

PACKAGE 1.0
USE AND APPLICATION
PART F

JUSTIFICATION FOR DIFFERENCES
(JFD)

from

NUREG-1431
IMPROVED STANDARD TECHNICAL SPECIFICATIONS

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
UNITS 1 AND 2

Improved Technical Specifications
Conversion Submittal

PACKAGE 1.0

PART F

USE AND APPLICATION

JUSTIFICATION FOR DIFFERENCES FROM IMPROVED STANDARD TECHNICAL SPECIFICATIONS (NUREG-1431) AND BASES

See Part E for specific proposed wording and location of referenced deviations.

Difference Category	Difference Number 1.0-	Justification for Differences
CL	31	This deviation takes exception to the requirement to include a continuity check of output devices. As discussed in the Bases for Specification 3.3.2, continuity checks of the master and slave relays are performed. Continuity checks of other devices are not performed as part of this test since the plant design does not facilitate performance of these checks. Since this requirement is only performed when specified by Specification 3.3.2 and not performed when an ACTUATION LOGIC TEST is required by other specifications, it is not included in the definition for the Prairie Island Improved Technical Specifications.
TA	32	Incorporated TSTF-205, Revision 3.

Difference Category	Difference Number 1.0-	Justification for Differences
CL	33	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.
CL	34	Following "sensor" the word "output" was inserted to allow this revised definition to be applied within the context of the current plant licensing basis.
	35	Not used.
CL	36	The references which do not apply to Prairie Island (PI) and the bracketed information has not been included in the Improved Technical Specifications (ITS). With these changes, the definition is the same as the current Technical Specifications (CTS) definition.

Difference Category	Difference Number 1.0-	Justification for Differences
CL	37	<p>The definitions for ENGINEERED SAFETY FEATURE (ESF) RESPONSE TIME, MASTER RELAY TEST, and SLAVE RELAY TEST, were not added to the new specifications. The current Prairie Island Technical Specifications do not require ESF response time testing, master relay testing or slave relay testing. The plant design does not physically permit some aspects of this testing. Other requirements would impose a significant change in the plant test program beyond the currently licensed requirements. Master and slave relay testing capabilities are discussed further in the Bases for SR 3.3.2.2 and the supporting Justification For Difference, CL3.3-233.</p> <p>For the reasons given above, the listed NUREG-1431 test definitions were not included in the new Technical Specifications. This change is consistent with the approved Ginna Improved Technical Specifications.</p>
CL	38	<p>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.</p>

Difference Category	Difference Number 1.0-	Justification for Differences
CL	39	The phrase "from the RCS" was added to the LEAKAGE definition to clarify the applicability of this definition.
	40	Not used.
CL	41	Reactor PHYSICS TESTS for Prairie Island initial startup are described in Appendix J of the Updated Safety Analysis Report.
TA	42	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".
PA	43	The PI specific Specifications are listed where the PTLR is referenced.
CL	44	This definition has been modified by inserting "output" after "channel sensor" and "opening of reactor trip breaker" is used in lieu of "loss of stationary gripper coil voltage". These changes are required to allow this new definition to be applied within the context of the current plant licensing basis.

Difference Category	Difference Number 1.0-	Justification for Differences
	45	Not used.
TA	46	Approved TSTF-111 Revision 6 is NOT included in the PI ITS since the WCAPs upon which this TSTF is based have not been adopted for use at PI.
CL	47	In lieu of the bracketed wording, the requirements contained in Current Technical Specifications Bases B 3.10.A, Shutdown Margin are included in this modified definition for SHUTDOWN MARGIN. The format of this definition has been modified to agree with the CTS format since this may affect the punctuation and therefore the implementation of this definition.
	48	Not used.
	49	Not Used.
	50	Not used.
	51	Not used.

Difference Category	Difference Number 1.0-	Justification for Differences
PA	52	An additional statement was added to reinforce the requirement that, in the application of Completion Time extensions, no single component, subsystem, or variable, etc., can be allowed to remain inoperable for longer than the stated Completion Time. This change is consistent with the approved Ginna Improved Technical Specifications.
PA	53	This Description refers to Completion Times on a "once per" basis, but no example of this form of a modified "time zero" is referenced. An appropriate example was added. The modified "time zero" modified by the phrase "from discovery" has been deleted from Example 1.3-3 and the corresponding discussion here is deleted. This change is consistent with the approved Ginna Improved Technical Specifications.
PA	54	Minor changes were made to Examples 1.3-2, 1.3-4 and 1.3-6 to provide additional clarification. These changes do not alter the intent of the examples. These changes are consistent with the approved Ginna Improved Technical Specifications.
TA	55	This change incorporates TSTF-284, Revision 3.

Difference Category	Difference Number 1.0-	Justification for Differences
PA	56	The Completion Time logical connector for Example 1.3-3 was deleted from the ACTIONS table and the discussion since this connector is not used in the Prairie Island Improved Technical Specifications. This change is consistent with the approved Ginna Improved Technical specifications.
PA	57	For consistency with SR 3.0.2, the Frequency extension is reworded. This change is consistent with the approved Ginna Improved Technical Specifications.
CL	58	SR 3.0.2 was revised to retain the CTS system for managing Surveillance Requirements. The PI system for managing Surveillance Requirements is a fixed schedule system and allows the performance of SR to be adjusted within $\pm 25\%$ of the fixed schedule. Section 1.4 has been revised to support this CTS system which has been incorporated into the ITS.

PACKAGE 1.0

USE AND APPLICATION

PART G

NO SIGNIFICANT HAZARDS DETERMINATION
(NSHD)

and

ENVIRONMENTAL ASSESSMENT

for

CHANGES TO PRAIRIE ISLAND
CURRENT TECHNICAL SPECIFICATIONS

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
UNITS 1 AND 2

Improved Technical Specifications
Conversion Submittal

Part G

PACKAGE 1.0

USE AND APPLICATION

NO SIGNIFICANT HAZARDS DETERMINATION AND ENVIRONMENTAL ASSESSMENT

NO SIGNIFICANT HAZARDS DETERMINATION

The proposed changes to the Operating License have been evaluated to determine whether they constitute a significant hazards consideration as required by 10CFR Part 50, Section 50.91 using the standards provided in Section 50.92.

For ease of review, the changes are evaluated in groupings according to the type of change involved. A single generic evaluation may suffice for some of the changes while others may require specific evaluation in which case the appropriate reference change numbers are provided.

A - Administrative (GENERIC NSHD)

(A1.0-01, A1.0-04, A1.0-05, A1.0-06, A1.0-08, A1.0-09, A1.0-11, A1.0-12, A1.0-18, A1.0-19, A1.0-21, A1.0-24, A1.0-28)

Most administrative changes have not been marked-up in the Current Technical Specifications, and may not be specifically referenced to a discussion of change. This No Significant Hazards Determination (NSHD) may be referenced in a discussion of change by the prefix "A" if the change is not obviously an administrative change and requires an explanation.

These proposed changes are editorial in nature. They involve reformatting, renaming, renumbering, or rewording of existing Technical Specifications to provide consistency with NUREG-1431 or conformance with the Writer's Guide, or change of current plant terminology to conform to NUREG-1431. Some administrative changes involve relocation of requirements within the Technical Specifications without affecting their

Administrative (continued)

technical content. Clarifications within the new Prairie Island Improved Technical Specifications which do not impose new requirements on plant operation are also considered administrative.

1. The proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated

The proposed conversion of Prairie Island Current Technical Specifications to conform to NUREG-1431 involves reformatting, rewording, changes in terminology and relocating requirements. These changes are simply editorial, or do not involve technical changes and thus they do not impact any initiators of previously analyzed events or assumed mitigation of accident or transient events. Therefore, these changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously analyzed.

These proposed administrative changes do not involve physical modification of the plant, no new or different type of equipment will be installed or removed associated with these administrative changes, nor will there be changes in parameters governing normal plant operation. The proposed administrative changes do not impose new or different requirements on plant operation. Therefore, these administrative changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The proposed amendment will not involve a significant reduction in the margin of safety.

These proposed administrative changes do not impact any safety analysis assumptions. Therefore, these changes do not involve a reduction in the plant margin of safety.

M - More restrictive (GENERIC NSHD)
(M1.0-02, M1.0-13, M1.0-17, M1.0-26, M1.0-27)

This proposed Technical Specifications revision involves modifying the Current Technical Specifications to impose more stringent requirements upon plant operations to achieve consistency with the guidance of NUREG-1431, correct discrepancies or remove ambiguities from the specifications. These more restrictive Technical Specifications have been evaluated against the plant design, safety analyses, and other Technical Specifications requirements to ensure the plant will continue to operate safely with these more stringent specifications.

1. The proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated

The proposed changes provide more stringent requirements for operation of the plant. These more stringent requirements do not result in operation that will increase the probability of initiating an analyzed event and do not alter assumptions relative to mitigation of an accident or transient event.

These more restrictive requirements continue to ensure process variables, structures, systems, and components are maintained consistent with the safety analyses and licensing basis. Therefore, these changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously analyzed.

The proposed changes do not involve a physical alteration of the plant; that is, no new or different type of equipment will be installed, nor do they change the methods governing normal plant operation.

These more stringent requirements do impose different operating restrictions. However, these operating restrictions are consistent with the boundaries established by the assumptions made in the plant safety analyses and licensing bases. Therefore, these changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

M - More restrictive (continued)

3. The proposed amendment will not involve a significant reduction in the margin of safety.

The imposition of more stringent requirements on plant operation either has no impact on the plant margin of safety or increases the margin of safety. Each change in this category is by definition providing additional restrictions to enhance plant safety by:

- a) increasing the analytical or safety limit;
- b) increasing the scope of the specifications to include additional plant equipment;
- c) adding requirements to current specifications;
- d) increasing the applicability of the specification;
- e) providing additional actions;
- f) decreasing restoration times;
- g) imposing new surveillances; or
- h) decreasing surveillance intervals.

These changes maintain requirements within the plant safety analyses and licensing bases. Therefore, these changes do not involve a significant reduction in a margin of safety.

R - Relocation (GENERIC NSHD)
(None in this Package)

This License Amendment Request (LAR) proposes to relocate requirements contained in the Current Technical Specifications out of the Technical Specifications into licensee controlled programs. These requirements are relocated because they 1) do not meet the Technical Specifications selection criteria defined in 10 CFR 50.36; or 2) are mandated by current Nuclear Regulatory Commission (NRC) regulations and are therefore unnecessary in the Technical Specifications.

In the NRC Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors (dated 7/16/93), the NRC stated:

... since 1969, there has been a trend towards including in Technical Specifications not only those requirements derived from the analyses and evaluations included in the safety analysis report but also essentially all other Commission requirements governing the operation of nuclear power reactors. . . This has contributed to the volume of Technical Specifications and to the several-fold increase, since 1969, in the number of license amendment applications to effect changes to the Technical Specifications. It has diverted both staff and licensee attention from the more important requirements in these documents to the extent that it has resulted in an adverse but unquantifiable impact on safety.

Thus, relocation of unnecessary requirements from the Current Technical Specifications should result in an overall improvement in plant safety through more focused attention to the requirements that are most important to plant safety.

1. The proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated

These proposed changes relocate requirements for structures, systems, components or variables which did not meet the criteria for inclusion in the improved Technical Specifications or duplicate regulatory requirements. The affected structures, systems, components or variables are not assumed to be initiators of analyzed events and are not assumed to mitigate accident or transient events.

These relocated operability requirements will continue to be maintained pursuant

R - Relocation (continued)

to 10 CFR 50.59, other regulatory requirements (as applicable for the document to which the requirement is relocated), or the Administrative Controls section of these proposed improved Technical Specifications.

Therefore, these changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously analyzed.

These proposed changes do not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in parameters governing normal plant operation. The proposed changes do not impose any different requirements and adequate control of existing requirements will be maintained. Thus, these changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The proposed amendment will not involve a significant reduction in the margin of safety.

These proposed changes will not reduce the margin of safety because they do not impact any safety analysis assumptions. In addition, the relocated requirements for the affected structure, system, component or variables are the same as the current Technical Specifications. Since future changes to these requirements will be evaluated per the requirements of 10 CFR 50.59, other regulatory requirements (as applicable for the document to which the requirement is relocated), or the Administrative Control section of the Improved Technical Specifications, proper controls are in place to maintain the plant margin of safety. Therefore, these changes do not involve a significant reduction in the margin of safety.

LR - Less restrictive, Relocated details (GENERIC NSHD)
(LR1.0-03, LR1.0-07, LR1.0-14, LR1.0-16)

Some information in the Prairie Island Current Technical Specifications that is descriptive in nature regarding the equipment, system(s), actions or surveillances identified by the specification has been removed from the proposed specification and relocated to the proposed Bases, Updated Safety Analysis Report or licensee controlled procedures. The relocation of this descriptive information to the Bases of the Improved Technical Specifications, Updated Safety Analysis Report or licensee controlled procedures is acceptable because these documents will be controlled by the Improved Technical Specifications required programs, procedures or 10CFR50.59. Therefore, the descriptive information that has been moved continues to be maintained in an appropriately controlled manner.

1. The proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated

The proposed changes relocate detailed, descriptive requirements from the Technical Specifications to the Bases, Updated Safety Analysis Report or licensee controlled procedures. These documents containing the relocated requirements will be maintained under the provisions of 10CFR50.59, a program or procedure based on 10CFR50.59 evaluation of changes, or NRC approved methodologies. Since these documents to which the Technical Specifications requirements have been relocated are evaluated under 10CFR50.59 or its guidance, or in accordance with NRC approved methodologies, no increase in the probability or consequences of an accident previously evaluated will be allowed without prior NRC approval. Therefore, these changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously analyzed.

These proposed changes do not necessitate physical alteration of the plant; that is, no new or different type of equipment will be installed, or change parameters governing normal plant operation. The proposed changes will not impose any different requirements and adequate control of the information will be maintained. Thus, these changes do not create the possibility of a new or

LR - Less restrictive, Relocated details (continued)

different kind of accident from any accident previously evaluated.

3. The proposed amendment will not involve a significant reduction in the margin of safety.
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The proposed changes will not reduce a margin of safety because it has no impact on any safety analysis assumptions. In addition, the requirements to be transposed from the Technical Specifications to the Bases, Updated Safety Analysis Report or licensee controlled procedures are the same as the existing Technical Specifications. Since future changes to these requirements will be evaluated under 10CFR50.59 or its guidance, or in accordance with NRC approved methodologies, no reduction in a margin of safety will be allowed without prior NRC approval. Therefore, these changes do not involve a significant reduction in a margin of safety.

L - Less restrictive, Specific

Each Current Technical Specifications change which is designated as Less (L prefix) restrictive on plant operations is provided with a specific NSHD.

Specific NSHD for Change L1.0-22

In conformance with the guidance of NUREG-1431, the new Technical Specifications table defining plant operational MODES introduces a number of differences from CTS MODE definitions. These changes also affect the power level limits on PHYSICS TESTs which CTS restricts to less than 2% RTP. These changes are acceptable as discussed below.

The shift from MODE 3 to MODE 2 has been changed to $K_{\text{eff}} = 0.99$ rather than subcritical-to-critical. This is a conservative (more restrictive) change in that the plant will be some distance below critical to meet the definition of MODE 3 whereas currently MODE 3 is entered immediately upon declaration of subcritical.

The shift from MODE 1 (Power Operation) and MODE 2 (Startup) is 5% RATED THERMAL POWER (RTP) in the proposed Technical Specifications whereas it is 2% RTP in the Prairie Island Current Technical Specifications. This change does not cause an unsafe condition during PHYSICS TESTs because 5% RTP is well below the power level at which core parameters are challenged. This change does not have a safety impact on plant shutdown tracks because the Current Technical Specifications do not use MODE 2 in any ACTION statements, but rather take the unit to MODE 3 to maintain the unit in a safe condition. Likewise in the new specifications, if there is inability to meet the required limiting conditions for operation while operating in MODE 1 and the early remedial actions are unsuccessful, most new specifications require the unit to go to MODE 3. Those specifications which require placement of the unit in MODE 2 maintain the unit in a safe condition either by imposing other requirements which assure the safety function is met, or by virtue that the reduced power level at 5% is safe for the condition being addressed. These changes are consistent with the guidance of NUREG-1431.

1. The proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated

The new MODE definition increases the MODE 2 power level from 2% to 5%. The application of MODE 2 in the new Technical Specifications assures that the

Specific NSHD for Change L1.0-22 (continued)

power level is not significant for the functions being protected or other measures are invoked to meet the safety function. Thus, the proposed change to MODE 2 power level does not significantly increase the probability or consequences of an accident.

2. The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously analyzed.

Plant operation between 2% and 5% power will be the same as it is under the Current Technical Specifications regardless of the defined MODE of operation. The plant will continue to perform the same PHYSICS TESTs as performed under CTS. Thus this change does not create the possibility of new kind of accident.

3. The proposed amendment will not involve a significant reduction in the margin of safety.

Plant operation between 2% and 5% RTP under the Prairie Island Improved Technical Specifications will be the same as operation under the Current Technical Specifications. If operation at this power level is required due to ACTION statement compliance, then this power level is inherently low enough to provide adequate margin of safety or other conditions are imposed to assure adequate safety margins are maintained. Plant PHYSICS TESTs performed between 2% and 5% RTP are well below the limits that challenge core physics parameters. Therefore, the new definition for operating MODES does not significantly reduce the plant margin of safety.

Therefore it is concluded that this change does not involve a significant hazards consideration. These changes are consistent with the guidance of NUREG-1431.

ENVIRONMENTAL ASSESSMENT

The Nuclear Management Company has evaluated the proposed changes and determined that:

1. The changes do not involve a significant hazards consideration, or
2. The changes do not involve a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or
3. The changes do not involve a significant increase in individual or cumulative occupational radiation exposure.

Accordingly, the proposed changes meet the eligibility criteria for categorical exclusion set forth in 10 CFR Part 51 Section 51.22(c)(9). Therefore, pursuant to 10 CFR Part 51 Section 51.22(b), an environmental assessment of the proposed changes is not required.

