are consistent with the guidance of NUREG-1431.</p> | TRM |

| Discussion Of Change | Issue Relocated | Document |
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| LR3.6-57 | CTS 4.4.B.3.a, 4.4.B.3.b, 4.4.B.4.a, 4.4.B.4.b, 4.4.B.4.c and 4.4.B.5. Specific details for conduct of ventilation filter tests have been relocated to the Ventilation Filter Test Program in accordance with the requirements of PI ITS Section 5.5, Ventilation Filter Test Program. Since this test program is required by the TS, these requirements remain under regulatory controls. This change is consistent with the guidance of NUREG-1431. | VFTP |
| LR3.6-64 | CTS 4.4.I.a, 4.4.I.b and 4.4.I.c. Specific details of how each hydrogen recombiner SR is performed have been relocated to the Bases since these details are unnecessary in the TS. Since the Bases are under the control of PI ITS Section 5.5, Bases Control Program, these requirements remain under regulatory controls. These changes are consistent with the guidance of NUREG-1431. | Bases |
| LR3.6-66 | CTS 4.5.A.2.a and 4.5.A.2.c. Specific details of how this containment spray system test is to be conducted and the acceptance criteria are unnecessary in the TS. Thus these CTS requirements are relocated to the Bases. Since the Bases are under the control of PI ITS Section 5.5, Bases Control Program, these requirements remain under regulatory controls. These changes are consistent with the guidance of NUREG-1431. | Bases |
| LR3.6-67 | CTS 4.5.A.3. Specific details of how the containment fan cooler unit are to be conducted and the specific parameters to be monitored are unnecessary in the TS. Thus these CTS requirements are relocated to the Bases. Since the Bases are under the control of PI ITS Section 5.5, Bases Control Program, these requirements remain under regulatory controls. These changes are consistent with the guidance of NUREG-1431. | Bases |
| LR3.6-71 | CTS 4.5.B.1.a. Specific details of how these pump tests are to be conducted and the acceptance criteria are unnecessary in the TS. Thus these CTS requirements are relocated to the IST Program. Since the IST Program is under the control of PI ITS Section 5.5, Programs and Manuals, Inservice Testing Program, these requirements remain under regulatory controls. These changes are consistent with the guidance of NUREG-1431. | IST Program |

| Discussion Of Change | Issue Relocated | Document |
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| LR3.6-72 | CTS 4.5.B.2. Specific details of how this test is to be conducted and the specific parameters to be monitored are unnecessary in the TS. Thus these CTS requirements are relocated to the Bases. Since the Bases are under the control of PI ITS Section 5.5, Bases Control Program, these requirements remain under regulatory controls. These changes are consistent with the guidance of NUREG-1431. | Bases |
| LR3.6-73 | CTS 4.5.B.3.d. Requirements for spray additive tank valve testing have been relocated to the IST Program. Since the IST Program is under the control of PI ITS Section 5.5, Inservice Testing Program, these requirements remain under regulatory controls. This change is consistent with the guidance of NUREG-1431. | IST Program |
| LR3.7-017 | CTS 3.4.B.1.d. The details of the OPERABILITY requirements for the condensate storage tank, including backup water supply requirements have been relocated to the Bases. These Specification details are unnecessary since the Specification requirement that the CST is OPERABLE envelopes these requirements. This change is consistent with the guidance of NUREG-1431. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) are licensee controlled, this change is less restrictive. | Bases |
| LR3.7-018 | CTS 3.4.B.1.e, f and g. The details of the OPERABILITY requirements for AFW system motor operated and manual valves, and condensate cross connect valve to the AFW system have been relocated to the TRM. These Specification details are unnecessary in the TS since the Specification requirement that the AFW system is OPERABLE envelopes these requirements. This change is consistent with the guidance of NUREG-1431. Since the TRM is licensee controlled, this change is less restrictive. This change is acceptable since the TRM is under the regulatory controls of 10 CFR 50.59. | TRM |

| Discussion Of Change | Issue Relocated | Document |
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| LR3.7-019 | <p>CTS 3.4.B.2.a. CTS and ITS allow startup to proceed without demonstration of AFW pump and associated valve OPERABILITY. CTS details on the conditions of inoperability have been relocated to the Bases. This change is consistent with the guidance of NUREG-1431 as modified by approved travelers. This change is acceptable because the turbine driven AFW pumps will continue to be maintained and tested as they are under the CTS requirements. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) are licensee controlled, this change is less restrictive.</p> | Bases |
| LR3.7-024 | <p>CTS 3.4 B.2.b. Since the ITS specifies that a whole train may be inoperable, the definition of equipment that may be inoperable is unnecessary in the TS and therefore relocated to the Bases. This change is consistent with the guidance of NUREG-1431. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) are licensee controlled, this change is less restrictive.</p> | Bases |
| LR3.7-028 | <p>CTS 3.4.B.2.d. The details of inoperability conditions for the AFW backup supply of water from the cooling water system have been relocated to the Bases for the AFW system. AFW system OPERABILITY will require the availability of the backup water supply. Therefore, these Specification details are unnecessary since the Specification requirement for AFW system OPERABILITY and associated ACTIONS envelope these requirements. This change is consistent with the guidance of NUREG-1431. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) are licensee controlled, this change is less restrictive.</p> | Bases |
| LR3.7-029 | <p>CTS 3.4.B.2.e. The details of inoperability conditions for AFW system valves have been relocated to the TRM. These Specification details are unnecessary since the Specification requirement for AFW system OPERABILITY and associated ACTIONS envelopes these requirements. This change is consistent with the guidance of NUREG-1431. Since the TRM is licensee controlled, this change is less restrictive. This change is acceptable since the TRM is under the regulatory controls of 10 CFR 50.59.</p> | TRM |

| Discussion Of Change | Issue Relocated | Document |
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| R3.7-032 | <p>CTS 3.4 C and 4.8.C. This Specification provides requirements for the plant Steam Exclusion System. The Steam Exclusion System LCO and SR requirements have been relocated to the TRM since the system does not meet the criteria of 10 CFR 50.36 for inclusion in the Technical Specifications.</p> <p>This system is an installed system for preventing steam from high energy line breaks from reaching safeguards equipment; thus it does not meet 10 CFR 50.36 (c)(2)(ii) Criterion 1 or 2.</p> <p>The Steam Exclusion System is an installed system. However, it does not mitigate accidents and thus is not a primary success path for mitigating accidents. Therefore, the Steam Exclusion System does not meet 10CFR50.36(c)(2)(ii) Criterion 3.</p> <p>The Steam Exclusion System is not considered in the plant IPE and it is not a system which operating experience or probabilistic risk assessment has shown to be significant to public health and safety. Therefore, this system does not meet 10 CFR 50.36(c)(2)(ii) Criterion 4.</p> | TRM |
| LR3.7-038 | <p>CTS 3.3.C.1.a.2. Since the ITS specifies that a whole train is required to be OPERABLE, the definition of specific components required to be OPERABLE is unnecessary in the TS and therefore relocated to the Bases. This change is consistent with the guidance of NUREG-1431. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) are licensee controlled, this change is less restrictive.</p> | Bases |
| LR3.7-041 | <p>CTS3.3.C.2. The new format of the PI ITS requires that each unit has two trains OPERABLE. The details of equipment required to define two OPERABLE trains is contained in the Bases. Therefore, these details are unnecessary in the TS and are relocated to the Bases. This change is consistent with the guidance of NUREG-1431. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) are licensee controlled, this change is less restrictive.</p> | Bases |

| Discussion Of Change | Issue Relocated | Document |
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| LR3.7-043 | <p>CTS 3.3.D.1.a, b. and c. The new format of the PI ITS requires that each unit has two trains OPERABLE. The details of equipment required to define two OPERABLE trains is contained in the Bases. Therefore, these details are unnecessary in the TS and are relocated to the Bases. This change is consistent with the guidance of NUREG-1431.</p> <p>The change also relocates the CTS requirements for non-safeguard CL pumps to the Bases. The non-safeguards pumps do not detect RCS Leakage, they are not an initial condition of a DBA, they are not components that are part of the primary success path for mitigation of a DBA and they are not significant to public health and safety; thus, these pumps do not meet the Screening Criteria for inclusion in the ITS. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) are licensee controlled, this change is less restrictive.</p> | Bases |
| LR3.7-045 | <p>CTS 3.3.D.2.a.(1) and (2). CTS provides specific actions to be taken if two CL safeguards pumps are inoperable. Under the guidance and format of NUREG-1431, these specific requirements are relocated to the Safety Function Determination Program (SFDP) as required by LCO 3.0.6 and 5.5.13, Safety Function Determination Program. This change is acceptable since the actions required to assure the plant is operated safely without loss of safety function is provided by the required Safety Function Determination Program. Since the SFDP is under licensee control, this change is less restrictive. This change is consistent with the guidance of NUREG-1431.</p> | SFDP |
| LR3.7-047 | <p>CTS 3.3.D.2.b.(1) and (2). CTS allows one CL header to be inoperable provided the horizontal CL pump is verified to be OPERABLE. Under the format and guidance of NUREG-1431, the other header including the horizontal pump will be verified to be OPERABLE in accordance with the Safety Function Determination Program (SFDP) per ITS LCO 3.0.6 and ITS 5.5.13, Safety Function Determination Program. Since this verification is required by the SFDP, it is not included in the ITS and is considered relocated to the SFDP. Since the SFDP is under licensee control, this change is less restrictive. This change is acceptable since the CTS required actions will continue to be performed.</p> | SFDP |

| Discussion Of Change | Issue Relocated | Document |
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| LR3.7-063 | <p>CTS 3.6.E.2 and 3. The details of inoperability conditions and controls for the ABSVS have been relocated to the TRM and Bases. These Specification details are unnecessary since the Specification requirement for ABSVS OPERABILITY in PI ITS 3.7.12 and associated ACTIONS envelopes these requirements. A general discussion of these requirements are included in the Bases for completeness. The specific requirements are included in the TRM to assure that they are readily accessible to the operators. This change is consistent with the format and philosophy of NUREG-1431. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) and the TRM are licensee controlled, this change is less restrictive. This change is acceptable since both of these documents are under the regulatory controls of 10 CFR 50.59.</p> | TRM Bases |
| LR3.7-064 | <p>CTS 3.6.F.1. The details of supporting equipment for OPERABILITY of ABSVS have been relocated to the TRM and Bases. These Specification details are unnecessary since the Specification requirement for ABSVS OPERABILITY in PI ITS 3.7.12 and associated ACTIONS envelopes these requirements. A general discussion of these requirements is included in the Bases for completeness. The specific requirements are included in the TRM to assure that they are readily accessible to the operators. This change is consistent with the format and philosophy of NUREG-1431. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) and the TRM are licensee controlled, this change is less restrictive. This change is acceptable since both of these documents are under the regulatory controls of 10 CFR 50.59.</p> | TRM Bases |

| Discussion Of Change | Issue Relocated | Document |
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| LR3.7-067 | <p>CTS 3.8.B.1.a. The CTS requirement to continuously monitor radiation levels in the SFP area during fuel handling was not included in the PI ITS. No screening criteria apply for this requirement because the process variable of the LCO is not an initial condition of a DBA or transient analysis. The SFP radiation levels only provide a secondary indication of a SFP area problem. Other ITS LCOs, such as SFP level and boron concentration, provide adequate assurance that all accident analysis assumptions are met. Since this Specification only applies during fuel handling, if an accident were to occur, the personnel stationed in the SFP area would be immediately aware of the problem. Therefore, this Specification does not satisfy any of the NRC Final Policy Statement TS screening criteria and is relocated to the TRM. This change is consistent with the guidance of NUREG-1431.</p> | TRM |
| LR3.7-068 | <p>CTS 3.8.B.1.b. The requirement to test fuel handling cranes prior to fuel handling is not included in the PI ITS. No screening criteria apply for this requirement because the fuel handling crane limit switches, interlocks and alarms are not installed instrumentation that is used to detect and indicate in the control room, a significant abnormal degradation of the RCS. The crane testing requirements are not related to an initial condition of a Design Basis Accident or Transient analysis that either assumes the failure or presents a challenge to the integrity of a fission product barrier. The equipment which is the subject of this Specification requirement is not a part of the primary success path for mitigation of a DBA or Transient. If a fuel handling accident occurs, other plant features such as the SFP water and SFPSVS are the primary success paths. Therefore, this Specification does not satisfy any of the NRC Final Policy Statement TS screening criteria and is relocated to the TRM. This change is consistent with WCAP-11618 and the guidance of NUREG-1431.</p> | TRM |

| Discussion Of Change | Issue Relocated | Document |
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| R3.7-069 | <p>CTS 3.8.C. The CTS requirement to limit the number of recently discharged fuel assemblies stored in the small pool (Pool 1) is not included in the PI ITS. This Specification does not contain requirements for installed instrumentation. This Specification does not address an operating restriction that is an initial condition of a DBA or Transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. This operating restriction on fuel storage is not a structure, system or component. Therefore, this Specification does not satisfy any of the NRC Final Policy Statement TS screening criteria and is relocated to the TRM.</p> | TRM |
| R3.7-079 | <p>CTS 3.12, 4.13 and Table 4.13-1. The snubber requirements in CTS 3.12 and 4.13 are relocated to the TRM. The CTS inspection and testing requirements do demonstrate the snubbers are OPERABLE. However, the ISI program, required by 10 CFR 50.55a, provides requirements for testing of snubbers. Prairie Island is required to comply with the provisions of 10 CFR 50.55a and therefore has an ISI program. This ISI program is reviewed, approved and inspected by the NRC. These controls are adequate to the required inspection and testing to demonstrate snubber OPERABILITY. Therefore, PI Programs and NRC regulations contain adequate requirements for snubbers without repeating them in the TS. Since the snubber requirements will be relocated to the TRM, changes will be under the controls of 10 CFR 50.59. This change is consistent with the guidance of NUREG-1431.</p> | TRM |

| Discussion Of Change | Issue Relocated | Document |
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| LR3.7-081 | <p>CTS Table 4.1-2A, Function 11. CTS requires periodic testing of the turbine stop valves, governor valves and intercept valves. These valve testing requirements have been relocated to the TRM. These valves are not leak detection equipment, they are not process variables, they are not a part of the primary success path for mitigation of an accident and these valves have not been found to be significant to the public health and safety. Therefore these valves do not meet the criteria of 10 CFR 50.36 for inclusion in the TS. Thus the SR for testing these valves has been relocated to the TRM. This change is consistent with the guidance of NUREG-1431. Since the SR for these valves is not in TS, this is a less restrictive change. However, this change is acceptable since the TRM is under the regulatory controls of 10 CFR 50.59.</p> | TRM |
| LR3.7-082 | <p>CTS Table 4.1-1B, F.U. 5a and 4.7. Specific requirements for the surveillance interval for this test have been relocated to the Inservice Testing Program (IST) in accordance with the requirements of ITS Section 5.5, IST. Since this test program is required by the TS, these requirements remain under regulatory controls. This change is consistent with the options given in NUREG-1431. Since this change removes specific requirements from the TS, it is a less restrictive change.</p> | IST Program |
| LR3.7-084 | <p>CTS 4.8.A.1. In accordance with approved TSTF-101, the schedule for performing the AFW pump test is relocated to the IST Program. Since the schedule is not in the TS, this is change is less restrictive. This change is acceptable since the IST Program is reviewed and approved by the NRC and a test schedule which assures the OPERABILITY of the AFW pumps will be specified.</p> | IST Program |

| Discussion Of Change | Issue Relocated | Document |
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| LR3.7-086 | <p>CTS 4.8.A.3 and 4. The detailed Specification that the AFW system valves will be tested in accordance with CTS 4.2 (IST Program) has not been included. ITS Section 5.5, Programs and Manuals, requires that plant components be tested in accordance with an IST Program. Thus these requirements have been relocated to the IST Program. This change is acceptable since the IST Program is reviewed and approved by the NRC. Since these CTS requirements are not explicitly stated in the ITS, this change is less restrictive. This change is consistent with the guidance of NUREG-1431.</p> | IST Program |
| LR3.7-087 | <p>CTS 4.8.A.5. The details of SR performance have been relocated to the Bases. Since the ITS requires system OPERABILITY and performance of tests to demonstrate OPERABILITY, the details of how the test is performed are unnecessary in the TS. This change is consistent with the format and philosophy of NUREG-1431. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) are licensee controlled, this change is less restrictive.</p> | Bases |
| LR3.7-098 | <p>CTS 4.5.A.4.b, 4.5.A.5.a, 4.5.B.1.b, 4.5.B.1.c, 4.5.B.3.e, 4.4.B.2 and 4.4.B.3.c. The details of SR performance have been relocated to the Bases. Since the ITS requires system OPERABILITY and performance of tests to demonstrate OPERABILITY, the details of how the test is performed are unnecessary in the TS. This change is consistent with the format and philosophy of NUREG-1431. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) are licensee controlled, this change is less restrictive.</p> | Bases |

| Discussion Of Change | Issue Relocated | Document |
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| LR3.7-099 | <p>CTS 4.5.A.5.b. The requirements for diesel engine inspections will be relocated to the TRM and have not been included in the PI ITS. ITS 3.7.8 requires the necessary CL trains, which includes applicable pumps, to be OPERABLE. The ITS definition of OPERABILITY states, "A system, subsystem, train, component, or device shall be OPERABLE . . . when it is capable of performing its specified safety function(s) and when all necessary attendant instrumentation, controls, normal or emergency power, cooling and seal water, lubrication, and other auxiliary equipment that are required for the system . . . to perform its specified safety function(s) are also capable of performing their related support functions(s)." The definition of OPERABILITY and the requirements of ITS LCO 3.7.8 are adequate for ensuring the diesel driven CL (DDCL) pump is OPERABLE. Therefore the LCO requirement for the DDCL pump to be OPERABLE mandates performance of inspections to the extent that they are required to assure OPERABILITY of the pump. Thus, these requirements are relocated to the TRM. Relocating these requirements to the TRM maintains consistency with NUREG-1431.</p> | TRM |
| LR3.7-100 | <p>CTS 4.4.B.3.c. CTS requires verification that the ABSVS actuates on a high radiation signal in addition to an SI signal. Following an accident, the ABSV system will be actuated by an SI signal and, therefore, actuation by the high radiation signal is not required for accident mitigation. The high radiation signal is not part of RCS leakage detection instrumentation; it is not a variable, design feature or operating restriction that is an initial condition of an accident; it is not a system, structure or component that is part of the primary success path for mitigating an accident; and it is not a structure, system or component which has been shown to be significant to the public health and safety. Thus this signal does not meet the TS Selection Criteria of 10 CFR 50.36 and is not included in the ITS. This requirement is relocated to the Offsite Dose Calculation Manual (ODCM). Since the ODCM is under licensee control this is a less restrictive requirement. However, this change is acceptable because the ODCM is a program required by ITS Section 5.5 and is under the regulatory controls of 10 CFR 50.59.</p> | ODCM |

| Discussion Of Change | Issue Relocated | Document |
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| LR3.7-102 | <p>CTS 4.14.A.1, 4.14.B, 4.4.B.3, 4.4.B.4, 4.4.B.5, 4.15.A.1, 4.15.B.1, 4.15.B.2 and 4.15.B.3. Specific details for conduct of ventilation filter tests have been relocated to the Ventilation Filter Test Program in accordance with the requirements of PI ITS Section 5.5, Ventilation Filter Test Program. Since this test Program is required by the TS, these requirements remain under regulatory controls. This change is consistent with the guidance of NUREG-1431. Since this change removes specific requirements from the TS, it is a less restrictive change.</p> | VFTP |
| R3.7-106 | <p>CTS 4.19. The requirements to inspect Auxiliary Building (AB) crane lifting devices prior to handling heavy loads is not included in the PI ITS. No screening criteria apply for this requirement because the AB crane lifting devices are not installed instrumentation that is used to detect and indicate in the control room a significant abnormal degradation of the RCS. The AB crane lifting device inspection requirements are not related to an initial condition of a Design Basis Accident or Transient analysis that either assumes the failure or presents a challenge to the integrity of a fission product barrier. The equipment which is the subject of this Specification requirement does not in any way mitigate the consequences of an accident and therefore is not a part of the primary success path for mitigation of a DBA or Transient. Therefore, this Specification does not satisfy any of the NRC Final Policy Statement TS screening criteria and is relocated to the TRM. This change is consistent with WCAP-11618 and the guidance of NUREG-1431.</p> | TRM |