PACKAGE 1.0
USE AND APPLICATION
CROSS - REFERENCE

CURRENT TECHNICAL SPECIFICATIONS

TO

IMPROVED TECHNICAL SPECIFICATIONS

List of Section Cross - References

1.0
4.1
Table 1.1

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
UNITS 1 AND 2

Improved Technical Specifications
Conversion Submittal

Current Technical Specification Cross-Reference

CTS Section	CTS Table Item Number	Section Type	ITS Section	ITS Table Item Number
CTS Section 1.0				
1.0	ACTIONS	G	1.1	ACTIONS
New		G	1.1	ACTUATION LOGIC TEST
New		G	1.1	AFD
1.0	ABSVZ INTEGRITY		Relocated - Bases	
1.0	CHANNEL CALIBRATION	G	1.1	CHANNEL CALIBRATION
1.0	CHANNEL CHECK	G	1.1	CHANNEL CHECK
1.0	CHANNEL FUNCTIONAL TEST	G	1.1	CHANNEL OPERATIONAL TEST
1.0	CHANNEL RESPONSE TEST		Deleted	
1.0	CONTAINMENT INTEGRITY		Relocated - Bases	
1.0	CORE ALTERATION	G	1.1	CORE ALTERATION

Current Technical Specification Cross-Reference

CTS Section	CTS Table Item Number	Section Type	ITS Section	ITS Table Item Number
1.0	COLR	G	1.1	COLR
1.0	DOSE EQUIV I-131	G	1.1	DOSE EQUIV I-131
1.0	E-AVE DISINTEGRATION	G	1.1	E-AVE DISINTEGRATION
1.0	LSSS		Deleted	
New		G	1.1	LEAKAGE
1.0	MODE	G	1.1	MODE
1.0	OPERABLE	G	1.1	OPERABLE
1.0	PHYSICS TESTS	G	1.1	PHYSICS TESTS
1.0	PTLR	G	1.1	PTLR
1.0	PROTECTION INSTR. AND LOGIC		Deleted	
1.0	QPTR	G	1.1	QPTR
1.0	RTP	G	1.1	RTP

Current Technical Specification Cross-Reference

CTS Section	CTS Table Item Number	Section Type	ITS Section	ITS Table Item Number
New	CHANNEL RESPONSE TEST	G	1.1	RTS RESPONSE TIME
1.0	REPORTABLE EVENT	G	Relocated - TRM	
1.0	SHIELD BLDG INTEGRIT	G	Relocated - Bases	
1.0	SDM	G	1.1	SDM
1.0	SOURCE CHECK		Deleted	
1.0	STAGGERED TEST BASIS	G	1.1	STAGGERED TEST BASIS
1.0	STARTUP		Deleted	
1.0	THERMAL POWER	G	1.1	THERMAL POWER
New		G	1.1	TADOT
New		G	1.2	
New		G	1.3	

Current Technical Specification Cross-Reference

CTS Section	CTS Table Item Number	Section Type	ITS Section	ITS Table Item Number
New		G	1.4	

Current Technical Specification Cross-Reference

CTS Section	CTS Table Item Number	Section Type	ITS Section	ITS Table Item Number
CTS Section 4.1				
4.1.A		LCO	3.3	
4.1.B		LCO	3.3	
4.1.C		LCO	3.3	
4.1.D		G	1.4	

Current Technical Specification Cross-Reference

CTS Section	CTS Table Item Number	Section Type	ITS Section	ITS Table Item Number
CTS Section Table 1.1				
Table 1-1		TABLE	Table 1.1-1	
Table 1-1	Note*	LCO	3.9.1	
Table 1-1	Note *	(Partial)	Relocated-COLR	
Table 1-1	Note **		Deleted	

PACKAGE 1.0
USE AND APPLICATION
CROSS - REFERENCE

IMPROVED TECHNICAL SPECIFICATIONS
TO
CURRENT TECHNICAL SPECIFICATIONS

Section Cross - Reference

1.0
Table 1.1

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
UNITS 1 AND 2

Improved Technical Specifications
Conversion Submittal

Improved Technical Specification Cross-Reference

ITS Section	ITS Table Item Number	Section Type	CTS Section	CTS Table Item Number
ITS Section 1.0				
1.1	ACTIONS	G	1.0	ACTIONS
1.1	ACTUATION LOGIC TEST	G	New	
1.1	AFD	G	New	
1.1	CHANNEL CALIBRATION	G	1.0	CHANNEL CALIBRATION
1.1	CHANNEL CHECK	G	1.0	CHANNEL CHECK
1.1	CHANNEL OPERATIONAL TEST	G	1.0	CHANNEL FUNCTIONAL TEST
1.1	COLR	G	1.0	COLR
1.1	CORE ALTERATION	G	1.0	CORE ALTERATION
1.1	DOSE EQUIV I-131	G	1.0	DOSE EQUIV I-131
1.1	E-AVE DISINTEGRATION	G	1.0	E-AVE DISINTEGRATION

Improved Technical Specification Cross-Reference

ITS Section	ITS Table Item Number	Section Type	CTS Section	CTS Table Item Number
1.1	LEAKAGE	G	New	
1.1	MODE	G	1.0	MODE
1.1	OPERABLE	G	1.0	OPERABLE
1.1	PHYSICS TESTS	G	1.0	PHYSICS TESTS
1.1	PTLR	G	1.0	PTLR
1.1	QPTR	G	1.0	QPTR
1.1	RTP	G	1.0	RTP
1.1	RTS RESPONSE TIME		New	CHANNEL RESPONSE TEST
1.1	SDM	G	1.0	SDM
1.1	STAGGERED TEST BASIS	G	1.0	STAGGERED TEST BASIS
1.1	THERMAL POWER	G	1.0	THERMAL POWER

Improved Technical Specification Cross-Reference

ITS Section	ITS Table Item Number	Section Type	CTS Section	CTS Table Item Number
1.1	TADOT	G	New	
1.2		G	New	
1.3		G	New	
1.4		G	4.1.D	
1.4		G	New	

Current Technical Specification Cross-Reference

ITS Section	CTS Table Item Number	Section Type	CTS Section	ITS Table Item Number
ITS Section Tables 1.1				
Table 1.1-1		TABLE	Table 1-1	

ITS PACKAGE CONTENTS

Package:

2.0

1. Part A Introduction
2. Part B Proposed PI ITS and Bases
3. Part C Markup of PI CTS
4. Part D DOC to PI CTS
5. Part E Markup of ISTS and Bases
6. Part F JD from ISTS
7. Part G NSHD for changes to PI CTS
8. Cross-Reference CTS to ITS
9. Cross-Reference ITS to CTS

PACKAGE 2.0
SAFETY LIMITS
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

2.0

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
IFE	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 2.0
SAFETY LIMITS
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

2.0 SAFETY LIMITS (SLs)

2.1 SLs

2.1.1 Reactor Core SLs

In MODES 1 and 2, the combination of THERMAL POWER, Reactor Coolant System (RCS) highest loop average temperature, and pressurizer pressure shall not exceed the SLs specified in Figure 2.1.1-1.

2.1.2 RCS Pressure SL

In MODES 1, 2, 3, 4, and 5, the RCS pressure shall be maintained ≤ 2735 psig.

2.2 SL Violations

2.2.1 If SL 2.1.1 is violated, restore compliance and be in MODE 3 within 1 hour.

2.2.2 If SL 2.1.2 is violated:

2.2.2.1 In MODE 1 or 2, restore compliance and be in MODE 3 within 1 hour.

2.2.2.2 In MODE 3, 4, or 5, restore compliance within 5 minutes.

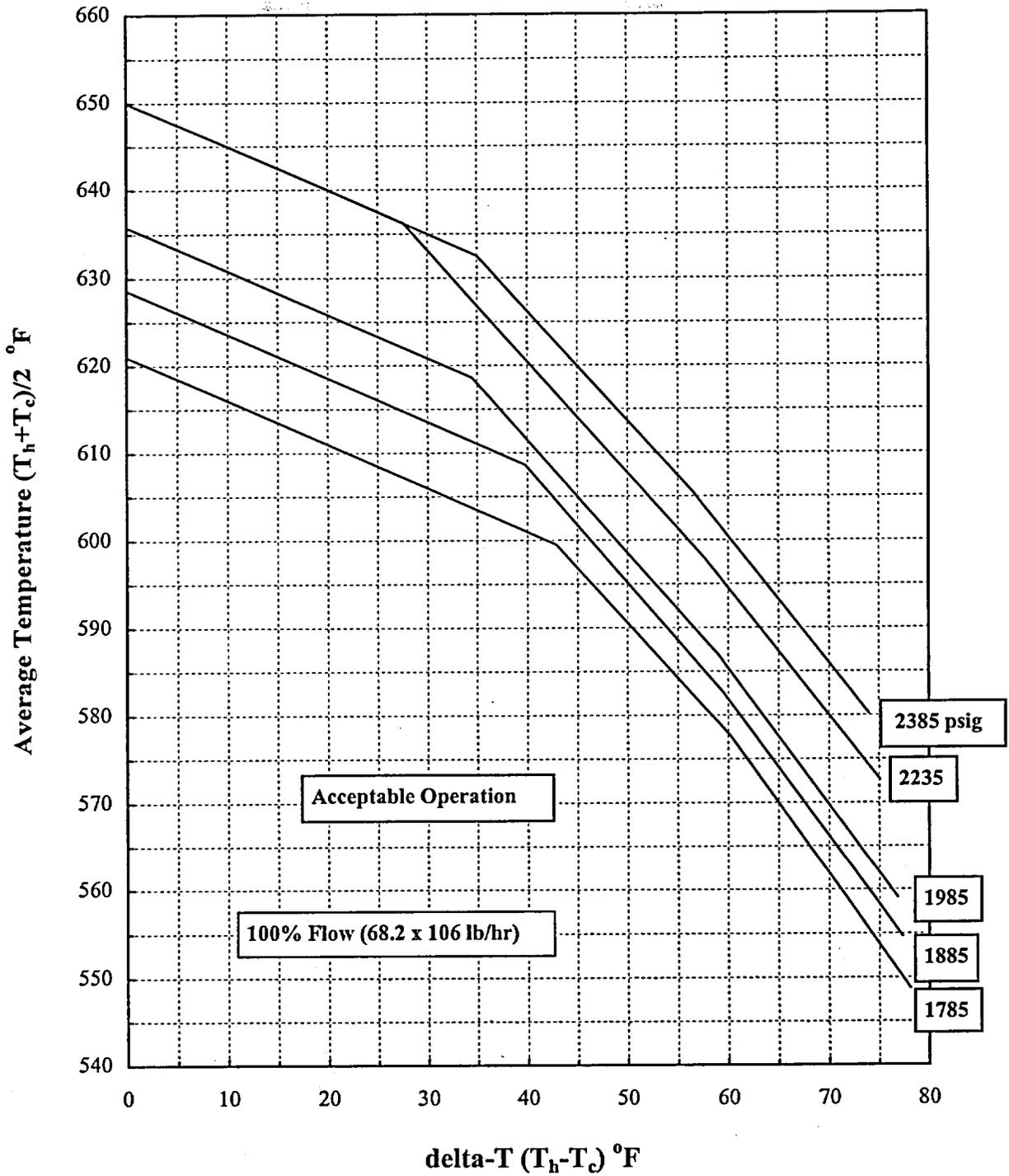


Figure 2.1.1-1 (page 1 of 1)
Reactor Core Safety Limits

B 2.0 SAFETY LIMITS (SLs)

B 2.1.1 Reactor Core SLs

BASES

BACKGROUND

AEC GDC Criterion 6 (Ref. 1) requires that the reactor core shall be designed to function throughout its design lifetime without exceeding acceptable fuel damage limits which have been stipulated and justified. This integrity is required during steady state operation, normal operational transients, and anticipated operational occurrences (AOOs). This is accomplished by having a departure from nucleate boiling (DNB) design basis, which corresponds to a 95% probability at a 95% confidence level (the 95/95 DNB criterion) that DNB will not occur and by requiring that fuel centerline temperature stays below the melting temperature.

The restrictions of this SL prevent overheating of the fuel and cladding, as well as possible cladding perforation, that would result in the release of fission products to the reactor coolant. Overheating of the fuel is prevented by maintaining the steady state peak linear heat rate (LHR) below the level at which fuel centerline melting occurs. Overheating of the fuel cladding is prevented by restricting fuel operation to within the nucleate boiling regime, where the heat transfer coefficient is large and the cladding surface temperature is slightly above the coolant saturation temperature.

Fuel centerline melting occurs when the local LHR, or power peaking, in a region of the fuel is high enough to cause the fuel centerline temperature to reach the melting point of the fuel. Expansion of the pellet upon centerline melting may cause the pellet to stress the cladding to the point of failure, allowing an uncontrolled release of activity to the reactor coolant.

Operation above the boundary of the nucleate boiling regime could result in excessive cladding temperature because of the onset of DNB and the resultant sharp reduction in heat transfer coefficient.

BASES

BACKGROUND
(continued)

Inside the steam film, high cladding temperatures are reached, and a cladding water (zirconium-water) reaction may take place. This chemical reaction results in oxidation of the fuel cladding to a structurally weaker form. This weaker form may lose its integrity, resulting in an uncontrolled release of activity to the reactor coolant.

The proper functioning of the Reactor Protection System (RPS) and steam generator safety valves prevents violation of the reactor core SLs.

**APPLICABLE
SAFETY
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The fuel cladding must not sustain damage as a result of normal operation and AOOs. The reactor core SLs are established to preclude violation of the following fuel design criteria:

- a. There must be at least 95% probability at a 95% confidence level (the 95/95 DNB criterion) that the hot fuel rod in the core does not experience DNB; and
- b. The hot fuel pellet in the core must not experience centerline fuel melting.

The Reactor Trip System allowable values specified in LCO 3.3.1, "Reactor Trip System (RTS) Instrumentation", in combination with other LCOs, are designed to prevent any anticipated combination of transient conditions for Reactor Coolant System (RCS) temperature, pressure, and THERMAL POWER level that would result in a departure from nucleate boiling ratio (DNBR) of less than the DNBR limit and preclude DNB related flow instabilities.

Automatic enforcement of these reactor core SLs is provided by the following functions:

- a. High pressurizer pressure trip;
 - b. Low pressurizer pressure trip;
-

BASES

APPLICABLE
SAFETY
ANALYSES
(continued)

- c. Overtemperature ΔT trip;
- d. Overpower ΔT trip;
- e. Power Range Neutron Flux trip; and
- f. Steam generator safety valves.

The limitation that the average enthalpy in the hot leg be less than or equal to the enthalpy of saturated liquid also ensures that the ΔT measured by instrumentation, used in the RPS design as a measure of core power, is proportional to core power.

The SLs represent a design requirement for establishing the RPS allowable values identified previously. LCO 3.4.1, "RCS Pressure, Temperature, and Flow-Departure from Nucleate Boiling (DNB) Limits," or the assumed initial conditions of the safety analyses (as indicated in the USAR, Ref. 2) provide more restrictive limits to ensure that the SLs are not exceeded.

SAFETY
LIMITS

The curves provided in Figure 2.1.1-1 show the loci of points of THERMAL POWER, RCS pressure, and average temperature for which the minimum DNBR is not less than the safety analyses limit, that fuel centerline temperature remains below melting, that the average enthalpy in the hot leg is less than or equal to the enthalpy of saturated liquid, or that the core exit quality is within the limits defined by the DNBR correlation.

The SL curves in Figure 2.1.1-1 define the regions of acceptable operation with respect to average temperatures, power (measured in ΔT), and pressurizer pressure. Each of the curves in the Figure has three slopes. For the 2235 and 2385 psig curves, at lower power (lower ΔT) the vessel exit design temperature, 650°F, is limiting.

BASES

SAFETY
LIMITS
(continued)

For the lower pressure curves, at lower ΔT , vessel exit temperature T_{sat} is limiting, to ensure the ΔT measurement remains valid. At all pressures after the first knee, at higher ΔT , the minimum DNBR derived from the critical heat flux correlation is limiting. The change in slope near full power ΔT is due to more restrictive $F_{\Delta H}$ consideration in the DNBR limit at high power.

The curves are based on enthalpy hot channel factor limits provided in the Core Operating Limits Report (COLR). Figure B 2.1.1-1 shows an example of a limit curve at 2235 psig. In addition, it illustrates the various RPS functions that are designed to prevent the unit from reaching the limit.

The SL is higher than the setpoint calculated when the Axial Flux Difference (AFD) is within the limits of the $F(\Delta I)$ function of the overtemperature ΔT reactor trip. When the AFD is not within the tolerance, the AFD effect on the overtemperature ΔT reactor trips will reduce the setpoints to provide protection consistent with the reactor core SLs (Ref. 3).

APPLICABILITY

SL 2.1.1 only applies in MODES 1 and 2 because these are the only MODES in which the reactor is critical. Automatic protection functions are required to be OPERABLE during MODES 1 and 2 to ensure operation within the reactor core SLs. The steam generator safety valves and automatic protection actions serve to prevent RCS heatup to the reactor core SL conditions or to initiate a reactor trip function, which forces the unit into MODE 3. Allowable values for the reactor trip functions are specified in LCO 3.3.1, "Reactor Trip System (RTS) Instrumentation." In MODES 3, 4, 5, and 6, Applicability is not required since the reactor is not generating significant THERMAL POWER.

BASES (continued)

SAFETY
LIMIT
VIOLATIONS

The following SL violation responses are applicable to the reactor core SLs. If SL 2.1.1 is violated, the requirement to go to MODE 3 places the unit in a MODE in which this SL is not applicable.

The allowed Completion Time of 1 hour recognizes the importance of bringing the unit to a MODE of operation where this SL is not applicable, and reduces the probability of fuel damage.

REFERENCES

1. AEC "General Design Criteria for Nuclear Power Plant Construction Permits", Criterion 6, issued for comment July 10, 1967, as referenced in USAR Section 1.2.
 2. USAR, Section 14.3.
 3. WCAP-13123, December 1991.
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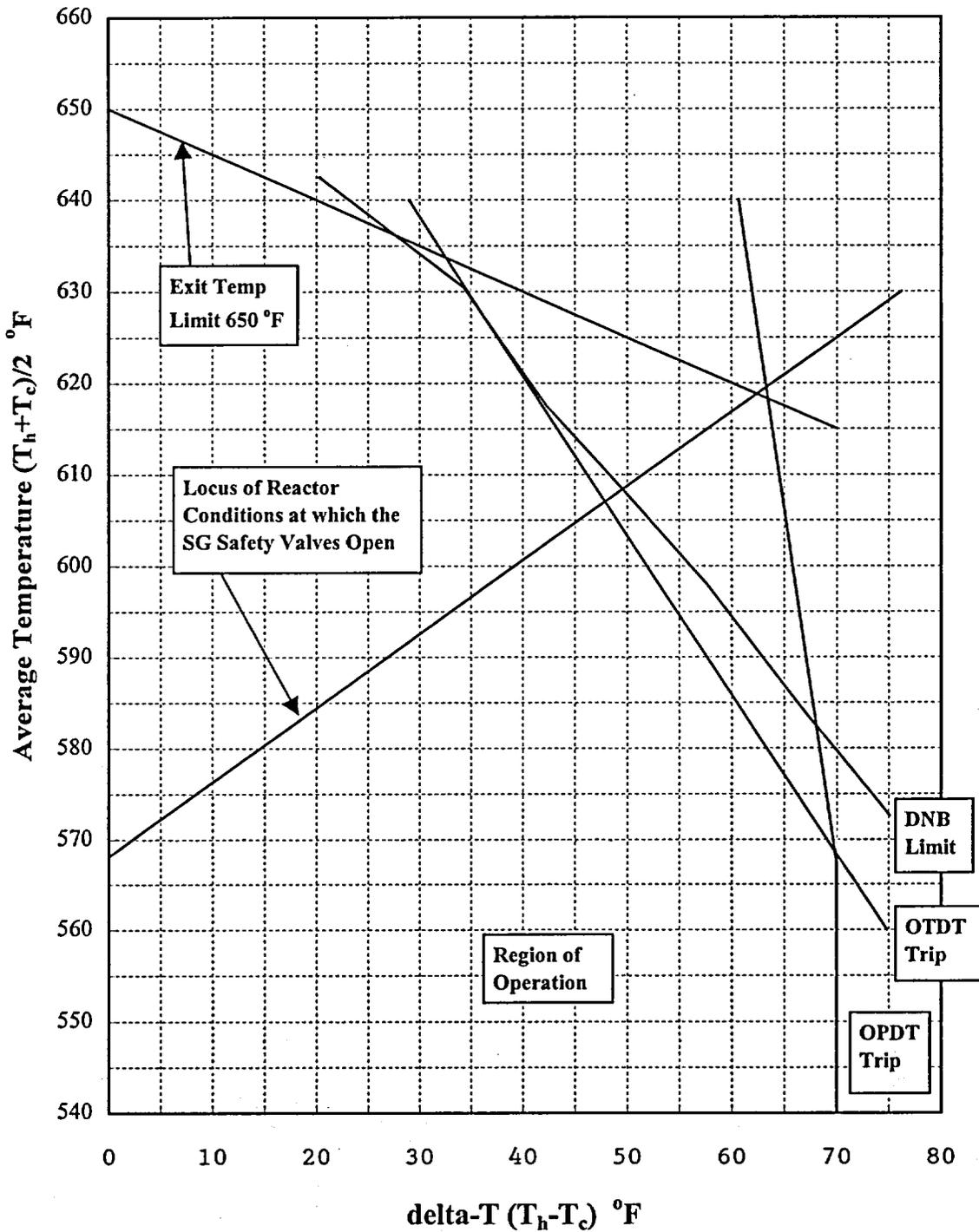


Figure B 2.1.1-1 (page 1 of 1)
Reactor Core Safety Limits vs. Boundary of Protection

B 2.0 SAFETY LIMITS (SLs)

B 2.1.2 Reactor Coolant System (RCS) Pressure SL

BASES

BACKGROUND

The SL on RCS pressure protects the integrity of the RCS against overpressurization. In the event of fuel cladding failure, fission products are released into the reactor coolant. The RCS then serves as the primary barrier in preventing the release of fission products into the atmosphere. By establishing an upper limit on RCS pressure, the continued integrity of the RCS is ensured. According to AEC GDC Criterion 9, "Reactor Coolant Pressure Boundary," GDC Criterion 33, "Reactor Coolant Pressure Boundary Capability," and GDC Criterion 34, "Reactor Coolant Pressure Boundary Rapid Propagation Failure Prevention" (Ref. 1), the reactor coolant pressure boundary (RCPB) design conditions are not to be exceeded during normal operation and anticipated operational occurrences (AOOs).

The design pressure of the RCS is 2485 psig (Ref. 2). During normal operation and AOOs, RCS pressure is limited from exceeding the design pressure by more than 10%, in accordance with Section III of the ASME Code. To ensure system integrity, all RCS components were hydrostatically tested at 125% of design pressure, according to the ASME Code requirements prior to initial operation when there was fuel in the core. Following inception of unit operation, RCS components are pressure tested, in accordance with the requirements of ASME Code, Section XI.

Overpressurization of the RCS could result in a breach of the RCPB, reducing the number of protective barriers designed to prevent radioactive releases from exceeding the limits specified in 10 CFR 100, "Reactor Site Criteria". If such a breach occurs in conjunction with a fuel cladding failure, fission products could enter the containment atmosphere.

BASES (continued)

APPLICABLE
SAFETY
ANALYSES

The RCS pressurizer safety valves, the main steam safety valves (MSSVs), and the pressurizer high pressure trip have settings established to ensure that the RCS pressure SL will not be exceeded.