| Discussion Of Change | Issue Relocated | Document |
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| LR3.7-112 | <p>CTS Table 4.1-2B, Items 14, 16 and Note 6. CTS requirements to sample the secondary coolant gross Beta-Gamma activity (Item 14) and secondary coolant chemistry (Item 16) have been relocated to the TRM. These sampling tests are not leak detection equipment, they are not process variables, they are not a part of the primary success path for mitigation of an accident and these tests have not been found to be significant to the public health and safety. Therefore these sampling tests do not meet the criteria of 10 CFR 50.36 for inclusion in the TS. Item 14 is not the subject of a TS in NUREG-1431, and since it does not meet the criteria of 10 CFR 50.36 (c)(2)(ii) it is not included in the ITS. Item 16 is related to the Secondary Water Chemistry Program in NUREG-1431 Section 5.5 and thus is not the subject of a TS in NUREG-1431. In accordance with the PI LAR dated December 14, 1995 (LA 141/132), PI does not propose to include a Secondary Water Chemistry Program in the ITS. Thus, Item 16 has been relocated to the TRM. Since the SR for these tests are not in ITS, this is a less restrictive change. However, this change is acceptable since the TRM is under the regulatory controls of 10 CFR 50.59.</p> | TRM |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|---|--------------------------|
| LR3.8-02 | <p>3.7.A. CTS 3.7.A.2, 3.7.A.3, 3.7.A.4, 3.7.A.5, 3.7.A.6, 3.7.A.7, 3.7.B.6 and 3.7.B.9 The CTS contains various information that is not incorporated into the ITS because it does not meet the NRC acceptance criteria in 10 CFR 50.36(c)(2)(ii). Therefore the following information is being relocated either to the ITS Bases or a licensee controlled document:</p> <p>CTS 3.7.A.2 specifically identifies buses 15 and 16 (Unit 2 buses 25 and 26) for the 4kV safeguards buses. This information is currently discussed in detail in the USAR and also discussed in the ITS Bases 3.8.9.</p> <p>CTS 3.7.A.3 specifically states in part, " buses 111, 112, 121, and 122 (Unit 2 busses: 211, 212, 221, and 222), and their safeguards motor control center ." The identification of the specific buses is important and is discussed in the USAR as well as the ITS Bases 3.8.9.</p> <p>CTS 3.7.A.4 again identifies specific buses 111, 112, 113, and 114 (Unit 2 buses: 211, 212, 213, and 214). This information is discussed in the USAR as well as the ITS Bases 3.8.9.</p> <p>CTS 3.7.A.5.a provides additional information about D1 and D2 diesel generators in Unit 1 such as the fuel tank are interconnected. This information is discussed in the USAR as well as being relocated to the ITS Bases 3.8.3. CTS 3.7.A.5.b also provides information that the Unit 2 diesel generator fuel tanks are interconnected. As stated above, this information is being relocated to the ITS Bases 3.8.3.</p> <p>CTS 3.7.A.7 states, "No more than one of the Instrument AC Panels 111, 112, 113, and 114 (Unit 2 panels; 211, 212, 213, and 214) shall be powered from Panel 117 (Unit 2 panel 217) or its associated instrument inverter bypass source." This information is being relocated to a Licensee Controlled Document such as the TRM or appropriate plant procedures.</p> <p>CTS 3.7.B.6 provides additional information concerning the associated 480 V bus including the associated motor control center. This information is being relocated to the ITS Bases. In</p> | <p>Bases</p> <p>USAR</p> |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|---|--|
| LR3.8-02 | <p>(continued)</p> <p>addition, CTS 3.7.B.6 provides descriptive information that is being relocated to the ITS Bases 3.8.9.</p> <p>CTS 3.7.B.9 states that in addition to the requirements of Specification 3.7.A.7, a second inverter supplying instrument AC panels 111, 112, 113, and 114 may (Unit 2 panels 211, 212, 213, and 214) be powered from an inverter bypass source for 8 hours. This information does not meet the NRC criteria for inclusion into the ITS and therefore, is being relocated to the TRM or plant procedures.</p> <p>These changes are consistent with NUREG-1431.</p> | |
| LR3.8-34 | <p>CTS 4.6.A.2.b and 4.6.A.3.a. CTS 4.6.A.2.b requires that the DG be manually synchronized and loaded to at least 1650 kW (Unit 2: 5100 kW to 5300 kW) in less than or equal to 60 seconds and operate for at least one hour once every 6 months. The ITS does not require either manual loading of the generator nor bringing the DG to load within 60 seconds. The 60 second requirement is PI CTS and is therefore being relocated to the TRM or other licensee controlled document.</p> <p>Reference DOC 3.8.A-51 for manual loading the generator.</p> <p>CTS 4.6.A.3.a requires that every 18 months that each diesel generator be thoroughly inspected in accordance with procedures prepared in consideration of the manufacturer's recommendations for this class of standby service. The ITS does not incorporate this requirement nor does it meet the NRC Criteria to be included in the Technical Specifications. Therefore, this requirement is being relocated to the TRM or other licensee controlled document.</p> <p>These changes are consistent with NUREG-1431.</p> | TRM or Other Licensee Controlled Documents |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|---|--|
| LR3.8-37 | <p>CTS 4.6.A.3.b.3. CTS 4.6.A.3.b.3 requires that during the loss of offsite power in conjunction with a SI signal test, that operation of the emergency lighting system shall be ascertained. This requirement is not in the ITS since it does not meet the NRC Criteria for inclusion in the Technical Specifications. This requirement will be relocated to the TRM or other licensee controlled documents. This change is consistent with NUREG-1431.</p> | TRM or Other Licensee Controlled Documents |
| LR3.8-43 | <p>CTS 4.6.B.1, 2, and 3. The CTS contains the following information that does not meet the NRC acceptance criteria 10 CFR 50.36 (c)(2)(ii) for inclusion into the ITS:</p> <p>CTS 4.6.B.1 states in part that "Tests shall include measuring voltage of each cell to the nearest hundredth volt, and measuring the temperature and density of a pilot cell in each battery." The requirement to measure each cell to the nearest hundredth volt and the density of each cell does not meet the NRC criteria for inclusion into the ITS; therefore, it will be relocated to a licensee controlled document.</p> <p>CTS 4.6.B.2 states, "The following additional measurements shall be made every three months: the density and height of electrolyte in every cell, the amount of water added to each cell, and the temperature of each fifth cell." The requirement to verify water level of each cell is reworded and retained in PI ITS SR 3.8.6.3. The rest of the CTS SR is being relocated to a licensee controlled document since it does not meet the NRC criteria for inclusion into the ITS.</p> <p>CTS 4.6.B.3 states, "All measurements shall be recorded and compared with previous data to detect signs of deterioration or need of equalization charge according to the manufacturer's recommendations." This information will be relocated to a licensee controlled document since it does not meet the NRC criteria for inclusion into the ITS.</p> | Licensee Controlled Documents |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|---|--|
| LR3.8-44 | <p>CTS 4.6.A.3.c. CTS 4.6.A.3.c contains various information about the DG full load carrying capability for an interval of not less than 103 to 110 percent of the continuous rating of the emergency DG, and information about the 90% of its continuous rating. This information does not meet the NRC criteria for inclusion into the ITS and is therefore being relocated to the ITS Bases, USAR or other licensee controlled documents. This change is consistent with NUREG-1431.</p> | <p>Bases, USAR, or Licensee Controlled Documents</p> |
| LR3.8-45 | <p>CTS 4.6.B.4. CTS4.6.B.4 requires in part that the battery performance test discharge during the first refueling and once every five years thereafter battery voltage shall be monitored as a function of time to establish that the battery performs as expected during heavy discharge and that all electrical connections are tight. This SR is being relocated to other licensee controlled documents.</p> | <p>Other Licensee Controlled Documents</p> |
| LR3.9-01 | <p>CTS Table 1-1, Definition of Operational Modes, Footnote * The requirement to maintain the refueling boron concentration at a level which assures $K_{eff} \leq 0.95$ and boron concentration ≥ 2000 will be relocated to the COLR. The COLR will specify the SDM required for all analyzed plant refueling conditions which assures that $K_{eff} \leq 0.95$ and boron concentration is ≥ 2000 ppm. Any changes to values in the COLR are made using NRC approved methodologies. Therefore it is unnecessary to retain these requirements in the TS. This change is generally consistent with the guidance of NUREG-1431 which allows the boron concentrations to be specified in the COLR. Since the COLR is licensee controlled, this change is less restrictive.</p> | <p>COLR</p> |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|---|----------|
| LR3.9-11 | <p>CTS 3.8.A.1.a.2) b) i. The CTS requirement to close the containment (high flow) purge system during fuel handling with the containment doors open is not included in the ITS. This requirement will be relocated to the TRM. This requirement will continue to be under the regulatory controls of 10 CFR 50.59 since the TRM is part of the USAR. Since the TRM is under licensee control, this is a less restrictive change. This change is acceptable since the containment high flow purge system is not used during fuel handling operations.</p> | TRM |
| LR3.9-13 | <p>CTS 3.8.A.1.a.2) b) iii. CTS requirements for control of the air lock doors are relocated to the Bases, since this is unnecessary detail in the TS. This change is consistent with the guidance of NUREG-1431 and TSTF-51. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) are licensee controlled, this change is less restrictive.</p> | Bases |
| LR3.9-17 | <p>CTS 3.8.A.1.b. The CTS requirement for containment radiation monitors, which provide monitoring for personnel safety, was not included in the PI ITS. No TS screening criteria apply for this requirement because the process variable of the LCO is not an initial condition of a DBA or transient analysis. Further, the containment radiation monitors are a non-significant risk contributor to core damage frequency and offsite release. Therefore, the requirement specified for this function does not satisfy the NRC Final Policy Statement Technical Specification Screening Criteria and is relocated to the TRM. This is acceptable since the TRM is under the controls of 10 CFR 50.59. This change is consistent with the guidance of NUREG-1431.</p> | TRM |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|--|----------|
| LR3.9-18 | <p>CTS 3.8.A.1.c. The CTS requirement for the neutron flux monitor to have continuous visual indication in the control room is relocated to the Bases. Visual indication is a normal part of considering these monitors OPERABLE and thus Specification of this requirement in the TS is unnecessary detail. Likewise, the requirement to have audible indication in containment is relocated to the Bases. These changes are consistent with the guidance of NUREG-1431. Since the ITS Bases (under the Bases Control Program in Section 5.5 of the ITS) are licensee controlled, these changes are less restrictive.</p> | Bases |
| LR3.9-27 | <p>CTS 3.8.A.1.e. CTS requires 23 feet of water above the reactor vessel flange during movement of control rods out of the reactor vessel. This change will relocate this requirement to the TRM. This change is consistent with the guidance of NUREG-1431. Since the TRM (under the regulatory control of 10 CFR 50.59) is licensee controlled, this change is less restrictive.</p> | TRM |
| LR3.9-44 | <p>CTS 3.8.A.1.h. The requirement for communication between the control room and containment is not included. No screening criteria apply for this requirement since communications is not part of the primary success path assumed in mitigation of a DBA or transient. The requirement specified for this function does not satisfy the NRC Final Policy Statement Technical Specification Screening Criteria and is relocated to the TRM. This is acceptable since the TRM is under the controls of 10 CFR 50.59. This change is consistent with the guidance of NUREG-1431.</p> | TRM |
| LR3.9-46 | <p>CTS 3.8.A.1.i. To be consistent with the guidance of NUREG-1431, the CTS restriction on moving fuel prior to 100 hours after the reactor is subcritical is not included in the ITS. This requirement will be relocated to the TRM. This change is acceptable since plant refueling preparations take longer than 100 hours; thus it is not possible to move fuel prior to this time. Since this restriction will not be a TS requirement, this is a less restrictive change.</p> | TRM |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|---|----------|
| LR4.0-01 | <p>CTS 5.2. The description of the containment design features will be relocated to the USAR, to the extent that the description is not already in the USAR, and is not included in the ITS. The CTS containment design features description will not be transcribed verbatim to the USAR, but the content of the CTS description will be in the USAR.</p> <p>The descriptive information represents design information only. Any changes to these containment design parameters must conform to the requirements of 10 CFR 50.59. Furthermore, sufficient detail relating to these features exists in the associated Technical Specification LCOs to ensure any changes which may affect safety would require prior NRC review and approval. Since the features with a potential to affect safety are sufficiently addressed by associated TS, the criteria for Design Features described in 10 CFR 50.36(c)(4) for including these details as Design Features are met without including the relocated information. Therefore, these relocated containment design parameters are not required to be in the TS to provide adequate protection of the public health and safety.</p> <p>Thus, in conformance with the guidance of NUREG-1431, the containment design features discussed in CTS Section 5.2 are described in the PI USAR. Since this material will not be contained in the TS, this is a less restrictive change. This change is acceptable since the descriptive material in the USAR is under the regulatory controls of 10 CFR 50.59.</p> | USAR |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|---|----------|
| LR4.0-04 | <p>CTS 5.3.B and 5.3.C. The description of the RCS and reactor protection systems will be relocated to the USAR, to the extent that the description is not already in the USAR, and is not included in the ITS. The CTS RCS and reactor protection systems description will not be transcribed verbatim to the USAR, but the content of the CTS description will be in the USAR.</p> <p>The descriptive information represents design information only. Any changes to these RCS and protection system design parameters must conform to the requirements of 10 CFR 50.59. Furthermore, sufficient detail relating to these features exists in the associated Technical Specification LCOs to ensure any changes which may affect safety would require prior NRC review and approval. Since the features with a potential to affect safety are sufficiently addressed by associated TS, the criteria for Design Features described in 10 CFR 50.36(c)(4) for including these details as Design Features are met without including the relocated information. Therefore, these relocated RCS and protection system design parameters are not required to be in the TS to provide adequate protection of the public health and safety.</p> <p>Thus, in conformance with the guidance of NUREG-1431, the reactor design features discussed in CTS Section 5.3.B and 5.3.C are described in the PI USAR. Since this material will not be contained in the TS, this is a less restrictive change. This change is acceptable since the descriptive material in the USAR is under the regulatory controls of 10 CFR 50.59.</p> | USAR |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|--|-------------|
| LR4.0-08 | <p>CTS 5.6.B and 5.6.C. The description of the spent fuel storage design features will be relocated to the USAR, to the extent that the description is not already in the USAR, and is not included in the ITS. The CTS spent fuel storage design features description will not be transcribed verbatim to the USAR, but the content of the CTS description will be in the USAR.</p> <p>The descriptive information represents design information only. Any changes to these spent fuel storage design parameters must conform to the requirements of 10 CFR 50.59. Furthermore, sufficient detail relating to these features exists in the associated Technical Specification LCOs to ensure any changes which may affect safety would require prior NRC review and approval. Since the features with a potential to affect safety are sufficiently addressed by associated TS, the criteria for Design Features described in 10CFR50.36(c)(4) for including these details as Design Features are met without including the relocated information. Therefore, these relocated spent fuel storage design parameters are not required to be in the TS to provide adequate protection of the public health and safety.</p> <p>Thus, in conformance with the guidance of NUREG-1431, the spent fuel storage design features discussed in CTS Section 5.6.B and 5.6.C are described in the PI USAR. Since this material will not be contained in the TS, this is a less restrictive change. This change is acceptable since the descriptive material in the USAR is under the regulatory controls of 10 CFR 50.59.</p> | USAR |
| LR5.0-01 | <p>CTS 4.2.A.1, 4.2.B and 4.2.C. The CTS requirements are not included in the ITS since ASME Section XI testing is required by 10 CFR 50.55a(g) and the specific requirements are defined in the Inservice Inspection (ISI) Program which complies with 10 CFR 50.55a(g), including NRC review and approval of any relief requests. Since the PI plant license requires compliance with 10 CFR 50, specific identification of the ISI requirements in ITS would be duplicative and unnecessary. The ISI Program includes definition of corrective measures and record keeping requirements; thus the requirements in CTS 4.2.B and C are also relocated. Since the plant requirements are not specifically in TS, this is a less restrictive change. This change is consistent with the guidance of NUREG-1431.</p> | ISI Program |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|---|--|
| LR5.0-02 | CTS 4.2.A.2. The CTS requirements for inservice testing have been relocated to the Inservice Testing (IST) Program in accordance with the guidance of NUREG-1431. This change is acceptable since the IST is required by the Administrative Controls Section 5.5. Since the program definition has been moved to the Administrative Controls section of the ITS this is a less restrictive change. | IST Program |
| LR5.0-03 | CTS Table 4.2-1 and 6.5.F. The CTS requirements for reactor coolant pump flywheel inspection have been relocated to the Reactor Coolant Pump Flywheel Inspection Program which is required by ITS Administrative Controls Section 5.5. This change is acceptable since reactor coolant pump flywheel inspection continues to be required by ITS Section 5.5. Since the program definition has been moved to the Administrative Controls Section of the ITS, this is a less restrictive change. This change is consistent with the guidance of NUREG-1431. | Internal Relocation, Section 5.5.6, RCP Flywheel Inspection Program |
| LR5.0-04 | CTS 4.12.A and 6.5.H. The CTS requirements for Steam Generator (SG) tube surveillance have been relocated to the SG Program which is required by the ITS Administrative Controls Section 5.5. This change is acceptable since SG tube surveillance will continue to be required in accordance with this new Program. Since changes can be made to the Program without prior NRC approval, this change is less restrictive. This change is consistent with the guidance of NUREG-1431. | Internal Relocation, Section 5.5.8, SG Program |
| LR5.0-05 | CTS 4.12.E. The CTS requirements for Steam Generator (SG) tube surveillance reports have been relocated to the SG Tube Inspection Report which is required by the ITS Administrative Controls Section 5.6. This change is acceptable since SG tube inspection report requirements continue to be defined in the ITS Administrative Controls Section 5.6. Since this report is not in the LCO/SR portion of the ITS, this change is less restrictive. This change is consistent with the guidance of NUREG-1431. | Internal Relocation, Section 5.5.8, SG Program |

| Discussion Of Change | Issue Relocated | Document |
|-------------------------|---|--|
| LR5.0-22 | CTS 6.5.I. The CTS requirements for testing of safety related ventilation filters have been relocated to the Ventilation Filter Test Program (VFTP), a new Program in the ITS Administrative Controls Section 5.5. Since specific test requirements have been relocated from the SR Section of the TS, this change is less restrictive. This change is acceptable since the Program requirements continue to be defined in Section 5.5 of the ITS. This change is consistent with the guidance of NUREG-1431. | Internal Relocation, Section 5.5.9, VFTP |

ATTACHMENT 8

ENVIRONMENTAL ASSESSMENT FOR PROPOSED
CHANGES TO APPENDIX A, TECHNICAL
SPECIFICATIONS, OF FACILITY OPERATING
LICENSES DPR-42 AND DPR-60

**Environmental Assessment for Proposed Changes
to Appendix A, Technical Specifications
of Facility Operating Licenses DPR-42 and DPR-60**
Attachment 8 to LAR dated December 11, 2000

The Nuclear Management Corporation (NMC) has evaluated this proposed LAR against the criteria for identification of licensing and regulatory actions that require an environmental assessment in accordance with Title 10, Code of Federal Regulations, Part 51, Section 21 (10CFR51.21). NMC has determined that this proposed LAR meets the criteria for a categorical exclusion set forth in 10CFR51.22(c)(9). This determination is based upon the following:

1. The proposed licensing action involves the issuance of an amendment to a license for a reactor pursuant to 10CFR50 which changes a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10CFR20, or which changes an inspection or a surveillance requirement;
2. This proposed LAR involves no significant hazards considerations as demonstrated in the enclosure to this letter;
3. There is no significant change in the types or significant increases in the amounts of any effluent that may be released offsite; and
4. There is no significant increase in individual or cumulative occupational radiation exposure.

Therefore, pursuant to 10CFR50.22(b), neither an environmental impact statement nor an environmental assessment is necessary for this proposed LAR.

ATTACHMENT 9

SPLIT REPORT

PI Split Report for Conversion to ITS

| CTS SECTION | CTS TITLE | NUREG-1431 REV. 1 | PRAIRIE ISLAND TECH SPECS | PRAIRIE ISLAND RESULTS-TSSC | NOTES |
|----------------|---|--------------------------------|---|--------------------------------|-------------------------------------|
| 2 | SAFETY LIMITS AND LIMITING SAFETY SYSTEM SETTINGS | 2.1 | 2.1 | RETAINED-NA | |
| 2.1.A | REACTOR CORE SAFETY LIMITS | 2.1.1 | 2.1.1 | RETAINED-NA | |
| 2.1.B | REACTOR COOLANT SYSTEM PRESSURE SAFETY LIMIT | 2.1.2 | 2.1.2 | RETAINED-NA | |
| 2.2 | SAFETY LIMIT VIOLATIONS | 2.2.1/2.2.2 | 2.2.1/2.2.2 | RETAINED-NA | PARTIAL RELOCATION TO TRM |
| 2.3 | LIMITING SAFETY SYSTEM SETTINGS: PROTECTIVE INSTRUM | 3.3.1 | 3.3.1.D | RETAINED-NA | |
| 2.3.A.1 | STARTUP PROTECTION | 3.3.1 | TABLE 3.3.1-1 | RETAINED-NA | |
| 2.3.A.2 | CORE PROTECTION | 3.3.1 | TABLE 3.3.1-1/3.3.2-1 | RETAINED-NA | |
| 2.3.A.3 | OTHER REACTOR TRIPS | 3.3.1/3.3.2 | TABLE 3.3.1-1/3.3.2-1 | RETAINED-NA | |
| 2.3.B | PROTECTIVE INSTRUMENTATION SETTINGS FOR RX TRIP INTERLOCKS | 3.3.1 | TABLE 3.3.1-1 | RETAINED-NA | |
| 2.3.C | CONTROL ROD WITHDRAWAL STOPS | NA | RELOCATED | RELOCATED | TRM |
| 3 | LIMITING CONDITIONS FOR OPERATION | 3 | 3.0 | RETAINED-NA | |
| 3..0 | APPLICABILITY | 3.0.1/3.0.2/3.0.3 | 3.0.1/3.0.2/3.0.3 | RETAINED-NA | |
| 3.1 | REACTOR COOLANT SYSTEM | 3.4 | 3.4 | RETAINED-2, 3, 4 | |
| 3.1.A | OPERATIONAL COMPONENTS | 3.4.4/3.4.5/3.4.7/3.4.8/3.4.19 | 3.4.4/3.4.5/3.4.6/3.4.7/3.4.8/3.4.13/3.4.18 | RETAINED-2, 3 | |
| 3.1.A.1 | REACTOR COOLANT LOOPS AND COOLANT CIRCULATION | 3.4.4/3.4.5/3.4.7/3.4.8/3.4.19 | 3.4.4/3.4.5/3.4.7/3.4.8/3.4.13/3.4.18 | RETAINED-2, 3 | |
| 3.1.A.1.a | REACTOR CRITICAL | 3.4.4/3.4.19 | 3.4.4/3.4.18 | RETAINED-2 | |
| 3.1.A.1.b | REACTOR COOLANT SYSTEM AVG TEMP ABOVE 350 F | 3.4.5 | 3.4.5 | RETAINED-3 | |
| 3.1.A.1.c | REACTOR COOLANT SYSTEM AVG TEMP BELOW 350 F (AND REACTOR COOLANT ABOVE THE REACTOR VESSEL FLANGE) | 3.4.7 | 3.4.6/3.4.7 | RETAINED-4 | PARTIAL RELACATION TO BASES |
| 3.1.A.1.d | REACTOR COOLANT LEVEL BELOW OR AT THE REACTOR VESSEL FLANGE | 3.4.8 | 3.4.8/3.4.13 | RETAINED-4 | PARTIAL RELOCATION TO BASES |
| 3.1.A.2 | REACTOR COOLANT SYSTEM PRESSURE CONTROL | 3.4.9/3.4.10/3.4.11/3.4.12 | 3.4.9/3.4.10/3.4.11/3.4.12/3.4.13 | RETAINED-2,3 | PARTIAL RELOCATION TO BASES |
| 3.1.A.2.a | PRESSURIZER | 3.4.9 | 3.4.9 | RETAINED-2, 4 | PARTIAL RELOCATIONS TO BASES |
| 3.1.A.2.b | PRESSURIZER SAFETY VALVES | 3.4.10 | 3.4.10 | RETAINED-3 | PARTIAL DELETION |
| 3.1.A.2.c | PRESSURIZER POWER OPERATED RELIEF VALVES | 3.4.11/3.4.12 | 3.4.11/3.4.12/3.4.13 | RETAINED-2,3 | PARTIAL RELOCATION TO BASES |
| 3.1.A.3 | REACTOR COOLANT VENT SYSTEMS | NA | RELOCATED | RELOCATED | RELOCATED TO TRM - R3.4-56 |
| 3.1.B | PRESSURE/TEMPERATURE LIMITS | 3.4.3 | 3.4.3 | RETAINED-2 | |
| 3.1.B.1 | REACTOR COOLANT SYSTEM | 3.4.3 | 3.4.3 | RETAINED-2 | |
| 3.1.B.2 | PRESSURIZER | NA | RELOCATED | RELOCATED | RELOCATED TO TRM - R3.4-66 AND PTLR |
| 3.1.B.3 | STEAM GENERATOR | NA | RELOCATED | RELOCATED | RELOCATED TO TRM - R3.4-67 |
| 3.1.C | REACTOR COOLANT SYSTEM LEAKAGE | 3.4.13/3.4.14/3.4.15 | 3.4.14/3.4.15/3.4.16 | RETAINED-1,2 | |

PI Split Report for Conversion to ITS

| CTS SECTION | CTS TITLE | NUREG-1431 REV. 1 | PRAIRIE ISLAND TECH SPECS | PRAIRIE ISLAND RESULTS-TSSC | NOTES |
|----------------|--|-------------------------|---------------------------------------|--------------------------------|---|
| 3.1.C.1 | LEAKAGE DETECTION | 3.4.15 | 3.4.16 | RETAINED-1 | |
| 3.1.C.2 | LEAKAGE LIMITATIONS | 3.4.13 | 3.4.14 | RETAINED-2 | PARTIAL RELOCATION TO BASES |
| 3.1.C.3 | PRESSURE ISOLATION VALVE LEAKAGE | 3.4.14 | 3.4.15 | RETAINED-2 | |
| 3.1.D | MAXIMUM COOLANT ACTIVITY | 3.4.16 | 3.4.17 | RETAINED-2 | PARTIAL DELETION |
| 3.1.E | DELETED | NA | NA | NA | NA |
| 3.1.F | ISOTHERMAL TEMPERATURE COEFFICIENT (ITC) | 3.1.4 | 3.1.3 | RETAINED-2 | PARTIAL RELOCATION TO BASES, COLR, AND DELETION |
| 3.2 | CHEMICAL AND VOLUME CONTROL SYSTEM | NA | DELETED | DELETED | DELETED LAR |
| 3.3 | ENGINEERED SAFETY FEATURES | 3.5 | 3.5 | RETAINED-2, 3 | |
| 3.3.A | SAFETY INJECTION AND RESIDUAL HEAT REMOVAL SYSTEMS | 3.5.1/3.5.2/3.5.3/3.5.4 | 3.4.12/3.4.13/3.5.1/3.5.2/3.5.3/3.5.4 | RETAINED-3 | PARTIAL RELOCATION TO BASES, TRM, AND PARTIAL DELETION |
| 3.3.B | CONTAINMENT COOLING SYSTEMS | 3.6.6A | 3.6.5/3.6.6 | RETAINED-3 | PARTIAL RELOCATION TO BASES |
| 3.3.C | COMPONENT COOLING WATER SYSTEM | 3.7.7 | 3.7.7 | RETAINED-3 | |
| 3.3.C.1 | SINGLE UNIT OPERATION | 3.7.7 | 3.7.7 | RETAINED-2 | PARTIAL RELOCATION TO BASES |
| 3.3.C.2 | TWO UNIT OPERATION | NA | RELOCATED | RELOCATED | RELOCATED TO BASES |
| 3.3.D | COOLING WATER SYSTEM | 3.7.8/3.7.9 | 3.7.8/3.7.9 | RETAINED-3 | PARTIAL RELOCATION TO BASES |
| 3.4 | STEAM AND POWER CONVERSION SYSTEM | 3.7.1/3.7.5/3.7.6/3.7.8 | 3.7.1/3.7.5/3.7.6/3.7.14 | RETAINED-3 | |
| 3.4.A | STEAM GENERATOR SAFETY AND POWER OPERATED RELIEF VALVES | 3.7.1/3.7.4 | 3.7.1/3.7.4 | RETAINED-3 | |
| 3.4.B | AUXILIARY FEEDWATER SYSTEM | 3.7.5/3.7.6 | 3.7.5/3.7.6 | RETAINED-3 | PARTIAL RELOCATION TO BASES AND TRM |
| 3.4.C | STEAM EXCLUSION SYSTEM | 3.7.18 | RELOCATED | RELOCATED | RELOCATED TO TRM |
| 3.4.D | RADIOCHEMISTRY | 3.3.1/3.3.2 | 3.7.14 | RETAINED-3 | |
| 3.5 | INSTRUMENTATION SYSTEM | 3.3.1/3.3.2 | 3.3.1/3.3.2 | RETAINED-2,3 | |
| 3.6 | CONTAINMENT SYSTEM | 3.6 | 3.6.1 | RETAINED-3 | |
| 3.6.A | CONTAINMENT INTEGRITY | 3.6.1 | 3.6.1 | RETAINED-3 | |
| 3.6.B | VACUUM BREAKER SYSTEM | 3.6.12 | 3.6.8 | RETAINED-3 | PARTIAL RELOCATION TO BASES |
| 3.6.C | CONTAINMENT ISOLATION VALVES | 3.6.3 | 3.6.3 | RETAINED-3 | |
| 3.6.D | CONTAINMENT PURGE SYSTEM | 3.6.3/3.6.6A | 3.3.5/3.6.3 | RETAINED-2 | PARTIAL RELOCATION TO BASES |

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| 3.6.E | AUXILIARY BUILDING SPECIAL VENTILATION ZONE INTEGRITY | 3.7.12 | 3.7.12 | RETAINED-3 | PARTIAL RELOCATION TO TRM AND BASES |
| 3.6.F | AUXILIARY BUILDING SPECIAL VENTILATION SYSTEM | 3.7.12 | 3.7.12 | RETAINED-3 | PARTIAL RELOCATION TO TRM AND BASES |
| 3.6.G | SHIELD BUILDING INTEGRITY | 3.6.9 | 3.6.10 | RETAINED-3 | |
| 3.6.H | SHIELD BUILDING VENTILATION SYSTEM | 3.6.13 | 3.6.9 | RETAINED-3 | |
| 3.6.I | CONTAINMENT INTERNAL PRESSURE | 3.6.4A | 3.6.4 | RETAINED-2 | |
| 3.6.J | CONTAINMENT AND SHIELD BUILDING AIR TEMPERATURE | 3.6.1 | 3.6.1 | RETAINED-3 | |
| 3.6.K | CONTAINMENT SHELL TEMPERATURE | 3.6.1 | 3.6.1 | RETAINED-3 | |
| 3.6.L | ELECTRIC HYDROGEN RECOMBINERS | 3.6.8 | 3.6.7 | RETAINED-3 | |
| 3.6.M | CONTAINMENT AIR LOCKS | 3.6.2 | 3.6.2 | RETAINED-3 | |
| 3.7 | AUXILIARY ELECTRICAL SYSTEM | 3.8 | 3.8.1/3.8.2/3.8.3/3.8.4/3.8.7/3.8.9 | RETAINED-3 | PARTIAL RELOCATION TO BASES AND TRM |
| 3.8 | REFUELING AND FUEL HANDLING | 3.9.1/3.9.3/3.9.4/3.9.5/3.9.6/3.9.7 | 3.9 | RETAINED-2, 3, 4 | |
| 3.8.A | CORE ALTERATIONS | 3.9 | 3.3.5/3.9.2/3.9.3/3.9.4/3.9.5/3.9.6 | RETRAINED-2,3 | PARTIAL RELOCATION TO BASES AND TRM |
| 3.8.B | FUEL HANDLING OPERATIONS | 3.7.16 | 3.7.16 | RETAINED-2,3 | PARTIAL RELOCATION TO TRM |
| 3.8.C | SMALL SPENT FUEL POOL RESTRICTIONS | NA | RELOCATED | RELOCATED | RELOCATED TO TRM |
| 3.8.D | SPENT FUEL POOL SPECIAL VENTILATION SYSTEM | 3.7.13 | 3.7.13 | RETAINED-3 | |
| 3.8.E | SPENT FUEL POOL STORAGE | 3.7.16/3.7.17 | 3.7.16/3.7.17 | RETAINED-2 | |
| 3.9 | DELETED | NA | NA | NA | NA |
| 3.10 | CONTROL ROD AND POWER DISTRIBUTION LIMITS | NA | NA | NA | A3.1-12 |
| 3.10.A | SHUTDOWN MARGIN | 3.1.1 | 3.1.1 | RETAINED-2 | PARTIAL RELOCATION TO COLR |
| 3.10.B | POWER DISTRIBUTION LIMITS | 3.2.1/3.2.2/3.2.3 | 3.2.1/3.2.2/3.2.3 | RETAINED-2 | PARTIAL RELOCATION TO COLR AND TRM |
| 3.10.C | QUADRANT POWER TILT RATIO | 3.2.4/3.3.1 | 3.2.4/3.3.1 | RETAINED-2,3 | PARTIAL DELETION AND PARTIAL RELOCATION TO BASES |
| 3.10.D | ROD INSERTION LIMITS | 3.1.6/3.1.7/3.1.10 | 3.1.5/3.1.6/3.1.8 | RETAINED-2 | |
| 3.10.E | ROD MISALIGNMENT LIMITATIONS | 3.1.5 | 3.1.4 | RETAINED-2 | PARTIAL DELETION |
| 3.10.F | ROD POSITION INDICATION SYSTEM | 3.1.5/3.1.8 | 3.1.4/3.1.7 | RETAINED-2 | PARTIAL RELOCATION TO BASES |
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| 3.10.H | ROD DROP TIMES | 3.1.5 | 3.1.4 | RETAINED-2 | |
| 3.10.I | MONITOR INOPERABILITY REQUIREMENTS | NA | RELOCATED | RELOCATED | RELOCATED TO TRM |

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| 3.10.J | DNB PARAMETERS | 3.4.1 | 3.4.1 | RETAINED-2 | PARTIAL RELOCATION TO COLOR |
| 3.11 | CORE SURVEILLANCE INSTRUMENTATION | NA | RELOCATED | RELOCATED | RELOCATED TO TRM R3.2-49 |
| 3.12 | SNUBBERS | NA | RELOCATED | RELOCATED | RELOCATED TO TRM R3.2-49, NOTE 22 |
| 3.13 | CONTROL ROOM AIR TREATMENT SYSTEM | 3.7.10 | 3.7.10 | RETAINED-3 | |
| 3.13.A | CONTROL ROOM SPECIAL VENTILATION SYSTEM | 3.7.10 | 3.7.10 | RETAINED-3 | |
| 3.14 | DELETED | NA | NA | NA | NA |
| 3.15 | EVENT MONITORING INSTRUMENTATION | 3.3.3 | 3.3.3 | RETAINED-3 | |
| 4 | SURVEILLANCE REQUIREMENTS | 3.0.1/3.0.2/3.0.3 | 3.0.1/3.0.2/3.0.3 | RETAINED-NA | |
| 4.1 | OPERATIONAL SAFETY REVIEW | 3.3 | 3.3 | RETAINED-NA | |
| 4.2 | INSERVICE INSPECTION AND TESTING OF PUMPS AND VALVES REQUIREMENTS | NA | NA | RELOCATED | RELOCATED TO ISI LR5.0-01 |
| 4.2.A | INSPECTION REQUIREMENTS | NA | NA | RELOCATED | RELOCATED TO ISI/ISTLR5.0-01/02 |
| 4.2.B | CORRECTIVE MEASURES | NA | NA | RELOCATED | RELOCATED TO ISI LR5.0-01 |
| 4.2.C | RECORDS | NA | NA | RELOCATED | RELOCATED TO ISI LR5.0-01 |
| 4.3 | PRIMARY COOLANT SYSTEM PRESSURE ISOLATION VALVES | 3.4.14 | 3.4.15 | RETAINED-2 | PARTIAL RELOCATION TO BASES |
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| 4.4.A | CONTAINMENT LEAKAGE TESTS | 3.6.1/3.6.2/3.6.3 | 3.6.1/3.6.2/3.6.3 | RETAINED-2,3 | |
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| 4.4.C | CONTAINMENT VACUUM BREAKERS | 3.6.1/3.6.12 | 3.6.1/3.6.8 | RETAINED-3 | |
| 4.4.D | DELETED | NA | NA | NA | NA |
| 4.4.E | CONTAINMENT ISOLATION VALVES | 3.6.1/3.6.13/3.7.12 | 3.6.3/3.6.9/3.7.12 | RETAINED-3 | |
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| 4.4.G | CONTAINMENT AND SHIELD BUILDING AIR TEMPERATURE | 3.6.1 | 3.6.1 | RETAINED-3 | |
| 4.4.H | CONTAINMENT SHELL TEMPERATURE | 3.6.1 | 3.6.1 | RETAINED-3 | |
| 4.4.I | ELECTRIC HYDROGEN RECOMBINERS | 3.6.8 | 3.6.7 | RETAINED-3 | PARTIAL RELOCATION BASES |
| 4.5 | ENGINEERED SAFETY FEATURES | 3.5 | 3.5 | RETAINED-3 | |

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| 4.5.B.1 | PUMPS | 3.5.2/3.5.3/3.6.6A/3.7.8 | 3.5.2/3.6.5/3.7.8 | RETAINED-3 | PARTIAL RELOCATION IST |
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| 4.8.B | STEAM GENERATOR POWER OPERATED RELIEF VALVES | 3.7.4 | 3.7.4 | RETAINED-3 | |
| 4.8.C | STEAM EXCLUSION SYSTEM | NA | RELOCATED | RELOCATED | RELOCATED TO TRM |
| 4.9 | REACTIVITY ANOMALIES | 3.1.3 | 3.1.2 | RETAINED-2 | |
| 4.10 | DELETED | NA | NA | NA | NA |
| 4.11 | DELETED | NA | NA | NA | NA |
| 4.12 | STEAM GENERATOR TUBE SURVEILLANCE | NA | RELOCATED | RELOCATED | RELOCATED TO SG PROGRAM LR5.0-04 |
| 4.12.A | STEAM GENERATOR SAMPLE SELECTION AND INSPECTION | NA | RELOCATED | RELOCATED | RELOCATED TO SG PROGRAM LR5.0-04 |

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| 4.12.B | STEAM GENERATOR TUBE SAMPLE SELECTION AND INSPECTION | NA | RELOCATED | RELOCATED | RELOCATED TO SG PROGRAM LR5.0-04 |
| 4.12.C | INSPECTION FREQUENCIES | NA | RELOCATED | RELOCATED | RELOCATED TO SG PROGRAM LR5.0-04 |
| 4.12.D | ACCEPTANCE CRITERIA | NA | RELOCATED | RELOCATED | RELOCATED TO SG PROGRAM LR5.0-04 |
| 4.12.E | REPORTS | NA | RELOCATED | RELOCATED | RELOCATED TO SG PROGRAM LR5.0-04 |
| 4.13 | SNUBBERS | NA | RELOCATED | RELOCATED | RELOCATED TO TRM |
| 4.14 | CONTROL ROOM AIR TREATMENT SYSTEM TESTS | 3.7.10 | 3.7.10 | RETAINED-3 | PARTIAL RELOCATION VTFF |
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| 4.16 | DELETED | NA | NA | NA | NA |
| 4.17 | DELETED | NA | NA | NA | NA |
| 4.18 | REACTOR COOLANT VENT SYSTEM PATHS | NA | RELOCATED | RELOCATED | RELOCATION TO TRM R3.4-56 |
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| 5 | DESIGN FEATURES | 4.0 | 4.0 | RETAINED-NA | |
| 5.1 | SITE LOCATION | 4.1 | 4.1 | RETAINED-NA | |
| 5.2 | CONTAINMENT STRUCTURES | NA | RELOCATED | RELOCATED | RELOCATED TO USAR LR4.0-01 |
| 5.3 | REACTOR | 4.2 | 4.2 | RETAINED-NA | |
| 5.3.A | REACTOR CORE | 4.2 | 4.2.1 | RETAINED-NA | |
| 5.3.B | REACTOR COOLANT SYSTEM | NA | RELOCATED | RELOCATED | RELOCATED TO USAR LR4.0-04 |
| 5.3.C | PROTECTION SYSTEMS | NA | RELOCATED | RELOCATED | RELOCATED TO USAR LR4.0-04 |
| 5.4 | DELETED | NA | NA | NA | NA |
| 5.5 | DELETED | NA | NA | NA | NA |
| 5.6 | FUEL HANDLING | 4.3 | 4.3 | RETAINED-NA | |
| 5.6.A | CRITICALITY CONSIDERATION | 4.3 | 4.3.1 | RETAINED-NA | |
| 5.6.B | SPENT FUEL STORAGE STRUCTURE | NA | RELOCATED | RELOCATED | RELOCATED TO USAR LR4.0-08 |
| 5.6.C | FUEL HANDLING | NA | RELOCATED | RELOCATED | RELOCATED TO USAR LR4.0-08 |
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| 6.4 | PROCEDURES | 5.4 | 5.4 | RETAINED-NA | |
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PACKAGE 1.0
USE AND APPLICATION
PART A

INTRODUCTION

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
UNITS 1 AND 2

Improved Technical Specifications
Conversion Submittal

LICENSE AMENDMENT REQUEST DATED December 11, 2000

Conversion to Improved Standard Technical Specifications

1.0

PART A

Introduction to the Discussion of the proposed Changes to the Current Technical Specifications, Justification of Differences from the Improved Standard Technical Specifications, and the supporting No Significant Hazards Determination

Pursuant to 10 CFR Part 50, Sections 50.59 and 50.90, the holders of Operating Licenses DPR-42 and DPR-60 hereby propose changes to the Facility Operating Licenses and Appendix A, Technical Specifications, as follows and as presented in the accompanying Parts B through G of this Package.

BACKGROUND

Over the past several years the nuclear industry and the Nuclear Regulatory Commission (NRC) have jointly developed Improved Standard Technical Specifications (ISTS). The NRC has encouraged licensees to implement these improved technical specifications as a means for improving plant safety through the more operator-oriented technical specifications, improved and expanded bases, reduced action statement induced plant transients, and more efficient use of NRC and industry resources.

This License Amendment Request (LAR) is submitted to conform the Prairie Island Nuclear Generating Plant (PINGP) Current Technical Specifications (CTS) to NUREG-1431, Improved Standard Technical Specifications, Westinghouse plants, Revision 1 issued April 1995 (ISTS). The resulting new Technical Specifications (TS) for Prairie Island (PI) are the PI Improved Technical Specifications (ITS) which incorporates the PI plant specific information.

NUREG-1431 is based on a hypothetical four loop Westinghouse plant. Since PI is similar in design and vintage to the R.E. Ginna Nuclear Power Plant which has already completed conversion to improved technical specifications, this amendment request relies on the Ginna ITS.

This LAR is also supported by Parts B through G. Part B contains a "clean" copy of the proposed PI ITS and Bases. Part C contains a mark-up of the PI CTS. Part D is the Description of Changes (DOC) to the PI CTS. Part E is a mark-up of the ISTS and Bases which shows the deviations from the standard incorporated to meet PI plant specific requirements. Part F gives the Justification for Deviations (JFD) from the ISTS and Part G provides the No Significant Hazards Determinations (NSHD) for changes to the PI CTS. To facilitate review of this LAR, cross-reference numbers from changes and deviations to the corresponding DOC, JFD and NSHD are provided. The methodology for mark-up and cross-references are described in the next section.

MARK-UP METHODOLOGY

The TS conversion package includes mark-ups of the CTS, the ISTS and the ISTS Bases in accordance with this guidance. Mark-up may be electronic or by hand as indicated.

Current Technical Specifications

The mark-up of the CTS is provided to show where current requirements are placed in the ITS, to show the major changes resulting from the conversion process, and to allow reviewers to evaluate significant differences between the CTS and ITS.

This ITS conversion LAR has been prepared in 14 packages following the Chapter/Section outline of the ITS as follows: 1.0, 2.0, 3.0, 3.1 . . . 3.9, 4.0 and 5.0. Accordingly, each package contains all the elements of Parts A through G as described above. The CTS Bases are not included in the CTS mark-up packages since the Bases have been rewritten in their entirety.

The current Specifications addressed by the associated ITS Chapter/Section are cross-referenced in the left margin to the new ITS location by Specification number and type (G-General, SL-Safety Limit, LCO-Limiting Condition for Operation or SR-Surveillance Requirements). Those portions of each CTS page which are not addressed in the associated ITS Chapter/Section are shadowed (electronic) or clouded and crossed out (by hand) and in the right margin is the comment, "Addressed Elsewhere".

The CTS are marked-up to incorporate the substance of NUREG-1431 Revision 1. It is not the intent to mark every nuance required to make the format change from CTS to ITS.

In general, only technical changes have been identified. However, some non-technical changes have also been included when the changes cannot easily be determined to be non-technical by a reviewer, or if an explanation is required to demonstrate that the change is non-technical.

Some apparent changes result from the different conventions and philosophies used in the ITS. Generally these apparent changes will not be marked-up in the CTS if there is no resulting change in plant operating requirements.

Changes are identified by a change number in the right margin which map the changed specification requirement to Part D, Discussion of Changes, and Part G, No Significant Hazards Determination (NSHD) and indicate the NSHD category. The change number form is R3.4-02 where the first two numbers, 3.4 in this example, refer to ITS Chapter/Section number 3.4, and the second number, 02 in this example, is a sequentially assigned number for changes within that Chapter/Section, starting with 01. The prefix letter(s) indicates the classification of the change impact. For CTS changes this is also the NSHD category.

The change impact categories defined below conveniently group the type of changes for consideration of the effect of the change on the current plant license in Part D and are also useful for efficient discussion in Part G the "No Significant Hazards Determination" (NSHD) section. If the same change is made in Part E, then the change impact category will also show up in the change number in Part F. These categories are:

- A - Administrative changes, editorial in nature that do not involve technical issues. These include reformatting, renaming (terminology changes), renumbering, and rewording of requirements.
- L - Less restrictive requirements included in the PI ITS in order to conform to the guidance of NUREG-1431. Generally these are technical changes to existing TS which may include items such as extending Completion Times or reducing Surveillance Frequencies (extended time interval between surveillances). The less restrictive requirements necessitate individual justification. Each is provided with its specific NSHD.
- LR - Less restrictive Removal of details and information from otherwise retained specifications which are removed from the CTS and placed in the Bases, Technical Requirements Manual (TRM), Updated Safety Analysis Report (USAR) or other licensee controlled documents. These changes include details of system design and function, procedural details or methods of conducting surveillances, or alarm or indication-only instrumentation.

- M - More restrictive requirements included in the PI ITS in order to provide a complete set of Specifications conforming to the guidance of NUREG-1431. Changes in this category may be completely new requirements or they may be technical changes made to current requirements in the CTS.
- R - Relocation of Current Specifications to other controlled documents or deletion of current Specifications which duplicate existing regulatory requirements.

Current requirements in the LCOs or SRs that do not meet the 10 CFR 50.36 selection criteria and may be relocated to the Bases, USAR, Core Operating Limits Report (COLR), Operational Quality Assurance Plan (OQAP), plant procedures or other licensee controlled documents. Relocating requirements to these licensee controlled documents does not eliminate the requirement, but rather, places them under more appropriate regulatory controls, such as 10CFR 50.54 (a)(3) and 10 CFR 50.59, to manage their implementation and future changes. Maintenance of these requirements in the TS commands resources which are not commensurate with their importance to safety and distract resources from more important requirements. Relocation of these items will enable more efficient maintenance of requirements under existing regulations and reduce the need to request TS changes for issues which do not affect public safety.

Deletion of Specifications which duplicate regulations eliminates the need to change Technical Specifications when changes in regulations occur. By law, licensees shall meet applicable requirements contained in the Code of Federal Regulations, or have NRC approved exemptions; therefore, restatement in the Technical Specifications is unnecessary.

The methodology for marking-up these changes is as follows:

As discussed above, administrative changes may not be marked-up in detail. Portions of the specifications which are no longer included are identified by use of the electronic strike-out feature (or crossed out by hand). Information being added is inserted into the specification in the appropriate location and is identified by use of shading features (or handwritten/insert pages).

Improved Standard Technical Specifications (NUREG-1431, Rev. 1)

The ISTS mark-up is to identify changes from the ISTS required to create a plant specific ITS by incorporating plant specific values in bracketed fields and identifying other changes with cross-reference to the Part F Justification For Differences.

All deviations from the ISTS are cross-referenced to the Part F justification for differences by a change number in the right margin. The change number form is CL3.4-05 where the prefix letter(s), CL in this example, indicate the classification of the reason for the difference, the first two numbers, 3.4 in this example, refer to the ITS Chapter/Section number 3.4, and the second number, 05 in this example, is a sequentially assigned number for deviations within that Chapter/Section, starting with a number which is larger than the last number from the Part C CTS mark-up. In some instances where a change has been made to the CTS and ISTS, the Part D change number is given since the justification for difference is the same as the discussion of change. The following categories are used as prefixes to indicate the general reason for each difference:

- CL - Current Licensing basis. Issues that have been previously licensed for PI and have been retained in the ITS. This includes Specifications dictated by plant design features or the design basis. Since no plant modifications have been or will be made to accommodate conversion to ITS, the plant design basis features shall be incorporated into the PI ITS.
- PA - Plant, Administrative. Plant specific wording preference or minor editorial improvements made to facilitate operator understanding.
- TA - Traveler, Approved. Deviations made to incorporate an industry traveler which has been approved by the NRC.
- TP - Traveler, Proposed. Deviation made to incorporate a proposed industry traveler which as of the time of submittal has not been approved by the NRC.
- X - Other, Deviation from the ISTS for any other reason than those given above.

Material which is deleted from the ISTS is identified by use of the WordPerfect strike-out feature (or crossed out by hand). Information being added to the ISTS to generate the PI ITS due to any of the deviations discussed above is identified by use of WordPerfect red-line features (or handwritten/insert pages).

Bracketed Information

Many parameters, conditions, notes, surveillances, and portions of sections are bracketed in the ISTS recognizing that plant specific values are likely to vary from the "generic" values provided in the standard.

If the bracketed value applies to PI, then the "generic" information is retained without any special indication and the brackets are marked using the WordPerfect strike-out feature. In some instances, bracketed material is not discussed. If bracketed material is discussed, a change number is provided which includes the appropriate prefix as described above. When bracketed "generic" material is not incorporated, the bracketed material and brackets are marked with the WordPerfect strike-out feature (or crossed out by hand), the plant specific information is substituted for the bracketed information and a change number is provided which includes the appropriate prefix. Information added is indicated by the WordPerfect red-line (shading) feature (or handwritten/insert pages).

Optional Sections

Due to differing Westinghouse plant designs and methodologies, some ISTS section numbers include a letter suffix indicating that only one of these sections is applicable to any specific plant. The appropriate section is indicated in the Table of Contents, the suffix letter is deleted, and justification, if required, is included in the appropriate Chapter/Section package.

Bases, Improved Standard Technical Specifications (NUREG-1431, Rev. 1)

The ISTS Bases have been marked-up to support the plant specific PI ITS and allow reviewers to identify changes from NUREG-1431. To the extent possible, the words of NUREG-1431, Rev. 1 are retained to maximize standardization. Where the existing words in the NUREG are incorrect or misleading with respect to Prairie Island, they have been revised. In addition, descriptions have been added to cover plant specific portions of the specifications. Change numbers have been provided for the ISTS Bases with the same format as the ISTS Specification mark-up. In some instances, the same change number is used to describe the change.

Material which is deleted from the ISTS Bases is identified by use of the strike-out feature of WordPerfect (or crossed out by hand). Information being added to the ISTS Bases to generate the PI ITS is identified by use of the red-line (shading) feature of WordPerfect (or handwritten/insert pages).

Bracketed Material

Many parameters and portions of Bases are bracketed in the ISTS recognizing that plant specific values and discussions are likely to vary from the "generic" information provided in the standard.

If the bracketed information applies to PI, then the "generic" information is retained without any special indication and the brackets are marked using the WordPerfect strike-out feature. No change number or justification is provided for use of bracketed material, unless special circumstances warrant discussion.

When bracketed "generic" Bases material is not incorporated, the bracketed material and brackets are marked with the WordPerfect strike-out feature (or crossed out by hand) and the plant specific information substituted for the bracketed information is indicated by the WordPerfect red-line (shading) feature (or handwritten/insert pages). A change number with the same format as those used for the ISTS Specification mark-up is provided.

ACRONYMS

Many acronyms are used throughout this submittal. The intent of the final ITS (Part B) is that in general acronyms be written in full prior to the first use. Commonly used acronyms may not be written in full. Other parts of this package may not always write in full each acronym prior to first use; therefore, a list of acronyms is attached to assist in the review of this package.

Attachment to Part A

LIST OF ACRONYMS

| | |
|-------|---|
| AB | Auxiliary Building |
| ABSVS | Auxiliary Building Special Ventilation System |
| AFD | Axial Flux Difference |
| AFW | Auxiliary Feedwater System |
| ALARA | As Low As Reasonably Achievable |
| ALT | Actuation Logic Test |
| ASA | Applicable Safety Analyses |
| ASME | American Society of Mechanical Engineers |
| AOO | Anticipated Operational Occurrences |
| AOT | Allowed Outage Time |
| BAST | Boric Acid Storage Tank |
| BIT | Boron Injection Tank |
| BOC | Beginning of Cycle |
| CC | Component Cooling |
| COT | CHANNEL OPERATIONAL TEST |
| CAOC | Constant Axial Offset Control |
| CET | Core Exit Thermocouple |
| CL | Cooling Water |
| CLB | Current Licensing Basis |
| COLR | Core Operating Limits Reports |
| CRDM | Control Rod Drive Mechanism |
| CRSVS | Control Room Special Ventilation System |
| CS | Containment Spray |
| CST | Condensate Storage Tanks |
| CTS | Current Technical Specification(s) |
| DBA | Design Basis Accident |
| DDCL | Diesel Driven Cooling Water |
| DG | Diesel Generator |
| DNB | Departure from Nucleate Boiling |
| DNBR | Departure from nucleate boiling ratio |
| ECCS | Emergency Core Cooling System |

| | |
|--------|--|
| EDG | Emergency Diesel Generators |
| EFPD | Effective Full Power Days |
| EOC | End of Cycle |
| ESF | Engineered Safety Feature |
| ESFAS | Engineered Safety Features Actuation System |
| FWLB | Feedwater Line Break |
| GDC | General Design Criteria |
| GITS | Ginna Improved Technical Specifications |
| HELB | High Energy Line Break |
| HZP | Hot Zero Power |
| IPE | Individual Plant Evaluation |
| ISTS | Improved Standard Technical Specifications |
| ITC | Isothermal Temperature Coefficient |
| ITS | Improved Technical Specifications |
| LA | License Amendment |
| LAR | License Amendment Request |
| LBLOCA | Large Break LOCA |
| LCO | Limiting Conditions for Operation |
| LHR | Linear Heat Rate |
| LOCA | Loss of Coolant Accident |
| LTOP | Low Temperature Overpressure Protection |
| MFIV | Main Feedwater Isolation Valve |
| MFRV | Main Feedwater Regulation Valve |
| MFW | Main Feedwater |
| MOSCA | MODE or Other Specified Condition of Applicability |
| MOV | Motor Operated Valve |
| MSIV | Main Steam Isolation Valves |
| MSLB | Main Steam Line Break |
| MSLI | Main Steam Line Isolation |
| MSSV | Main Steam Safety Valves |
| MTC | Moderator Temperature Coefficient |
| NIS | Nuclear Instrumentation System |
| NMC | Nuclear Management Company |
| NPSH | Net Positive Suction Head |

| | |
|------------|---|
| NRCV | Non-Return Check Valve |
| NUREG-1431 | The ISTS for Westinghouse plants |
| OPPS | OverPressure Protection System |
| PCT | Peak Cladding Temperature |
| PI | Prairie Island |
| PITS | Prairie Island Technical Specifications |
| PIV | Pressure Isolation Valve |
| PORV | Power Operated Relief Valve |
| PRA | Probabilistic Risk Assessment |
| PSV | Pressurizer Safety Valve |
| PTLR | Pressure and Temperature Limits Report |
| QTPR | Quadrant Power Tilt Ratio |
| RCCA | Rod Cluster Control Assembly |
| RCP | Reactor Coolant Pump |
| RCPB | Reactor Coolant Pressure Boundary |
| RCS | Reactor Coolant System |
| RHR | Residual Heat Removal System |
| RPI | Rod Position Indication |
| RPS | Reactor Protection System |
| RTB | Reactor Trip Breaker |
| RTBB | Reactor Trip Bypass Breaker |
| RTP | Rated Thermal Power |
| RTS | Reactor Trip System |
| RWST | Refueling Water Storage Tank |
| SBLOCA | Small Break Loss of Coolant Accident |
| SBVS | Shield Building Ventilation System |
| SCWS | Safeguards Chilled Water System |
| SDM | Shut Down Margin |
| SFDP | Safety Function Determination Program |
| SFP | Spent Fuel Pool |
| SG | Steam Generator |
| SGTR | Steam Generator Tube Rupture |
| SI | Safety Injection |
| SL | Safety Limit |

| | |
|-------|--|
| SLB | Steam Line Break |
| SR | Surveillance Requirements |
| SSC | Structures, Systems and Components |
| TADOT | Trip Actuating Device Operational Test |
| TDAFW | Turbine Driven Auxiliary Feedwater |
| TRM | Technical Requirements Manual |
| TS | Technical Specifications |
| TSSC | Technical Specification Selection Criteria |
| TSTF | Term used for a NUREG change (traveler) |
| VCT | Volume Control Tank |
| VFTP | Ventilation Filter Test Program |
| UHS | Ultimate Heat Sink |
| USAR | Updated Safety Analysis Report |
| WCAP | Westinghouse technical report |

PACKAGE 1.0

USE AND APPLICATION

PART B

PROPOSED PRAIRIE ISLAND IMPROVED TECHNICAL SPECIFICATIONS AND BASES

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PRAIRIE ISLAND NUCLEAR GENERATING PLANT UNITS 1 AND 2

Improved Technical Specifications Conversion Submittal

1.0 USE AND APPLICATION

1.1 Definitions

NOTE

The defined terms of this section appear in capitalized type and are applicable throughout these Technical Specifications and Bases.

| <u>Term</u> | <u>Definition</u> |
|-----------------------------|--|
| ACTIONS | ACTIONS shall be that part of a Specification that prescribes Required Actions to be taken under designated Conditions within specified Completion Times. |
| ACTUATION LOGIC TEST | An ACTUATION LOGIC TEST shall be the application of various simulated or actual input combinations in conjunction with each possible interlock logic state required for OPERABILITY of a logic circuit and the verification of the required logic output. |
| AXIAL FLUX DIFFERENCE (AFD) | AFD shall be the difference in normalized flux signals between the top and bottom halves of a two section excore neutron detector. |
| CHANNEL CALIBRATION | A CHANNEL CALIBRATION shall be the adjustment, as necessary, of the channel output such that it responds within the necessary range and accuracy to known values of the parameter that the channel monitors. The CHANNEL CALIBRATION shall encompass all devices in the channel required for channel OPERABILITY. Calibration of instrument channels with resistance temperature detector (RTD) or thermocouple sensors may consist of an inplace qualitative assessment of sensor behavior and normal calibration of the remaining adjustable devices in the channel. The CHANNEL CALIBRATION may be performed by means of any series of sequential, overlapping, or total channel steps. |

1.1 Definitions (continued)

| | |
|-------------------------------------|--|
| CHANNEL CHECK | A CHANNEL CHECK shall be the qualitative assessment, by observation, of channel behavior during operation. This determination shall include, where possible, comparison of the channel indication and status to other indications or status derived from independent instrument channels measuring the same parameter. |
| CHANNEL OPERATIONAL TEST (COT) | A COT shall be the injection of a simulated or actual signal into the channel as close to the sensor output as practicable to verify OPERABILITY of all devices in the channel required for channel OPERABILITY. The COT shall include adjustments, as necessary, of the required alarm, interlock, and trip setpoints required for channel OPERABILITY such that the setpoints are within the necessary range and accuracy. The COT may be performed by means of any series of sequential, overlapping, or total channel steps. |
| CORE ALTERATION | CORE ALTERATION shall be the movement of any fuel, sources, or reactivity control components, within the reactor vessel with the vessel head removed and fuel in the vessel. Suspension of CORE ALTERATIONS shall not preclude completion of movement of a component to a safe position. |
| CORE OPERATING LIMITS REPORT (COLR) | The COLR is the unit specific document that provides cycle specific parameter limits for the current reload cycle. These cycle specific parameter limits shall be determined for each reload cycle in accordance with Specification 5.6.5. Plant operation within these limits is addressed in individual Specifications. |
| DOSE EQUIVALENT I-131 | DOSE EQUIVALENT I-131 shall be that concentration of I-131 (microcuries/gram) that alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134, and I-135 actually present. The thyroid dose conversion factors used for this calculation shall be those listed in Table III of TID-14844, AEC, 1962, "Calculation of Distance Factors for Power and Test Reactor Sites". |

1.1 Definitions (continued)

**\bar{E} -AVERAGE
DISINTEGRATION
ENERGY** \bar{E} shall be the average (weighted in proportion to the concentration of each radionuclide in the reactor coolant at the time of sampling) of the sum of the average beta and gamma energies per disintegration (in MeV) for isotopes, other than iodines, with half lives > 15 minutes, making up at least 95% of the total noniodine activity in the coolant.