The RCS pressurizer safety valves are sized to prevent system pressure from exceeding the design pressure by more than 10%, as specified in Section III of the ASME Code for Nuclear Power Plant Components. The transient that establishes the required relief capacity, and hence valve size requirements and lift settings, is a complete loss of external load without a direct reactor trip. During the transient, no control actions are assumed, except that the safety valves on the secondary plant are assumed to open when the steam pressure reaches the secondary plant safety valve settings.

The Reactor Trip System, together with the settings of the MSSVs, provide pressure protection for normal operation and AOOs. The pressurizer high pressure trip is specifically set to provide protection against overpressurization (Ref. 3). The safety analyses for both the high pressure trip and the RCS pressurizer safety valves are performed using conservative assumptions relative to pressure control devices (Ref. 4).

More specifically, no credit is taken for operation of the following:

- a. Pressurizer power operated relief valves (PORVs);
- b. Steam generator power operated relief valves;
- c. Steam dump system;
- d. Rod control system;
- e. Pressurizer level control system; or
- f. Pressurizer spray valves.

BASES (continued)

SAFETY
LIMITS

The maximum transient pressure allowed in the RCS pressure vessel under the ASME Code, Section III, is 110% of design pressure. The maximum transient pressure allowed in the RCS piping, valves, and fittings under USAS, Section B31.1 (Ref. 5) is 120% of design pressure. The most limiting of these two allowances is the 110% of design pressure; therefore, the SL on maximum allowable RCS pressure is 2735 psig (Ref. 2).

APPLICABILITY

SL 2.1.2 applies in MODES 1, 2, 3, 4, and 5 because this SL could be approached or exceeded in these MODES due to overpressurization events. The SL is not applicable in MODE 6 because the reactor vessel head closure bolts are not fully tightened, making it unlikely that the RCS can be pressurized.

SAFETY
LIMIT
VIOLATIONS

If the RCS pressure SL is violated when the reactor is in MODE 1 or 2, the requirement is to restore compliance and be in MODE 3 within 1 hour.

Exceeding the RCS pressure SL may cause immediate RCS failure and create a potential for radioactive releases in excess of 10 CFR 100, "Reactor Site Criteria," limits.

The allowable Completion Time of 1 hour recognizes the importance of reducing power level to a MODE of operation where the potential for challenges to safety systems is minimized. If the Completion Time is exceeded, actions shall continue in order to restore compliance with the SL and bring the plant to MODE 3.

If the RCS pressure SL is exceeded in MODE 3, 4, or 5, RCS pressure must be restored to within the SL value within 5 minutes. Exceeding the RCS pressure SL in MODE 3, 4, or 5 is more severe than exceeding this SL in MODE 1 or 2, since the reactor vessel temperature may be lower and the vessel material, consequently, less ductile. As such, pressure must be reduced to less than the SL

BASES

SAFETY
LIMIT
VIOLATIONS
(continued)

within 5 minutes. The action does not require reducing MODES, since this would require reducing temperature, which would compound the problem by adding thermal gradient stresses to the existing pressure stress.

REFERENCES

1. AEC "General Design Criteria for Nuclear Power Plant Construction Permits," Criteria 9, 33 and 34, issued for comment July 10, 1967, as referenced in USAR Section 1.2.
 2. USAR, Section 4.
 3. USAR, Section 7.4.
 4. USAR, Section 14.4.
 5. USAS B31.1, Standard Code for Pressure Piping, American Society of Mechanical Engineers, 1967.
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PACKAGE 2.0
SAFETY LIMITS
PART C

MARKUP OF PRAIRIE ISLAND
CURRENT TECHNICAL SPECIFICATIONS

List of Pages

Part C Page	Current Technical Specifications Page
1	TS.2.1-1
2	TS.2.1-1(overflow)
3	Figure TS.2.1-1

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
UNITS 1 AND 2

Improved Technical Specifications
Conversion Submittal

2.0 ~~SAFETY LIMITS AND LIMITING SAFETY SYSTEM SETTING~~
~~SAFETY LIMITS (SLs)~~

2.1 ~~SAFETY LIMITS~~ SLs

A. ~~2.1.1~~ Reactor Core Safety Limits SLs

A2.0-01

2.0

In MODES 1 and 2, the combination of ~~THERMAL POWER~~ thermal power (measured in OT), ~~Reactor Coolant System (RCS)~~ pressurizer pressure, and the highest reactor coolant system loop average temperature, ~~and pressurizer pressure~~ shall not exceed the limits shown in Figure TS-2.1-1.

LR2.0-02

B. ~~2.1.2~~ RCS Reactor Coolant System Pressure Safety Limit

A2.0-01

In MODES 1, 2, 3, 4, and 5, the ~~RCS~~ reactor coolant system pressure shall ~~be maintained~~ not exceed 2735 psig.

2.2 ~~SAFETY LIMIT VIOLATIONS~~ Violations

A2.0-01

A. ~~2.2.1~~ If SAFETY LIMIT 2.1. ~~A.~~ is violated, restore compliance and be in MODE 3 within 1 hour.

B. ~~2.2.2~~ If SAFETY LIMIT 2.1. ~~B.~~ is violated:

~~2.2.2.1~~ 1- In MODE 1 or 2, restore compliance and be in MODE 3 within 1 hour.

~~2.2.2.2~~ 2- In MODE 3, 4, or 5, restore compliance within 5 minutes.

LR2.0-03

~~C. If a SAFETY LIMIT is violated, within 1 hour notify the NRC Operations Center in accordance with 10CFR50.72.~~

REV 123 6/21/96
Overflow

LR2.0-04

~~D. If a SAFETY LIMIT is violated, within 24 hours notify the Vice President Nuclear Generation, and the Chairman of the Safety Audit Committee or their designated alternates.~~

LR2.0-03

~~E. If a SAFETY LIMIT is violated, within 30 days a Licensee Event Report (LER) shall be prepared pursuant to 10 CFR 50.73. The LER shall be submitted to the NRC, the Vice President Nuclear Generation and the Safety Audit Committee.~~

LR2.0-03

~~F. If a SAFETY LIMIT is violated, operation of the unit shall not be resumed until authorized by the NRC.~~

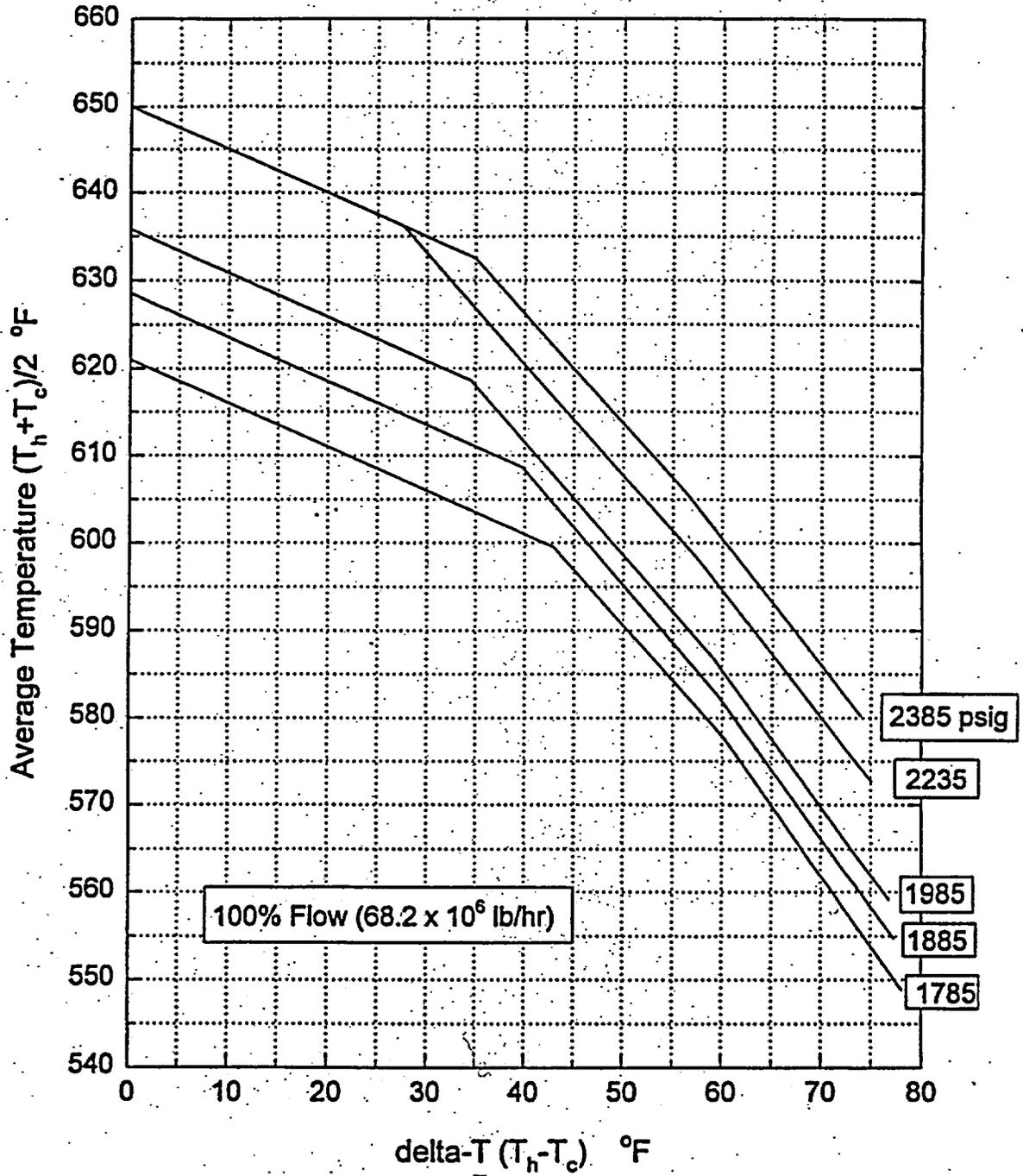


Figure 2.1-1-1 (Page 1 of 1)
Reactor Core Safety Limits

Figure TS.2.1-1

PACKAGE 2.0

SAFETY LIMITS

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 2.0
SAFETY LIMITS

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 2.0-	Discussion Of Change
A	01	CTS 2.0. Minor format and wording changes have been made to current Technical Specification (CTS) Sections 2.1 and 2.2.A and 2.2.B to conform to NUREG-1431. These changes do not change the meaning, limits or otherwise change plant operation or testing; thus, these are administrative changes.
LR	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.

- LR 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 10CFR50.72, a written report in accordance with 10CFR50.73 and cessation of operation until NRC authorization. The latter requirement is required by 10CFR50.36. 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 10CFR50.36, 10CFR50.72 and 10CFR50.73 which the plant is required to meet and do not need to be specified in TS.
- LR 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.
- 05 Not used.

PACKAGE 2.0

SAFETY LIMITS

PART E

MARKUP OF NUREG-1431
IMPROVED STANDARD TECHNICAL SPECIFICATIONS
AND BASES

List of Pages

2.0-1	B 2.1.1-7
2.0-2	B 2.1.1-8
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B 2.1.1-1	B 2.1.2-2
B 2.1.1-2	B 2.1.2-3
B 2.1.1-3	B 2.1.2-4
B 2.1.1-4	B 2.1.2-5
B 2.1.1-5	B 2.1.2-6
B 2.1.1-6	

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
UNITS 1 AND 2

Improved Technical Specifications
Conversion Submittal

2.0 SAFETY LIMITS (SLs)

2.1 SLs

CL2.0-11

2.1.1 Reactor Core SLs

In MODES 1 and 2, the combination of THERMAL POWER, Reactor Coolant System (RCS) highest loop average temperature, and pressurizer pressure shall not exceed the SLs specified in Figure 2.1.1-1.

2.1.2 RCS Pressure SL

In MODES 1, 2, 3, 4, and 5, the RCS pressure shall be maintained \leq [2735] psig.

2.2 SL Violations

2.2.1 If SL 2.1.1 is violated, restore compliance and be in MODE 3 within 1 hour.

2.2.2 If SL 2.1.2 is violated:

2.2.2.1 In MODE 1 or 2, restore compliance and be in MODE 3 within 1 hour.

2.2.2.2 In MODE 3, 4, or 5, restore compliance within 5 minutes.

~~2.2.3 Within 1 hour, notify the NRC Operations Center, in accordance with 10 CFR 50.72.~~

TA2.0-12

~~2.2.4 Within 24 hours, notify the [Plant Superintendent and Vice President - Nuclear Operations].~~

TA2.0-12

~~2.2.5 Within 30 days a Licensee Event Report (LER) shall be prepared pursuant to 10 CFR 50.73. The LER shall be submitted to the NRC, the [offsite review function], and the [Plant Superintendent, and Vice President - Nuclear Operations].~~

TA2.0-12

~~2.2.6 Operation of the unit shall not be resumed until authorized by the NRC.~~

TA2.0-12

Replace with CTS Figure TS-2.1.1

CL2.0-13

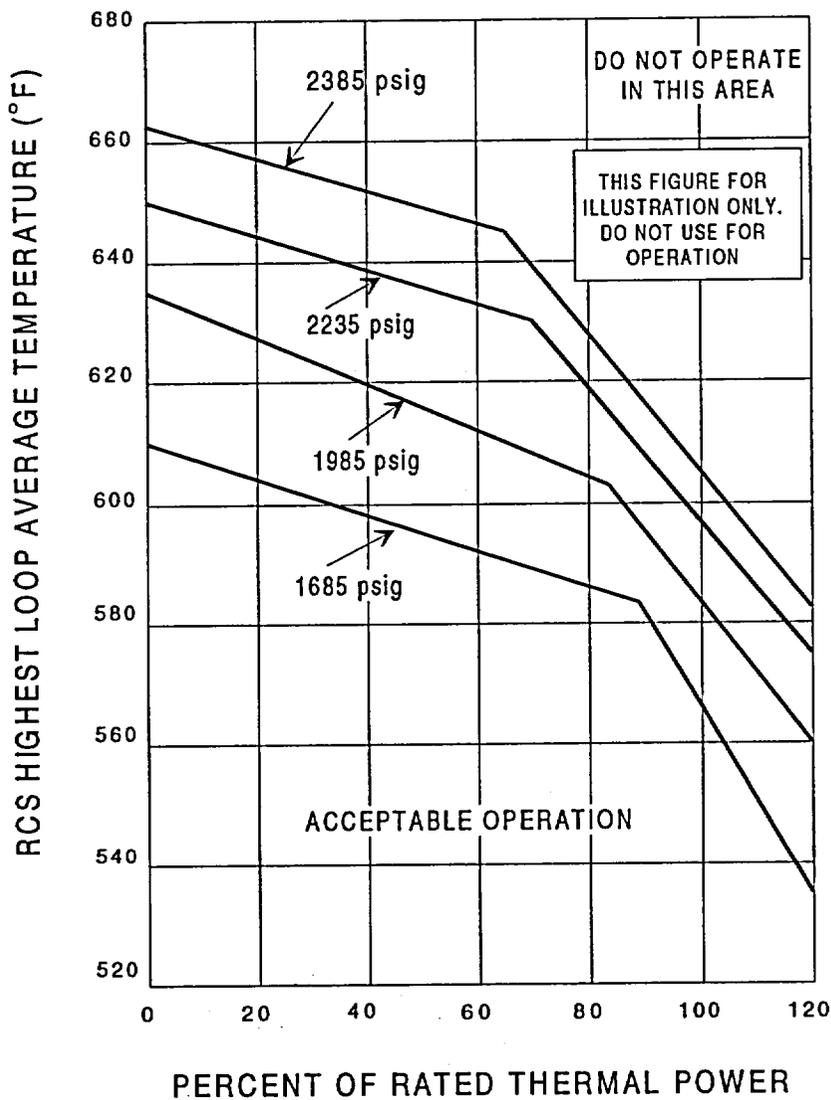


Figure 2.1.1-1 (page 1 of 1)
Reactor Core Safety Limits

B 2.0 SAFETY LIMITS (SLs)

B 2.1.1 Reactor Core SLs

BASES

PA2.0-19

BACKGROUND

~~AEC GDC 10 criterion 6 (Ref. 1) requires that the reactor core shall be designed to function throughout its design lifetime without exceeding acceptable fuel damage limits which have been stipulated and justified. This integrity is required.~~ specified acceptable fuel design limits are not exceeded during steady state operation, normal operational transients, and anticipated operational occurrences (A00s). This is accomplished by having a departure from nucleate boiling (DNB) design basis, which corresponds to a 95% probability at a 95% confidence level (the 95/95 DNB criterion) that DNB will not occur and by requiring that fuel centerline temperature stays below the melting temperature.

CL2.0-21

The restrictions of this SL prevent overheating of the fuel and cladding, as well as possible cladding perforation, that would result in the release of fission products to the reactor coolant. Overheating of the fuel is prevented by maintaining the steady state peak linear heat rate (LHR) below the level at which fuel centerline melting occurs. Overheating of the fuel cladding is prevented by restricting fuel operation to within the nucleate boiling regime, where the heat transfer coefficient is large and the cladding surface temperature is slightly above the coolant saturation temperature.

Fuel centerline melting occurs when the local LHR, or power peaking, in a region of the fuel is high enough to cause the fuel centerline temperature to reach the melting point of the fuel. Expansion of the pellet upon centerline melting may cause the pellet to stress the cladding to the point of

(continued)

BASES (continued)

failure, allowing an uncontrolled release of activity to the reactor coolant.

BACKGROUND
(continued)

Operation above the boundary of the nucleate boiling regime could result in excessive cladding temperature because of the onset of DNB and the resultant sharp reduction in heat transfer coefficient. Inside the steam film, high cladding temperatures are reached, and a cladding water (zirconium-water) reaction may take place. This chemical reaction results in oxidation of the fuel cladding to a structurally weaker form. This weaker form may lose its integrity, resulting in an uncontrolled release of activity to the reactor coolant.

The proper functioning of the Reactor Protection System (RPS) and steam generator safety valves prevents violation of the reactor core SLs.

APPLICABLE
SAFETY ANALYSES

The fuel cladding must not sustain damage as a result of normal operation and AOOs. The reactor core SLs are established to preclude violation of the following fuel design criteria:

- a. There must be at least 95% probability at a 95% confidence level (the 95/95 DNB criterion) that the hot fuel rod in the core does not experience DNB; and
- b. The hot fuel pellet in the core must not experience centerline fuel melting.

The Reactor Trip System ~~allowable values specified in~~ PA2.0-23
~~LCO 3.3.1, "Reactor Trip System (RTS)~~
~~Instrumentation~~ setpoints (Ref. 2), in combination with PA2.0-24
~~other~~ all the LCOs, are designed to prevent any anticipated combination of transient conditions for Reactor

(continued)

BASES (continued)

Coolant System (RCS) temperature, pressure, and THERMAL POWER level that would result in a departure from nucleate boiling ratio (DNBR) of less than the DNBR limit and preclude ~~DNB related~~ the existence of flow instabilities. PA2.0-26

Automatic enforcement of these reactor core SLs is provided by the following functions:

- a. High pressurizer pressure trip;
- b. Low pressurizer pressure trip;
- c. Overtemperature ΔT trip;
- d. Overpower ΔT trip;
- e. Power Range Neutron Flux trip; and
- f. Steam generator safety valves.

APPLICABLE
SAFETY ANALYSES
(continued)

The limitation that the average enthalpy in the hot leg be less than or equal to the enthalpy of saturated liquid also ensures that the ΔT measured by instrumentation, used in the RPS design as a measure of core power, is proportional to core power.

The SLs represent a design requirement for establishing the RPS ~~allowable values~~ trip setpoints identified previously. LCO 3.4.1, "RCS Pressure, Temperature, and Flow ~~Departure~~ from Nucleate Boiling (DNB) Limits," or the assumed PA2.0-23 initial conditions of the safety analyses (as indicated in the UFSAR, Ref. 2) provide more restrictive limits to ensure that the SLs are not exceeded.

(continued)

BASES (continued)

SAFETY LIMITS

The curves provided in Figure B-2.1.1-1 show the loci of points of THERMAL POWER, RCS pressure, and average temperature for which the minimum DNBR is not less than the safety analyses limit, that fuel centerline temperature remains below melting, that the average enthalpy in the hot leg is less than or equal to the enthalpy of saturated liquid, or that the core exit quality is within the limits defined by the DNBR correlation.

PA2.0-27

CL2.0-31

The SL curves in Figure 2.1.1-1 define the regions of acceptable operation with respect to average temperatures, power (measured in ΔT), and pressurizer pressure. Each of the curves in the Figure has three slopes. For the 2235 and 2385 psig curves, at lower power (lower ΔT) the vessel exit design temperature, 650°F, is limiting. For the lower pressure curves, at lower ΔT , vessel exit temperature T_{sat} is limiting, to ensure the ΔT measurement remains valid. At all pressures after the first knee, at higher ΔT , the minimum DNBR derived from the critical heat flux correlation is limiting. The change in slope near full power ΔT is due to more restrictive F_{DH} consideration in the DNBR limit at high power.

CL2.0-32

The curves are based on enthalpy hot channel factor limits provided in the Core Operating Limits Report (COLR). The dashed line of Figure B 2.1.1-1 shows an example of a limit curve at 2235 psig. In addition, it illustrates the various RPS functions that are designed to prevent the unit from reaching the limit.

CL2.0-33

SAFETY LIMITS
(continued)

The SL is higher than the setpoint limit calculated when the Axial Flux Difference (AFD) is within the limits of the $F_z(\Delta I)$ function of the overtemperature ΔT reactor trip. When the AFD is not within the tolerance, the AFD effect on the overtemperature ΔT reactor trips will reduce the setpoints to provide

PA2.0-34

(continued)

BASES (continued)

protection consistent with the reactor core SLs (Refs. 3 and 4).

APPLICABILITY

SL 2.1.1 only applies in MODES 1 and 2 because these are the only MODES in which the reactor is critical. Automatic protection functions are required to be OPERABLE during MODES 1 and 2 to ensure operation within the reactor core SLs. The steam generator safety valves ~~and~~ automatic protection actions serve to prevent RCS heatup to the reactor core SL conditions or to initiate a reactor trip function, which forces the unit into MODE 3. Allowable Values Setpoints for the reactor trip functions are specified in LCO 3.3.1, "Reactor Trip System (RTS) Instrumentation." In MODES 3, 4, 5, and 6, Applicability is not required since the reactor is not generating significant THERMAL POWER.

PA2.0-23

SAFETY LIMIT VIOLATIONS

The following SL violation responses are applicable to the reactor core SLs.

2.2.1

TA2.0-12

If SL 2.1.1 is violated, the requirement to go to MODE 3 places the unit in a MODE in which this SL is not applicable.

The allowed Completion Time of 1 hour recognizes the importance of bringing the unit to a MODE of operation where this SL is not applicable, and reduces the probability of fuel damage.

(continued)

BASES

~~SAFETY LIMITS
VIOLATIONS~~
(continued)

~~2.2.3~~

~~If SL 2.1.1 is violated, the NRC Operations Center must be notified within 1 hour, in accordance with 10 CFR 50.72 (Ref. 5).~~

TA2.0-12

~~2.2.4~~

~~If SL 2.1.1 is violated, the Plant Superintendent and the Vice President - Nuclear Operations shall be notified within 24 hours. This 24 hour period provides time for the plant operators and staff to take the appropriate immediate action and assess the condition of the unit before reporting to senior management.~~

TA2.0-12

~~2.2.5~~

~~If SL 2.1.1 is violated, a Licensee Event Report shall be prepared and submitted within 30 days to the NRC in accordance with 10 CFR 50.73 (Ref. 6). A copy of the report shall also be provided to the Plant Superintendent and the Vice President - Nuclear Operations.~~

TA2.0-12

~~2.2.6~~

~~If SL 2.1.1 is violated, restart of the unit shall not commence until authorized by the NRC. This requirement ensures the NRC that all necessary reviews, analyses, and actions are completed before the unit begins its restart to normal operation.~~

TA2.0-12

(continued)

BASES

REFERENCES

1. ~~AEC "General Design Criteria for Nuclear Power Plant Construction Permits" Criterion 6, issued for comment July 10, 1967, as referenced in USAR Section 1.210 CFR 50, Appendix A, GDC 10.~~
2. ~~UFSAR, Section 4.3[7.2].~~
3. ~~WCAP-131238746-A, December 1991 March 1977.~~
4. ~~WCAP-9273-NP-A, July 1985.~~

CL2.0-21

~~REFERENCES~~
(continued)

- ~~5. 10 CFR 50.72.~~
- ~~6. 10 CFR 50.73.~~

TA2.0-12

(continued)

Replace this Figure with CTS Figure B2.1.1

CL2.0-33

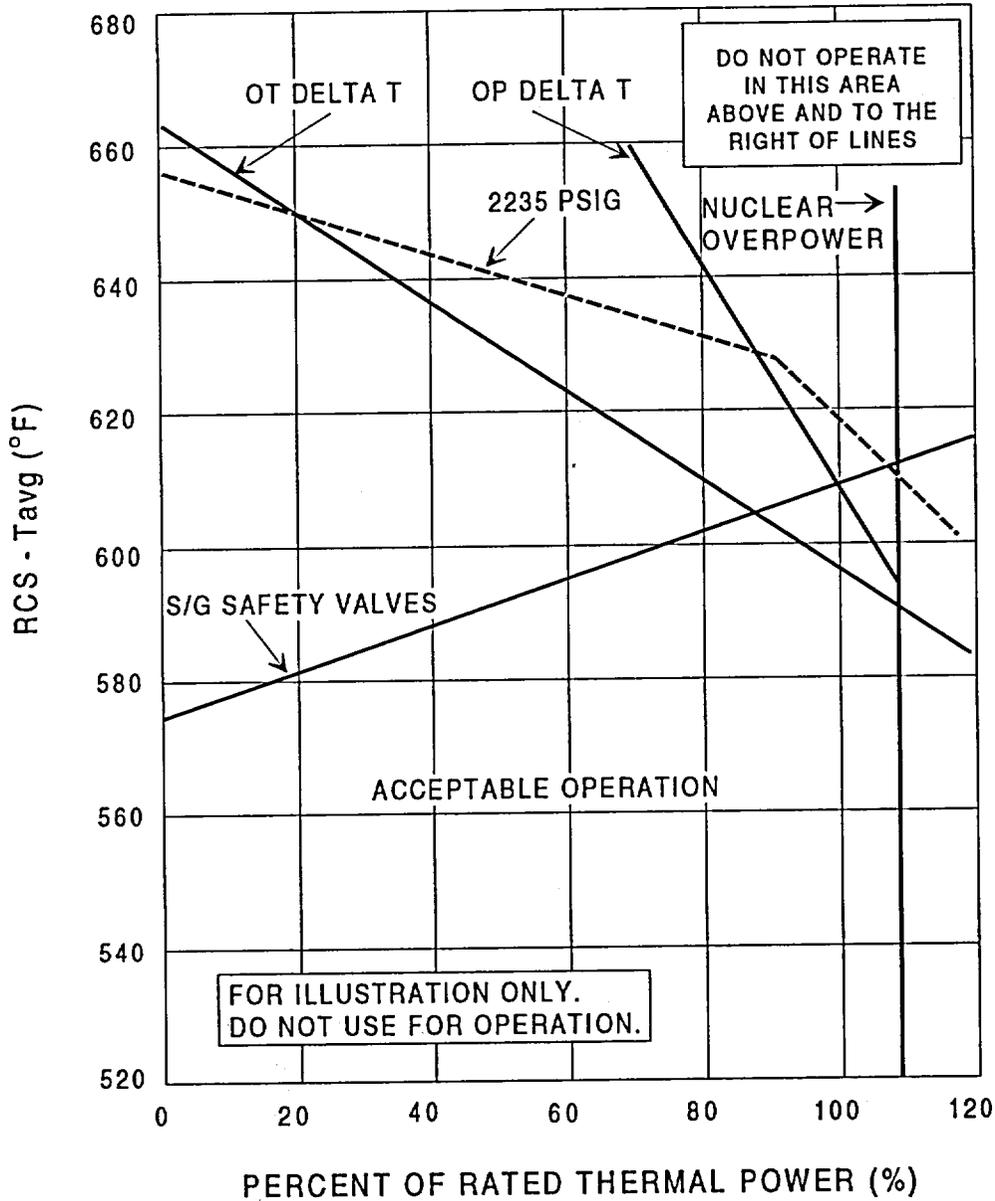


Figure B 2.1.1-1 (page 1 of 1)
Reactor Core Safety Limits vs. Boundary of Protection

B 2.0 SAFETY LIMITS (SLs)

B 2.1.2 Reactor Coolant System (RCS) Pressure SL

PA2.0-19

BASES

BACKGROUND The SL on RCS pressure protects the integrity of the RCS against overpressurization. In the event of fuel cladding failure, fission products are released into the reactor coolant. The RCS then serves as the primary barrier in preventing the release of fission products into the atmosphere. By establishing an upper limit on RCS pressure, the continued integrity of the RCS is ensured. According to ~~AEC10 CFR 50, Appendix A, GDC Criterion 914, "Reactor Coolant Pressure Boundary," GDC Criterion 33, "Reactor Coolant Pressure Boundary Capability," and GDC Criterion 3415, "Reactor Coolant Pressure Boundary Rapid Propagation Failure Prevention System Design"~~ (Ref. 1), the reactor pressure-coolant ~~pressure~~ boundary (RCPB) design conditions are not to be exceeded during normal operation and anticipated operational occurrences (AOOs). ~~Also, in accordance with GDC 28, "Reactivity Limits" (Ref. 1), reactivity accidents, including rod ejection, do not result in damage to the RCPB greater than limited local yielding.~~

CL2.0-21

CL2.0-37

The design pressure of the RCS is ~~2485 psia~~ 2500 psia (Ref. 2). During normal operation and AOOs, RCS pressure is limited from exceeding the design pressure by more than 10%, in accordance with Section III of the ASME Code (Ref. 2). To ensure system integrity, all RCS components ~~were~~ are hydrostatically tested at 125% of design pressure, according to the ASME Code requirements prior to initial operation when there ~~is~~ was fuel in the core. Following inception of unit operation, RCS components ~~are~~ shall be pressure tested, in accordance with the requirements of ASME Code, Section XI (Ref. 3).

CL2.0-38

CL2.0-41

CL2.0-42

(continued)

BASES

Overpressurization of the RCS could result in a breach of the RCPB, ~~reducing the number of protective barriers designed to prevent radioactive releases from exceeding the limits specified in 10 CFR 100, "Reactor Site Criteria"~~. If such a breach occurs in conjunction with a fuel cladding failure, fission products could enter the containment atmosphere, ~~raising concerns relative to limits on radioactive releases specified in 10 CFR 100, "Reactor Site Criteria" (Ref. 4).~~ CL2.0-43

APPLICABLE SAFETY ANALYSES The RCS pressurizer safety valves, the main steam safety valves (MSSVs), and the ~~pressurizer reactor high pressure trip~~ have settings established to ensure that the RCS pressure SL will not be exceeded. CL2.0-44

The RCS pressurizer safety valves are sized to prevent system pressure from exceeding the design pressure by more than 10%, as specified in Section III of the ASME Code for Nuclear Power Plant Components ~~(Ref. 2)~~. The transient that establishes the required relief capacity, and hence valve size requirements and lift settings, is a complete loss of external load without a direct reactor trip. During the transient, no control actions are assumed, except that the safety valves on the secondary plant CL2.0-46 are assumed to open when the steam pressure reaches the secondary plant safety valve settings, ~~and nominal feedwater supply is maintained.~~

The ~~Reactor Trip System setpoints (Ref. 5)~~, together with the settings of the MSSVs, provide pressure protection for normal operation and AOOs. The ~~pressurizer reactor high pressure trip setpoint~~ is specifically set to provide protection CL2.0-44 against overpressurization (Ref. ~~5~~). The safety analyses PA2.0-23 for both the high pressure trip and the RCS pressurizer safety valves are performed using conservative assumptions relative to pressure control devices ~~(Ref. 4)~~.

(continued)

BASES

More specifically, no credit is taken for operation of the following:

- a. Pressurizer power operated relief valves (PORVs);
- b. Steam ~~generator power operated~~ line relief valves;
- c. Steam ~~dump~~ System;
- d. ~~Reactor~~ Control System;
- e. Pressurizer ~~Level~~ Control System; or
- f. Pressurizer spray valves.

CL2.0-47

SAFETY LIMITS

The maximum transient pressure allowed in the RCS pressure vessel under the ASME Code, Section III, is 110% of design pressure. The maximum transient pressure allowed in the RCS piping, valves, and fittings under [USAS, Section B31.1 (Ref. 56)] is 120% of design pressure. The most limiting of these two allowances is the 110% of design pressure; therefore, the SL on maximum allowable RCS pressure is 2735 psig (Ref. 2).

APPLICABILITY

SL 2.1.2 applies in MODES 1, 2, 3, 4, and 5 because this SL could be approached or exceeded in these MODES due to overpressurization events. The SL is not applicable in MODE 6 because the reactor vessel head closure bolts are not fully tightened, making it unlikely that the RCS can be pressurized.

(continued)

BASES

SAFETY LIMIT ~~The following SL violations are applicable to the RCS~~
VIOLATIONS ~~pressure SL.~~

TA2.0-12

2.2.2.1

If the RCS pressure SL is violated when the reactor is in MODE 1 or 2, the requirement is to restore compliance and be in MODE 3 within 1 hour.

Exceeding the RCS pressure SL may cause immediate RCS failure and create a potential for radioactive releases in excess of 10 CFR 100, "Reactor Site Criteria," limits (Ref. 4).

PA2.0-52

The allowable Completion Time of 1 hour recognizes the importance of reducing power level to a MODE of operation where the potential for challenges to safety systems is minimized. ~~If the Completion Time is exceeded, actions shall continue in order to restore compliance with the SL and bring the plant to MODE 3.~~

CL2.0-51

2.2.2.2

If the RCS pressure SL is exceeded in MODE 3, 4, or 5, RCS pressure must be restored to within the SL value within 5 minutes. Exceeding the RCS pressure SL in MODE 3, 4, or 5 is more severe than exceeding this SL in MODE 1 or 2, since the reactor vessel temperature may be lower and the vessel material, consequently, less ductile. As such, pressure must be reduced to less than the SL within 5 minutes. The

TA2.0-12

(continued)

BASES (continued)

SAFETY LIMIT
VIOLATIONS
(continued)

action does not require reducing MODES, since this would require reducing temperature, which would compound the problem by adding thermal gradient stresses to the existing pressure stress.

~~2.2.3~~

TA2.0-12

~~If the RCS pressure SL is violated, the NRC Operations Center must be notified within 1 hour, in accordance with 10 CFR 50.72 (Ref. 7).~~

~~2.2.4~~

TA2.0-12

~~If the RCS pressure SL is violated, the Plant Superintendent and the Vice President - Nuclear Operations shall be notified within 24 hours. The 24 hour period provides time for the plant operators and staff to take the appropriate immediate action and assess the condition of the unit before reporting to senior management.~~

~~2.2.5~~

TA2.0-12

~~If the RCS pressure SL is violated, a Licensee Event Report shall be prepared and submitted within 30 days to the NRC in accordance with 10 CFR 50.73 (Ref. 8). A copy of the report shall also be provided to the Plant Superintendent and the Vice President - Nuclear Operations.~~

~~2.2.6~~

TA2.0-12

(continued)

BASES

~~If the RCS pressure SL is violated, restart of the unit shall not commence until authorized by the NRC. This requirement ensures the NRC that all necessary reviews, analyses, and actions are completed before the unit begins its restart to normal operation.~~

- REFERENCES 1. ~~AEC "General Design Criteria for Nuclear Power Plant Construction Permits," Criteria 9, 33 and 34, issued for comment July 10, 1967, as referenced in USAR Section 1.210 CFR 50, Appendix A, GDC 14, GDC 15, and GDC 28.~~ CL2.0-21
- REFERENCES 2. (continued) ~~USAR, Section 4.1 ASME, Boiler and Pressure Vessel Code, Section III, Article NB-7000.~~
- ~~3. ASME, Boiler and Pressure Vessel Code, Section XI, Article IX-5000.~~
- ~~4. 10 CFR 100.~~
- ~~5. UFSAR, Section 7.42.~~
- ~~4. USAR, Section 14.4.~~
- ~~56. USAS B31.1, Standard Code for Pressure Piping, American Society of Mechanical Engineers, 1967.~~
- ~~7. 10 CFR 50.72.~~ TA2.0-12
- ~~8. 10 CFR 50.73.~~
-

(continued)

PACKAGE 2.0

SAFETY LIMITS

PART F

JUSTIFICATION FOR DIFFERENCES
(JFD)

from

NUREG-1431

IMPROVED STANDARD TECHNICAL SPECIFICATIONS

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
UNITS 1 AND 2

Improved Technical Specifications
Conversion Submittal

PART F
PACKAGE 2.0
SAFETY LIMITS

**JUSTIFICATION FOR DIFFERENCES FROM IMPROVED STANDARD
TECHNICAL SPECIFICATIONS (NUREG-1431) AND BASES**

See Part E for specific proposed wording and location of referenced deviations.

Difference Category	Difference Number 2.0-	Justification for Differences
CL	11	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.
TA	12	Incorporates approved TSTF-5, Rev. 1. NRC approved TSTF-65, Revision 1 was not incorporated into this chapter since the changes were entirely superceded by the TSTF-5 changes.
CL	13	The Figure in NUREG-1431 is not included since this is for illustrative purposes only. The PI specific figure is included.

Difference Category	Difference Number 2.0-	Justification for Differences
	14	Not used.
	15	Not used.
	16	Not used.
	17	Not used.
	18	Not used.
PA	19	Included throughout the Bases are reference corrections, renumbering and relettering of paragraphs and minor wording changes which have been made to accommodate changes to the Specifications and PI unique needs. These changes are not identified by change numbers.
	20	Not used.
CL	21	Reference to the General Design Criteria (GDC) contained in 10CFR50 Appendix A is replaced by reference to the Atomic Energy Commission (AEC) proposed GDC which is the PI licensing basis. PI was licensed to the proposed AEC GDC which pre-dated the 10CFR50 App A GDC.
	22	Not used.

Difference Category	Difference Number 2.0-	Justification for Differences
PA	23	The PI - ITS includes instrumentation allowable values in lieu of trip setpoints. For consistency, "trip setpoints" or "setpoints" is changed to "allowable values" where applicable. Since PI does not have the Reactor Trip System (RTS) instrumentation setpoints in the Updated Safety Analysis Report (USAR) (FSAR), reference to the USAR is changed to Specification 3.3.1 which specifies the instrumentation allowable values.
PA	24	Since "all" LCOs do not prevent DNB, "all the" has been replaced by "other".
	25	Not used.
PA	26	The discussion of flow instabilities has been modified for improved understanding.
PA	27	The discussion of the curve presentation is more appropriate for the curve in the SLs, Figure 2.1.1-1 than the curve in the Bases; thus, this paragraph references the SL Figure.
	28	Not used.
	29	Not used.

Difference Category	Difference Number 2.0-	Justification for Differences
	30	Not used.
CL	31	"core" was included to clarify that the core exit quality is the subject of discussion in this sentence.
CL	32	Discussion of the basis for SL Figure 2.1.1-1, based on the CTS Bases, is included to make this section complete.
CL	33	NUREG-1431 Figure B 2.1.1-1 has been replaced by CTS Bases Figure B 2.1-1. Reference to a "dashed line" on this figure is not included since this figure does not have any dashed lines.
PA	34	"Limit" has been changed to "setpoint" to improve understanding of what the SL is higher than in the discussion of Axial Flux Difference (AFD).
	35	Not used.
	36	Not used.
CL	37	Since the PI license pre-dates 10CFR50 Appendix A, the discussion of GDC 28 is not included.

Difference Category	Difference Number 2.0-	Justification for Differences
CL	38	The Reactor Coolant System (RCS) design pressure has been restated as psig rather than psia to be consistent with CTS, the USAR and plant instrumentation indications. Reference 2 is included to provide a connection from these Bases back to the USAR for operator guidance and is consistent with CTS Bases.
	39	Not used.
	40	Not used.
CL	41	Since the PI reactor pressure vessel hydro is an historical event, the tense of this discussion has been changed. The reference to the ASME Code is not included since adequate description of the Code section is provided in the text, the Reference list does not provide additional information and the Reference list does not provide a shortcut since the reference is not used again.
CL	42	The statement of this sentence has been revised since it is a statement of fact based on other requirements, that is, this Bases is not the source for this testing. The reference to the ASME Code is not included since adequate description of the Code section is provided in the text, the Reference list does not provide additional information and the Reference list does not provide a shortcut since the reference is not used again.

Difference Category	Difference Number 2.0-	Justification for Differences
CL	43	The Bases Background discussion of overpressurization has been rewritten to provide a more positive presentation. This discussion has been patterned after the approved Ginna ITS.
CL	44	The name of the high pressure trip has been revised to agree with PI terminology.
	45	Not used.
CL	46	Reference to maintenance of nominal feedwater supply during this transient is not included since the USAR does not list feedwater flow as a key system parameter assumption nor does the NRC approved methodology for PI, NSPNAD 8102-PA, Rev. 7, require this as an input assumption.
CL	47	The name of the steam relief valves has been revised to agree with PI terminology.
	48	Not used.
	49	Not used.
	50	Not used.

Difference Category	Difference Number 2.0-	Justification for Differences
CL	51	In the unlikely event that the SL Violation actions could not be completed within the Completion Time, further guidance is provided that requires continuing to restore compliance. This statement brings closure to the SL Violation actions since there is no other TS guidance provided. This change is consistent with the approved Ginna ITS.
PA	52	Reference 4 has not been included since references are generally used to provide a short hand for presenting information in written text. This reference is not used again and the reference listing in the Bases Reference Section does not provide any information in addition to that provided in the text; thus, this reference is not included.