LEAKAGE LEAKAGE from the Reactor Coolant System (RCS) shall be:

a. Identified LEAKAGE

1. LEAKAGE, such as that from pump seals or valve packing (except reactor coolant pump (RCP) seal water injection or leakoff), that is captured and conducted to collection systems or a sump or collecting tank;
2. LEAKAGE into the containment atmosphere from sources that are both specifically located and known either not to interfere with the operation of leakage detection systems or not to be pressure boundary LEAKAGE; or
3. RCS LEAKAGE through a steam generator (SG) to the Secondary System;

b. Unidentified LEAKAGE

All LEAKAGE (except RCP seal water injection or leakoff) that is not identified LEAKAGE;

c. Pressure Boundary LEAKAGE

LEAKAGE (except SG LEAKAGE) through a nonisolable fault in an RCS component body, pipe wall, or vessel wall.

1.1 Definitions (continued)

| | |
|---|--|
| MODE | A MODE shall correspond to any one inclusive combination of core reactivity condition, power level, average reactor coolant temperature, and reactor vessel head closure bolt tensioning specified in Table 1.1-1 with fuel in the reactor vessel. |
| OPERABLE - OPERABILITY | A system, subsystem, train, component, or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified safety function(s) and when all necessary attendant instrumentation, controls, normal or emergency electrical power, cooling and seal water, lubrication, and other auxiliary equipment that are required for the system, subsystem, train, component, or device to perform its specified safety function(s) are also capable of performing their related support function(s). |
| PHYSICS TESTS | <p>PHYSICS TESTS shall be those tests performed to measure the fundamental nuclear characteristics of the reactor core and related instrumentation. These tests are:</p> <ul style="list-style-type: none"> a. Described in Appendix J of the USAR, Pre-Operational and Startup Tests; b. Authorized under the provisions of 10 CFR 50.59; or c. Otherwise approved by the Nuclear Regulatory Commission. |
| PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR) | The PTLR is the unit specific document that provides the reactor vessel pressure and temperature limits, including heatup and cooldown rates, and the OPPS arming temperature for the current reactor vessel fluence period. These pressure and temperature limits shall be determined for each fluence period in accordance with Specification 5.6.6. Plant operation within these operating limits is addressed in LCO 3.4.3, "RCS Pressure and Temperature (P/T) Limits," LCO 3.4.12, "Low Temperature Overpressure Protection (LTOP) > Safety Injection (SI) Pump Disable Temperature," and LCO 3.4.13, "Low Temperature Overpressure Protection (LTOP) ≤ Safety Injection (SI) Pump Disable Temperature." |

1.1 Definitions (continued)

| | |
|---|---|
| QUADRANT POWER TILT RATIO (QPTR) | QPTR shall be the ratio of the maximum upper excore detector calibrated output to the average of the upper excore detector calibrated outputs, or the ratio of the maximum lower excore detector calibrated output to the average of the lower excore detector calibrated outputs, whichever is greater. |
| RATED THERMAL POWER (RTP) | RTP shall be a total reactor core heat transfer rate to the reactor coolant of 1650 MWt. |
| REACTOR TRIP SYSTEM (RTS) RESPONSE TIME | The RTS RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its RTS trip setpoint at the channel sensor output until opening of a reactor trip breaker. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured. |
| SHUTDOWN MARGIN (SDM) | SDM shall be the instantaneous amount of reactivity by which: <ul style="list-style-type: none">a. The reactor is subcritical; orb. The reactor would be subcritical from its present condition assuming all rod cluster control assemblies (RCCAs) are fully inserted except for the single RCCA of highest reactivity worth, which is assumed to be fully withdrawn. With any RCCA not capable of being fully inserted, the reactivity worth of the RCCA must be accounted for in the determination of SDM. In MODES 1 and 2, the fuel and moderator temperatures are changed to the nominal zero power design temperature. |
| STAGGERED TEST BASIS | A STAGGERED TEST BASIS shall consist of the testing of one of the systems, subsystems, channels, or other designated components during the interval specified by the Surveillance Frequency, so that all systems, subsystems, channels, or other designated components are tested during n Surveillance Frequency intervals, where n is the total number of systems, subsystems, channels, or other designated components in the associated function. |

1.1 Definitions (continued)

| | |
|---|---|
| THERMAL POWER | THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant. |
| TRIP ACTUATING DEVICE OPERATIONAL TEST (TADOT) | A TADOT shall consist of operating the trip actuating device and verifying the OPERABILITY of all devices in the channel required for trip actuating device OPERABILITY. The TADOT shall include adjustment, as necessary, of the trip actuating device so that it actuates at the required setpoint within the necessary accuracy. The TADOT may be performed by means of any series of sequential, overlapping, or total channel steps. |

Table 1.1-1 (page 1 of 1)
MODES

| MODE | TITLE | REACTIVITY CONDITION (k_{eff}) | % RATED THERMAL POWER ^(a) | AVERAGE REACTOR COOLANT TEMPERATURE (°F) |
|------|------------------------------|--|--|--|
| 1 | Power Operation | ≥ 0.99 | > 5 | NA |
| 2 | Startup | ≥ 0.99 | ≤ 5 | NA |
| 3 | Hot Standby | < 0.99 | NA | ≥ 350 |
| 4 | Hot Shutdown ^(b) | < 0.99 | NA | $350 > T_{avg} > 200$ |
| 5 | Cold Shutdown ^(b) | < 0.99 | NA | ≤ 200 |
| 6 | Refueling ^(c) | NA | NA | NA |

(a) Excluding decay heat.

(b) All reactor vessel head closure bolts fully tensioned.

(c) One or more reactor vessel head closure bolts less than fully tensioned.

1.0 USE AND APPLICATION

1.2 Logical Connectors

PURPOSE

The purpose of this section is to explain the meaning of logical connectors.

Logical connectors are used in Technical Specifications (TS) to discriminate between, and yet connect, discrete Conditions, Required Actions, Completion Times, Surveillances, and Frequencies. The only logical connectors that appear in TS are AND and OR. The physical arrangement of these connectors constitutes logical conventions with specific meanings.

BACKGROUND

Several levels of logic may be used to state Required Actions. These levels are identified by the placement (or nesting) of the logical connectors and by the number assigned to each Required Action. The first level of logic is identified by the first digit of the number assigned to a Required Action and the placement of the logical connector in the first level of nesting (i.e., left justified with the number of the Required Action). The successive levels of logic are identified by additional digits of the Required Action number and by successive indentations of the logical connectors.

When logical connectors are used to state a Condition, Completion Time, Surveillance, or Frequency, only the first level of logic is used, and the logical connector is left justified with the statement of the Condition, Completion Time, Surveillance, or Frequency.

1.2 Logical Connectors

EXAMPLES The following examples illustrate the use of logical connectors.

EXAMPLE 1.2-1

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|-----------------|---|--------------------|
| A. LCO not met. | A.1 Verify ... <u>AND</u> A.2 Restore ... | |

In this example the logical connector AND is used to indicate that when in Condition A, both Required Actions A.1 and A.2 must be completed.

1.2 Logical Connectors

EXAMPLES (continued)

EXAMPLE 1.2-2

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|-----------------|---|-----------------|
| A. LCO not met. | A.1 Trip ... <u>OR</u> A.2.1 Verify ... <u>AND</u> A.2.2.1 Reduce ... <u>OR</u> A.2.2.2 Perform ... <u>OR</u> A.3 Align ... | |

This example represents a more complicated use of logical connectors. Required Actions A.1, A.2, and A.3 are alternative choices, only one of which must be performed as indicated by the use of the logical connector OR and the left justified placement. Any one of these three Actions may be chosen. If A.2 is chosen, then both A.2.1 and A.2.2 must be performed as indicated by the logical connector AND. Required Action A.2.2 is met by performing A.2.2.1 or A.2.2.2. The indented position of the logical connector OR indicates that A.2.2.1 and A.2.2.2 are alternative choices, only one of which must be performed.

1.0 USE AND APPLICATION

1.3 Completion Times

PURPOSE The purpose of this section is to establish the Completion Time convention and to provide guidance for its use.

BACKGROUND Limiting Conditions for Operation (LCOs) specify minimum requirements for ensuring safe operation of the unit. The ACTIONS associated with an LCO state Conditions that typically describe the ways in which the requirements of the LCO can fail to be met. Specified with each stated Condition are Required Action(s) and Completion Time(s).

DESCRIPTION The Completion Time is the amount of time allowed for completing a Required Action. It is referenced to the time of discovery of a situation (e.g., inoperable equipment or variable not within limits) that requires entering an ACTIONS Condition unless otherwise specified, providing the unit is in a MODE or specified condition stated in the Applicability of the LCO. Required Actions must be completed prior to the expiration of the specified Completion Time. An ACTIONS Condition remains in effect and the Required Actions apply until the Condition no longer exists or the unit is not within the LCO Applicability.

If situations are discovered that require entry into more than one Condition at a time within a single LCO (multiple Conditions), the Required Actions for each Condition must be performed within the associated Completion Time. When in multiple Conditions, separate Completion Times are tracked for each Condition starting from the time of discovery of the situation that required entry into the Condition.

Once a Condition has been entered, subsequent trains, subsystems, components, or variables expressed in the Condition, discovered to be inoperable or not within limits, will not result in separate entry

1.3 Completion Times

DESCRIPTION
(continued)

into the Condition, unless specifically stated. The Required Actions of the Condition continue to apply to each additional failure, with Completion Times based on initial entry into the Condition.

However, when a subsequent train, subsystem, component, or variable expressed in the Condition is discovered to be inoperable or not within limits, the Completion Time(s) may be extended. The Completion Time extension cannot be used to extend the stated Completion Time for the first inoperable train, subsystem, component, or variable. To apply this Completion Time extension, two criteria must first be met. The subsequent inoperability:

- a. Must exist concurrent with the first inoperability; and
- b. Must remain inoperable or not within limits after the first inoperability is resolved.

The total Completion Time allowed for completing a Required Action to address the subsequent inoperability shall be limited to the more restrictive of either:

- a. The stated Completion Time, as measured from the initial entry into the Condition, plus an additional 24 hours; or
- b. The stated Completion Time as measured from discovery of the subsequent inoperability.

The above Completion Time extensions do not apply to those Specifications that have exceptions that allow completely separate re-entry into the Condition (for each train, subsystem, component, or variable expressed in the Condition) and separate tracking of Completion Times based on this re-entry. These exceptions are stated in individual Specifications.

The above Completion Time extension does not apply to a Completion Time with a modified "time zero." This modified "time

1.3 Completion Times

DESCRIPTION
(continued)

zero” may be expressed as a repetitive time (i.e., “once per 8 hours,” where the Completion Time is referenced from a previous completion of the Required Action versus the time of Condition entry). An example of a modified “time zero” with the Completion Time expressed as “once per 8 hours” is illustrated in Example 1.3-6, Condition A. In this example, the Completion Time may not be extended.

1.3 Completion Times (continued)

EXAMPLES

The following examples illustrate the use of Completion Times with different types of Conditions and changing Conditions.

EXAMPLE 1.3-1

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|---------------------------------|-----------------|
| B. Required Action and associated Completion Time not met. | B.1 Be in MODE 3. <u>AND</u> | 6 hours |
| | B.2 Be in MODE 5. | 36 hours |

Condition B has two Required Actions. Each Required Action has its own separate Completion Time. Each Completion Time is referenced to the time that Condition B is entered.

The Required Actions of Condition B are to be in MODE 3 within 6 hours AND in MODE 5 within 36 hours. A total of 6 hours is allowed for reaching MODE 3 and a total of 36 hours (not 42 hours) is allowed for reaching MODE 5 from the time that Condition B was entered. If MODE 3 is reached within 3 hours, the time allowed for reaching MODE 5 is the next 33 hours because the total time allowed for reaching MODE 5 is 36 hours.

If Condition B is entered while in MODE 3, the time allowed for reaching MODE 5 is the next 36 hours.

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-2

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|---------------------------------------|-----------------|
| A. One train inoperable. | A.1 Restore train to OPERABLE status. | 7 days |
| B. Required Action and associated Completion Time not met. | B.1 Be in MODE 3. AND | 6 hours |
| | B.2 Be in MODE 5. | 36 hours |

When a train is declared inoperable, Condition A is entered. If the train is not restored to OPERABLE status within 7 days, Condition B is also entered and the Completion Time clocks for Required Actions B.1 and B.2 start. If the inoperable train is restored to OPERABLE status after Condition B is entered, Condition A and B are exited, and therefore, the Required Actions of Condition B may be terminated.

When a second train is declared inoperable while the first train is still inoperable, Condition A is not re-entered for the second train. LCO 3.0.3 is entered, since the ACTIONS do not include a Condition for more than one inoperable train. The Completion Time clock for Condition A does not stop after LCO 3.0.3 is entered, but continues to be tracked from the time Condition A was initially entered.

While in LCO 3.0.3, if either of the inoperable trains is restored to OPERABLE status and the Completion Time for Condition A has

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-2 (continued)

not expired, LCO 3.0.3 may be exited and operation continued in accordance with Condition A.

While in LCO 3.0.3, if either of the inoperable trains is restored to OPERABLE status and the Completion Time for Condition A has expired, LCO 3.0.3 may be exited and operation continued in accordance with Condition B. The Completion Time for Condition B is tracked from the time the Condition A Completion Time expired.

Upon restoring either of the trains to OPERABLE status, the Condition A Completion Time is not reset, but continues from the time the first train was declared inoperable. This Completion Time may be extended if the train restored to OPERABLE status was the first inoperable train. A 24 hour extension to the stated 7 days is allowed, provided this does not result in the second train being inoperable for > 7 days.

1.3 Completion Times

EXAMPLES
(continued)

EXAMPLE 1.3-3

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|---|---|------------------------------|
| A. One Function X train inoperable. | A.1 Restore Function X train to OPERABLE status. | 7 days |
| B. One Function Y train inoperable. | B.1 Restore Function Y train to OPERABLE status. | 72 hours |
| C. One Function X train inoperable. <u>AND</u> One Function Y train inoperable. | C.1 Restore Function X train to OPERABLE status. <u>OR</u> C.2 Restore Function Y train to OPERABLE status. | 72 hours 72 hours |

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-3 (continued)

When one Function X train and one Function Y train are inoperable, Condition A and Condition B are concurrently applicable. The Completion Times for Condition A and Condition B are tracked separately for each train starting from the time each train was declared inoperable and the Condition was entered. A separate Completion Time is established for Condition C and tracked from the time the second train was declared inoperable (i.e., the time the situation described in Condition C was discovered).

If Required Action C.2 is completed within the specified Completion Time, Conditions B and C are exited. If the Completion Time for Required Action A.1 has not expired, operation may continue in accordance with Condition A. The remaining Completion Time in Condition A is measured from the time the affected train was declared inoperable (i.e., initial entry into Condition A).

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-4

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|--|-----------------|
| A. One or more valves inoperable. | A.1 Restore valve(s) to OPERABLE status. | 4 hours |
| B. Required Action and associated Completion Time not met. | B.1 Be in MODE 3. <u>AND</u> | 6 hours |
| | B.2 Be in MODE 4. | 12 hours |

A single Completion Time is used for any number of valves inoperable at the same time. The Completion Time associated with Condition A is based on the initial entry into Condition A and is not tracked on a per valve basis. Declaring subsequent valves inoperable, while Condition A is still in effect, does not trigger the tracking of separate Completion Times.

Once one of the valves has been restored to OPERABLE status, the Condition A Completion Time is not reset, but continues from the time the first valve was declared inoperable. The Completion Time may be extended if the valve restored to OPERABLE status was the first inoperable valve. The Condition A Completion Time may be extended for up to 4 hours provided this does not result in any subsequent valve being inoperable for > 4 hours.

If the Completion Time of 4 hours (plus the extension) expires while one or more valves are still inoperable, Condition B is entered.

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-5

ACTIONS

-----NOTE-----
Separate Condition entry is allowed for each inoperable valve.

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|---------------------------------------|-----------------|
| A. One or more valves inoperable. | A.1 Restore valve to OPERABLE status. | 4 hours |
| B. Required Action and associated Completion Time not met. | B.1 Be in MODE 3. <u>AND</u> | 6 hours |
| | B.2 Be in MODE 4. | 12 hours |

The Note above the ACTIONS Table is a method of modifying how the Completion Time is tracked. If this method of modifying how the Completion Time is tracked was applicable only to a specific Condition, the Note would appear in that Condition rather than at the top of the ACTIONS Table.

The Note allows Condition A to be entered separately for each inoperable valve, and Completion Times tracked on a per valve basis. When a valve is declared inoperable, Condition A is entered and its Completion Time starts. If subsequent valves are declared inoperable, Condition A is entered for each valve and separate Completion Times start and are tracked for each valve.

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-5 (continued)

If the Completion Time associated with a valve in Condition A expires, Condition B is entered for that valve. If the Completion Times associated with subsequent valves in Condition A expire, Condition B is entered separately for each valve and separate Completion Times start and are tracked for each valve. If a valve that caused entry into Condition B is restored to OPERABLE status, Condition B is exited for that valve.

Since the Note in this example allows multiple Condition entry and tracking of separate Completion Times, Completion Time extensions do not apply.

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-6

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|---|------------------|
| A. One channel inoperable. | A.1 Perform SR 3.x.x.x. | Once per 8 hours |
| | <u>OR</u> A.2 Reduce THERMAL POWER to $\leq 50\%$ RTP. | 8 hours |
| B. Required Action and associated Completion Time not met. | B.1 Be in MODE 3. | 6 hours |

Entry into Condition A offers a choice between Required Action A.1 or A.2. Required Action A.1 has a "once per" Completion Time, which qualifies for the 1.25 times the stated Frequency extension, per SR 3.0.2, to each performance after the initial performance. The initial 8 hour interval of Required Action A.1 begins when Condition A is entered and the initial performance of Required Action A.1 must be complete within the first 8 hour interval. If Required Action A.1 is followed, and the Required Action is not met within the Completion Time (plus the extension allowed by SR 3.0.2), Condition B is entered. If Required Action A.2 is followed and the Completion Time of 8 hours is not met, Condition B is entered.

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-6 (continued)

If after entry into Condition B, Required Action A.1 or A.2 is met, Condition B is exited and operation may then continue in Condition A.

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-7

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|---|---|
| A. One subsystem inoperable. | A.1 Verify affected subsystem isolated. | 1 hour <u>AND</u> Once per 8 hours thereafter |
| | <u>AND</u> A.2 Restore subsystem to OPERABLE status. | 72 hours |
| B. Required Action and associated Completion Time not met. | B.1 Be in MODE 3. | 6 hours |
| | <u>AND</u> B.2 Be in MODE 5. | 36 hours |

Required Action A.1 has two Completion Times. The 1 hour Completion Time begins at the time the Condition is entered and each "Once per 8 hours thereafter" interval begins upon performance of Required Action A.1.

If after Condition A is entered, Required Action A.1 is not met within either the initial 1 hour or any subsequent 8 hour interval

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-7 (continued)

from the previous performance (plus the extension allowed by SR 3.0.2), Condition B is entered. The Completion Time clock for Condition A does not stop after Condition B is entered, but continues from the time Condition A was initially entered. If Required Action A.1 is met after Condition B is entered, Condition B is exited and operation may continue in accordance with Condition A, provided the Completion Time for Required Action A.2 has not expired.

IMMEDIATE COMPLETION TIME

When "Immediately" is used as a Completion Time, the Required Action should be pursued without delay and in a controlled manner.

1.0 USE AND APPLICATION

1.4 Frequency

| | |
|---------|--|
| PURPOSE | The purpose of this section is to define the proper use and application of Frequency requirements. |
|---------|--|

| | |
|-------------|--|
| DESCRIPTION | <p>Each Surveillance Requirement (SR) has a specified Frequency in which the Surveillance must be met in order to meet the associated LCO. An understanding of the correct application of the specified Frequency is necessary for compliance with the SR.</p> |
|-------------|--|

The "specified Frequency" is referred to throughout this section and each of the Specifications of Section 3.0, Surveillance Requirement (SR) Applicability. The "specified Frequency" consists of the requirements of the Frequency column of each SR as well as certain Notes in the Surveillance column that modify performance requirements.

Sometimes special situations dictate when the requirements of a Surveillance are to be met. They are "otherwise stated" conditions allowed by SR 3.0.1. They may be stated as clarifying Notes in the Surveillance, as part of the Surveillance, or both.

Situations where a Surveillance could be required (i.e., its Frequency could expire), but where it is not possible or not desired that it be performed until sometime after the associated LCO is within its Applicability, represent potential SR 3.0.4 conflicts. To avoid these conflicts, the SR (i.e., the Surveillance or the Frequency) is stated such that it is only "required" when it can be and should be performed. With an SR satisfied, SR 3.0.4 imposes no restriction.

The use of "met" or "performed" in these instances conveys specific meanings. A Surveillance is "met" only when the acceptance criteria are satisfied. Known failure of the requirements of a

1.4 Frequency

DESCRIPTION (continued)

Surveillance, even without a Surveillance specifically being “performed,” constitutes a Surveillance not “met.” “Performance” refers only to the requirement to specifically determine the ability to meet the acceptance criteria.

Some Surveillances contain notes that modify the Frequency of performance or the conditions during which the acceptance criteria must be satisfied. For these Surveillances, the MODE-entry restrictions of SR 3.0.4 may not apply. Such a Surveillance is not required to be performed prior to entering a MODE or other specified condition in the Applicability of the associated LCO if any of the following three conditions are satisfied:

- a. The Surveillance is not required to be met in the MODE or other specified condition to be entered; or
- b. The Surveillance is required to be met in the MODE or other specified condition to be entered, but has been performed within the specified Frequency (i.e., it is current) and is known not to be failed; or
- c. The Surveillance is required to be met, but not performed, in the MODE or other specified condition to be entered, and is known not to be failed.

Examples 1.4-3, 1.4-4, 1.4-5, and 1.4-6 discuss these special situations.

EXAMPLES

The following examples illustrate the various ways that Frequencies are specified. In these examples, the Applicability of the LCO (LCO not shown) is MODES 1, 2, and 3.