PACKAGE 2.0

SAFETY LIMITS

PART G

NO SIGNIFICANT HAZARDS DETERMINATION
(NSHD)

and

ENVIRONMENTAL ASSESSMENT

for

CHANGES TO PRAIRIE ISLAND
CURRENT TECHNICAL SPECIFICATIONS

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
UNITS 1 AND 2

Improved Technical Specifications
Conversion Submittal

Part G

PACKAGE 2.0

SAFETY LIMITS

NO SIGNIFICANT HAZARDS DETERMINATION AND ENVIRONMENTAL ASSESSMENT

NO SIGNIFICANT HAZARDS DETERMINATION

The proposed changes to the Operating License have been evaluated to determine whether they constitute a significant hazards consideration as required by 10CFR Part 50, Section 50.91 using the standards provided in Section 50.92.

For ease of review, the changes are evaluated in groupings according to the type of change involved. A single generic evaluation may suffice for some of the changes while others may require specific evaluation in which case the appropriate reference change numbers are provided.

A - Administrative (GENERIC NSHD) (A2.0-01)

Most administrative changes have not been marked-up in the Current Technical Specifications, and may not be specifically referenced to a discussion of change. This No Significant Hazards Determination (NSHD) may be referenced in a discussion of change by the prefix "A" if the change is not obviously an administrative change and requires an explanation.

These proposed changes are editorial in nature. They involve reformatting, renaming, renumbering, or rewording of existing Technical Specifications to provide consistency with NUREG-1431 or conformance with the Writer's Guide, or change of current plant terminology to conform to NUREG-1431. Some administrative changes involve relocation of requirements within the Technical Specifications without affecting their technical content. Clarifications within the new Prairie Island Improved Technical Specifications which do not impose new requirements on plant operation are also considered administrative.

A – Administrative (continued)

1. The proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated

The proposed conversion of Prairie Island Current Technical Specifications to conform to NUREG-1431 involves reformatting, rewording, changes in terminology and relocating requirements. These changes are simply editorial, or do not involve technical changes and thus they do not impact any initiators of previously analyzed events or assumed mitigation of accident or transient events. Therefore, these changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously analyzed.

These proposed administrative changes do not involve physical modification of the plant, no new or different type of equipment will be installed or removed associated with these administrative changes, nor will there be changes in parameters governing normal plant operation. The proposed administrative changes do not impose new or different requirements on plant operation. Therefore, these administrative changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The proposed amendment will not involve a significant reduction in the margin of safety.

These proposed administrative changes do not impact any safety analysis assumptions. Therefore, these changes do not involve a reduction in the plant margin of safety.

M - More restrictive (GENERIC NSHD)
(None in this Package)

This proposed Technical Specifications revision involves modifying the Current Technical Specifications to impose more stringent requirements upon plant operations to achieve consistency with the guidance of NUREG-1431, correct discrepancies or remove ambiguities from the specifications. These more restrictive Technical Specifications have been evaluated against the plant design, safety analyses, and other Technical Specifications requirements to ensure the plant will continue to operate safely with these more stringent specifications.

1. The proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated

The proposed changes provide more stringent requirements for operation of the plant. These more stringent requirements do not result in operation that will increase the probability of initiating an analyzed event and do not alter assumptions relative to mitigation of an accident or transient event.

These more restrictive requirements continue to ensure process variables, structures, systems, and components are maintained consistent with the safety analyses and licensing basis. Therefore, these changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously analyzed.

The proposed changes do not involve a physical alteration of the plant; that is, no new or different type of equipment will be installed, nor do they change the methods governing normal plant operation.

These more stringent requirements do impose different operating restrictions. However, these operating restrictions are consistent with the boundaries established by the assumptions made in the plant safety analyses and licensing bases. Therefore, these changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

M - More restrictive (continued)

3. The proposed amendment will not involve a significant reduction in the margin of safety.
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The imposition of more stringent requirements on plant operation either has no impact on the plant margin of safety or increases the margin of safety. Each change in this category is by definition providing additional restrictions to enhance plant safety by:

- a) increasing the analytical or safety limit;
- b) increasing the scope of the specifications to include additional plant equipment;
- c) adding requirements to current specifications;
- d) increasing the applicability of the specification;
- e) providing additional actions;
- f) decreasing restoration times;
- g) imposing new surveillances; or
- h) decreasing surveillance intervals.

These changes maintain requirements within the plant safety analyses and licensing bases. Therefore, these changes do not involve a significant reduction in a margin of safety.

R - Relocation (GENERIC NSHD)
(None in this Package)

This License Amendment Request (LAR) proposes to relocate requirements contained in the Current Technical Specifications out of the Technical Specifications into licensee controlled programs. These requirements are relocated because they 1) do not meet the Technical Specifications selection criteria defined in 10 CFR 50.36; or 2) are mandated by current Nuclear Regulatory Commission (NRC) regulations and are therefore unnecessary in the Technical Specifications.

In the NRC Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors (dated 7/16/93), the NRC stated:

... since 1969, there has been a trend towards including in Technical Specifications not only those requirements derived from the analyses and evaluations included in the safety analysis report but also essentially all other Commission requirements governing the operation of nuclear power reactors. . . This has contributed to the volume of Technical Specifications and to the several-fold increase, since 1969, in the number of license amendment applications to effect changes to the Technical Specifications. It has diverted both staff and license attention from the more important requirements in these documents to the extent that it has resulted in an adverse but unquantifiable impact on safety.

Thus, relocation of unnecessary requirements from the Current Technical Specifications should result in an overall improvement in plant safety through more focused attention to the requirements that are most important to plant safety.

1. The proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated

These proposed changes relocate requirements for structures, systems, components or variables which did not meet the criteria for inclusion in the improved Technical Specifications or duplicate regulatory requirements. The affected structures, systems, components or variables are not assumed to be initiators of analyzed events and are not assumed to mitigate accident or transient events.

These relocated operability requirements will continue to be maintained pursuant to 10 CFR 50.59, other regulatory requirements (as applicable for the document

R - Relocation (continued)

to which the requirement is relocated), or the Administrative Controls section of these proposed improved Technical Specifications.

Therefore, these changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously analyzed.

These proposed changes do not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in parameters governing normal plant operation. The proposed changes do not impose any different requirements and adequate control of existing requirements will be maintained. Thus, these changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The proposed amendment will not involve a significant reduction in the margin of safety.

These proposed changes will not reduce the margin of safety because they do not impact any safety analysis assumptions. In addition, the relocated requirements for the affected structure, system, component or variables are the same as the current Technical Specifications. Since future changes to these requirements will be evaluated per the requirements of 10 CFR 50.59, other regulatory requirements (as applicable for the document to which the requirement is relocated), or the Administrative Control section of the Improved Technical Specifications, proper controls are in place to maintain the plant margin of safety. Therefore, these changes do not involve a significant reduction in the margin of safety.

LR - Less restrictive, Relocated details (GENERIC NSHD)
(LR2.0-02, LR2.0-03, LR2.0-04)

Some information in the Prairie Island Current Technical Specifications that is descriptive in nature regarding the equipment, system(s), actions or surveillances identified by the specification has been removed from the proposed specification and relocated to the proposed Bases, Updated Safety Analysis Report or licensee controlled procedures. The relocation of this descriptive information to the Bases of the Improved Technical Specifications, Updated Safety Analysis Report or licensee controlled procedures is acceptable because these documents will be controlled by the Improved Technical Specifications required programs, procedures or 10CFR50.59. Therefore, the descriptive information that has been moved continues to be maintained in an appropriately controlled manner.

1. The proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated

The proposed changes relocate detailed, descriptive requirements from the Technical Specifications to the Bases, Updated Safety Analysis Report or licensee controlled procedures. These documents containing the relocated requirements will be maintained under the provisions of 10CFR50.59, a program or procedure based on 10CFR50.59 evaluation of changes, or NRC approved methodologies. Since these documents to which the Technical Specifications requirements have been relocated are evaluated under 10CFR50.59 or its guidance, or in accordance with NRC approved methodologies, no increase in the probability or consequences of an accident previously evaluated will be allowed without prior NRC approval. Therefore, these changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously analyzed.

These proposed changes do not necessitate physical alteration of the plant; that is, no new or different type of equipment will be installed, or change parameters governing normal plant operation. The proposed changes will not impose any different requirements and adequate control of the information will be maintained. Thus, these changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

LR - Less restrictive, Relocated details (continued)

3. The proposed amendment will not involve a significant reduction in the margin of safety.

The proposed changes will not reduce a margin of safety because it has no impact on any safety analysis assumptions. In addition, the requirements to be transposed from the Technical Specifications to the Bases, Updated Safety Analysis Report or licensee controlled procedures are the same as the existing Technical Specifications. Since future changes to these requirements will be evaluated under 10CFR50.59 or its guidance, or in accordance with NRC approved methodologies, no reduction in a margin of safety will be allowed without prior NRC approval. Therefore, these changes do not involve a significant reduction in a margin of safety.

ENVIRONMENTAL ASSESSMENT

The Nuclear Management Company has evaluated the proposed changes and determined that:

1. The changes do not involve a significant hazards consideration, or
2. The changes do not involve a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or
3. The changes do not involve a significant increase in individual or cumulative occupational radiation exposure.

Accordingly, the proposed changes meet the eligibility criteria for categorical exclusion set forth in 10 CFR Part 51 Section 51.22(c)(9). Therefore, pursuant to 10 CFR Part 51 Section 51.22(b), an environmental assessment of the proposed changes is not required.

PACKAGE 2.0
SAFETY LIMITS (SLs)
CROSS - REFERENCE

CURRENT TECHNICAL SPECIFICATIONS

TO

IMPROVED TECHNICAL SPECIFICATIONS

List of Section Cross - References

Section 2.0
Figure

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
UNITS 1 AND 2

Improved Technical Specifications
Conversion Submittal

Current Technical Specification Cross-Reference

CTS Section	CTS Table Item Number	Section Type	ITS Section	ITS Table Item Number
CTS Section 2.0				
2.1.A		SL	2.1.1	
2.1.B		SL	2.1.2	
2.2.A		SL	2.2.1	
2.2.B		SL	2.2.2	
2.2.C			Relocated - TRM	
2.2.D			Relocated - TRM	
2.2.E			Relocated - TRM	
2.2.F			Relocated - TRM	
2.3		LCO	3.3.1 D	
2.3.A.1.a		TABLE	3.3.1-1	4
2.3.A.1.b		TABLE	3.3.1-1	2b
2.3.A.1.c		TABLE	3.3.1-1	5
2.3.A.2.a		TABLE	3.3.1-1	2a
2.3.A.2.b		TABLE	3.3.1-1	8b
2.3.A.2.c		TABLE	3.3.1-1	8a
2.3.A.2.d		TABLE	3.3.1-1	6

Current Technical Specification Cross-Reference

CTS Section	CTS Table Item Number	Section Type	ITS Section	ITS Table Item Number
2.3.A.2.e		TABLE	3.3.1-1	7
2.3.A.2.f		TABLE	3.3.1-1	10
2.3.A.2.g		TABLE	3.3.2-1	6d
2.3.A.2.g		TABLE	3.3.1-1	12
2.3.A.2.h		TABLE	3.3.1-1	11b
2.3.A.2.h		TABLE	3.3.1-1	11a
2.3.A.2.i.1		TABLE	3.3.1-1	3a
2.3.A.2.i.2		TABLE	3.3.1-1	3b
2.3.A.3.a		TABLE	3.3.1-1	9
2.3.A.3.b		TABLE	3.3.2-1	6b
2.3.A.3.b		TABLE	3.3.1-1	13
2.3.A.3.c.1		TABLE	3.3.1-1	14b
2.3.A.3.c.2		TABLE	3.3.1-1	14a
2.3.A.3.d			Deleted	
2.3.B.1		TABLE	3.3.1-1	16a
2.3.B.2		TABLE	3.3.1-1	16b
2.3.B.3		TABLE	3.3.1-1	16c
2.3.B.4		TABLE	3.3.1-1	16d
2.3.B.5		TABLE	3.3.1-1	16e

Current Technical Specification Cross-Reference

CTS Section	CTS Table Item Number	Section Type	ITS Section	ITS Table Item Number
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2.3.C

Relocated -
TRM

Current Technical Specification Cross-Reference

CTS Section	CTS Table Item Number	Section Type	ITS Section	ITS Table Item Number
Figure				
Figure 2.1-1		FIGURE	2.1.1-1	
Figure 3.1-3		FIGURE	3.4.17-1	
Figure 3.8-1		FIGURE	3.7.17-1	
Figure 3.8-2		FIGURE	3.7.17-2	
Figure 3.10-1			Relocated - COLR	
Figure 4.4-1			Relocated - TRM	
Figure 5.6-1		FIGURE	4.3.1-1	
Figure 5.6-2		FIGURE	4.3.1-2	
Figure 5.6-3		FIGURE	4.3.1-3	
Figure 5.6-4		FIGURE	4.3.1-4	
Figure 5.6-5		FIGURE	4.3.1-5	
Figure 5.6-6		FIGURE	4.3.1-6	
Figure 5.6-7		FIGURE	4.3.1-7	
Figure 5.6-8		FIGURE	4.3.1-8	
Figure 5.6-9		FIGURE	4.3.1-9	
Figure 5.6-10		FIGURE	4.3.1-10	
Figure 5.6-11		FIGURE	4.3.1-11	

Current Technical Specification Cross-Reference

CTS Section	CTS Table Item Number	Section Type	ITS Section	ITS Table Item Number
Figure 5.6-12		FIGURE	4.3.1-12	

PACKAGE 2.0
SAFETY LIMITS (SLs)
CROSS - REFERENCE

IMPROVED TECHNICAL SPECIFICATIONS
TO
CURRENT TECHNICAL SPECIFICATIONS

Section Cross - Reference

Section 2.0

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
UNITS 1 AND 2

Improved Technical Specifications
Conversion Submittal

Improved Technical Specification Cross-Reference

ITS Section	ITS Table Item Number	Section Type	CTS Section	CTS Table Item Number
ITS Section 2.0				
2.1.1		SL	2.1.A	
2.1.2		SL	2.1.B	
2.2.1		SL	2.2.A	
2.2.2		SL	2.2.B	
2.1.1-1		FIGURE	Figure 2.1-1	

ITS PACKAGE CONTENTS

Package:

3.0

1. Part A Introduction
2. Part B Proposed PI ITS and Bases
3. Part C Markup of PI CTS
4. Part D DOC to PI CTS
5. Part E Markup of ISTS and Bases
6. Part F JD from ISTS
7. Part G NSHD for changes to PI CTS
8. Cross-Reference CTS to ITS
9. Cross-Reference ITS to CTS

PACKAGE 3.0

LIMITING CONDITION FOR OPERATION
APPLICABILITY

SURVEILLANCE REQUIREMENT APPLICABILITY

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

3.0

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 3.0

LIMITING CONDITION FOR OPERATION
APPLICABILITY

SURVEILLANCE REQUIREMENT APPLICABILITY

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

3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

LCO 3.0.1 LCOs shall be met during the MODES or other specified conditions in the Applicability, except as provided in LCO 3.0.2 and 3.0.7.

LCO 3.0.2 Upon discovery of a failure to meet an LCO, the Required Actions of the associated Conditions shall be met, except as provided in LCO 3.0.5, LCO 3.0.6 and LCO 3.0.8.

If the LCO is met or is no longer applicable prior to expiration of the specified Completion Time(s), completion of the Required Action(s) is not required unless otherwise stated.

LCO 3.0.3 When an LCO is not met and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS, the unit shall be placed in a MODE or other specified condition in which the LCO is not applicable. Action shall be initiated within 1 hour to place the unit, as applicable, in:

- a. MODE 3 within 7 hours;
- b. MODE 4 within 13 hours; and
- c. MODE 5 within 37 hours.

Exceptions to this Specification are stated in the individual Specifications.

Where corrective measures are completed that permit operation in accordance with the LCO or ACTIONS, completion of the actions required by LCO 3.0.3 is not required.

LCO 3.0.3 is only applicable in MODES 1, 2, 3, and 4.

3.0 LCO APPLICABILITY (continued)

LCO 3.0.4 When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall not be made except when the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time. This Specification shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

Exceptions to this Specification are stated in the individual Specifications.

LCO 3.0.4 is only applicable for entry into a MODE or other specified condition in the Applicability in MODES 1, 2, 3, and 4.

LCO 3.0.5 Equipment removed from service or declared inoperable to comply with ACTIONS may be returned to service under administrative control solely to perform testing required to demonstrate its OPERABILITY or the OPERABILITY of other equipment. This is an exception to LCO 3.0.2 for the system returned to service under administrative control to perform the testing required to demonstrate OPERABILITY.

LCO 3.0.6 When a supported system LCO is not met solely due to a support system LCO not being met, the Conditions and Required Actions associated with this supported system are not required to be entered. Only the support system LCO ACTIONS are required to be entered. This is an exception to LCO 3.0.2 for the supported system. In this event, an evaluation shall be performed in accordance with Specification 5.5.13, "Safety Function Determination Program (SFDP)." If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

3.0 LCO APPLICABILITY

LCO 3.0.6
(continued) When a support system's Required Action directs a supported system to be declared inoperable or directs entry into Conditions and Required Actions for a supported system, the applicable Conditions and Required Actions shall be entered in accordance with LCO 3.0.2.

LCO 3.0.7 Test Exception LCOs 3.1.8 and 3.4.18 allow specified Technical Specification (TS) requirements to be changed to permit performance of special tests and operations. Unless otherwise specified, all other TS requirements remain unchanged. Compliance with Test Exception LCOs is optional. When a Test Exception LCO is desired to be met but is not met, the ACTIONS of the Test Exception LCO shall be met. When a Test Exception LCO is not desired to be met, entry into a MODE or other specified condition in the Applicability shall be made in accordance with the other applicable Specifications.

LCO 3.0.8 When a Technical Specification supported system LCO is not met solely due to the inoperability of a non-Technical Specification support system listed below, the Technical Specification supported system LCO is considered to be met unless the associated delay time of the non-Technical Specification support system has expired. This is an exception to LCO 3.0.2 for the Technical Specification. Upon expiration of the non-Technical Specification support system delay time, the Technical Specification supported system shall be declared inoperable and the applicable Conditions and Required Actions for Technical Specification supported system shall be entered in accordance with LCO 3.0.2.

<u>Non-Technical Specification Support System</u>	<u>Delay Time</u>
Snubbers	72 hours

3.0 LCO APPLICABILITY (continued)

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

3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

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

SR 3.0.2 To accommodate normal test schedules, the specified Frequency for each SR is met, except for SRs with a specified Frequency of 24 months, if the Surveillance is performed within 0.75 to 1.25 times ($\pm 25\%$) the interval specified in the Frequency, as measured from the established schedule for performance of the SR or as measured from the time a specified condition of the Frequency is met.

The specified Frequency is met for each SR with a specified Frequency of 24 months if the Surveillance is performed within 24 months, as measured from the previous performance or as measured from the time a specified condition of the Frequency is met.

For Frequencies specified as "once," the interval extension (1.25 times the interval specified) does not apply.

If a Completion Time requires periodic performance on a "once per . . ." basis, the interval extension (1.25 times the interval specified) applies to each performance after the initial performance as measured from the previous performance.

Exceptions to this Specification are stated in the individual Specifications.

3.0 SR APPLICABILITY (continued)

SR 3.0.3 If it is discovered that a Surveillance was not performed within its specified Frequency, then compliance with the requirement to declare the LCO not met may be delayed, from the time of discovery, up to 24 hours or up to the limit of the specified Frequency, whichever is less. This delay period is permitted to allow performance of the Surveillance.

If the Surveillance is not performed within the delay period, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

When the Surveillance is performed within the delay period and the Surveillance is not met, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

SR 3.0.4 Entry into a MODE or other specified condition in the Applicability of an LCO shall not be made unless the LCO's Surveillances have been met within their specified Frequency. This provision shall not prevent entry into MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

SR 3.0.4 is only applicable for entry into a MODE or other specified condition in the Applicability in MODES 1, 2, 3 and 4.

B 3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

BASES

LCOs LCO 3.0.1 through LCO 3.0.9 establish the general requirements applicable to all Specifications and apply at all times, unless otherwise stated.

LCO 3.0.1 LCO 3.0.1 establishes the Applicability statement within each individual Specification as the requirement for when the LCO is required to be met (i.e., when the unit is in the MODES or other specified conditions of the Applicability statement of each Specification).

LCO 3.0.2 LCO 3.0.2 establishes that upon discovery of a failure to meet an LCO, the associated ACTIONS shall be met. The Completion Time of each Required Action for an ACTIONS Condition is applicable from the point in time that an ACTIONS Condition is entered. The Required Actions establish those remedial measures that must be taken within specified Completion Times when the requirements of an LCO are not met. This Specification establishes that:

- a. Completion of the Required Actions within the specified Completion Times constitutes compliance with a Specification; and
- b. Completion of the Required Actions is not required when an LCO is met within the specified Completion Time, unless otherwise specified.

There are two basic types of Required Actions. The first type of Required Action specifies a time limit in which the LCO must be met. This time limit is the Completion Time to restore an inoperable system or component to OPERABLE status or to restore variables to within specified limits. If this type of Required Action is not completed within the specified Completion Time, a shutdown may

BASES

LCO 3.0.2
(continued)

be required to place the unit in a MODE or condition in which the Specification is not applicable. (Whether stated as a Required Action or not, correction of the entered Condition is an action that may always be considered upon entering LCO 3.0.2 ACTIONS.) The second type of Required Action specifies the remedial measures that permit continued operation of the unit that is not further restricted by the Completion Time. In this case, compliance with the Required Actions provides an acceptable level of safety for continued operation.

Completing the Required Actions is not required when an LCO is met or is no longer applicable, unless otherwise stated in the individual Specifications.

The nature of some Required Actions of some Conditions necessitates that, once the Condition is entered, the Required Actions must be completed even though the associated Conditions no longer exist. The individual LCO's ACTIONS specify the Required Actions where this is the case. An example of this is in LCO 3.4.3, "RCS Pressure and Temperature (P/T) Limits."

The Completion Times of the Required Actions are also applicable when a system or component is removed from service intentionally. The reasons for intentionally relying on the ACTIONS include, but are not limited to, performance of Surveillances, preventive maintenance, corrective maintenance, or investigation of operational problems. Entering ACTIONS for these reasons must be done in a manner that does not compromise safety. Intentional entry into ACTIONS should not be made for operational convenience. Alternatives that would not result in redundant equipment being inoperable should be used instead. Doing so limits the time both subsystems/trains of a safety function are inoperable and limits the time other conditions exist which may result in LCO 3.0.3 being entered. Individual Specifications may specify a time limit for performing an SR when equipment is removed from service or bypassed for testing. In this case, the Completion Times of the

BASES

LCO 3.0.2
(continued)

Required Actions are applicable when this time limit expires, if the equipment remains removed from service or bypassed.

When a change in MODE or other specified condition is required to comply with Required Actions, the unit may enter a MODE or other specified condition in which another Specification becomes applicable resulting in a new LCO not met. In this case, the Completion Times of the new Required Actions would apply from the point in time that the new Specification becomes applicable, and the ACTIONS Condition(s) are entered.

LCO 3.0.3

LCO 3.0.3 establishes the actions that must be implemented when an LCO is not met and:

- a. An associated Required Action and Completion Time is not met and no other Condition applies; or
- b. The condition of the unit is not specifically addressed by the associated ACTIONS. This means that no combination of Conditions stated in the ACTIONS can be made that exactly corresponds to the actual condition of the unit. Sometimes, possible combinations of Conditions are such that entering LCO 3.0.3 is warranted; in such cases, the ACTIONS specifically state a Condition corresponding to such combinations and also that LCO 3.0.3 be entered immediately.

This Specification delineates the time limits for placing the unit in a safe MODE or other specified condition when operation cannot be maintained within the limits for safe operation as defined by the LCO and its ACTIONS. It is not intended to be used as an operational convenience that permits routine voluntary removal of redundant systems or components from service in lieu of other alternatives that would not result in redundant systems or components being inoperable.

BASES

LCO 3.0.3
(continued)

Upon entering LCO 3.0.3, 1 hour is allowed to prepare for an orderly shutdown before initiating a change in unit operation. This includes time to permit the operator to coordinate the reduction in electrical generation with system operations to ensure the stability and availability of the electrical grid. The shutdown shall be initiated so that the time limits specified to reach lower MODES of operation permit the shutdown to proceed in a controlled and orderly manner that is well within the specified maximum cooldown rate and within the capabilities of the unit, assuming that only the minimum required equipment is OPERABLE. This reduces thermal stresses on components of the Reactor Coolant System and the potential for a plant upset that could challenge safety systems under conditions to which this Specification applies. The use and interpretation of specified times to complete the actions of LCO 3.0.3 are consistent with the discussion of Section 1.3, Completion Times.

A unit shutdown required in accordance with LCO 3.0.3 may be terminated and LCO 3.0.3 exited if any of the following occurs:

- a. The LCO is now met.
- b. A Condition exists for which the Required Actions have now been performed.
- c. ACTIONS exist that do not have expired Completion Times. These Completion Times are applicable from the point in time that the Condition is initially entered and not from the time LCO 3.0.3 is exited.

The time limits of LCO 3.0.3 allow 37 hours for the unit to be in MODE 5 when a shutdown is required during MODE 1 operation. If the unit is in a lower MODE of operation when a shutdown is required, the time limit for reaching the next lower MODE applies. If a lower MODE is reached in less time than allowed, however, the total allowable time to reach MODE 5, or other applicable MODE, is not reduced. For example, if MODE 3 is reached in 2 hours, then

BASES

LCO 3.0.3
(continued)

the time allowed for reaching MODE 4 is the next 11 hours, because the total time for reaching MODE 4 is not reduced from the allowable limit of 13 hours. Therefore, if remedial measures are completed that would permit a return to MODE 1, a penalty is not incurred by having to reach a lower MODE of operation in less than the total time allowed.

In MODES 1, 2, 3, and 4, LCO 3.0.3 provides actions for Conditions not covered in other Specifications. The requirements of LCO 3.0.3 do not apply in MODES 5 and 6 because the unit is already in the most restrictive Condition required by LCO 3.0.3. The requirements of LCO 3.0.3 do not apply in other specified conditions of the Applicability (unless in MODE 1, 2, 3, or 4) because the ACTIONS of individual Specifications sufficiently define the remedial measures to be taken.

Exceptions to LCO 3.0.3 are provided in instances where requiring a unit shutdown, in accordance with LCO 3.0.3, would not provide appropriate remedial measures for the associated condition of the unit. An example of this is in LCO 3.7.15, "Spent Fuel Storage Pool Water Level." LCO 3.7.15 has an Applicability of "During movement of irradiated fuel assemblies in the spent fuel storage pool." Therefore, this LCO can be applicable in any or all MODES. If the LCO and the Required Actions of LCO 3.7.15 are not met while in MODE 1, 2, or 3, there is no safety benefit to be gained by placing the unit in a shutdown condition. The Required Action of LCO 3.7.15 of "Suspend movement of irradiated fuel assemblies in the spent fuel storage pool" is the appropriate Required Action to complete in lieu of the actions of LCO 3.0.3. These exceptions are addressed in the individual Specifications.

LCO 3.0.4

LCO 3.0.4 establishes limitations on changes in MODES or other specified conditions in the Applicability when an LCO is not met. It precludes placing the unit in a MODE or other specified condition stated in that Applicability (e.g., Applicability desired to be entered) when the following exist:

BASES

LCO 3.0.4
(continued)

- a. Unit conditions are such that the requirements of the LCO would not be met in the Applicability desired to be entered; and
- b. Continued noncompliance with the LCO requirements, if the Applicability were entered, would result in the unit being required to exit the Applicability desired to be entered to comply with the Required Actions.

Compliance with Required Actions that permit continued operation of the unit for an unlimited period of time in a MODE or other specified condition provides an acceptable level of safety for continued operation. This is without regard to the status of the unit before or after the MODE change. Therefore, in such cases, entry into a MODE or other specified condition in the Applicability may be made in accordance with the provisions of the Required Actions. The provisions of this Specification should not be interpreted as endorsing the failure to exercise the good practice of restoring systems or components to OPERABLE status before entering an associated MODE or other specified condition in the Applicability.

The provisions of LCO 3.0.4 shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS. In addition, the provisions of LCO 3.0.4 shall not prevent changes in MODES or other specified conditions in the Applicability that result from any unit shutdown.

Exceptions to LCO 3.0.4 are stated in the individual Specifications. The exceptions allow entry into MODES or other specified conditions in the Applicability when the associated ACTIONS to be entered do not provide for continued operation for an unlimited period of time. Exceptions may apply to all the ACTIONS or to a specific Required Action of a Specification.

LCO 3.0.4 is only applicable when entering MODE 4 from MODE 5, MODE 3 from MODE 4, MODE 2 from MODE 3, or MODE 1 from MODE 2. Furthermore, LCO 3.0.4 is applicable when entering

BASES

LCO 3.0.4
(continued)

any other specified condition in the Applicability only while operating in MODE 1, 2, 3, or 4. The requirements of LCO 3.0.4 do not apply in MODES 5 and 6, or in other specified conditions of the Applicability (unless in MODE 1, 2, 3, or 4) because the ACTIONS of individual Specifications sufficiently define the remedial measures to be taken.

Surveillances do not have to be performed on the associated inoperable equipment (or on variables outside the specified limits), as permitted by SR 3.0.1. Therefore, changing MODES or other specified conditions while in an ACTIONS Condition, in compliance with LCO 3.0.4 or where an exception to LCO 3.0.4 is stated, is not a violation of SR 3.0.1 or SR 3.0.4 for those Surveillances that do not have to be performed due to the associated inoperable equipment. However, SRs must be met to ensure OPERABILITY prior to declaring the associated equipment OPERABLE (or variable within limits) and restoring compliance with the affected LCO.

LCO 3.0.5

LCO 3.0.5 establishes the allowance for restoring equipment to service under administrative controls when it has been removed from service or declared inoperable to comply with ACTIONS. The sole purpose of this Specification is to provide an exception to LCO 3.0.2 (e.g., to not comply with the applicable Required Action(s)) to allow the performance of required testing to demonstrate:

- a. The OPERABILITY of the equipment being returned to service;
or
- b. The OPERABILITY of other equipment.

The administrative controls ensure the time the equipment is returned to service in conflict with the requirements of the ACTIONS is limited to the time absolutely necessary to perform the required testing to demonstrate OPERABILITY. This Specification does not provide time to perform any other preventive or corrective maintenance.

BASES

LCO 3.0.5
(continued)

An example of demonstrating the OPERABILITY of the equipment being returned to service is reopening a containment isolation valve that has been closed to comply with Required Actions and must be reopened to perform the required testing.

An example of demonstrating the OPERABILITY of other equipment is taking an inoperable channel or trip system out of the tripped condition to prevent the trip function from occurring during the performance of required testing on another channel in the other trip system. A similar example of demonstrating the OPERABILITY of other equipment is taking an inoperable channel or trip system out of the tripped condition to permit the logic to function and indicate the appropriate response during the performance of required testing on another channel in the same trip system.

LCO 3.0.6

LCO 3.0.6 establishes an exception to LCO 3.0.2 for support systems that have an LCO specified in the Technical Specifications (TS). This exception is provided because LCO 3.0.2 would require that the Conditions and Required Actions of the associated inoperable supported system LCO be entered solely due to the inoperability of the support system. This exception is justified because the actions that are required to ensure the unit is maintained in a safe condition are specified in the support system LCO's Required Actions. These Required Actions may include entering the supported system's Conditions and Required Actions or may specify other Required Actions.

When a support system is inoperable and there is an LCO specified for it in the TS, the supported system(s) are required to be declared inoperable if determined to be inoperable as a result of the support system inoperability. However, it is not necessary to enter into the supported systems' Conditions and Required Actions unless directed to do so by the support system's Required Actions. The potential confusion and inconsistency of requirements related to the entry into

BASES

LCO 3.0.6
(continued)

multiple support and supported systems' LCOs' Conditions and Required Actions are eliminated by providing all the actions that are necessary to ensure the unit is maintained in a safe condition in the support system's Required Actions.

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

Specification 5.5.13, "Safety Function Determination Program (SFDP)," ensures loss of safety function is detected and appropriate actions are taken. Upon entry into LCO 3.0.6, an evaluation shall be made to determine if loss of safety function exists. Additionally, other limitations, remedial actions, or compensatory actions may be identified as a result of the support system inoperability and corresponding exception to entering supported system Conditions and Required Actions. The SFDP implements the requirements of LCO 3.0.6.

Cross train checks to identify a loss of safety function for those support systems that support multiple and redundant safety systems are required. The cross train check verifies that the supported systems of the redundant OPERABLE support system are OPERABLE, thereby ensuring safety function is retained. If this evaluation determines that a loss of safety function exists, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

BASES

LCO 3.0.6
(continued)

This loss of safety function does not require the assumption of additional single failures or loss of offsite power. Since operation is being restricted in accordance with the ACTIONS of the support system, any resulting temporary loss of redundancy or single failure protection is taken into account. Similarly, the ACTIONS for inoperable offsite circuit(s) and inoperable diesel generator(s) provide the necessary restriction for cross train inoperabilities. This explicit cross train verification for inoperable AC electrical power sources also acknowledges that supported system(s) are not declared inoperable solely as a result of inoperability of a normal or emergency electrical power source (refer to the definition of OPERABILITY).

When a loss of safety function is determined to exist, and the SFDP requires entry into the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists, consideration must be given to the specific type of function affected. Where a loss of function is solely due to a single Technical Specification support system (e.g., loss of automatic start due to inoperable instrumentation, or loss of pump suction source due to low tank level) the appropriate LCO is the LCO for the support system. The ACTIONS for a support system LCO adequately addresses the inoperabilities of that system without reliance on entering its supported system LCO. When the loss of function is the result of multiple support systems, the appropriate LCO is the LCO for the supported system.

LCO 3.0.7

There are certain special tests and operations required to be performed at various times over the life of the unit. These special tests and operations are necessary to demonstrate select unit performance characteristics, to perform special maintenance activities, and to perform special evolutions. Test Exception LCOs 3.1.8 and 3.4.18 allow specified Technical Specification (TS) requirements to be changed to permit performances of these special tests and operations, which otherwise could not be performed if

BASES

LCO 3.0.7
(continued)

required to comply with the requirements of these TS. Unless otherwise specified, all the other TS requirements remain unchanged. This will ensure all appropriate requirements of the MODE or other specified condition not directly associated with or required to be changed to perform the special test or operation will remain in effect.

The Applicability of a Test Exception LCO represents a condition not necessarily in compliance with the normal requirements of the TS. Compliance with Test Exception LCOs is optional. A special operation may be performed either under the provisions of the appropriate Test Exception LCO or under the other applicable TS requirements. If it is desired to perform the special operation under the provisions of the Test Exception LCO, the requirements of the Test Exception LCO shall be followed.

LCO 3.0.8

LCO 3.0.8 establishes an exception to LCO 3.0.2 for Technical Specification (TS) supported systems due to an inoperability of a non-Technical Specification (non-TS) support system. The specific non-TS support system for which this exception is allowed is listed in LCO 3.0.8. This exception is provided because LCO 3.0.2 would require that the Conditions and Required Actions of the associated inoperable supported system LCO be entered solely due to the inoperability of the support system. This exception is justified because the actions that are required to ensure the unit is maintained in a safe condition are specified in the support system non-TS Required Actions. The NRC has acknowledged that the system listed in LCO 3.0.8 may be inoperable for the specified Delay Time without entering the TS supported system LCO. If the non-TS support system inoperability is not corrected within the Delay Time, then the TS supported system's Conditions and Required Actions must be entered.

BASES (continued)

LCO 3.0.9

LCO 3.0.9 is provided to clarify the unit applicability of the LCO's and associated ACTION requirements, especially with respect to systems or components that are common to both units.

In the Specifications, parentheses and notes may be used to identify systems, components, operating parameters, setpoints, etc., specific to one unit. These are considered an integral part of the Specifications with which compliance is required for the specified unit.

B 3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

BASES

SRs SR 3.0.1 through SR 3.0.4 establish the general requirements applicable to all Specifications and apply at all times, unless otherwise stated.

SR 3.0.1 SR 3.0.1 establishes the requirement that SRs must be met during the MODES or other specified conditions in the Applicability for which the requirements of the LCO apply, unless otherwise specified in the individual SRs. This Specification is to ensure that Surveillances are performed to verify the OPERABILITY of systems and components, and that variables are within specified limits. Failure to meet a Surveillance within the specified Frequency, in accordance with SR 3.0.2, constitutes a failure to meet an LCO.

Systems and components are assumed to be OPERABLE when the associated SRs have been met. Nothing in this Specification, however, is to be construed as implying that systems or components are OPERABLE when:

- a. The systems or components are known to be inoperable, although still meeting the SRs; or
- b. The requirements of the Surveillance(s) are known not to be met between required Surveillance performances.

Surveillances do not have to be performed when the unit is in a MODE or other specified condition for which the requirements of the associated LCO are not applicable, unless otherwise specified. The SRs associated with a test exception are only applicable when the Test Exception LCO is used as an allowable exception to the requirements of a Specification.

Unplanned events may satisfy the requirements (including applicable acceptance criteria) for a given SR. In this case, the unplanned event

BASES

SR 3.0.1
(continued)

may be credited as fulfilling the performances of the SR. This allowance includes those SRs whose performance is normally precluded in a given MODE or other specified condition.

Surveillances, including Surveillances invoked by Required Actions, do not have to be performed on inoperable equipment because the ACTIONS define the remedial measures that apply. Surveillances have to be met and performed in accordance with SR 3.0.2, prior to returning equipment to OPERABLE status.

Upon completion of maintenance, appropriate post maintenance testing is required to declare equipment OPERABLE. This includes ensuring applicable Surveillances are not failed and their most recent performance is in accordance with SR 3.0.2. Post maintenance testing may not be possible in the current MODE or other specified conditions in the Applicability due to the necessary unit parameters not having been established. In these situations, the equipment may be considered OPERABLE provided testing has been satisfactorily completed to the extent possible and the equipment is not otherwise believed to be incapable of performing its function. This will allow operation to proceed to a MODE or other specified condition where other necessary post maintenance tests can be completed.

SR 3.0.2

SR 3.0.2 establishes the requirements for meeting the specified Frequency for Surveillances and any Required Action with a Completion Time that requires the periodic performance of the Required Action on a "once per . . ." interval.

SR 3.0.2 permits a $\pm 25\%$ allowance of the interval specified in the Frequency. This allowance facilitates Surveillance scheduling and considers plant operating conditions that may not be suitable for conducting the Surveillance (e.g., transient conditions or other ongoing Surveillance or maintenance activities).

BASES

SR 3.0.2
(continued)

The 25% allowance does not significantly degrade the reliability that results from performing the Surveillance at its specified Frequency. This is based on the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the SRs. The exceptions to SR 3.0.2 are those Surveillances for which the 25% extension of the interval specified in the Frequency does not apply. These exceptions are stated in the individual Specifications. The requirements of regulations take precedence over the TS. An example of where SR 3.0.2 does not apply is in the Containment Leakage Rate Testing Program. This program establishes testing requirements and Frequencies in accordance with the requirements of regulations. The TS cannot in and of themselves extend a test interval specified in the regulations.

As stated in SR 3.0.2, the 25% extension also does not apply to the initial portion of a periodic Completion Time that requires performance on a "once per ..." basis. The 25% extension applies to each performance after the initial performance. The initial performance of the Required Action, whether it is a particular Surveillance or some other remedial action, is considered a single action with a single Completion Time. One reason for not allowing the 25% extension to this Completion Time is that such an action usually verifies that no loss of function has occurred by checking the status of redundant or diverse components or accomplishes the function of the inoperable equipment in an alternative manner.

Also, as stated in SR 3.0.2, the 25% extension does not apply to SRs with a specified Frequency of 24 months. This is to ensure performance is within equipment performance expectations. This is consistent with present industry analysis that supports refueling cycle intervals up to, but not longer than, 24 months.

The provisions of SR 3.0.2 are not intended to be used repeatedly merely as an operational convenience to extend Surveillance intervals (other than those consistent with refueling intervals) or periodic Completion Time intervals beyond those specified.

BASES (continued)

SR 3.0.3

SR 3.0.3 establishes the flexibility to defer declaring affected equipment inoperable or an affected variable outside the specified limits when a Surveillance has not been completed within the specified Frequency. A delay period of up to 24 hours or up to the limit of the specified Frequency, whichever is less, applies from the point in time that it is discovered that the Surveillance has not been performed in accordance with SR 3.0.2, and not at the time that the specified Frequency was not met.

This delay period provides adequate time to complete Surveillances that have been missed. This delay period permits the completion of a Surveillance before complying with Required Actions or other remedial measures that might preclude completion of the Surveillance.

The basis for this delay period includes consideration of unit conditions, adequate planning, availability of personnel, the time required to perform the Surveillance, the safety significance of the delay in completing the required Surveillance, and the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the requirements. When a Surveillance with a Frequency based not on time intervals, but upon specified unit conditions or operational situations, is discovered not to have been performed when specified, SR 3.0.3 allows the full delay period of 24 hours to perform the Surveillance.

SR 3.0.3 also provides a time limit for completion of Surveillances that become applicable as a consequence of MODE changes imposed by Required Actions.

Failure to comply with specified Frequencies for SRs is expected to be an infrequent occurrence. Use of the delay period established by SR 3.0.3 is a flexibility which is not intended to be used as an operational convenience to extend Surveillance intervals.