1.4 Frequency

EXAMPLES
(continued)EXAMPLE 1.4-1SURVEILLANCE REQUIREMENTS

| SURVEILLANCE | FREQUENCY |
|------------------------|-----------|
| Perform CHANNEL CHECK. | 12 hours |

Example 1.4-1 contains the type of SR most often encountered in the Technical Specifications (TS). The Frequency specifies an interval (12 hours) at which the associated Surveillance is scheduled to be performed. Although the Frequency is stated as 12 hours, the SR may be performed between 0.75 to 1.25 times the stated Frequency as allowed by SR 3.0.2 for operational flexibility. The schedule of this interval continues at all times, even when the SR is not required to be met per SR 3.0.1 (such as when the equipment is inoperable, a variable is outside specified limits, or the unit is outside the Applicability of the LCO). If the interval specified by SR 3.0.2 is exceeded while the unit is in a MODE or other specified condition in the Applicability of the LCO, and the performance of the Surveillance is not otherwise modified (refer to Example 1.4-3), then SR 3.0.3 becomes applicable.

If the interval as specified by SR 3.0.2 is exceeded while the unit is not in a MODE or other specified condition in the Applicability of the LCO for which performance of the SR is required, the Surveillance must be performed within the Frequency requirements of SR 3.0.2 prior to entry into the MODE or other specified condition. Failure to do so would result in a violation of SR 3.0.4.

1.4 Frequency

EXAMPLES
(continued)EXAMPLE 1.4-2SURVEILLANCE REQUIREMENTS

| SURVEILLANCE | FREQUENCY |
|-------------------------------|--|
| Verify flow is within limits. | Once within 12 hours after ≥ 25% RTP <u>AND</u> 24 hours thereafter |

Example 1.4-2 has two Frequencies. The first is a one time performance Frequency, and the second is of the type shown in Example 1.4-1. The logical connector "AND" indicates that both Frequency requirements must be met. Each time reactor power is increased from a power level < 25% RTP to ≥ 25% RTP, the Surveillance must be performed within 12 hours.

The use of "once" indicates a single performance will satisfy the specified Frequency (assuming no other Frequencies are connected by "AND"). This type of Frequency does not qualify for the 1.25 times the stated Frequency extension allowed by SR 3.0.2.

"Thereafter" indicates future performances are scheduled, but are required but only after a specified condition is first met (i.e., the "once" performance in this example). If reactor power decreases to < 25% RTP, the Surveillance is not required to be completed, but the scheduled intervals continue.

1.4 Frequency

EXAMPLES
(continued)EXAMPLE 1.4-3SURVEILLANCE REQUIREMENTS

| SURVEILLANCE | FREQUENCY |
|--|-----------|
| -----NOTE----- Not required to be performed until 12 hours after $\geq 25\%$ RTP. ----- | |
| Perform channel adjustment. | 7 days |

The interval continues, whether or not the unit operation is $< 25\%$ RTP between performances.

As the Note modifies the required performance of the Surveillance, it is construed to be part of the "specified Frequency." Should the 7 day interval be exceeded while operation is $< 25\%$ RTP, this Note allows 12 hours after power reaches $\geq 25\%$ RTP to perform the Surveillance. The Surveillance is still considered to be performed within the "specified Frequency." Therefore, if the Surveillance were not performed within the 7 day (plus the extension allowed by SR 3.0.2) interval, but operation was $< 25\%$ RTP, it would not constitute a failure of the SR or failure to meet the LCO. Also, no violation of SR 3.0.4 occurs when changing MODES, even with the 7 day Frequency not met, provided operation does not exceed 12 hours with power $\geq 25\%$ RTP.

Once the unit reaches 25% RTP, 12 hours would be allowed for completing the Surveillance. If the Surveillance were not performed within this 12 hour interval, there would then be a failure to perform a Surveillance within the specified Frequency, and the provisions of SR 3.0.3 would apply.

1.4 Frequency

EXAMPLES
(continued)EXAMPLE 1.4-4SURVEILLANCE REQUIREMENTS

| SURVEILLANCE | FREQUENCY |
|---|-----------|
| -----NOTE----- Only required to be met in MODE 1. ----- | |
| Verify leakage rates are within limits. | 24 hours |

Example 1.4-4 specifies that the requirements of this Surveillance do not have to be met until the unit is in MODE 1. The interval measurement for the Frequency of this Surveillance continues at all times, as described in Example 1.4-1. However, the Note constitutes an "otherwise stated" exception to the Applicability of this Surveillance. Therefore, if the Surveillance were not performed within the 24 hour interval (plus the extension allowed by SR 3.0.2), but the unit was not in MODE 1, there would be no failure of the SR nor failure to meet the LCO. Therefore, no violation of SR 3.0.4 occurs when changing MODES, even with the 24 hour Frequency exceeded, provided the MODE change was not made into MODE 1. Prior to entering MODE 1 (assuming again that the 24 hour Frequency were not met), SR 3.0.4 would require satisfying the SR.

1.4 Frequency

EXAMPLES
(continued)EXAMPLE 1.4-5SURVEILLANCE REQUIREMENTS

| SURVEILLANCE | FREQUENCY |
|---|-----------|
| -----NOTE----- Only required to be performed in MODE 1. ----- | |
| Perform complete cycle of the valve. | 7 days |

The interval continues, whether or not the unit operation is in MODE 1, 2, or 3 (the assumed Applicability of the associated LCO) between performances.

As the Note modifies the required performance of the Surveillance, the Note is construed to be part of the "specified Frequency." Should the 7 day interval be exceeded while operation is not in MODE 1, this Note allows entry into and operation in MODES 2 and 3 to perform the Surveillance. The Surveillance is still considered to be performed within the "specified Frequency" if completed prior to entering MODE 1. Therefore, if the Surveillance were not performed within the 7 day (plus the extension allowed by SR 3.0.2) interval, but operation was not in MODE 1, it would not constitute a failure of the SR or failure to meet the LCO. Also, no violation of SR 3.0.4 occurs when changing MODES, even with the 7 day Frequency not met, provided operation does not result in entry into MODE 1.

Once the unit reaches MODE 1, the requirement for the Surveillance to be performed within its specified Frequency applies and would require that the Surveillance had been performed. If the Surveillance were not performed prior to entering MODE 1, there would then be a failure to perform a Surveillance within the specified Frequency, and the provisions of SR 3.0.3 would apply.

1.4 Frequency

EXAMPLES
(continued)EXAMPLE 1.4-6SURVEILLANCE REQUIREMENTS

| SURVEILLANCE | FREQUENCY |
|--|-----------|
| -----NOTE----- Not required to be met in MODE 3. ----- | |
| Verify parameter is within limits. | 24 hours |

Example 1.4-6 specifies that the requirements of this Surveillance do not have to be met while the unit is in MODE 3 (the assumed Applicability of the associated LCO is MODES 1, 2, and 3). The interval measurement for the Frequency of this Surveillance continues at all times, as described in Example 1.4-1. However, the Note constitutes an "otherwise stated" exception to the Applicability of this Surveillance. Therefore, if the Surveillance were not performed within the 24 hour interval (plus the extension allowed by SR 3.0.2), and the unit was in MODE 3, there would be no failure of the SR nor failure to meet the LCO. Therefore, no violation of SR 3.0.4 occurs when changing MODES to enter MODE 3, even with the 24 hour Frequency exceeded, provided the MODE change does not result in entry into MODE 2. Prior to entering MODE 2 (assuming again that the 24 hour Frequency were not met), SR 3.0.4 would require satisfying the SR.

PACKAGE 1.0

USE AND APPLICATION

PART C

MARKUP OF PRAIRIE ISLAND CURRENT TECHNICAL SPECIFICATIONS

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| 9 | TS.1-5 | 29 | New |
| 10 | TS.1-5 Overflow | 30 | New |
| 11 | TS.1-6 | 31 | New |
| 12 | TS.1-6 Overflow | 32 | TS.4.1-1 |
| 13 | Table TS.1-1 | 33 | New |
| 14 | New | 34 | New |
| 15 | New | 35 | New |
| 16 | New | 36 | New |
| 17 | New | 37 | New |
| 18 | New | 38 | New |
| 19 | New | 39 | New |
| 20 | New | 40 | New |

PRAIRIE ISLAND NUCLEAR GENERATING PLANT UNITS 1 AND 2

Improved Technical Specifications Conversion Submittal

1.1

1.0 USE AND APPLICATION

A1.0-01

1.1 Definitions DEFINITIONS

NOTE

The defined terms of this section appear in capitalized type and are applicable throughout these Technical Specifications.

Term

Definition

ACTIONS

ACTIONS shall be that part of a Specification that which prescribes Required Actions to be taken remedial measures required under designated conditions within specified Completion Times.

A1.0-01

ACTUATION LOGIC TEST

An ACTUATION LOGIC TEST shall be the application of various simulated or actual input combinations in conjunction with each possible interlock logic state required for OPERABILITY of a logic circuit and the verification of the required logic output.

M1.0-02

AXIAL FLUX DIFFERENCE (AFD)

AFD shall be the difference in normalized Flux signals between the top and bottom halves of a two section excore neutron detector.

M1.0-02

AUXILIARY BUILDING SPECIAL VENTILATION ZONE INTEGRITY

~~AUXILIARY BUILDING SPECIAL VENTILATION ZONE INTEGRITY shall exist when:~~

LR1.0-03

- ~~1. Single doors in the Auxiliary Building Special Ventilation Zone are locked closed, and~~
- ~~2. At least one door in each Auxiliary Building Special Ventilation Zone air lock type passage is closed, and~~
- ~~3. The valves and actuation circuits that isolate the Auxiliary Building Normal Ventilation System following an accident are OPERABLE.~~
- ~~4.3. The Auxiliary Building Special Ventilation System is OPERABLE.~~

CHANNEL CALIBRATION

A CHANNEL CALIBRATION shall be the adjustment, as necessary, of the channel output such that it responds within the necessary required range and accuracy to known values of the parameter that the channel monitors input. The CHANNEL CALIBRATION shall encompass all devices in the channel required for channel OPERABILITY. Calibration of instrument channels with resistance temperature detector (RTD) or thermocouple sensors may consist of an in-place qualitative assessment of sensor behavior and normal calibration of the remaining adjustable devices in the channel. The entire channel including the sensors and alarm, interlock and/or trip functions and The CHANNEL CALIBRATION may be performed by means of any series of sequential, overlapping, or total channel steps such that the entire channel is calibrated.

A1.0-04

CHANNEL CHECK

CHANNEL CHECK shall be the qualitative assessment, determination of acceptable OPERABILITY by observation of channel behavior during operation. This determination shall include, where possible, comparison of the channel indication and status with other indications or status derived from independent instrument channels measuring the same parameter variable.

A1.0-01

CHANNEL OPERATIONAL FUNCTIONAL TEST (COT)

A COT CHANNEL FUNCTIONAL TEST shall be the consists of injection of a simulated or actual signal into the channel as close to the primary sensor output as practicable to verify that it is OPERABILITY of all devices in the channel required for channel OPERABILITY, including alarm and/or trip initiating action. The COT shall include adjustments, as necessary, of the required alarm, interlock, and trip setpoints required for channel OPERABILITY such that the setpoints are within the necessary range and accuracy. The COT may be performed by means of any series of sequential, overlapping, or total channel steps.

A1.0-06

CHANNEL RESPONSE TEST

A CHANNEL RESPONSE TEST consists of injecting a simulated signal into the channel as near the sensor as practicable to measure the time for electronics and relay actions, including the output scram relay.

M1.0-13

8/10/94

CONTAINMENT INTEGRITY

~~CONTAINMENT INTEGRITY shall exist when:~~

- ~~1. Penetrations required to be isolated during accident conditions are either:~~

LR1.0-07

~~a. Capable of being closed by an OPERABLE containment automatic isolation valve system, or~~

~~b. Closed by manual valves, blind flanges, or deactivated automatic valves secured in their closed positions, except as provided in Specifications 3.6.C and 3.6.D.~~

- ~~2. The equipment hatch is closed and sealed.~~

- ~~3. Each air lock is in compliance with the requirements of Specification 3.6.M.~~

- ~~4. The containment leakage rates are within their required limits.~~

CORE ALTERATION

CORE ALTERATION shall be the movement of any fuel, sources, or reactivity control or manipulation of any component within the reactor pressure vessel with the vessel head removed and fuel in the vessel, which may affect core reactivity. Suspension of CORE ALTERATIONS shall not preclude completion of movement of a component to a safe conservative position.

A1.0-01

CORE OPERATING LIMITS REPORT (COLR)

The COLR CORE OPERATING LIMITS REPORT is the unit-specific document that provides cycle-specific parameter core operating limits for the current operating-reload cycle. These cycle-specific parameter core operating limits shall be determined for each reload cycle in accordance with Specification 3.6.5-6.6-E. Plant operation within these operating limits is addressed in individual specifications.

A1.0-01

A1.0-05

1/24/96

DOSE EQUIVALENT I-131

DOSE EQUIVALENT I-131 is that concentration of I-131 (uCi/gram) ~~that which~~ alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134, and I-135 actually present. The thyroid dose conversion factors used for this calculation shall be those listed in Table III of TID-14844, ~~AEC, 1962~~ "Calculation of Distance Factors for Power and Test Reactor Sites".

A1.0-01

E-AVERAGE
DISINTEGRATION ENERGY

E shall be the average (weighted in proportion to the concentration of each radionuclide in the ~~reactor coolant at the time of sampling~~) of the sum of the average beta and gamma energies per disintegration (in MeV) for isotopes, other than iodines, with half lives ~~greater than~~ 15 minutes, making up at least 95% of the total non-iodine activity in the coolant.

A1.0-01

~~LIMITING SAFETY SYSTEM
SETTINGS~~

~~LIMITING SAFETY SYSTEM SETTINGS are settings, as specified in Section 2.3, for automatic protective devices related to those variables having significant safety functions.~~

A1.0-08

LEAKAGE

LEAKAGE from the Reactor Coolant System (RCS) shall be:

M1.0-02

a. Identified LEAKAGE

1. LEAKAGE, such as that from pump seals or valve packing (except reactor coolant pump (RCP) seal water injection or leakoff), that is captured and conducted to collection systems or a sump or collecting tank;

2. LEAKAGE into the containment atmosphere from sources that are both specifically located and known either not to interfere with the operation of leakage detection systems or not to be pressure boundary LEAKAGE; or

3. RCS LEAKAGE through a steam generator (SG) to the Secondary System;

b. Unidentified LEAKAGE

All LEAKAGE (except RCP seal water injection or leakoff) that is not identified LEAKAGE;

c. Pressure Boundary LEAKAGE

LEAKAGE (except SG LEAKAGE) through a nonisolable fault in an RCS component body, pipe wall, or vessel wall.

OPERATIONAL MODE
MODE

An OPERATIONAL MODE (i.e., MODE) shall correspond to any one inclusive combination of core reactivity condition, power level, and average reactor coolant temperature and reactor vessel head closure bolt tensioning specified in Table TS-1.1-1 with fuel in the reactor vessel.

A1.0-01

5/4/98

OPERABLE - OPERABILITY

A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified safety function(s) ~~and when~~. ~~Implicit in this definition shall be the assumption that all necessary attendant instrumentation, controls, normal or emergency electrical power sources, cooling and or seal water, lubrication, or other auxiliary equipment that are required for the system, subsystem, train, component, or device to perform its specified safety function(s) are also capable of performing their related support function(s).~~

A1.0-01

~~When a system, subsystem, train, component or device is determined to be inoperable solely because its emergency power source is inoperable, or solely because its normal power source is inoperable, it may be considered OPERABLE for the purpose of satisfying the requirements of its applicable Limiting Condition for Operation, provided: (1) its corresponding normal or emergency power source is OPERABLE, and (2) all of its redundant system(s), subsystem(s), train(s), component(s) and device(s) are OPERABLE, or likewise satisfy the requirements of this paragraph.~~

A1.0-09

~~The OPERABILITY of a system or component shall be considered to be established when: (1) it satisfies the Limiting Conditions for Operation in Specification 3.0, (2) it has been tested periodically in accordance with Specification 4.0 and has met its performance requirements, and (3) its condition is consistent with the two paragraphs above.~~

PHYSICS TESTS

PHYSICS TESTS shall be those tests performed to measure the fundamental nuclear characteristics of the reactor core and related instrumentation. These tests are:

A1.0-11

a. Described in Appendix J of the USAR, Pre-Operational and Startup Tests;

b. Authorized under the provisions of 10 CFR 50.59, or

c. Otherwise approved by the Nuclear Regulatory Commission. PHYSICS TESTS are conducted such that the core power is sufficiently reduced to allow for the perturbation due to the test and therefore avoid exceeding power distribution limits in Specification 3.10.B.

~~Low power PHYSICS TESTS are run at reactor powers less than 2% of rated power.~~

PRESSURE AND
TEMPERATURE LIMITS
REPORT (PTLR)

The PTLR is the unit specific document that provides reactor vessel pressure and temperature limits, including heatup and cooldown rates, and the OPPS arming temperature for the current reactor vessel fluence period. These pressure and temperature limits shall be determined for each fluence period in accordance with Specification 5.6.6 6.7.A.7. Plant operation within these operating limits is addressed in

A1.0-01

ICO 3.4.3, "RCS Pressure and Temperature (P/T) Limits," LCO 3.4.12, "Low Temperature Overpressure Protection (LTOP) > Safety Injection (SI) Pump Disable Temperature," and LCO 3.4.13, "Low Temperature Overpressure Protection (LTOP) < Safety Injection (SI) Pump Disable Temperature." the individual specifications.

PROTECTION
INSTRUMENTATION AND
LOGIC

1. PROTECTION SYSTEM

~~The PROTECTION SYSTEM consists of both the reactor trip system and the engineered safety feature system. The PROTECTION SYSTEM encompasses all electrical and mechanical devices and circuitry (from sensors through the actuating devices) which are required to operate in order to produce the required protective function. Tests of protection systems will be considered acceptable when overlapped if run in parts.~~

A1.0-12

2. PROTECTION SYSTEM CHANNEL

~~A PROTECTION SYSTEM CHANNEL is an arrangement of components and modules as required to generate a single protective action signal when required by a unit condition. The channel loses its identity where single action signals are combined.~~

3. LOGIC CHANNEL

~~A LOGIC CHANNEL is a group of relay contact matrices which operate in response to analog channel signals to generate a protective action signal.~~

QUADRANT POWER TILT
RATIO (QPTR)

QPTR QUADRANT POWER TILT RATIO shall be the ratio of the maximum quadrant power indicated by an upper excore detector calibrated output to the average PI reactor power indicated by the upper excore detectors calibrated outputs, or the ratio of the maximum quadrant power indicated by a lower excore detector calibrated output to the average PI reactor power indicated by the lower excore detectors calibrated outputs, whichever is greater. Power is proportional to excore detector current times its calibration factor.

A1.0-01

RATED THERMAL POWER
(RTP)

~~RTP~~ATED THERMAL POWER shall be ~~the~~ total reactor core heat transfer rate to the reactor coolant of 1650 megawatts thermal (MWt).

A1.0-01

REACTOR TRIP SYSTEM
(RTS) RESPONSE TIME

The ~~RTS RESPONSE TIME~~ shall be that time interval from when the monitored parameter exceeds its RTS trip setpoint at the channel sensor output until opening of a reactor trip breaker. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured.

M1.0-13

REPORTABLE EVENT

A ~~REPORTABLE EVENT~~ shall be any of those conditions specified in Section 50.73 of 10 CFR Part 50.

LR1.0-14

SHIELD BUILDING
INTEGRITY

~~SHIELD BUILDING INTEGRITY shall exist when:~~

LR1.0-16

- ~~1. Each door in each access opening is closed except when the access opening is being used for normal transit entry and exit, then at least one door shall be closed, and~~
- ~~2. The shield building equipment opening is closed.~~
- ~~3. The Shield Building Ventilation System is OPERABLE.~~

SHUTDOWN MARGIN (SDM)

~~SDM SHUTDOWN MARGIN shall be the instantaneous amount of reactivity by which:~~

A1.0-01

~~a. 1) the reactor is subcritical;~~

or

~~b. 2) the reactor would be subcritical from its present condition assuming all rod cluster control assemblies (RCCAs) are fully inserted except for the single RCCA rod cluster control assembly of highest reactivity worth, which is assumed to be fully withdrawn. With any RCCA not capable of being fully inserted, the reactivity worth of the RCCA must be accounted for in the determination of SDM. In MODES 1 and 2, the fuel and moderator temperatures are changed to the nominal zero power design temperature.~~

M1.0-17

SOURCE CHECK

~~A SOURCE CHECK shall be the qualitative assessment of channel response when the channel sensor is exposed to a source of increased radioactivity.~~

A1.0-18

STAGGERED TEST BASIS

A STAGGERED TEST BASIS shall consist of the testing of one of the systems, subsystems, channels, or other designated components during the interval specified by the Surveillance Frequency, so that all systems, subsystems, channels, or other designated components are tested during n Surveillance Frequency intervals, where n is the total number of systems, subsystems, channels, or other designated components in the associated function.

A1.0-01

~~For example, the surveillance frequency for the automatic trip and interlock logic specifies that the functional testing of that system is monthly and that each train shall be tested at least every two months on a STAGGERED TEST BASIS. Per the definition above, for the automatic trip and interlock logic, the Surveillance Frequency interval is monthly and the number of trains (channels) is 2 (n=2). therefore, STAGGERED TEST BASIS requires one train be tested each month such that after two Surveillance Frequency intervals (two months) both trains will have been tested.~~

A1.0-19

STARTUP OPERATION

~~The process of heating up a reactor above 200°F, making it critical, and bringing it up to POWER OPERATION.~~

A1.0-21

THERMAL POWER

THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.

TRIP ACTUATING DEVICE OPERATIONAL TEST (TADOT)

A TADOT shall consist of operating the trip actuating device and verifying the OPERABILITY of all devices in the channel required for trip actuating device OPERABILITY. The TADOT shall include adjustment, as necessary, of the trip actuating device so that it actuates at the required setpoint within the necessary accuracy. The TADOT may be performed by means of any series of sequential, overlapping, or total channel steps.

M1.0-02

TABLE TS-1-1-1 (Page 1 of 1)

L1.0-22

OPERATIONAL MODES

| MODE | TITLE | REACTIVITY CONDITION (k_{eff}) | %RATED THERMAL POWER ^a | AVERAGE REACTOR COOLANT TEMPERATURE (°F) | REACTOR VESSEL HEAD CLOSURE BOLTS FULLY TENSIONED |
|------|--|--|---|--|--|
| 1 | POWER OPERATION | Critical 0.99 | > 52% | NA | YES |
| 2 | Startup HOT _STANDBY** | Critical 0.99 | ≤ 52% | NA | YES |
| 3 | HOT Standby SHUTDOWN** | Subcritical 0.99 | NA | ≥ 350°F | YES |
| 4 | Hot INTERMEDIATE SHUTDOWN(b)** | Subcritical 0.99 | NA | ← 350°F ≥ 200°F 350 > T _{ave} > 200 | YES |
| 5 | COLD SHUTDOWN(b) | Subcritical 0.99 | NA | ← 200°F | YES |
| 6 | REFUELING(c) | NA* | NA | NA | NO |

(a) Excluding decay heat.

(b) All reactor vessel head closure bolts fully tensioned.

(c) One or more reactor vessel head closure bolts less than fully tensioned.

Addressed
Elsewhere

Boron concentration of the reactor coolant system and the refueling cavity sufficient to ensure that the more restrictive of the following conditions is met:

- a. $K_{eff} \leq 0.95$.
- b. Boron concentration ≥ 2000 ppm, or
- c. Shutdown Margin as specified in the Core Operating Limits Report.

** Prairie Island specific MODE title, not consistent with Standard Technical Specification MODE titles. MODE numbers are consistent with Standard Technical Specification MODE numbers.

A1.0-24

1.0 USE AND APPLICATION

1.2 Logical Connectors

1.2

PURPOSE The purpose of this section is to explain the meaning of logical connectors.

Logical connectors are used in Technical Specifications (TS) to discriminate between, and yet connect, discrete Conditions, Required Actions, Completion Times, Surveillances, and Frequencies. The only logical connectors that appear in TS are AND and OR. The physical arrangement of these connectors constitutes logical conventions with specific meanings.

BACKGROUND Several levels of logic may be used to state Required Actions. These levels are identified by the placement (or nesting) of the logical connectors and by the number assigned to each Required Action. The first level of logic is identified by the first digit of the number assigned to a Required Action and the placement of the logical connector in the first level of nesting (i.e., left justified with the number of the Required Action). The successive levels of logic are identified by additional digits of the Required Action number and by successive indentations of the logical connectors.

When logical connectors are used to state a Condition, Completion Time, Surveillance, or Frequency, only the first level of logic is used, and the logical connector is left justified with the statement of the Condition, Completion Time, Surveillance, or Frequency.

EXAMPLES The following examples illustrate the use of logical connectors.

1.2 Logical Connectors

EXAMPLES EXAMPLE 1.2-1
(continued)

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|-----------------|---|-----------------|
| A. LCO not met. | A.1 Verify <u>AND</u> A.2 Restore | |

In this example the logical connector AND is used to indicate that when in Condition A, both Required Actions A.1 and A.2 must be completed.

1.2 Logical Connectors

EXAMPLES EXAMPLE 1.2-1

(continued)

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|-----------------|--|-----------------|
| A. LCO not met. | <p>A.1 Trip . . .</p> <p><u>OR</u></p> <p>A.2.1 Verify . . .</p> <p><u>AND</u></p> <p>A.2.2.1 Reduce . . .</p> <p><u>OR</u></p> <p>A.2.2.2 Perform . . .</p> <p><u>OR</u></p> <p>A.3 Align . . .</p> | |

This example represents a more complicated use of logical connectors. Required Actions A.1, A.2, and A.3 are alternative choices, only one of which must be performed as indicated by the use of the logical connector OR and the left justified placement. Any one of these three Actions may be chosen. If A.2 is chosen, then both A.2.1 and A.2.2 must be performed as indicated by the logical connector AND. Required Action A.2.2 is met by performing A.2.2.1 or A.2.2.2. The indented position of the logical connector OR indicates that A.2.2.1 and A.2.2.2 are alternative choices, only one of which must be performed.

1.0 USE AND APPLICATION

M1.0-26

1.3 Completion Times

1.3

PURPOSE The purpose of this section is to establish the Completion Time convention and to provide guidance for its use.