BASES

SR 3.0.3
(continued)

If a Surveillance is not completed within the allowed delay period, then the equipment is considered inoperable or the variable is considered outside the specified limits and the Completion Times of the Required Actions for the applicable LCO Conditions begin immediately upon expiration of the delay period. If a Surveillance is failed within the delay period, then the equipment is inoperable, or the variable is outside the specified limits and the Completion Times of the Required Actions for the applicable LCO Conditions begin immediately upon the failure of the Surveillance.

Completion of the Surveillance within the delay period allowed by this Specification, or within the Completion Time of the ACTIONS, restores compliance with SR 3.0.1.

SR 3.0.4

SR 3.0.4 establishes the requirement that all applicable SRs must be met before entry into a MODE or other specified condition in the Applicability.

This Specification ensures that system and component OPERABILITY requirements and variable limits are met before entry into MODES or other specified conditions in the Applicability for which these systems and components ensure safe operation of the unit.

The provisions of this Specification should not be interpreted as endorsing the failure to exercise the good practice of restoring systems or components to OPERABLE status before entering an associated MODE or other specified condition in the Applicability.

However, in certain circumstances, failing to meet an SR will not result in SR 3.0.4 restricting a MODE change or other specified condition change. When a system, subsystem, division, component, device, or variable is inoperable or outside its specified limits, the associated SR(s) are not required to be performed, per SR 3.0.1, which states that surveillances do not have to be performed on

BASES

SR 3.0.4
(continued)

inoperable equipment. When equipment is inoperable, SR 3.0.4 does not apply to the associated SR(s) since the requirement for the SR(s) to be performed is removed. Therefore, failing to perform the Surveillance(s) within the specified Frequency does not result in an SR 3.0.4 restriction to changing MODES or other specified conditions of the Applicability. However, since the LCO is not met in this instance, LCO 3.0.4 will govern any restrictions that may (or may not) apply to MODE or other specified condition changes.

The provisions of SR 3.0.4 shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS. In addition, the provisions of LCO 3.0.4 shall not prevent changes in MODES or other specified conditions in the Applicability that result from any unit shutdown.

The precise requirements for performance of SRs are specified such that exceptions to SR 3.0.4 are not necessary. The specific time frames and conditions necessary for meeting the SRs are specified in the Frequency, in the Surveillance, or both. This allows performance of Surveillances when the prerequisite condition(s) specified in a Surveillance procedure require entry into the MODE or other specified condition in the Applicability of the associated LCO prior to the performance or completion of a Surveillance. A Surveillance that could not be performed until after entering the LCO Applicability, would have its Frequency specified such that it is not "due" until the specific conditions needed are met. Alternately, the Surveillance may be stated in the form of a Note as not required (to be met or performed) until a particular event, condition, or time has been reached. Further discussion of the specific formats of SRs' annotation is found in Section 1.4, Frequency.

SR 3.0.4 is only applicable when entering MODE 4 from MODE 5, MODE 3 from MODE 4, Mode 2 from MODE 3, or MODE 1 from MODE 2. Furthermore, SR 3.0.4 is applicable when entering any other specified condition in the Applicability only while operating

BASES

SR 3.0.4
(continued)

in MODE 1, 2, or 3 or 4. The requirements of SR 3.0.4 do not apply in MODES 5 and 6, or in other specified conditions of the Applicability (unless in MODE 1, 2, 3 or 4) because the ACTIONS of individual Specifications sufficiently define the remedial measures to be taken.

PACKAGE 3.0
LIMITING CONDITION FOR OPERATION
APPLICABILITY
SURVEILLANCE REQUIREMENT APPLICABILITY
PART C

MARKUP OF PRAIRIE ISLAND
CURRENT TECHNICAL SPECIFICATIONS

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1	TS.3.0-1
2	TS.3.0-1 Overflow
3	TS.3.0-1 Overflow (continued)
4	TS.3.0-1 Overflow (continued)
5	TS.4.0-1
6	TS.4.0-1 Overflow

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
UNITS 1 AND 2

Improved Technical Specifications
Conversion Submittal

3.0 LIMITING CONDITIONS FOR OPERATION

3.0 Applicability

LCO 3.0

~~LCO 3.0.1~~ A. Compliance with the Limiting Conditions for Operation shall ~~be met~~ A3.0-01 contained in the following Technical Specifications is required during the ~~MODES or other specified conditions~~ specified ~~except as provided in LCO 3.0.2 and 3.0.7.~~

~~LCO 3.0.2~~ Upon ~~discovery of a~~ failure to meet the Limiting Conditions for Operation, the associated ~~Required actions~~ A3.0-01 of the ~~associated Conditions~~ requirements shall be met ~~except as provided in LCO 3.0.5, LCO 3.0.6 and LCO 3.0.8.~~

B. ~~Noncompliance with a specification shall exist when the requirements of the Limiting Condition for Operation and associated action requirements are not met within the specified time interval. If the Limiting Condition for Operation is not satisfied prior to expiration of the specified Completion time(s) interval, completion of the Required action(s) requirements is not required unless otherwise stated.~~ A3.0-01

~~LCO 3.0.3~~ C. When a Limiting Condition for Operation is not met, and an associated required action is not ~~provided specified or~~ A3.0-01 ~~the associated ACTIONS are cannot be met~~ satisfied, ~~or if~~ directed by the associated ACTIONS, within one hour initiate the action necessary to place the affected unit ~~shall be~~ placed in a ~~MODE or other specified~~ condition in which the ~~LCO equipment is not applicable~~ required to be OPERABLE.

~~Action shall be initiated within 1 hour to place the unit, as applicable. If the equipment is required to be Operable above COLD SHUTDOWN, then be in:~~ A3.0-01

~~E1. At least MODE 3 HOT SHUTDOWN within the next 7 1/2 hours,~~ A3.0-02

~~MODE 4 within 13 hours, and~~ M3.0-03

~~E2. MODE 5 COLD SHUTDOWN within the following 3 1/2 hours.~~ A3.0-02

~~Exceptions to this Specification are stated in individual Specifications. If the equipment is required to be OPERABLE when the reactor coolant system average temperature is above 350°F, then be in:~~ A3.0-01

~~1. At least HOT SHUTDOWN within the next 6 hours, and~~

A3.0-01

~~2. Reduce reactor coolant system average temperature below
350°F within the following 6 hours.~~

Where corrective measures are completed such that permit operation in accordance with under actions specified in the Limiting Condition for Operation or ACTIONS, completion of the actions required by LCO 3.0.3 is not required. Once again possible, those actions may be taken in lieu of actions specified above. Time limitations specified by the applicable Limiting Condition for Operation actions are measured from the time of discovery of the failure to meet the Limiting Condition for Operation.

A3.0-01

LCO 3.0.3 is only applicable in MODES 1, 2, 3, and 4.

A3.0-04

LCO 3.0.4 When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall not be made except when the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time. This Specification shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

M3.0-06

Exceptions to this Specification are stated in the individual Specifications.

LCO 3.0.4 is only applicable for entry into a MODE or other specified condition in the Applicability in MODES 1, 2, 3, and 4.

LCO 3.0.5 Equipment removed from service or declared inoperable to comply with ACTIONS may be returned to service under administrative control solely to perform testing required to demonstrate its OPERABILITY or the OPERABILITY of other equipment. This is an exception to LCO 3.0.2 for the system returned to service under administrative control to perform the testing required to demonstrate OPERABILITY.

M3.0-07

3.0-6 When a supported system LCO is not met solely due to a support system LCO not being met, the Conditions and Required Actions associated with this supported system are not required to be entered. Only the support system LCO ACTIONS are required to be entered. This is an exception to LCO 3.0.2 for the supported system. In this event, an evaluation shall be performed in accordance with Specification 5.5.13, "Safety Function Determination Program (SFDP)". If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered. M3.0-11

When a support system's Required Action directs a supported system to be declared inoperable or directs entry into Conditions and Required Actions for a supported system, the applicable Conditions and Required Actions shall be entered in accordance with LCO 3.0.2.

3.0-7 Test Exception LCOs 3.1.8 and 3.4.18 allow specified Technical Specification (TS) requirements to be changed to permit performance of special tests and operations. Unless otherwise specified, all other TS requirements remain unchanged. Compliance with Test Exception LCOs is optional. When a Test Exception LCO is desired to be met but is not met, the ACTIONS of the Test Exception LCO shall be met. When a Test Exception LCO is not desired to be met, entry into a MODE or other specified condition in the Applicability shall be made in accordance with the other applicable Specifications. A3.0-12

3.0-8 When a Technical Specification supported system LCO is not met solely due to the inoperability of a non-Technical specification support system listed below, the Technical Specification supported system LCO is considered to be met unless the associated delay time of the non-Technical Specification support system has expired. This is an exception to LCO 3.0.2 for the Technical Specification. Upon expiration of the non-Technical Specification support system delay time, the Technical Specification supported system shall be declared inoperable and the applicable conditions and Required Actions for Technical Specification supported system shall be entered in accordance with LCO 3.0.2. A3.0-09

PC 3.0-1
REV 01 10/27/89

Overflow (continued)

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

A3.0-09

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

A3.0-13

4.0 SURVEILLANCE REQUIREMENTS

3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

Applicability

SR3.0

~~SR 3.0.2A. Each Surveillance Requirement shall be performed within the specified time interval with the following exceptions.~~

~~1. To accommodate normal test schedules, the specified Frequency for each SR is met, Specific time intervals between tests, except for tests with a specified Frequency of 24 months, if the Surveillance is performed may be within 0.75 to 1.25 times the interval specified in the Frequency, as measured from the established schedule for performance of the SR or as measured from the time a specified condition of the Frequency is met adjusted plus or minus 25% to accommodate normal test schedules.~~ A3.0-14

~~2. The intervals between tests The specified Frequency is met for each SR with a specified Frequency of 24 months if the Surveillance is performed within 18 months to 24 months scheduled for refueling shutdowns shall not exceed two years.~~ A3.0-14

~~For Frequencies specified as "once", the interval extension (1.25 times the interval specified) does not apply.~~ M3.0-16

~~If a Completion Time requires periodic performance on a "once per" basis, the interval extension (1.25 times the interval specified) applies to each performance after the initial performance as measured from the previous performance.~~ M3.0-16

~~Exceptions to this Specification are stated in the individual Specifications.~~ A3.0-14

~~SR 3.0.1B. SRs shall be met during the MODES or other specified conditions in the Applicability for individual LCOs, unless otherwise stated in the SR. Failure to meet perform a Surveillance Requirement, whether such failure is experienced during the performance of the Surveillance or between performances, within the allowed surveillance interval, defined by Specification 4.0.A, shall be failure to meet The constitute noncompliance with the OPERABILITY requirements for a Limiting Condition for Operation. Failure to perform a Surveillance within the specified Frequency shall be failure to meet the LCO except as provided in SR 3.0.3. Surveillances do not have to be performed on inoperable equipment or variables outside specified limits.~~ A3.0-17

SR 3.0.3 The time limits of the ACTION requirements are applicable at the time it is identified that a Surveillance Requirement has not been performed. If it is discovered that a Surveillance was not performed within its specified Frequency, then compliance with the requirement to declare the LCO not met. The ACTION requirements may be delayed for up to 24 hours or up to the limit of the specified Frequency, whichever is less. This delay period is permitted to allow the performance completion of the surveillance, when the allowable outage time limits of the ACTION requirements are less than 24 hours. Surveillance Requirements do not have to be performed on inoperable equipment.

A3.0-18

If the Surveillance is not performed within the delay period, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

A3.0-18

When the Surveillance is performed within the delay period and the Surveillance is not met, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

A3.0-18

SR 3.0.4 Entry into a MODE or other specified condition in the Applicability of an LCO shall not be made unless the LCO's Surveillances have been met within their specified Frequency. This provision shall not prevent entry into MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

M3.0-19

SR 3.0.4 is only applicable for entry into a MODE or other specified condition in the Applicability in MODES 1, 2, 3 and 4.

PACKEAGE 3.0
LIMITING CONDITION FOR OPERATION
APPLICABILITY
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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 3.0

LIMITING CONDITION FOR OPERATION APPLICABILITY

SURVEILLANCE REQUIREMENT APPLICABILITY

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 3.0-	Discussion Of Change
A	01	CTS 3.0.A, 3.0.B, 3.0.C. (ITS LCO 3.0.1, LCO 3.0.2, LCO 3.0.3) Although the specific terms and phraseology have changed, the Improved Technical Specifications (ITS) requirements are substantially the same requirements as those contained in the current Specifications. Since the current Technical Specifications (CTS) requirements are basically the same requirements which have been incorporated in the new 3.0 Specifications, this is an administrative change. Any significant differences are marked and referenced to a separate change number.

NSHD category	Change number 3.0-	Discussion Of Change
A	02	<p>CTS 3.0.C. (ITS LCO 3.0.3) Due to differences in convention and rules of use, the CTS and ITS differ in the stated Completion Times for Required Actions. CTS states Completion Times within the hours following the previous Required Action. ITS states the total time from when the Condition was first entered. In most instances these times are equivalent; e.g., CTS in 3.0.C requires action to be initiated in 1 hour, shutdown to MODE 3 within the next 6 hours and shutdown to MODE 5 within the next 30 hours. The ITS results in requiring the actions to be completed in the same time as the CTS since it requires the plant to be in MODE 3 in 7 hours from the time the Condition was entered and in MODE 5 in 37 hours from the time the Condition was entered. Also, the CTS uses the titles of the MODES and the ITS uses the MODE number; however, the required plant condition is the same. Since the CTS and ITS required Completion Time and plant condition (MODE) are substantively the same, these are administrative changes. If the Completion Times or the required plant condition (MODE) differs from the CTS, then a separate Discussion of Change is provided.</p>
M	03	<p>New Requirement. (ITS LCO 3.0.3 b) ITS requires the plant to be in MODE 4 within 13 hours following entry into LCO 3.0.3. Since CTS does not require this intermediate milestone, this is a more restrictive change. This change is included to make the ITS complete. This change is acceptable since this time is reasonable and will not require the plant to be operated or shutdown in an unsafe manner.</p>

NSHD category	Change number 3.0-	Discussion Of Change
A	04	<p>New Requirement. (ITS LCO 3.0.3) ITS LCO 3.0.3 only applies in MODES 1, 2, 3, and 4. Although CTS does not explicitly make this statement, if the plant is already in MODE 5 or 6, CTS 3.0.C (the CTS equivalent of ITS 3.0.3) does not provide any further plant safety or remedial action. Thus this new statement is a clarification which is an administrative change.</p>
	05	Not used.
M	06	<p>New Requirement. (ITS LCO 3.0.4) This is a new Specification in conformance with NUREG-1431 which precludes entry into a MODE or other specified condition in the Applicability (MOSCA) when a LCO is not met. This new specification includes two new provisions of NUREG-1431, Revision 1: (1) this specification does not prevent changes in MOSCA that are part of a shutdown of the unit; and (2) this specification is only applicable for entry into a MOSCA in MODES 1, 2, 3, and 4. These new provisions are accompanied by a Reviewer's Note which states in part, "Before this version of LCO 3.0.4 can be implemented on a plant specific basis, the licensee must review the existing technical specifications to determine where specific restrictions on MODE changes or Required Actions should be included in individual LCOs to justify this change; such an evaluation should be summarized in a matrix of all existing LCOs to facilitate NRC staff review of a conversion to the STS."</p> <p>CTS does not have general restrictions, such as LCO 3.0.4, governing MODE changes when LCOs are not met. Where such restrictions are required, each individual specification statement imposes the restrictions as applicable. Thus, all CTS were reviewed individually for limitations on MOSCA</p>

NSHD category	Change number 3.0-	Discussion Of Change
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M	06	(continued)
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changes. The Reviewer's Note requires evaluation of restrictions on changing MOSCA when an LCO is not met to perform a unit shutdown or while in MODES 5 and 6. PI CTS does not have any such restrictions on changing MOSCA when performing a unit shutdown. Likewise, it does not have any limitations on changing MOSCA during MODES 5 and 6. Since there are no CTS restrictions on plant shutdown or MOSCA changes in MODES 5 and 6 when an LCO is not met, the NUREG-1431 Reviewer's Note requirement for an evaluation matrix does not apply and thus is not supplied.

The new LCO 3.0.4 may impose restrictions on changing MOSCA which do not exist in the CTS; thus, this is a more restrictive change. These new requirements are included to make the ITS complete and assure that the plant is operated in a conservative safe manner. These new requirements do not cause the plant to be operated or tested in an unsafe manner.

M	07	<p>New Requirement. (ITS LCO 3.0.5) This new Specification is included in conformance with NUREG-1431 to allow equipment removed from service or declared inoperable to comply with ACTIONS, to be returned to service under administrative controls to perform testing to demonstrate OPERABILITY. Specification LCO 3.0.5 is necessary to establish an allowance that, although presently informally used to restore inoperable equipment, is not formally recognized in the CTS. Since this provision is required in the new ITS to provide flexibility presently exercised at PI, this is a more restrictive requirement.</p>
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NSHD category	Change number 3.0-	Discussion Of Change
A	08	Not used.
A	09	New Requirement. (ITS LCO 3.0.8) This new Specification LCO 3.0.8 clarifies the relation of the ITS to non-Technical Specification requirements for systems which support ITS systems. This LCO specifically applies to snubbers. The intent of LCO 3.0.8 is to retain CTS operational flexibility when the snubbers have been relocated to the TRM. Since LCO 3.0.8 does not involve more or less plant operational flexibility, that is, less or more restrictive requirements, this is an administrative change.
	10	Not used.

NSHD category	Change number 3.0-	Discussion Of Change
M	11	<p>New Requirement. (ITS 3.0.6) In conformance with NUREG-1431, this new LCO clarifies the actions necessary to be taken when a system or support system that has its own LCO is inoperable. The supported system(s) are required to be declared inoperable if they are inoperable due to support system inoperability. However, the supported systems' Conditions and Required Actions are not entered unless directed to do so by the support system's Required Actions.</p> <p>By staying out of the supported systems' Conditions and Required Actions, potential confusion and inconsistency of requirements related to entry into multiple support systems' LCO Conditions and Required Actions is avoided. The unit is maintained in a safe condition through specification of all necessary actions within the support system's Required Actions statements and through use of the Safety Function Determination Program which ensures there is no resulting loss of safety function. Although the proposed change clarifies existing TS requirements regarding support system operability, it also imposes the Safety Function Determination Program which is a new requirement. Therefore, LCO 3.0.6 is a more restrictive change.</p>
A	12	<p>New Requirement. (ITS LCO 3.0.7) LCO 3.0.7 provides for the rules for the optional application of test exception LCOs for the purpose of performing physics testing. This Specification does not provide any new requirements and is included to conform to NUREG-1431.</p>

NSHD category	Change number 3.0-	Discussion Of Change
A	13	<p>New Requirement. (ITS LCO 3.0.9) This new Specification LCO 3.0.9 clarifies the use of the PI ITS for two units. The CTS follows these same rules although they were never explicitly written. This Specification does not provide any new requirements, but simply documents current practice; therefore, this is an administrative change. This LCO is particularly useful at PI because the plant uses a single TS book for both units. This Specification is consistent with the approved Vogtle Improved Technical Specifications.</p>
A	14	<p>CTS 4.0.A. (ITS SR 3.0.2) The requirements of the PI CTS have been retained. The current program for managing SR performance at PI is based on a "fixed schedule" surveillance program which schedules each test on a particular repeating day which differs from the NUREG-1431 guidelines which are based on a "fixed interval" surveillance program. More details on the PI SR program are provided in the letter entitled, "Comment on Request for Technical Assistance Regarding Prairie Island Surveillance Intervals," to US Nuclear Regulatory Commission from Joel P. Sorensen, NSP, dated June 26, 1997. Additional phraseology has been included to make the current TS program requirements clearer.</p> <p>It is important for PI to retain these current TS requirements for SR schedule flexibility. The current program has been refined for over 20 years to the point that it is very effective in assuring SRs are performed on schedule and the plant is maintained in a safe condition. Changing the SR management program at this time to conform to the guidance of NUREG-1431 would impose significant change management hardships on the plant operations. Such changes could result in missed SRs and significantly</p>

NSHD category	Change number 3.0-	Discussion Of Change
A	14	(continued) <p data-bbox="583 428 1528 583">increase operator burden associated with conversion to the ITS. Therefore, PI retains the CTS requirements for SR scheduling with additional phraseology which codifies current plant practices.</p> <p data-bbox="583 627 1523 821">The Specification on the interval between refueling shutdown has also been revised to retain the current requirements in conjunction with increasing the refueling interval. The CTS does not allow any SRs to be performed at an interval greater than two years.</p> <p data-bbox="583 865 1503 1094">This LAR will extend many SR Frequencies to 24 months to support longer plant refueling cycles. However, analyses have not been performed to demonstrate that the Frequency can be extended beyond 24 months. Therefore, through this added phraseology, the CTS restriction of two years has been retained.</p>
	15	Not used.
M	16	New Requirement. (ITS SR 3.0.2) New requirements from NUREG-1431 SR 3.0.2 have been included to support the ITS format changes and make the ITS complete. These changes are acceptable since they do not allow plant operation or testing that will cause an unsafe condition. Since these changes impose additional rules of use in the TS, these are more restrictive changes.