BACKGROUND Limiting Conditions for Operation (LCOs) specify minimum requirements for ensuring safe operation of the unit. The ACTIONS associated with an LCO state Conditions that typically describe the ways in which the requirements of the LCO can fail to be met. Specified with each stated Condition are Required Action(s) and Completion Time(s).

DESCRIPTION The Completion Time is the amount of time allowed for completing a Required Action. It is referenced to the time of discovery of a situation (e.g., inoperable equipment or variable not within limits) that requires entering an ACTIONS Condition unless otherwise specified, providing the unit is in a MODE or specified condition stated in the Applicability of the LCO. Required Actions must be completed prior to the expiration of the specified Completion Time. An ACTIONS Condition remains in effect and the Required Actions apply until the Condition no longer exists or the unit is not within the LCO Applicability.

If situations are discovered that require entry into more than one Condition at a time within a single LCO (multiple Conditions), the Required Actions for each Condition must be performed within the associated Completion Time. When in multiple Conditions, separate Completion Times are tracked for each Condition starting from the time of discovery of the situation that required entry into the Condition.

Once a Condition has been entered, subsequent trains, subsystems, components, or variables expressed in the Condition, discovered to be inoperable or not within limits, will not result in separate entry into the

1.3 Completion Times

DESCRIPTION Condition, unless specifically stated. The Required
(continued) Actions of the Condition continue to apply to each
additional failure, with Completion Times based on
initial entry into the Condition.

However, when a subsequent train, subsystem, component, or variable expressed in the Condition is discovered to be inoperable or not within limits, the Completion Time(s) may be extended. The Completion Time extension cannot be used to extend the stated Completion Time for the first inoperable train, subsystem, component, or variable. To apply this Completion Time extension, two criteria must first be met. The subsequent inoperability:

a. Must exist concurrent with the first inoperability; and

b. Must remain inoperable or not within limits after the first inoperability is resolved.

The total Completion Time allowed for completing a Required Action to address the subsequent inoperability shall be limited to the more restrictive of either:

a. The stated Completion Time, as measured from the initial entry into the Condition, plus an additional 24 hours; or

b. The stated Completion Time as measured from discovery of the subsequent inoperability.

The above Completion Time extensions do not apply to those Specifications that have exceptions that allow completely separate re-entry into the Condition (for each train, subsystem, component, or variable expressed in the Condition) and separate tracking of Completion Times based on this re-entry. These exceptions are stated in individual Specifications.

1.3 Completion Times

DESCRIPTION: The above Completion Time extension does not apply to a
(continued) Completion Time with a modified "time zero." This
modified "time zero" may be expressed as a repetitive
time (i.e., "once per 8 hours," where the Completion Time
is referenced from a previous completion of the Required
Action versus the time of Condition entry). An example
of a modified "time zero" with the Completion Time
expressed as "once per 8 hours" is illustrated in Example
1.3-6, Condition A. In this example, the Completion Time
may not be extended.

1.3 Completion Times (continued)

EXAMPLES The following examples illustrate the use of Completion Times with different types of Conditions and changing Conditions.

EXAMPLE 1.3-1

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|--------------------------|-----------------|
| B. Required Action and associated Completion Time not met. | B.1 Be in MODE 3. | 6 hours |
| | AND B.2 Be in MODE 5. | 36 hours |

Condition B has two Required Actions. Each Required Action has its own separate Completion Time. Each Completion Time is referenced to the time that Condition B is entered.

The Required Actions of Condition B are to be in MODE 3 within 6 hours AND in MODE 5 within 36 hours. A total of 6 hours is allowed for reaching MODE 3 and a total of 36 hours (not 42 hours) is allowed for reaching MODE 5 from the time that Condition B was entered. If MODE 3 is reached within 3 hours, the time allowed for reaching MODE 5 is the next 33 hours because the total time allowed for reaching MODE 5 is 36 hours.

If Condition B is entered while in MODE 3, the time allowed for reaching MODE 5 is the next 36 hours.

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-2

(continued)

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|---|---------------------|
| A. One train inoperable. | A.1 Restore train to OPERABLE status. | 7 days |
| B. Required Action and associated Completion Time not met. | B.1 Be in MODE 3. AND B.2 Be in MODE 5. | 6 hours 36 hours |

When a train is declared inoperable, Condition A is entered. If the train is not restored to OPERABLE status within 7 days, Condition B is also entered and the Completion Time clocks for Required Actions B.1 and B.2 start. If the inoperable train is restored to OPERABLE status after Condition B is entered, Condition A and B are exited, and therefore, the Required Actions of Condition B may be terminated.

When a second train is declared inoperable while the first train is still inoperable, Condition A is not re-entered for the second train. LCO 3.0.3 is entered, since the ACTIONS do not include a Condition for more than one inoperable train. The Completion Time clock for Condition A does not stop after LCO 3.0.3 is entered, but continues to be tracked from the time Condition A was initially entered.

While in LCO 3.0.3, if either of the inoperable trains is restored to OPERABLE status and the Completion Time for Condition A has not expired, LCO 3.0.3 may be exited and

1.3 Completion Times

EXAMPLES EXAMPLE 1.3-2 (continued)

operation continued in accordance with Condition A.

While in LCO 3.0.3, if either of the inoperable trains is restored to OPERABLE status and the Completion Time for Condition A has expired, LCO 3.0.3 may be exited and operation continued in accordance with Condition B. The Completion Time for Condition B is tracked from the time the Condition A Completion Time expired.

Upon restoring either of the trains to OPERABLE status, the Condition A Completion Time is not reset, but continues from the time the first train was declared inoperable. This Completion Time may be extended if the train restored to OPERABLE status was the first inoperable train. A 24 hour extension to the stated 7 days is allowed, provided this does not result in the second train being inoperable for > 7 days.

1.3 Completion Times

EXAMPLES EXAMPLE 1.3-3
(continued)

| ACTIONS | | |
|--|---|-----------------|
| CONDITION | REQUIRED ACTION | COMPLETION TIME |
| A: One Function X train inoperable. | A.1 Restore Function X train to OPERABLE status. | 7 days |
| B: One Function Y train inoperable. | B.1 Restore Function Y train to OPERABLE status. | 72 hours |
| C: One Function X train inoperable. | C.1 Restore Function X train to OPERABLE status. | 72 hours |
| AND | OR | |
| One Function Y train inoperable. | C.2 Restore Function Y train to OPERABLE status. | 72 hours |

1.3 Completion Times

EXAMPLES EXAMPLE 1.3-3 (continued)

When one Function X train and one Function Y train are inoperable, Condition A and Condition B are concurrently applicable. The Completion Times for Condition A and Condition B are tracked separately for each train starting from the time each train was declared inoperable and the Condition was entered. A separate Completion Time is established for Condition C and tracked from the time the second train was declared inoperable (i.e., the time the situation described in Condition C was discovered).

If Required Action C.2 is completed within the specified Completion Time, Conditions B and C are exited. If the Completion Time for Required Action A.1 has not expired, operation may continue in accordance with Condition A. The remaining Completion Time in Condition A is measured from the time the affected train was declared inoperable (i.e., initial entry into Condition A).

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-4

((continued))

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|---|---------------------|
| A. One or more valves inoperable. | A.1 Restore valve(s) to OPERABLE status. | 4 hours |
| 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 |

A single Completion Time is used for any number of valves inoperable at the same time. The Completion Time associated with Condition A is based on the initial entry into Condition A and is not tracked on a per valve basis. Declaring subsequent valves inoperable, while Condition A is still in effect, does not trigger the tracking of separate Completion Times.

Once one of the valves has been restored to OPERABLE status, the Condition A Completion Time is not reset, but continues from the time the first valve was declared inoperable. The Completion Time may be extended if the valve restored to OPERABLE status was the first inoperable valve. The Condition A Completion Time may be extended for up to 4 hours provided this does not result in any subsequent valve being inoperable for > 4 hours. If the Completion Time of 4 hours (plus the extension) expires while one or more valves are still inoperable, Condition B is entered.

1.3. Completion Times

EXAMPLES

EXAMPLE 1.3-5

(continued)

ACTIONS

NOTE

Separate Condition entry is allowed for each inoperable valve.

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|---|---------------------|
| A. One or more valves inoperable. | A.1 Restore valve to OPERABLE status. | 4 hours |
| 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 |

The Note above the ACTIONS Table is a method of modifying how the Completion Time is tracked. If this method of modifying how the Completion Time is tracked was applicable only to a specific Condition, the Note would appear in that Condition rather than at the top of the ACTIONS Table.

The Note allows Condition A to be entered separately for each inoperable valve, and Completion Times tracked on a per valve basis. When a valve is declared inoperable, Condition A is entered and its Completion Time starts. If subsequent valves are declared inoperable, Condition A is entered for each valve and separate Completion Times start and are tracked for each valve.

1.3 Completion Times

EXAMPLES: EXAMPLE 1.3-5 (continued)

If the Completion Time associated with a valve in Condition A expires, Condition B is entered for that valve. If the Completion Times associated with subsequent valves in Condition A expire, Condition B is entered separately for each valve and separate Completion Times start and are tracked for each valve. If a valve that caused entry into Condition B is restored to OPERABLE status, Condition B is exited for that valve.

Since the Note in this example allows multiple Condition entry and tracking of separate Completion Times, Completion Time extensions do not apply.

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-6

(continued)

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|--|------------------|
| A. One channel inoperable. | A.1 Perform SR 3.x.x.x. | Once per 8 hours |
| | OR A.2 Reduce THERMAL POWER to 50% RTP. | 8 hours |
| B. Required Action and associated Completion Time not met. | B.1 Be in MODE 3. | 6 hours |

Entry into Condition A offers a choice between Required Action A.1 or A.2. Required Action A.1 has a "once per" Completion Time, which qualifies for the 1.25 times the stated Frequency extension, per SR 3.0.2, to each performance after the initial performance. The initial 8 hour interval of Required Action A.1 begins when Condition A is entered and the initial performance of Required Action A.1 must be complete within the first 8 hour interval. If Required Action A.1 is followed, and the Required Action is not met within the Completion Time (plus the extension allowed by SR 3.0.2), Condition B is entered. If Required Action A.2 is followed and the Completion Time of 8 hours is not met, Condition B is entered.

1.3 Completion Times

EXAMPLES EXAMPLE 1.3-6 (continued)

If after entry into Condition B, Required Action A.1 or A.2 is met, Condition B is exited and operation may then continue in Condition A.

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-7

(continued)

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|--|-----------------------------|
| A. One subsystem inoperable. | A.1. Verify affected subsystem isolated. | 1 hour |
| | AND | Once per 8 hours thereafter |
| | A.2. Restore subsystem to OPERABLE status. | 72 hours |
| B. Required Action and associated Completion Time not met. | B.1. Be in MODE 3. | 6 hours |
| | AND | |
| | B.2. Be in MODE 5. | 36 hours |

Required Action A.1 has two Completion Times. The 1 hour Completion Time begins at the time the Condition is entered and each "Once per 8 hours thereafter" interval begins upon performance of Required Action A.1.

If after Condition A is entered, Required Action A.1 is not met within either the initial 1 hour or any subsequent 8 hour interval from the previous performance (plus the extension allowed by SR 3.0-2), Condition B is entered. The Completion Time clock for Condition A does not stop after Condition B is entered, but continues from

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-7 (continued)

(continued)

the time Condition A was initially entered. If Required Action A.1 is met after Condition B is entered, Condition B is exited and operation may continue in accordance with Condition A, provided the Completion Time for Required Action A.2 has not expired.

IMMEDIATE

COMPLETION

TIME

When "Immediately" is used as a Completion Time, the Required Action should be pursued without delay and in a controlled manner.

TS 4.1-1

REV 111 8/10/94

Addressed
elsewhere

4.1 OPERATIONAL SAFETY REVIEW

Applicability

Applies to items directly related to safety limits and limiting conditions for operation.

Objective

To specify the minimum frequency and type of surveillance to be applied to plant equipment and conditions.

Specification

- A. Calibration, testing, and checking of instrumentation channels and testing of logic channels shall be performed as specified in Tables TS 4-1-1A, 4-1-1B and 4-1-1C.
- B. Equipment tests shall be conducted as specified in Table TS 4-1-2A.
- C. Sampling tests shall be conducted as specified in Table TS 4-1-2B.

- D. Whenever the plant condition is such that a system or component is not required to be OPERABLE the surveillance testing associated with that system or component may be discontinued. Discontinued surveillance tests shall be resumed less than one test interval before establishing plant conditions requiring OPERABILITY of the associated system or component, unless such testing is not practicable (i.e., nuclear power range calibration cannot be done prior to reaching POWER OPERATION) in which case the testing will be specified in the Specification or ~~presumed within 48 hours of attaining the plant condition which permits testing to be accomplished.~~

1.4

M1.0-27

A1.0-28

1.0 USE AND APPLICATION

1.4 Frequency

1.4

PURPOSE

The purpose of this section is to define the proper use and application of Frequency requirements.

DESCRIPTION

Each Surveillance Requirement (SR) has a specified Frequency in which the Surveillance must be met in order to meet the associated LCO. An understanding of the correct application of the specified Frequency is necessary for compliance with the SR.

The "specified Frequency" is referred to throughout this section and each of the Specifications of Section 3.0, Surveillance Requirement (SR) Applicability. The "specified Frequency" consists of the requirements of the Frequency column of each SR as well as certain Notes in the Surveillance column that modify performance requirements.

Sometimes special situations dictate when the requirements of a Surveillance are to be met. They are "otherwise stated" conditions allowed by SR 3.0.1. They may be stated as clarifying Notes in the Surveillance, as part of the Surveillance, or both.

Situations where a Surveillance could be required (i.e., its Frequency could expire), but where it is not possible or not desired that it be performed until sometime after the associated LCO is within its Applicability, represent potential SR 3.0.4 conflicts. To avoid these conflicts, the SR (i.e., the Surveillance or the Frequency) is stated such that it is only "required" when it can be and should be performed. With an SR satisfied, SR 3.0.4 imposes no restriction.

The use of "met" or "performed" in these instances conveys specific meanings. A Surveillance is "met" only when the acceptance criteria are satisfied. Known failure of the requirements of a Surveillance, even without a Surveillance specifically being "performed," constitutes a Surveillance not "met." "Performance" refers only to the requirement to specifically determine the ability to meet the acceptance criteria.

Some Surveillances contain notes that modify the Frequency of performance or the conditions during which the acceptance criteria must be satisfied. For these Surveillances, the MODE-entry restrictions of SR 3.0.4 may not apply. Such a Surveillance is not required to be performed prior to entering a MODE or other specified condition in the Applicability of the associated LCO if any of the following three conditions are satisfied:

a. The Surveillance is not required to be met in the MODE or other specified condition to be entered; or

b. The Surveillance is required to be met in the MODE or other specified condition to be entered, but has been performed within the specified Frequency (i.e., it is current) and is known not to be failed; or

c. The Surveillance is required to be met, but not performed, in the MODE or other specified condition to be entered, and is known not to be failed.

Examples 1.4-3, 1.4-4, 1.4-5, and 1.4-6 discuss these special situations.

EXAMPLES

The following examples illustrate the various ways that Frequencies are specified. In these examples, the Applicability of the LCO (LCO not shown) is MODES 1, 2, and 3.

1.4 Frequency

EXAMPLE
(continued)

EXAMPLE 1.4-1

SURVEILLANCE REQUIREMENTS

| SURVEILLANCE | FREQUENCY |
|------------------------|-----------|
| Perform CHANNEL CHECK. | 12 hours |

Example 1.4-1 contains the type of SR most often encountered in the Technical Specifications (TS). The Frequency specifies an interval (12 hours) at which the associated Surveillance is scheduled to be performed. Although the Frequency is stated as 12 hours, the SR may be performed between 0.75 to 1.25 times the stated Frequency as allowed by SR 3.0.2 for operational flexibility. The schedule of this interval continues at all times, even when the SR is not required to be met per SR 3.0.1 (such as when the equipment is inoperable, a variable is outside specified limits, or the unit is outside the Applicability of the LCO). If the interval specified by SR 3.0.2 is exceeded while the unit is in a MODE or other specified condition in the Applicability of the LCO, and the performance of the Surveillance is not otherwise modified (refer to Example 1.4-3), then SR 3.0.3 becomes applicable.

If the interval as specified by SR 3.0.2 is exceeded while the unit is not in a MODE or other specified condition in the Applicability of the LCO for which performance of the SR is required, the Surveillance must be performed within the Frequency requirements of SR 3.0.2 prior to entry into the MODE or other specified condition. Failure to do so would result in a violation of SR 3.0.4.

| 1.4 Frequency | |
|-------------------------------|--|
| EXAMPLE (continued) | EXAMPLE 1.4-2 SURVEILLANCE REQUIREMENTS |
| SURVEILLANCE | FREQUENCY |
| Verify flow is within limits. | Once within 12 hours after ≥ 25% RTP <u>AND</u> 24 hours thereafter |

Example 1.4-2 has two Frequencies. The first is a one time performance Frequency, and the second is of the type shown in Example 1.4-1. The logical connector "AND" indicates that both Frequency requirements must be met. Each time reactor power is increased from a power level < 25% RTP to ≥ 25% RTP, the Surveillance must be performed within 12 hours.

The use of "once" indicates a single performance will satisfy the specified Frequency (assuming no other Frequencies are connected by "AND"). This type of Frequency does not qualify for the 1.25 times the stated Frequency extension allowed by SR 3.0.2. "Thereafter" indicates future performances are scheduled, but are required only after a specified condition is first met (i.e., the "once" performance in this example). If reactor power decreases to < 25% RTP, the Surveillance is not required to be completed, but the scheduled intervals continue.

1.4 Frequency

EXAMPLES

(continued)

EXAMPLE 1.4-3

SURVEILLANCE REQUIREMENTS

| SURVEILLANCE | FREQUENCY |
|--|-----------|
| <p>-----NOTE----- Not required to be performed until 12 hours after $\geq 25\%$ RTP. ----- Perform channel adjustment</p> | 7 days |

The interval continues, whether or not the unit operation is $< 25\%$ RTP between performances.

As the Note modifies the required performance of the Surveillance, it is construed to be part of the "specified Frequency." Should the 7 day interval be exceeded while operation is $< 25\%$ RTP, this Note allows 12 hours after power reaches $\geq 25\%$ RTP to perform the Surveillance. The Surveillance is still considered to be performed within the "specified Frequency." Therefore, if the Surveillance were not performed within the 7 day (plus the extension allowed by SR 3.0.2) interval, but operation was $< 25\%$ RTP, it would not constitute a failure of the SR or failure to meet the LCO. Also, no violation of SR 3.0.4 occurs when changing MODES, even with the 7 day Frequency not met, provided operation does not exceed 12 hours with power $\geq 25\%$ RTP.

Once the unit reaches 25% RTP, 12 hours would be allowed for completing the Surveillance. If the Surveillance were not performed within this 12 hour interval, there would then be a failure to perform a Surveillance within the specified Frequency, and the provisions of SR 3.0.3 would apply.

| NOTE | |
|---|----------|
| only required to be met in MODE 1 | |
| Verify leakage rates are within limits. | 24 hours |

Example 1.4-4 specifies that the requirements of this Surveillance do not have to be met until the unit is in MODE 1. The interval measurement for the Frequency of this Surveillance continues at all times, as described in Example 1.4-1. However, the Note constitutes an "otherwise stated" exception to the Applicability of this Surveillance. Therefore, if the Surveillance were not performed within the 24 hour interval (plus the extension allowed by SR 3.0.2) but the unit was not in MODE 1, there would be no failure of the SR nor failure to meet the LCO. Therefore, no violation of SR 3.0.4 occurs when changing MODES, even with the 24 hour Frequency exceeded, provided the MODE change was not made into MODE 1. Prior to entering MODE 1 (assuming again that the 24 hour Frequency were not met), SR 3.0.4 would require satisfying the SR.

EXAMPLE 1.4-5

| SURVEILLANCE REQUIREMENTS | |
|--|-----------|
| SURVEILLANCE | FREQUENCY |
| <p>NOTE</p> <p>only required to be performed in MODE 1</p> <p>Perform complete cycle of the valve.</p> | 7 days |

The interval continues, whether or not the unit operation is in MODE 1, 2, or 3 (the assumed Applicability of the associated LCO) between performances.

As the Note modifies the required performance of the Surveillance, the Note is construed to be part of the specified Frequency. Should the 7 day interval be exceeded while operation is not in MODE 1, this Note allows entry into and operation in MODES 2 and 3 to perform the Surveillance. The Surveillance is still considered to be

The interval continues, whether or not the unit operation is in MODE 1, 2, or 3 (the assumed Applicability of the associated LCO) between performances.

As the Note modifies the required performance of the Surveillance, the Note is construed to be part of the "specified Frequency". Should the 7 day interval be exceeded while operation is not in MODE 1, this Note allows entry into and operation in MODES 2 and 3 to perform the Surveillance. The Surveillance is still considered to be performed within the "specified Frequency" if completed prior to entering MODE 1. Therefore, if the Surveillance were not performed within the 7 day (plus the extension allowed by SR 3.0.2) interval, but operation was not in MODE 1, it would not constitute a failure of the SR or failure to meet the LCO. Also, no violation of SR 3.0.4 occurs when changing MODES, even with the 7 day Frequency not met, provided operation does not result in entry into MODE 1.

Once the unit reaches MODE 1, the requirement for the Surveillance to be performed within its specified Frequency applies and would require that the Surveillance had been performed. If the Surveillance were not performed prior to entering MODE 1, there would then be a failure to perform a Surveillance within the specified Frequency, and the provisions of SR 3.0.3 would apply.

EXAMPLE 1.4-6

SURVEILLANCE REQUIREMENTS

| SURVEILLANCE | FREQUENCY |
|---|-----------|
| <p>NOTE</p> <p>Not required to be met in MODE 3</p> <p>Verify parameter is within limits.</p> | 24 hours |

Example 1.4-6 specifies that the requirements of this Surveillance do not have to be met while the unit is in MODE 3 (the assumed Applicability of the associated LCO is MODES 1, 2, and 3). The interval measurement for the Frequency of this Surveillance continues at all times, as described in Example 1.4-1. However, the Note constitutes an "otherwise

stated" exception to the Applicability of this Surveillance. Therefore, if the Surveillance were not performed within the 24 hour interval (plus the extension allowed by SR 3 0 2) and the unit was in MODE 3, there would be no failure of the SR nor failure to meet the LCO. Therefore, no violation of SR 3 0 4 occurs when changing MODES to enter MODE 3, even with the 24 hour Frequency exceeded, provided the MODE change does not result in entry into MODE 2. Prior to entering MODE 2 (assuming again that the 24 hour Frequency were not met), SR 3 0 4 would require satisfying the SR.

PACKAGE 1.0
USE AND APPLICATION

PART D

DISCUSSION OF CHANGES
(DOC)

to

PRAIRIE ISLAND
CURRENT TECHNICAL SPECIFICATIONS

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
UNITS 1 AND 2

Improved Technical Specifications
Conversion Submittal

Part D

Package 1.0

USE AND APPLICATION

DISCUSSION OF CHANGES TO CURRENT TECHNICAL SPECIFICATIONS

The proposed changes to PI Operating License Appendix A, TS are discussed below and the specific wording changes are shown in parts B, C and E.

For ease of review, all package parts and discussions are organized according to the proposed PI ITS Table of Contents.

| NSHD Category | Change Number | Discussion of Change |
|------------------|------------------|--|
| A | 1.0- 01 | CTS definitions of ACTIONS, CHANNEL CHECK, CORE ALTERATION, COLR, DOSE EQUIVALENT I-131, E-AVERAGE DISINTEGRATION ENERGY, OPERATIONAL MODE - MODE, OPERABLE - OPERABILITY, PTLR, QPTR, RTP, SDM, and STAGGERED TEST BASIS. Administrative changes have been introduced into the current Technical Specifications (CTS) definition to conform to the guidance of NUREG-1431. These changes do not change the meaning or intent of the current Prairie Island definitions; thus, these are administrative changes. |

| NSHD Category | Change Number | Discussion of Change |
|------------------|------------------|---|
| M | 1.0- 02 | <p>New definitions - ACTUATION LOGIC TEST, AFD, REACTOR TRIP SYSTEM (RTS) RESPONSE TIME (replaces CHANNEL RESPONSE TEST), LEAKAGE, and TRIP ACTUATING DEVICE OPERATIONAL TEST. The following new definitions have been included in the Prairie Island Improved Technical Specifications since these terms are used throughout the Technical Specifications (TS) and this conforms to the guidance of NUREG-1431:</p> <p>ACTUATION LOGIC TEST AXIAL FLUX DIFFERENCE (AFD) LEAKAGE REACTOR TRIP SYSTEM (RTS) RESPONSE TIME (replaces CHANNEL RESPONSE TEST) TRIP ACTUATING DEVICE OPERATIONAL TEST (TADOT)</p> <p>Since these defined terms are new to the PI TS, these are more restrictive changes. These changes are acceptable since they do not change plant operations or testing. These new definitions are included to make the ITS complete.</p> |
| LR | 03 | <p>CTS definition of AUXILIARY BUILDING SPECIAL VENTILATION INTEGRITY. The definition for AUXILIARY BUILDING SPECIAL VENTILATION INTEGRITY was relocated to the Bases of new Technical Specifications 3.7.12 which is consistent with the guidance of NUREG-1431. This definition has not been relocated verbatim, but the substance of the definition in the context of the ITS Specification requirements is included in the Bases. Since the Bases are under licensee control in accordance with Section 5.5, "Bases Control Program" this is a less restrictive change. This is acceptable since the Bases remain under regulatory control through use of a 10 CFR 50.59 type program.</p> |

| NSHD Category | Change Number | Discussion of Change |
|------------------|------------------|--|
| | 1.0- | |
| A | 04 | CTS definition of CHANNEL CALIBRATION. The CHANNEL CALIBRATION definition has in general been conformed to NUREG-1431 as modified by approved TSTF-205 Revision 3. Specific reference to testing of resistance temperature detectors or thermocouple sensors has been added to the current Prairie Island definition for clarification. These changes are administrative since they do not substantively change the Prairie Island methodology for calibration of plant instrumentation. |
| A | 05 | CTS definition of COLR. The CTS reference within this definition has been corrected to "6.6.E" to be consistent with proposed Prairie Island Plant License Amendment Request entitled, "Remove High Steam Flow Signal from Input to MSLI Logic." Since the change is justified in that LAR, this is an administrative change in this submittal. |
| A | 06 | CTS definition of CHANNEL FUNCTIONAL TEST. The current CHANNEL FUNCTIONAL TEST definition is retitled CHANNEL OPERATIONAL TEST (COT) since much of the definition wording is the same. This definition has in general been conformed to NUREG-1431 as modified by approved TSTF-205 Revision 3. These changes are administrative since they do not substantively change the Prairie Island methodology for testing of these instruments. |

| NSHD Category | Change Number | Discussion of Change |
|------------------|------------------|---|
| LR | 1.0- 07 | CTS definition for CONTAINMENT INTEGRITY. The definition for CONTAINMENT INTEGRITY was relocated to the Bases of new Technical Specifications 3.6.1 and 3.6.2 which is consistent with the guidance of NUREG-1431. This definition has not been relocated verbatim, but the substance of the definition in the context of the ITS Specification requirements is included in the Bases. Since the Bases are under licensee control in accordance with Section 5.5, "Bases Control Program" this is a less restrictive change. This is acceptable since the Bases remain under regulatory control through use of a 10 CFR 50.59 type program. |
| A | 08 | CTS definition for LIMITING SAFETY SYSTEM SETTINGS. The definition for LIMITING SAFETY SYSTEM SETTINGS was not included in the Prairie Island Improved Technical Specifications since it is not used. This is considered an administrative change since the justification for not including LIMITING SAFETY SYSTEM SETTINGS is considered in the discussion of current Technical Specifications 2.3. This change is consistent with NUREG-1431. |

| NSHD Category | Change Number | Discussion of Change |
|------------------|------------------|--|
| | 1.0- | |
| A | 09 | <p>CTS definition of OPERABLE - OPERABILITY. The second and third paragraphs which elaborate on the definition of OPERABLE are deleted from the current definition of OPERABILITY. The second paragraph has been satisfied by the inclusion of "or" and the deletion of "and" following "normal" in the new definition.</p> <p>The third paragraph does not provide any additional technical information to the definition and it deviates from the NUREG-1431 definition, therefore it is deleted. These changes do not substantively change the definition of OPERABLE - OPERABILITY, thus these are administrative changes.</p> |
| | 10 | Not used. |
| A | 11 | <p>CTS definition of PHYSICS TESTS. The definition for PHYSICS TESTS has been generally conformed to the guidance of NUREG-1431. These changes remove the 2% power limit restriction from the definition. The allowed power level for PHYSICS TESTS is related to the definition of power level at which the MODE changes from MODE 2 to MODE 1. The impact of changing the definition for these MODES is addressed later in the changes to TABLE 1.1-1. Therefore, the changes to this definition are considered administrative.</p> |

| NSHD Category | Change Number | Discussion of Change |
|------------------|------------------|--|
| A | 12 | CTS definition of PROTECTION INSTRUMENTATION AND LOGIC. The definition for PROTECTION INSTRUMENTATION AND LOGIC is not included in the Prairie Island (PI) Improved Technical Specifications (ITS) since this term is not used. This is a descriptive term which is not needed in the ITS since the format is changed. This is consistent with NUREG-1431. Since the ITS contains substantially the same instrumentation requirements as CTS, or the changes are justified in Section 3.3, this is an administrative change. |
| M | 13 | CTS definition of CHANNEL RESPONSE TEST. The definition of CHANNEL RESPONSE TEST was deleted and replaced by the new definition REACTOR TRIP SYSTEM (RTS) RESPONSE TIME in conformance with NUREG-1431. This definition has been modified by inserting "output" after "channel sensor" and "opening of a reactor trip breaker" is used in lieu of "loss of stationary gripper coil voltage". These changes from the NUREG-1431 definition are proposed to allow this new definition to be applied within the context of the current plant licensing basis. Since this is a new definition with more detail, this is a more restrictive change. This change is acceptable because it will not create any unsafe conditions during plant testing. This change is made to provide a complete ITS. |
| LR | 14 | CTS definition of REPORTABLE EVENT. The definition for REPORTABLE EVENT has been relocated to the TRM which makes this a less restrictive change. This change is acceptable since this term is not used in the ITS and the requirements for REPORTABLE EVENTS are described in NRC regulations 10 CFR 50.72 and 50.73 which Prairie Island is required to meet. |

| NSHD Category | Change Number | Discussion of Change |
|------------------|------------------|---|
| | 1.0- 15 | Not used. |
| LR | 16 | CTS definition of SHIELD BUILDING INTEGRITY. The definition for SHIELD BUILDING INTEGRITY was relocated to the Bases of new Technical Specifications 3.6.10 which is consistent with the guidance of NUREG-1431. This definition has not been relocated verbatim, but the substance of the definition in the context of the ITS Specification requirements is included in the Bases. Since the Bases are under licensee control in accordance with Section 5.5, "Bases Control Program" this is a less restrictive change. This is acceptable since the Bases remain under regulatory control through use of a 10 CFR 50.59 type program. |
| M | 17 | CTS definition of SHUTDOWN MARGIN. The definition for SHUTDOWN MARGIN was revised to require consideration of 1) any rod cluster control assemblies (RCCA) known to be incapable of being fully inserted, and 2) in MODES 1 and 2, the fuel and moderator temperatures are changed to nominal zero power design temperature. These changes are more restrictive since these requirements are now a part of the TS. These changes are acceptable since these requirements were previously contained in the Bases for Current Technical Specifications B 3.10.A, Shutdown Margin. |

| NSHD Category | Change Number | Discussion of Change |
|------------------|------------------|---|
| | 1.0- | |
| A | 18 | CTS definition of SOURCE CHECK. The definition for SOURCE CHECK was not included in the Prairie Island Improved Technical Specifications since it is no longer required. The performance of a SOURCE CHECK is now addressed within the definition of CHANNEL CALIBRATION and CHANNEL OPERATING TEST (COT). Since relocation of these requirements to other definitions does not cause any substantive changes in plant operations or testing, this is an administrative change. |
| A | 19 | CTS definition of STAGGERED TEST BASIS. Consistent with the guidance of NUREG-1431, the second paragraph of the definition for STAGGERED TEST BASIS is not included in the PI ITS. This paragraph conflicts with ITS use of the STAGGERED TEST BASIS definition and therefore can not be included. Any differences in use of this term between CTS and ITS are accounted for by changing instrument test frequencies in Section 3.3. Therefore, this is an administrative change. |
| | 20 | Not used. |
| A | 21 | CTS definition of STARTUP OPERATION. The definition for STARTUP OPERATION was not included since it is no longer used in the Prairie Island Improved Technical Specifications. All phases of plant operation are included within the definition of MODES listed in Table 1.1-1. This change does not involve any substantive changes in plant operations or testing; therefore, this is an administrative change. |

| NSHD Category | Change Number |
|------------------|------------------|
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| Discussion of Change |
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|----------------------|

| | | |
|---|----|---|
| L | 22 | CTS Table TS.1.1-1. The current Technical Specifications definition of operating MODES was revised to generally conform to the guidance of NUREG-1431 as follows: |
|---|----|---|

The CTS MODE titles have been changed to the NUREG-4131 titles and the double star (**) note was deleted. Except for the minor changes discussed below, the definitions are substantially the same as NUREG-1431.

The Reactivity Conditions were redefined to change MODES at $0.99 K_{eff}$ rather than "Critical" in conformance with the guidance of NUREG-1431. The individual Specification applicability MODES and corresponding ACTIONS appropriately account for the slight difference in reactivity conditions defined for the MODES. Thus this change introduces minimal impact on plant operations.

The percent RATED THERMAL POWER (RTP) at which the MODE changes from MODE 2 to MODE 1 has been revised from 2% in the current Technical Specifications to 5% in the new Technical Specifications. This change also allows PHYSICS TESTs to be performed at power levels up to 5% RTP. This change has been accounted for in the applicable individual ITS Specifications and their corresponding Conditions and REQUIRED ACTIONS to maintain safe plant operations at all times.

Since the power level at which the MODE changes between MODES 1 and 2 has been increased, this is considered a less restrictive change. This change is acceptable since the 5% power is well below any limits where plant systems are challenged and the TS provide adequate limits to assure the plant is maintained in a safe condition.

AVERAGE REACTOR COOLANT TEMPERATURE requirements remain functionally the same except that

| NSHD Category | Change Number 1.0- | Discussion of Change |
|------------------|--------------------------|---|
| L | 22 | (continued) current Technical Specifications MODE 5 was less than 200°F and new Technical Specifications is less than or equal to 200°F. MODE 4 changed accordingly to interface with the new limit for MODE 5. The column, REACTOR VESSEL HEAD CLOSURE BOLTS FULLY TENSIONED, was deleted since this facet of the MODE definition is included in footnotes to the NUREG-1431 MODE Table. |
| | 23 | Not used. |
| A | 24 | ITS 1.2. A new section was added to the specifications which explains the use of Logical Connectors within the new Technical Specifications. This section does not provide any new requirements, only a description and examples of how to use the new Improved Technical Specifications format. Since these changes do not involve any substantive changes in plant operations or testing, these are administrative changes. |
| | 25 | Not used. |

| NSHD Category | Change Number |
|------------------|------------------|
|------------------|------------------|

| Discussion of Change |
|----------------------|
|----------------------|

| | | |
|---|----|---|
| M | 26 | ITS 1.3. A new section was added to the specifications which explains the use of the Completion Time convention within the new Technical Specifications. There are several changes from the current Prairie Island Technical Specifications format which are discussed below: |
|---|----|---|

- a. Completion Times in the new Technical Specifications are based on the format that the clock for all Required Actions begins from the time that the Condition is entered. The Completion Times in the new specifications and the current Prairie Island Technical Specifications are typically equal. For example, the new specifications may require that a unit be in MODE 3 within 6 hours and in MODE 4 within 36 hours for a specified Condition while the current Prairie Island Technical Specifications require that the unit be in MODE 3 within 6 hours and in MODE 4 within an additional 30 hours for the same Condition. The intent of both the new specifications and the current Prairie Island Technical Specifications is the same; i.e., be in MODE 4 within 36 hours.
- b. The new specifications restrict multiple entries into the ACTIONS table for separate Conditions unless it is specifically stated as acceptable. For example, if one Safety Injection (SI) pump is inoperable and while in this Condition, a second SI pump is declared inoperable, the plant would enter 3.0 conditions in both the new specifications and the current Prairie Island Technical Specifications. If the first SI pump were restored to OPERABLE status before entering MODE 3, the plant could resume operation in both Technical Specifications. However, in the current Technical Specifications, the Completion Time for restoring the second SI pump to OPERABLE status would begin from the time that it was

NSHD
Category

Change
Number
1.0-

Discussion of Change

M 26 (continued)

declared inoperable. In the new specifications, the Completion Time would begin from the time the first pump was declared inoperable with either an additional 24 hours allowed or the stated Completion Time as measured from discovery of the subsequent inoperability, whichever is more restrictive. This is a conservative change.

Since this section includes new TS requirements, these changes are more restrictive. Since these changes further define plant operations, they will not create unsafe operating conditions; thus, these changes are acceptable.

M 27 CTS 4.1.D. (ITS1.4) This paragraph allows SRs to be suspended when the plant is not in the Mode of Applicability associated with the SR. The CTS allows 48 hours to perform the test if it can not be performed until the plant enters the Mode of Applicability. The ITS does not provide a blanket allowance such as this, but rather specifies the allowable time or conditions for testing in the Mode of Applicability in each Specification or SR which can not be performed prior to entry into the Mode of Applicability. Thus, this is a more restrictive change. This change is acceptable since the ITS provides a reasonable time for performing tests which can not be performed until the Mode of Applicability is entered. Due to the unique handling of each such SR, the ITS assures that the plant is maintained in a safe condition.

| NSHD Category | Change Number | Discussion of Change |
|------------------|------------------|---|
| A | 1.0- 28 | ITS 1.4. A new section was added to the specifications which explains the use of the Frequencies specified within the Surveillance Requirements (SRs). This section does not provide any new requirements, only a description and examples of how to use the new Improved Technical Specifications format. Since these changes do not involve any substantive changes in plant operations or testing, these changes are administrative. |

PACKAGE 1.0

USE AND APPLICATION

PART E

MARKUP OF NUREG-1431 IMPROVED STANDARD TECHNICAL SPECIFICATIONS AND BASES

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| 1.1-1 | 1.3-3 | 1.3-18 |
| 1.1-2 | 1.3-4 | 1.3-19 |
| 1.1-3 | 1.3-5 | 1.4-1 |
| 1.1-4 | 1.3-6 | 1.4-2 |
| 1.1-5 | 1.3-7 | 1.4-3 |
| 1.1-6 | 1.3-8 | 1.4-4 |
| 1.1-7 | 1.3-9 | 1.4-5 |
| 1.1-8 | 1.3-10 | 1.4-6 |
| 1.1-9 | 1.3-11 | 1.4-7 |
| 1.1-10 | 1.3-12 | 1.4-8 |
| 1.2-1 | 1.3-13 | 1.4-9 |
| 1.2-2 | 1.3-14 | 1.4-10 |
| 1.2-3 | 1.3-15 | |
| 1.3-1 | 1.3-16 | |
| 1.3-2 | 1.3-17 | |

PRAIRIE ISLAND NUCLEAR GENERATING PLANT UNITS 1 AND 2

Improved Technical Specifications
Conversion Submittal

1.0 USE AND APPLICATION

1.1 Definitions

-----NOTE-----

The defined terms of this section appear in capitalized type and are applicable throughout these Technical Specifications and Bases.

| <u>Term</u> | <u>Definition</u> |
|-----------------------------|--|
| ACTIONS | ACTIONS shall be that part of a Specification that prescribes Required Actions to be taken under designated Conditions within specified Completion Times. |
| ACTUATION LOGIC TEST | An ACTUATION LOGIC TEST shall be the application of various simulated or actual input combinations in conjunction with each possible interlock logic state required for OPERABILITY of a logic circuit and the verification of the required logic output. The ACTUATION LOGIC TEST, as a minimum, shall include a continuity check of output devices. TA1.0-32 CL1.0-31 |
| AXIAL FLUX DIFFERENCE (AFD) | AFD shall be the difference in normalized flux signals between the {top and bottom halves of a two section excore neutron detector}. |
| CHANNEL CALIBRATION | A CHANNEL CALIBRATION shall be the adjustment, as necessary, of the channel output such so that it responds within the necessary required range and accuracy to known values of the parameter that the channel monitors input . The CHANNEL CALIBRATION shall encompass all devices in the channel required for channel OPERABILITY the entire channel, including the required sensor, alarm, interlock, display, and trip functions. Calibration of instrument channels TA1.0-32 |

(continued)

with resistance temperature detector (RTD) or thermocouple sensors may consist of an inplace qualitative assessment of sensor behavior and normal calibration of the remaining adjustable devices in the channel. Whenever a sensing element is replaced, the next required CHANNEL CALIBRATION shall include an inplace cross calibration that compares the other

CL1.0-33

sensing elements with the recently installed sensing element. The CHANNEL CALIBRATION may be performed by means of any series of sequential, overlapping calibrations or total channel steps so that the entire

TA1.0-32

1.1 Definitions

CHANNEL CALIBRATION (continued)

~~channel is calibrated.~~

CHANNEL CHECK

A CHANNEL CHECK shall be the qualitative assessment, by observation, of channel behavior during operation. This determination shall include, where possible, comparison of the channel indication and status to other indications or status derived from independent instrument channels measuring the same parameter.

CHANNEL OPERATIONAL TEST (COT)

A COT shall be the injection of a simulated or actual signal into the channel as close to the sensor output as practicable to verify the OPERABILITY of all devices in the channel

CL1.0-34

required for

TA1.0-32

channel OPERABILITY required alarm, interlock, display, and trip functions. The COT shall include adjustments, as necessary, of the required alarm, interlock, and trip setpoints required for channel OPERABILITY such that the setpoints are within the necessary required range and accuracy. The COT may be performed by means of any series of sequential

(continued)

1.1 Definitions

~~overlapping, or total channel steps~~

TA1.0-32

CORE ALTERATION CORE ALTERATION shall be the movement of any fuel, sources, or reactivity control components, within the reactor vessel with the vessel head removed and fuel in the vessel. Suspension of CORE ALTERATIONS shall not preclude completion of movement of a component to a safe position.

CORE OPERATING LIMITS REPORT (COLR) The COLR is the unit specific document that provides cycle specific parameter limits for the current reload cycle. These cycle specific parameter limits shall be determined for each reload cycle in accordance with Specification 5.6.5. Plant operation within these limits is addressed in individual Specifications.

DOSE EQUIVALENT I-131 DOSE EQUIVALENT I-131 shall be that concentration of I-131 (microcuries/gram) that alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134, and I-135 actually present. The thyroid dose conversion factors used for

1.1 Definitions

DOSE EQUIVALENT I-131 (continued) this calculation shall be those listed in [Table III of TID-14844, AEC, 1962, "Calculation of Distance Factors for Power and Test Reactor Sites," or those
~~listed in Table E-7 of Regulatory Guide 1.109, Rev. 1, NRC, 1977, or ICRP 30, Supplement to Part 1, page 192-212, Table titled, "Committed Dose Equivalent in Target Organs or Tissues per Intake of Unit Activity"].~~

CL1.0-36

E - AVERAGE E shall be the average (weighted in proportion to

(continued)

1.1 Definitions

DISINTEGRATION ENERGY the concentration of each radionuclide in the reactor coolant at the time of sampling) of the sum of the average beta and gamma energies per disintegration (in MeV) for isotopes, other than iodines, with half lives > {15} minutes, making up at least 95% of the total noniodine activity in the coolant.

~~ENGINEERED SAFETY~~ The ESF RESPONSE TIME shall be that time
~~FEATURE (ESF) RESPONSE~~ interval from when the monitored parameter
~~TIME~~ exceeds its ESF actuation setpoint at the channel sensor until the ESF equipment is capable of performing its safety function (i.e., the valves travel to their required positions, pump discharge pressures reach their required values, etc.). Times shall include diesel generator starting and sequence loading delays, where applicable. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured. CL1.0-37

~~L_a~~ The maximum allowable primary containment leakage rate, L_a , shall be [] 0.25% of primary containment air weight per day at the calculated peak containment pressure (P_a). CL1.0-38

LEAKAGE LEAKAGE ~~from the Reactor Coolant System (RCS)~~ CL1.0-39 shall be:

a. Identified LEAKAGE

1. LEAKAGE, such as that from pump seals or valve packing (except reactor coolant pump (RCP) seal water injection or leakoff), that is captured and conducted to

1.1 Definitions

(continued)

LEAKAGE
(continued)

collection systems or a sump or collecting tank;

2. LEAKAGE into the containment atmosphere from sources that are both specifically located and known either not to interfere with the operation of leakage detection systems or not to be pressure boundary LEAKAGE; or

3. ~~Reactor Coolant System (RCS)~~ LEAKAGE through a steam generator (SG) to the secondary system;

b. Unidentified LEAKAGE

All LEAKAGE (except RCP seal water injection or leakoff) that is not identified LEAKAGE;

c. Pressure Boundary LEAKAGE

LEAKAGE (except SG LEAKAGE) through a nonisolable fault in an RCS component body, pipe wall, or vessel wall.

~~MASTER RELAY TEST~~

~~A MASTER RELAY TEST shall consist of energizing each master relay and verifying the OPERABILITY of each relay. The MASTER RELAY TEST shall include a continuity check of each associated slave relay.~~

CL1.0-37

MODE

A MODE shall correspond to any one inclusive combination of core reactivity condition, power level, average reactor coolant temperature, and reactor vessel head closure bolt tensioning specified in Table 1.1-1 with fuel in the reactor vessel.

(continued)

OPERABLE – OPERABILITY

A system, subsystem, train, component, or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified safety function(s) and when all necessary attendant instrumentation, controls, normal or emergency electrical power, cooling and seal water, lubrication, and other auxiliary equipment that are required for the system, subsystem, train,

1.1 Definitions

OPERABLE-OPERABILITY
(continued)

component, or device to perform its specified safety function(s) are also capable of performing their related support function(s).

PHYSICS TESTS

PHYSICS TESTS shall be those tests performed to measure the fundamental nuclear characteristics of the reactor core and related instrumentation. These tests are:

- a. Described in Chapter ~~[14, Initial Test Program]~~ of the FSAR; ~~Appendix J of the USAR; Pre-Operational and Startup tests;~~ CL1.0-41
- b. Authorized under the provisions of 10 CFR 50.59; or
- c. Otherwise approved by the Nuclear Regulatory Commission.

PRESSURE AND
TEMPERATURE LIMITS
REPORT (PTLR)

The PTLR is the unit specific document that provides the reactor vessel pressure and temperature limits, including heatup and cooldown rates, ~~and the OPSS Arming Temperature~~ for the current reactor vessel

TA1.0-42
PA1.0-43

(continued)

fluence period. These pressure and temperature limits shall be determined for each fluence period in accordance with Specification 5.6.6. Plant operation within these operating limits is addressed in LCO 3.4.3, "RCS Pressure and Temperature (P/T) Limits," ~~LCO 3.4.12, "Low Temperature Overpressure Protection (LTOP),"~~ ~~Safety Injection (SI) Pump Disable Temperature,"~~ and LCO 3.4.12, "Low Temperature Overpressure Protection (LTOP) ~~Safety Injection (SI) Pump Disable Temperature~~ System."

QUADRANT POWER TILT RATIO (QPTR)

QPTR shall be the ratio of the maximum upper excore detector calibrated output to the average of the upper excore detector calibrated outputs, or the ratio of the maximum lower excore detector calibrated output to the average of the lower excore detector calibrated outputs, whichever is greater.

1.1 Definitions (continued)

RATED THERMAL POWER (RTP)

RTP shall be a total reactor core heat transfer rate to the reactor coolant of ~~1650~~ ~~[2893]~~ Mwt.

REACTOR TRIP SYSTEM (RTS) RESPONSE TIME

The RTS RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its RTS trip setpoint at the channel sensor ~~output~~ ~~until opening of a reactor trip~~ ~~breaker~~ ~~stationary gripper coil voltage.~~ The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured.

CL1.0-44

TA1.0-46

SHUTDOWN MARGIN (SDM)

SDM shall be the instantaneous amount of reactivity by which

(continued)

a. ~~the reactor is subcritical~~ or

CL1.0-47

b. ~~The reactor~~ would be subcritical from its present condition assuming:

~~SHUTDOWN MARGIN (SDM)~~

(continued)

a. ~~a~~ All rod cluster control assemblies (RCCAs) are fully inserted except for the single RCCA of highest reactivity worth, which is assumed to be fully withdrawn. With any RCCA not capable of being fully inserted, the reactivity worth of the RCCA must be accounted for in the determination of SDM; and

b. ~~In~~ MODES 1 and 2, the fuel and moderator temperatures are changed to the nominal zero power design ~~temperature level~~.

~~SLAVE RELAY TEST~~

~~A SLAVE RELAY TEST shall consist of energizing each slave relay and verifying the OPERABILITY of each slave relay. The SLAVE RELAY TEST shall include, as a minimum, a continuity check of associated testable actuation devices.~~

CL1.0-37

STAGGERED TEST BASIS

A STAGGERED TEST BASIS shall consist of the testing of one of the systems, subsystems, channels, or other designated components during the interval specified by the Surveillance Frequency, so that all systems, subsystems, channels, or other designated components are tested during n Surveillance Frequency intervals.

1.1 Definitions

STAGGERED TEST BASIS
(continued)

where n is the total number of systems, subsystems, channels, or other designated

components in the associated function.

THERMAL POWER

THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.

TRIP ACTUATING DEVICE OPERATIONAL TEST (TADOT)

A TADOT shall consist of operating the trip actuating device and verifying the OPERABILITY of ~~all devices in the channel required for trip actuating device OPERABILITY~~ required alarm, interlock, display, and trip functions. The TADOT shall include adjustment, as necessary, of the trip actuating device so that it actuates at the required setpoint within the ~~necessary~~ required accuracy. ~~The TADOT may be performed by means of any series of sequential, overlapping, or total channel steps.~~

TA1.0-32

Table 1.1-1 (page 1 of 1)
MODES

| MODE | TITLE | REACTIVITY CONDITION (k_{eff}) | % RATED THERMAL POWER ^(a) | AVERAGE REACTOR COOLANT TEMPERATURE (°F) |
|------|------------------------------|--|--|---|
| 1 | Power Operation | ≥ 0.99 | > 5 | NA |
| 2 | Startup | ≥ 0.99 | ≤ 5 | NA |
| 3 | Hot Standby | < 0.99 | NA | $\geq \{350\}$ |
| 4 | Hot Shutdown ^(b) | < 0.99 | NA | $\{350\} > T_{avg} > \{200\}$ |
| 5 | Cold Shutdown ^(b) | < 0.99 | NA | $\leq \{200\}$ |
| 6 | Refueling ^(c) | NA | NA | NA |

(a) Excluding decay heat.

(b) All reactor vessel head closure bolts fully tensioned.

(c) One or more reactor vessel head closure bolts less than fully tensioned.

1.0 USE AND APPLICATION

1.2 Logical Connectors

PURPOSE The purpose of this section is to explain the meaning of logical connectors.

Logical connectors are used in Technical Specifications (TS) to discriminate between, and yet connect, discrete Conditions, Required Actions, Completion Times, Surveillances, and Frequencies. The only logical connectors that appear in TS are AND and OR. The physical arrangement of these connectors constitutes logical conventions with specific meanings.

BACKGROUND Several levels of logic may be used to state Required Actions. These levels are identified by the placement (or nesting) of the logical connectors and by the number assigned to each Required Action. The first level of logic is identified by the first digit of the number assigned to a Required Action and the placement of the logical connector in the first level of nesting (i.e., left justified with the number of the Required Action). The successive levels of logic are identified by additional digits of the Required Action number and by successive indentations of the logical connectors.

When logical connectors are used to state a Condition, Completion Time, Surveillance, or Frequency, only the first level of logic is used, and the logical connector is left justified with the statement of the Condition, Completion Time, Surveillance, or Frequency.

EXAMPLES The following examples illustrate the use of logical connectors.

(continued)

1.2 Logical Connectors

EXAMPLES
(continued)

EXAMPLE 1.2-1

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|-----------------|---|-----------------|
| A. LCO not met. | A.1 Verify . . . <u>AND</u> A.2 Restore . . . | |

In this example the logical connector AND is used to indicate that when in Condition A, both Required Actions A.1 and A.2 must be completed.

(continued)

1.2 Logical Connectors

EXAMPLES
(continued)

EXAMPLE 1.2-2

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|-----------------|-----------------------|-----------------|
| A. LCO not met. | A.1 Trip . . . | |
| | <u>OR</u> | |
| | A.2.1 Verify . . . | |
| | <u>AND</u> | |
| | A.2.2.1 Reduce . . . | |
| | <u>OR</u> | |
| | A.2.2.2 Perform . . . | |
| | <u>OR</u> | |
| | A.3 Align . . . | |

This example represents a more complicated use of logical connectors. Required Actions A.1, A.2, and A.3 are alternative choices, only one of which must be performed as indicated by the use of the logical connector OR and the left justified placement. Any one of these three Actions may be chosen. If A.2 is chosen, then both A.2.1 and A.2.2 must be performed as indicated by the logical connector AND. Required Action A.2.2 is met by performing A.2.2.1 or A.2.2.2. The indented position of the logical connector OR indicates that A.2.2.1 and A.2.2.2 are alternative choices, only one of which must be performed.

1.0 USE AND APPLICATION

1.3 Completion Times

PURPOSE The purpose of this section is to establish the Completion Time convention and to provide guidance for its use.

BACKGROUND Limiting Conditions for Operation (LCOs) specify minimum requirements for ensuring safe operation of the unit. The ACTIONS associated with an LCO state Conditions that typically describe the ways in which the requirements of the LCO can fail to be met. Specified with each stated Condition are Required Action(s) and Completion Time(s).

DESCRIPTION The Completion Time is the amount of time allowed for completing a Required Action. It is referenced to the time of discovery of a situation (e.g., inoperable equipment or variable not within limits) that requires entering an ACTIONS Condition unless otherwise specified, providing the unit is in a MODE or specified condition stated in the Applicability of the LCO. Required Actions must be completed prior to the expiration of the specified Completion Time. An ACTIONS Condition remains in effect and the Required Actions apply until the Condition no longer exists or the unit is not within the LCO Applicability.

If situations are discovered that require entry into more than one Condition at a time within a single LCO (multiple Conditions), the Required Actions for each Condition must be performed within the associated Completion Time. When in multiple Conditions, separate Completion Times are tracked for each Condition starting from the time of discovery of the situation that required entry into the Condition.

(continued)

Once a Condition has been entered, subsequent trains, subsystems, components, or variables expressed in the Condition, discovered to be inoperable or not within limits, will not result in separate entry into the Condition, unless specifically stated. The Required Actions of the Condition continue to apply to each additional failure, with Completion Times based on initial entry into the Condition.

1.3 Completion Times

DESCRIPTION
(continued)

However, when a subsequent train, subsystem, component, or variable expressed in the Condition is discovered to be inoperable or not within limits, the Completion Time(s) may be extended. ~~The Completion Time extension cannot be used to extend the stated Completion Time for the first inoperable train, subsystem, component, or variable.~~ To apply this Completion Time extension, two criteria must first be met. The subsequent inoperability:

PA1.0-52

- a. Must exist concurrent with the first inoperability; and
- b. Must remain inoperable or not within limits after the first inoperability is resolved.

The total Completion Time allowed for completing a Required Action to address the subsequent inoperability shall be limited to the more restrictive of either:

- a. The stated Completion Time, as measured from the initial entry into the Condition, plus an additional 24 hours; or
- b. The stated Completion Time as measured from discovery of the subsequent inoperability.

The above Completion Time extensions do not apply to those

(continued)

1.3 Completion Times (continued)

Specifications that have exceptions that allow completely separate re-entry into the Condition (for each train, subsystem, component, or variable expressed in the Condition) and separate tracking of Completion Times based on this re-entry. These exceptions are stated in individual Specifications.

The above Completion Time extension does not apply to a Completion Time with a modified "time zero." This modified "time zero" may be expressed as a repetitive time (i.e., "once per 8 hours," where the Completion Time is referenced from a previous completion of the Required Action versus the time of Condition entry).

~~An example of a modified "time zero" with the Completion Time expressed as "once per 8 hours" is illustrated in Example 1.3-6 Condition A. In this example, the Completion Time may not be extended, or as a time modified by the phrase "from discovery . . .". Example 1.3-3 illustrates one use of this~~

PA1.0-53

(continued)

(continued)

1.3 Completion Times

~~DESCRIPTION— type of Completion Time. The 10 day Completion Time~~
~~(continued) specified for Conditions A and B in Example 1.3-3 may not be~~
~~extended.~~

1.3 Completion Times (continued)

EXAMPLES The following examples illustrate the use of Completion Times with different types of Conditions and changing Conditions.

EXAMPLE 1.3-1

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|---------------------------------|-----------------|
| B. Required Action and associated Completion Time not met. | B.1 Be in MODE 3. | 6 hours |
| | <u>AND</u> B.2 Be in MODE 5. | 36 hours |

Condition B has two Required Actions. Each Required Action has its own separate Completion Time. Each Completion Time is referenced to the time that Condition B is entered.

The Required Actions of Condition B are to be in MODE 3 within 6 hours AND in MODE 5 within 36 hours. A total of 6 hours is allowed for reaching MODE 3 and a total of

(continued)

36 hours (not 42 hours) is allowed for reaching MODE 5 from the time that Condition B was entered. If MODE 3 is reached within 3 hours, the time allowed for reaching MODE 5 is the next 33 hours because the total time allowed for reaching MODE 5 is 36 hours.

If Condition B is entered while in MODE 3, the time allowed for reaching MODE 5 is the next 36 hours.

1.3 Completion Times

EXAMPLES
(continued)

EXAMPLE 1.3-2

ACTIONS

| <u>CONDITION</u> | <u>REQUIRED ACTION</u> | <u>COMPLETION TIME</u> |
|---|---|---|
| A. One train pump inoperable. | A.1 Restore train pump to OPERABLE status. | 7 day PA1.0-54 s |
| B. Required Action and associated Completion Time not met. | B.1 Be in MODE 3. AND B.2 Be in MODE 5. | 6 hours 36 hours |

When a ~~train~~-pump is declared inoperable, Condition A is entered. If the ~~train~~-pump is not restored to PA1.0-54 OPERABLE status within 7 days, Condition B is also entered.

(continued)

and the Completion Time clocks for Required Actions B.1 and B.2 start. If the inoperable ~~train-pump~~ is restored to OPERABLE status after Condition B is entered, Condition A and B are exited, and therefore, the Required Actions of Condition B may be terminated.

When a second ~~train-pump~~ is declared inoperable while the first ~~train-pump~~ is still inoperable, Condition A PA1.0-54 is not re-entered for the second ~~train-pump~~. LCO 3.0.3 is entered, since the ACTIONS do not include a Condition for more than one inoperable ~~train-pump~~. The Completion Time clock for Condition A does not stop after LCO 3.0.3 is entered, but continues to be tracked from the time Condition A was initially entered.

While in LCO 3.0.3, if ~~either one~~ of the inoperable ~~trainspumps~~ is restored to OPERABLE status and the Completion Time for Condition A has not expired, LCO 3.0.3 PA1.0-54

1.3 Completion Times

EXAMPLES

EXAMPLES 1.3-2 (continued)

may be exited and operation continued in accordance with Condition A.

While in LCO 3.0.3, if either of the inoperable trains is restored to OPERABLE status and the Completion Time for Condition A has expired, LCO 3.0.3 may be exited and operation continued in accordance with Condition B. The Completion Time for Condition B is tracked from the time the Condition A Completion Time expired.

~~Upon~~ On restoring ~~either one~~ of the ~~trainspumps~~ to OPERABLE status, the Condition A Completion Time is PA1.0-54 not reset, but continues from the time the first ~~train-pump~~

(continued)

was declared inoperable. This Completion Time may be extended if the trainpump restored to OPERABLE status was the first inoperable trainpump. A 24 hour extension to the stated 7 days is allowed, provided this does not result in the second trainpump being inoperable for > 7 days.

(continued)

1.3 Completion Times

EXAMPLES
(continued)

EXAMPLE 1.3-3

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|-------------------------------------|--|---|
| A. One Function X train inoperable. | A.1 Restore Function X train to OPERABLE status. | 7 days AND 10 days from PA1.0-56 discovery of failure to meet the LCO |
| B. One Function Y train inoperable. | B.1 Restore Function Y train to OPERABLE status. | 72 hours AND 10 days from PA1.0-56 discovery of failure to meet the LCO |

(continued)

| | | |
|--|---|----------|
| C. One Function X train inoperable. AND One Function Y train inoperable. | C.1 Restore Function X train to OPERABLE status. | 72 hours |
| | OR C.2 Restore Function Y train to OPERABLE status. | 72 hours |

(continued)

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-3 (continued)

When one Function X train and one Function Y train are inoperable, Condition A and Condition B are concurrently applicable. The Completion Times for Condition A and Condition B are tracked separately for each train starting from the time each train was declared inoperable and the Condition was entered. A separate Completion Time is established for Condition C and tracked from the time the second train was declared inoperable (i.e., the time the situation described in Condition C was discovered).

If Required Action C.2 is completed within the specified Completion Time, Conditions B and C are exited. If the Completion Time for Required Action A.1 has not expired, operation may continue in accordance with Condition A. The remaining Completion Time in Condition A is measured from the time the affected train was declared inoperable (i.e., initial entry into Condition A).

~~The Completion Times of Conditions A and B are modified by a logical connector with a separate 10 day Completion Time measured from the time it was discovered the LCO was not met. In this example, without the separate Completion Time, it would be possible to alternate between Conditions A, B, and C in such a manner that operation could continue indefinitely without ever restoring systems to meet the LCO. The separate Completion Time modified by the phrase "from discovery of failure to meet the LCO" is designed to prevent indefinite continued operation while not meeting the LCO. This Completion Time allows for an exception to the normal "time zero" for beginning the Completion Time "clock". In this instance, the Completion Time "time zero" is specified as commencing at the time the LCO was initially not met, instead of at the time the associated Condition was entered.~~

PA1.0-57

(continued)

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-4

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|--|-----------------|
| A. One or more valves inoperable. | A.1 Restore valve(s) to OPERABLE status. | 4 hours |
| B. Required Action and associated Completion Time not met. | B.1 Be in MODE 3. | 6 hours |
| | <u>AND</u> B.2 Be in MODE 4. | 12 hours |

A single Completion Time is used for any number of valves inoperable at the same time. The Completion Time associated with Condition A is based on the initial entry into Condition A and is not tracked on a per valve basis. Declaring subsequent valves inoperable, while Condition A is still in effect, does not trigger the tracking of separate Completion Times.

Once one of the valves has been restored to OPERABLE status, the Condition A Completion Time is not reset, but continues from the time the first valve was declared inoperable. The Completion Time may be extended if the valve restored to OPERABLE status was the first inoperable valve. The Condition A Completion Time may be extended for up to

(continued)

4 hours provided this does not result in any subsequent valve being inoperable for > 4 hours.

If the Completion Time of 4 hours (~~plus~~ including the extension) expires while one or more valves are still inoperable, Condition B is entered. PA1.0-54

(continued)

1.3 Completion Times

EXAMPLES
(continued)

EXAMPLE 1.3-5

ACTIONS

-----NOTE-----
Separate Condition entry is allowed for each inoperable valve.

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|---------------------------------------|-----------------|
| A. One or more valves inoperable. | A.1 Restore valve to OPERABLE status. | 4 hours |
| B. Required Action and associated Completion Time not met. | B.1 Be in MODE 3. | 6 hours |
| | <u>AND</u> B.2 Be in MODE 4. | 12 hours |

The Note above the ACTIONS Table is a method of modifying how the Completion Time is tracked. If this method of modifying how the Completion Time is tracked was applicable only to a specific Condition, the Note would appear in that Condition rather than at the top of the ACTIONS Table.

The Note allows Condition A to be entered separately for each inoperable valve, and Completion Times tracked on a per

(continued)

valve basis. When a valve is declared inoperable, Condition A is entered and its Completion Time starts. If subsequent valves are declared inoperable, Condition A is entered for each valve and separate Completion Times start and are tracked for each valve.

(continued)

1.3 Completion Times

EXAMPLES: EXAMPLE 1.3-5 (continued)

If the Completion Time associated with a valve in Condition A expires, Condition B is entered for that valve. If the Completion Times associated with subsequent valves in Condition A expire, Condition B is entered separately for each valve and separate Completion Times start and are tracked for each valve. If a valve that caused entry into Condition B is restored to OPERABLE status, Condition B is exited for that valve.

Since the Note in this example allows multiple Condition entry and tracking of separate Completion Times, Completion Time extensions do not apply.

EXAMPLE 1.3-6

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|----------------------------|---|------------------|
| A. One channel inoperable. | A.1 Perform SR 3.x.x.x. | Once per 8 hours |
| | <u>OR</u> A.2 Reduce THERMAL POWER to $\leq 50\%$ RTP. | 8 hours |

(continued)

| | | |
|--|-------------------|---------|
| B. Required Action and associated Completion Time not met. | B.1 Be in MODE 3. | 6 hours |
|--|-------------------|---------|

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-6 (continued)

Entry into Condition A offers a choice between Required Action A.1 or A.2. Required Action A.1 has a "once per" Completion Time, which qualifies for the ~~1.25 times~~ PA1.0-57 ~~the stated Frequency~~ 25% extension, per SR 3.0.2, to each performance after the initial performance. The initial 8 hour interval of Required Action A.1 begins when Condition A is entered and the initial performance of Required Action A.1 must be complete within the first 8 hour interval. If Required Action A.1 is followed, and the Required Action is not met within the Completion Time (plus the extension allowed by SR 3.0.2), Condition B is entered. If Required Action A.2 is followed and the Completion Time of 8 hours is not met, Condition B is entered.

If after entry into Condition B, Required Action A.1 or A.2 is met, Condition B is exited and operation may then continue in Condition A.

(continued)

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-7

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|---|---|
| A. One subsystem inoperable. | A.1 Verify affected subsystem isolated. | 1 hour <u>AND</u> Once per 8 hours thereafter |
| | <u>AND</u> A.2 Restore subsystem to OPERABLE status. | 72 hours |
| B. Required Action and associated Completion Time not met. | B.1 Be in MODE 3. | 6 hours |
| | <u>AND</u> B.2 Be in MODE 5. | 36 hours |

Required Action A.1 has two Completion Times. The 1 hour Completion Time begins at the time the Condition is entered

(continued)

and each "Once per 8 hours thereafter" interval begins upon performance of Required Action A.1.

If after Condition A is entered, Required Action A.1 is not met within either the initial 1 hour or any subsequent 8 hour interval from the previous performance (plus the extension allowed by SR 3.0.2), Condition B is entered. The Completion Time clock for Condition A does not stop after Condition B is entered, but continues from the time

(continued)

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-7 (continued)

Condition A was initially entered. If Required Action A.1 is met after Condition B is entered, Condition B is exited and operation may continue in accordance with Condition A, provided the Completion Time for Required Action A.2 has not expired.

IMMEDIATE COMPLETION TIME

When "Immediately" is used as a Completion Time, the Required Action should be pursued without delay and in a controlled manner.

1.0 USE AND APPLICATION

1.4 Frequency

PURPOSE The purpose of this section is to define the proper use and application of Frequency requirements.

DESCRIPTION Each Surveillance Requirement (SR) has a specified Frequency in which the Surveillance must be met in order to meet the associated LCO. An understanding of the correct application of the specified Frequency is necessary for compliance with the SR.

The "specified Frequency" is referred to throughout this section and each of the Specifications of Section 3.0, Surveillance Requirement (SR) Applicability. The "specified Frequency" consists of the requirements of the Frequency column of each SR as well as certain Notes in the Surveillance column that modify performance requirements.

Sometimes special situations dictate when the requirements of a Surveillance are to be met. They are otherwise stated conditions allowed by SR 3.0.1. They may be stated as clarifying Notes in the Surveillance, as part of the Surveillance, or both.

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Situations where a Surveillance could be required (i.e., its Frequency could expire), but where it is not possible or not desired that it be performed until sometime after the associated LCO is within its Applicability, represent potential SR 3.0.4 conflicts. To avoid these conflicts, the SR (i.e., the Surveillance or the Frequency) is stated such that it is only required when it can be and should be performed. With an SR satisfied, SR 3.0.4 imposes no restriction.

(continued)

The use of "met" or "performed" in these instances conveys specific meanings. A Surveillance is "met" only when the acceptance criteria are satisfied. Known failure of the requirements of a Surveillance, even without a Surveillance specifically being performed, constitutes a Surveillance not "met". "Performance" refers only to the requirement to specifically determine the ability to meet the acceptance criteria.

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Some Surveillances contain notes that modify the Frequency of performance or the conditions during which the acceptance criteria must be satisfied. For these Surveillances, the MODE entry restrictions of SR 3.0.4 may not apply. Such a Surveillance is not required to be performed prior to entering a MODE or other specified condition in the Applicability of the associated LCO if any of the following three conditions are satisfied:

- a. The Surveillance is not required to be met in the MODE or other specified condition to be entered; or
- b. The Surveillance is required to be met in the MODE or other specified condition to be entered, but has been performed within the specified Frequency (i.e., it is current) and is known not to be failed; or
- c. The Surveillance is required to be met, but not performed, in the MODE or other specified condition to be entered, and is known not to be failed.

Examples 1.4-3, 1.4-4, 1.4-5, and 1.4-6 discuss these special situations.

Situations where a Surveillance could be required (i.e., its Frequency could expire), but where it is not possible or not desired that it be performed until sometime after the associated LCO is within its Applicability, represent potential SR 3.0.4 conflicts. To avoid these conflicts, the SR (i.e., the Surveillance or the

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(continued)

~~Frequency) is stated such that it is only "required" when it can be and should be performed. With an SR satisfied, SR 3.0.4 imposes no restriction.~~

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EXAMPLES

The following examples illustrate the various ways that Frequencies are specified. In these examples, the Applicability of the LCO (LCO not shown) is MODES 1, 2, and 3.

(continued)

1.4 Frequency

EXAMPLES
(continued)EXAMPLE 1.4-1SURVEILLANCE REQUIREMENTS

| <u>SURVEILLANCE</u> | <u>FREQUENCY</u> |
|------------------------|------------------|
| Perform CHANNEL CHECK. | 12 hours |

Example 1.4-1 contains the type of SR most often encountered in the Technical Specifications (TS). The Frequency specifies an interval (12 hours) ~~at~~ during which the associated Surveillance ~~is scheduled to~~ must be performed at least one time. ~~Performance of the Surveillance initiates the subsequent interval.~~

CL1.0-58

Although the Frequency is stated as 12 hours, ~~the SR may be performed between 0.75~~ an extension of the time interval to 1.25 times the stated Frequency ~~is~~ is allowed by SR 3.0.2 for operational flexibility. The ~~scheduled~~ measurement of this interval continues at all times, even when the SR is not required to be met per SR 3.0.1 (such as when the equipment is inoperable, a variable is outside specified limits, or the unit is outside the Applicability of the LCO). If the interval specified by SR 3.0.2 is exceeded while the unit is in a MODE or other specified condition in the Applicability of the LCO, and the performance of the Surveillance is not otherwise modified (refer to Example 1.4-3), then SR 3.0.3 becomes applicable.

If the interval as specified by SR 3.0.2 is exceeded while the unit is not in a MODE or other specified condition in the Applicability of the LCO for which performance of the SR is required, the Surveillance must be performed within the Frequency requirements of SR 3.0.2 prior to entry into the

(continued)

MODE or other specified condition. Failure to do so would result in a violation of SR 3.0.4.

1.4 Frequency

EXAMPLES (continued)

EXAMPLE 1.4-2

SURVEILLANCE REQUIREMENTS

| SURVEILLANCE | FREQUENCY |
|-------------------------------|--|
| Verify flow is within limits. | Once within 12 hours after ≥ 25% RTP <u>AND</u> 24 hours thereafter |

Example 1.4-2 has two Frequencies. The first is a one time performance Frequency, and the second is of the type shown in Example 1.4-1. The logical connector "AND" indicates that both Frequency requirements must be met. Each time reactor power is increased from a power level < 25% RTP to ≥ 25% RTP, the Surveillance must be performed within 12 hours.

The use of "once" indicates a single performance will satisfy the specified Frequency (assuming no other Frequencies are connected by "AND"). This type of Frequency does not qualify for the ~~1-25 times the stated Frequency~~ 25% extension allowed by SR 3.0.2. "Thereafter" indicates future performances ~~are scheduled, but are required~~ must be established per

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(continued)

SR 3.0.2, but only after a specified

1.4 Frequency

condition is first met (i.e., the "once" performance in this example). If reactor power decreases to < 25% RTP, the ~~surveillance is not required to be completed but~~ CL1.0-58 ~~the scheduled intervals continue measurement of both intervals stops. — New intervals start upon reactor power reaching 25% RTP.~~

(continued)

1.4 Frequency

EXAMPLES
(continued)

EXAMPLE 1.4-3

SURVEILLANCE REQUIREMENTS

| SURVEILLANCE | FREQUENCY |
|---|-----------|
| <p>-----NOTE----- Not required to be performed until 12 hours after $\geq 25\%$ RTP. -----</p> <p>Perform channel adjustment.</p> | 7 days |

The interval continues, whether or not the unit operation is $< 25\%$ RTP between performances.

As the Note modifies the required performance of the Surveillance, it is construed to be part of the "specified Frequency." Should the 7 day interval be exceeded while operation is $< 25\%$ RTP, this Note allows 12 hours after power reaches $\geq 25\%$ RTP to perform the Surveillance. The Surveillance is still considered to be performed within the "specified Frequency." Therefore, if the Surveillance were not performed within the 7 day (plus the extension allowed by SR 3.0.2) interval, but operation was $< 25\%$ RTP, it would not constitute a failure of the SR or failure to meet the LCO. Also, no violation of SR 3.0.4 occurs when changing MODES, even with the 7 day Frequency not met, provided operation does not exceed 12 hours with power $\geq 25\%$ RTP.

Once the unit reaches 25% RTP, 12 hours would be allowed for completing the Surveillance. If the Surveillance were not performed within this 12 hour interval, there would then be

1.4 Frequency

a failure to perform a Surveillance within the specified Frequency, and the provisions of SR 3.0.3 would apply.

EXAMPLE 1.4-4

SURVEILLANCE REQUIREMENTS

TA1.0-55

| SURVEILLANCE | FREQUENCY |
|--|-----------|
| <p>NOTE</p> <p>Only required to be met in MODE 1</p> <p>Verify leakage rates are within limits</p> | 24 hours |

Example 1.4-4 specifies that the requirements of this Surveillance do not have to be met until the unit is in MODE 1. The interval measurement for the Frequency of this Surveillance continues at all times, as described in Example 1.4-1. However, the Note constitutes an otherwise stated exception to the Applicability of this Surveillance. Therefore, if the Surveillance were not performed within the 24 hour interval (plus the extension allowed by SR 3.0.2), but the unit was not in MODE 1, there would be no failure of the SR nor failure to meet the LCO. Therefore, no violation of SR 3.0.4 occurs when changing MODES, even with the 24 hour Frequency exceeded, provided the MODE change was not made into MODE 1. Prior to entering MODE 1 (assuming again that the 24 hour Frequency were not met), SR 3.0.4 would require satisfying the SR.

EXAMPLE 1.4-5

SURVEILLANCE REQUIREMENTS

TA1.0-55

| SURVEILLANCE | FREQUENCY |
|---|---------------|
| <p>NOTE</p> <p>Only required to be performed in MODE 1</p> <p>Perform complete cycle of the valve</p> | <p>7 days</p> |

The interval continues, whether or not the unit operation is in MODE 1, 2, or 3 (the assumed Applicability of the associated LCO) between performances.

As the Note modifies the required performance of the Surveillance, the Note is construed to be part of the specified Frequency. Should the 7 day interval be exceeded while operation is not in MODE 1, this Note allows entry into and operation in MODES 2 and 3 to perform the Surveillance. The Surveillance is still considered to be performed within the specified Frequency if completed prior to entering MODE 1. Therefore, if the Surveillance were not performed within the 7 day (plus the extension allowed by SR 3.0.2) interval, but operation was not in MODE 1, it would not constitute a failure of the SR or failure to meet the LCO. Also, no violation of SR 3.0.4 occurs when changing MODES, even with the 7 day Frequency not met, provided operation does not result in entry into MODE 1.

Once the unit reaches MODE 1, the requirement for the Surveillance to be performed within its specified Frequency applies and would require that the Surveillance had been performed. If the Surveillance were not performed prior to entering MODE 1, there would then be a failure to perform a Surveillance within the specified Frequency, and the

provisions of SR 3.0.3 would apply.

EXAMPLE 1.4-6

SURVEILLANCE REQUIREMENTS

TA1.0-55

| SURVEILLANCE | FREQUENCY |
|--|-----------------|
| <p>NOTE</p> <p>Not required to be met in MODE 3.</p> <p>Verify parameter is within limits.</p> | <p>24 hours</p> |

Example 1.4-6 specifies that the requirements of this Surveillance do not have to be met while the unit is in MODE 3 (the assumed Applicability of the associated LCO is MODES 1, 2, and 3). The interval measurement for the Frequency of this Surveillance continues at all times, as described in Example 1.4-1. However, the Note constitutes an "otherwise stated" exception to the Applicability of this Surveillance. Therefore, if the Surveillance were not performed within the 24 hour interval (plus the extension allowed by SR 3.0.2), and the unit was in MODE 3, there would be no failure of the SR nor failure to meet the LCO. Therefore, no violation of SR 3.0.4 occurs when changing MODES to enter MODE 3, even with the 24 hour Frequency exceeded, provided the MODE change does not result in entry into MODE 2. Prior to entering MODE 2 (assuming again that the 24 hour Frequency were not met), SR 3.0.4 would require satisfying the SR.