NSHD category	Change number 3.0-	Discussion Of Change
A	17	CTS 4.0.B. (ITS SR 3.0.1) Specification SR 3.0.1 is included in conformance with NUREG-1431 and expands upon the current requirements in the first sentence of CTS 4.0.B. This Specification establishes the requirements and limitations that the SRs shall meet during the MODES or other specified conditions in the Applicability for which the requirements of the LCO apply. This Specification is administrative since it does not impose any new requirements and is consistent with current practice at the PI plant.
A	18	CTS 4.0.B. (ITS SR 3.0.3) Current TS language which establishes flexibility to defer declaring affected equipment inoperable or an affected variable outside the specified limits when a Surveillance has not been completed within the specified Frequency has been replaced by NUREG-1431 wording. The intent is substantially the same as the CTS. However, the NUREG allows delaying declaration that the LCO is not met rather than delaying only the ACTIONS. This may eliminate the issuance of some Licensee Event Reports under these new ITS; however, the impact on plant safe operation is unchanged. To the contrary, CTS allows 24 hours for performing any missed Surveillance Requirements (SR) while ITS only allows the specified Frequency up to 24 hours; thus, in a sense, the ITS may be more restrictive. Since there are off-setting considerations and the intent remains the same, this change is considered administrative.

NSHD category	Change number 3.0-	Discussion Of Change
M	19	New Requirement. (ITS SR 3.0.4) A new SR 3.0.4 is included which establishes the requirement that all applicable SRs shall be met before entry into a MODE or other specified condition in the Applicability. This Specification clarifies and describes the SR applicability consistent with the use and format of NUREG-1431. Since this specification adds new requirements to the TS, it is considered more restrictive.

PACKAGE 3.0
LIMITING CONDITION FOR OPERATION
APPLICABILITY
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PART E
MARKUP OF NUREG-1431
IMPROVED STANDARD TECHNICAL SPECIFICATIONS
AND BASES

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PRAIRIE ISLAND NUCLEAR GENERATING PLANT
UNITS 1 AND 2

Improved Technical Specifications
Conversion Submittal

3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

LCO 3.0.1 LCOs shall be met during the MODES or other specified conditions in the Applicability, except as provided in LCO 3.0.2 and 3.0.7.

TA3.0-21

LCO 3.0.2 Upon discovery of a failure to meet an LCO, the Required Actions of the associated Conditions shall be met, except as provided in LCO 3.0.5 and LCO 3.0.6 and LCO 3.0.8.

PA3.0-22

If the LCO is met or is no longer applicable prior to expiration of the specified Completion Time(s), completion of the Required Action(s) is not required unless otherwise stated.

LCO 3.0.3 When an LCO is not met and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS, the unit shall be placed in a MODE or other specified condition in which the LCO is not applicable. Action shall be initiated within 1 hour to place the unit, as applicable, in:

- a. MODE 3 within 7 hours;
- b. MODE 4 within 13 hours; and
- c. MODE 5 within 37 hours.

Exceptions to this Specification are stated in the individual Specifications.

Where corrective measures are completed that permit operation in accordance with the LCO or ACTIONS, completion of the actions required by LCO 3.0.3 is not required.

(continued)

LCO 3.0.3 is only applicable in MODES 1, 2, 3, and 4.

LCO 3.0.4 When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall not be made except when the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the

3.0 LCO APPLICABILITY

LCO 3.0.4 Applicability for an unlimited period of time. This
(continued) Specification shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

Exceptions to this Specification are stated in the individual Specifications. ~~These exceptions allow entry into MODES or other specified conditions in the Applicability when the associated ACTIONS to be entered allow unit operation in the MODE or other specified condition in the Applicability only for a limited period of time.~~

TA3.0-23

LCO 3.0.4 is only applicable for entry into a MODE or other specified condition in the Applicability in MODES 1, 2, 3, and 4.

~~Reviewers's Note: LCO 3.0.4 has been revised so that changes in MODES or other specified conditions in the Applicability that are part of a shutdown of the unit shall not be prevented. In addition, LCO 3.0.4 has been revised so that it is only applicable for entry into a MODE or other specified condition in the Applicability in MODES 1, 2, and 3. The MODE change restrictions in LCO 3.0.4 were previously applicable in all MODES. Before this version of LCO 3.0.4 can be implemented on a plant specific basis, the~~

TA3.0-23

~~licensee must review the existing technical specifications to determine where specific restrictions on MODE changes or Required Actions should be included in individual LCOs to justify this change; such an evaluation should be summarized in a matrix of all existing LCOs to facilitate NRC staff review of a conversion to the STS.~~

TA3.0-23

LCO 3.0.5 Equipment removed from service or declared inoperable to comply with ACTIONS may be returned to service under administrative control solely to perform testing required to demonstrate its OPERABILITY or the OPERABILITY of other equipment. This is an exception to LCO 3.0.2 for the system returned to service under administrative control to perform the testing required to demonstrate OPERABILITY.

LCO 3.0.6 When a supported system LCO is not met solely due to a support system LCO not being met, the Conditions and

3.0 LCO APPLICABILITY

LCO 3.0.6
(continued) Required Actions associated with this supported system are not required to be entered. Only the support system LCO ACTIONS are required to be entered. This is an exception to LCO 3.0.2 for the supported system. In this event, ~~an additional evaluation shall be performed and limitations may be required in accordance with~~ Specification 5.5.185, "Safety Function Determination Program (SFDP)." If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

TA3.0-24

When a support system's Required Action directs a supported system to be declared inoperable or directs entry into Conditions and Required Actions for a supported system, the

(continued)

applicable Conditions and Required Actions shall be entered in accordance with LCO 3.0.2.

LCO 3.0.7 ~~Test Exception LCOs [3.1.89, 3.1.10, 3.1.11, and 3.4.189]~~ TA3.0-26
allow specified Technical Specification (TS) TA3.0-27
requirements to be changed to permit performance of special tests and operations. Unless otherwise specified, all other TS requirements remain unchanged. Compliance with Test Exception LCOs is optional. When a Test Exception LCO is desired to be met but is not met, the ACTIONS of the Test Exception LCO shall be met. When a Test Exception LCO is not desired to be met, entry into a MODE or other specified condition in the Applicability shall be made in accordance with the other applicable Specifications.

~~LCO 3.0.8 When a Technical Specification supported system LCO is not met solely due to the inoperability of a non-Technical Specification support system listed below, the Technical Specification supported system LCO is considered to be met unless the associated delay time of the non-Technical Specification support system has expired. This is an exception to LCO 3.0.2 for the Technical Specification. Upon expiration of the non-Technical Specification support system delay time, the Technical Specification supported system shall be declared inoperable and the applicable Conditions and Required Actions for Technical Specification supported system shall be entered in accordance with LCO 3.0.2.~~ PA3.0-22

(continued)

SR 3.0.2

~~To accommodate normal test schedules, the specified Frequency for each SR is met, except for SRs with a specified Frequency of 24 months, if the Surveillance is performed within 0.75 to 1.25 times ($\pm 25\%$) the interval specified in the Frequency, as measured from the established schedule for performance of the SR previous performance or as measured from the time a specified condition of the Frequency is met.~~

CL3.0-32

~~The specified Frequency is met for each SR with a specified Frequency of 24 months if the Surveillance is performed within 24 months, as measured from the previous performance or as measured from the time a specified condition of the Frequency is met.~~

CL3.0-32

For Frequencies specified as "once," the above interval extension (~~1.25 times the interval specified~~) does not apply.

CL3.0-32

If a Completion Time requires periodic performance on a "once per . . ." basis, the above Frequency ~~interval extension (1.25 times the interval specified)~~ extension applies to each performance after the initial performance ~~as measured from the previous performance.~~

CL3.0-32

Exceptions to this Specification are stated in the individual Specifications.

SR 3.0.3

If it is discovered that a Surveillance was not performed within its specified Frequency, then compliance with the requirement to declare the LCO not met may be delayed, from the time of discovery, up to 24 hours or up to the limit of

3.0 SR APPLICABILITY

SR 3.0.3
(continued)

the specified Frequency, whichever is less. This delay period is permitted to allow performance of the Surveillance.

If the Surveillance is not performed within the delay period, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

When the Surveillance is performed within the delay period and the Surveillance is not met, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

SR 3.0.4

Entry into a MODE or other specified condition in the Applicability of an LCO shall not be made unless the LCO's Surveillances have been met within their specified Frequency. This provision shall not prevent entry into MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

SR 3.0.4 is only applicable for entry into a MODE or other specified condition in the Applicability in MODES 1, 2, 3 and 4.

~~Reviewer's Note: SR 3.0.4 has been revised so that changes in MODES or other specified conditions in the Applicability that are part of a shutdown of the unit shall not be prevented. In addition, SR 3.0.4 has been revised so that it is only applicable for entry into a MODE or other specified condition in the Applicability in MODES 1, 2, and 3. The MODE change restrictions in SR 3.0.4 were previously applicable in all MODES. Before this version of SR 3.0.4 can be implemented on a plant-specific basis, the licensee must review the existing technical specifications to determine where specific restrictions on MODE changes or Required Actions should be included in individual LCOs to justify this change; such an evaluation should be summarized in a matrix of all existing LCOs to facilitate NRC staff review of a conversion to the STS.~~

TA3.0-23

B 3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

PA3.0-41

BASES

LCOs LCO 3.0.1 through LCO 3.0.96 establish the general requirements applicable to all Specifications and apply at all times, unless otherwise stated.

LCO 3.0.1 LCO 3.0.1 establishes the Applicability statement within each individual Specification as the requirement for when the LCO is required to be met (i.e., when the unit is in the MODES or other specified conditions of the Applicability statement of each Specification).

LCO 3.0.2 LCO 3.0.2 establishes that upon discovery of a failure to meet an LCO, the associated ACTIONS shall be met. The Completion Time of each Required Action for an ACTIONS Condition is applicable from the point in time that an ACTIONS Condition is entered. The Required Actions establish those remedial measures that must be taken within specified Completion Times when the requirements of an LCO are not met. This Specification establishes that:

- a. Completion of the Required Actions within the specified Completion Times constitutes compliance with a Specification; and
- b. Completion of the Required Actions is not required when an LCO is met within the specified Completion Time, unless otherwise specified.

There are two basic types of Required Actions. The first type of Required Action specifies a time limit in which the LCO must be met. This time limit is the Completion Time to

(continued)

restore an inoperable system or component to OPERABLE status or to restore variables to within specified limits. If this type of Required Action is not completed within the specified Completion Time, a shutdown may be required to place the unit in a MODE or condition in which the Specification is not applicable. (Whether stated as a Required Action or not, correction of the entered Condition is an action that may always be considered upon entering LCO 3.0.2 ACTIONS.) The second type of Required Action

BASES

LCO 3.0.2
(continued)

specifies the remedial measures that permit continued operation of the unit that is not further restricted by the Completion Time. In this case, compliance with the Required Actions provides an acceptable level of safety for continued operation.

Completing the Required Actions is not required when an LCO is met or is no longer applicable, unless otherwise stated in the individual Specifications.

The nature of some Required Actions of some Conditions necessitates that, once the Condition is entered, the Required Actions must be completed even though the associated Conditions no longer exist. The individual LCO's ACTIONS specify the Required Actions where this is the case. An example of this is in LCO 3.4.3, "RCS Pressure and Temperature (P/T) Limits."

The Completion Times of the Required Actions are also applicable when a system or component is removed from service intentionally. The reasons for intentionally relying on the ACTIONS include, but are not limited to, performance of Surveillances, preventive maintenance, corrective maintenance, or investigation of operational problems. Entering ACTIONS for these reasons must be done in a manner that does not compromise safety. Intentional

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entry into ACTIONS should not be made for operational convenience. Alternatives that would not result in redundant equipment being inoperable should be used instead. Doing so limits the time both subsystems/trains of a safety function are inoperable and limits the time other conditions exist which may result in LCO 3.0.3 being entered. Individual Specifications may specify a time limit for performing an SR when equipment is removed from service or bypassed for testing. In this case, the Completion Times of the Required Actions are applicable when this time limit expires, if the equipment remains removed from service or bypassed.

When a change in MODE or other specified condition is required to comply with Required Actions, the unit may enter a MODE or other specified condition in which another Specification becomes applicable, resulting in a new LCO not met. In this case, the Completion Times of the new associated Required Actions would apply from the point

PA3.0-42

BASES

LCO 3.0.2 (continued) in time that the new Specification becomes applicable, and the ACTIONS Condition(s) are entered.

LCO 3.0.3 LCO 3.0.3 establishes the actions that must be implemented when an LCO is not met and:

- a. An associated Required Action and Completion Time is not met and no other Condition applies; or
- b. The condition of the unit is not specifically addressed by the associated ACTIONS. This means that no combination of Conditions stated in the ACTIONS can

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be made that exactly corresponds to the actual condition of the unit. Sometimes, possible combinations of Conditions are such that entering LCO 3.0.3 is warranted; in such cases, the ACTIONS specifically state a Condition corresponding to such combinations and also that LCO 3.0.3 be entered immediately.

This Specification delineates the time limits for placing the unit in a safe MODE or other specified condition when operation cannot be maintained within the limits for safe operation as defined by the LCO and its ACTIONS. It is not intended to be used as an operational convenience that permits routine voluntary removal of redundant systems or components from service in lieu of other alternatives that would not result in redundant systems or components being inoperable.

Upon entering LCO 3.0.3, 1 hour is allowed to prepare for an orderly shutdown before initiating a change in unit operation. This includes time to permit the operator to coordinate the reduction in electrical generation with

BASES

LCO 3.0.3

(continued)

~~system operations~~ the load dispatcher to ensure the PA3.0-43
stability and availability of the electrical grid. The ~~shutdown shall be initiated so that the~~ time limits specified to reach lower MODES of operation permit the shutdown to proceed in a controlled and orderly manner that is well within the specified maximum cooldown rate and within the capabilities of the unit, assuming that only the minimum required equipment is OPERABLE. This reduces thermal stresses on components of the Reactor Coolant System and the potential for a plant upset that could challenge safety systems under conditions to which this Specification applies. The use and interpretation of specified times to

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complete the actions of LCO 3.0.3 are consistent with the discussion of Section 1.3, Completion Times.

A unit shutdown required in accordance with LCO 3.0.3 may be terminated and LCO 3.0.3 exited if any of the following occurs:

- a. The LCO is now met.
- b. A Condition exists for which the Required Actions have now been performed.
- c. ACTIONS exist that do not have expired Completion Times. These Completion Times are applicable from the point in time that the Condition is initially entered and not from the time LCO 3.0.3 is exited.

The time limits of LCO Specification 3.0.3 allow 37 hours for the unit to be in MODE 5 when a shutdown is required during MODE 1 operation. If the unit is in a lower MODE of operation when a shutdown is required, the time limit for reaching the next lower MODE applies. If a lower MODE is reached in less time than allowed, however, the total allowable time to reach MODE 5, or other applicable MODE, is not reduced. For example, if MODE 3 is reached in 2 hours, then the time allowed for reaching MODE 4 is the next 11 hours, because the total time for reaching MODE 4 is not reduced from the allowable limit of 13 hours. Therefore, if remedial measures are completed that would permit a return to MODE 1, a penalty is not incurred by having to reach a lower MODE of operation in less than the total time allowed.

In MODES 1, 2, 3, and 4, LCO 3.0.3 provides actions for Conditions not covered in other Specifications. The

BASES

LCO 3.0.3 requirements of LCO 3.0.3 do not apply in MODES 5 and 6

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(continued) because the unit is already in the most restrictive Condition required by LCO 3.0.3. The requirements of LCO 3.0.3 do not apply in other specified conditions of the Applicability (unless in MODE 1, 2, 3, or 4) because the ACTIONS of individual Specifications sufficiently define the remedial measures to be taken.

Exceptions to LCO 3.0.3 are provided in instances where requiring a unit shutdown, in accordance with LCO 3.0.3, would not provide appropriate remedial measures for the associated condition of the unit. An example of this is in LCO 3.7.15, "~~Spent~~ Fuel Storage Pool Water Level." LCO 3.7.15 has an Applicability of "During movement of irradiated fuel assemblies in the ~~spent~~ fuel storage pool." Therefore, this LCO can be applicable in any or all MODES. If the LCO and the Required Actions of LCO 3.7.15 are not met while in MODE 1, 2, or 3, there is no safety benefit to be gained by placing the unit in a shutdown condition. The Required Action of LCO 3.7.15 of "Suspend movement of irradiated fuel assemblies in the ~~spent~~ fuel storage pool" is the appropriate Required Action to complete in lieu of the actions of LCO 3.0.3. These exceptions are addressed in the individual Specifications.

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- LCO 3.0.4 LCO 3.0.4 establishes limitations on changes in MODES or other specified conditions in the Applicability when an LCO is not met. It precludes placing the unit in a MODE or other specified condition stated in that Applicability (e.g., Applicability desired to be entered) when the following exist:
- a. Unit conditions are such that the requirements of the LCO would not be met in the Applicability desired to be entered; and
 - b. Continued noncompliance with the LCO requirements, if the Applicability were entered, would result in the

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unit being required to exit the Applicability desired to be entered to comply with the Required Actions.

Compliance with Required Actions that permit continued operation of the unit for an unlimited period of time in a MODE or other specified condition provides an acceptable

BASES

LCO 3.0.4
(continued)

level of safety for continued operation. This is without regard to the status of the unit before or after the MODE change. Therefore, in such cases, entry into a MODE or other specified condition in the Applicability may be made in accordance with the provisions of the Required Actions. The provisions of this Specification should not be interpreted as endorsing the failure to exercise the good practice of restoring systems or components to OPERABLE status before entering an associated MODE or other specified condition in the Applicability.

The provisions of LCO 3.0.4 shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS. In addition, the provisions of LCO 3.0.4 shall not prevent changes in MODES or other specified conditions in the Applicability that result from any unit shutdown.

Exceptions to LCO 3.0.4 are stated in the individual Specifications. ~~The exceptions allow entry into MODES or other specified conditions in the Applicability when the associated ACTIONS to be entered do not provide for continued operation for an unlimited period of time.~~ Exceptions may apply to all the ACTIONS or to a specific Required Action of a Specification. TA3.0-23

LCO 3.0.4 is only applicable when entering MODE 4 from MODE 5, MODE 3 from MODE 4, MODE 2 from MODE 3, or MODE 1 from MODE 2. Furthermore, LCO 3.0.4 is applicable when entering

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any other specified condition in the Applicability only while operating in MODE 1, 2, PA3.0-44 3, or 4. The requirements of LCO 3.0.4 do not apply in MODES 5 and 6, or in other specified conditions of the Applicability (unless in MODE 1, 2, 3, or 4) because the ACTIONS of individual Specifications sufficiently define the remedial measures to be taken. ~~[In some cases (e.g., ...) these ACTIONS provide a Note that states "While this LCO is not met, entry into a MODE or other specified condition in the Applicability is not permitted, unless required to comply with ACTIONS." This Note is a requirement explicitly precluding entry into a MODE or other specified condition of the Applicability.]~~

Surveillances do not have to be performed on the associated inoperable equipment (or on variables outside the specified limits), as permitted by SR 3.0.1. Therefore, changing MODES or other specified conditions while in an ACTIONS

BASES

LCO 3.0.4
(continued)

Condition, in compliance with LCO 3.0.4 or where an exception to LCO 3.0.4 is stated, is not a violation of SR 3.0.1 or SR 3.0.4 for those Surveillances that do not have to be performed due to the associated inoperable equipment. However, SRs must be met to ensure OPERABILITY prior to declaring the associated equipment OPERABLE (or variable within limits) and restoring compliance with the affected LCO.

LCO 3.0.5

LCO 3.0.5 establishes the allowance for restoring equipment to service under administrative controls when it has been removed from service or declared inoperable to comply with ACTIONS. The sole purpose of this Specification is to provide an exception to LCO 3.0.2 (e.g., to not comply with the applicable Required Action(s)) to TA3.0-46

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allow the performance of ~~required testing~~ SRs to demonstrate:

- a. The OPERABILITY of the equipment being returned to service; or
- b. The OPERABILITY of other equipment.

The administrative controls ensure the time the equipment is returned to service in conflict with the requirements of the ACTIONS is limited to the time absolutely necessary to perform the ~~required testing to demonstrate~~ OPERABILITY allowed SRs. This Specification does not provide time to perform any other preventive or corrective maintenance. TA3.0-46

An example of demonstrating the OPERABILITY of the equipment being returned to service is reopening a containment isolation valve that has been closed to comply with Required Actions and must be reopened to perform the ~~required testing~~ SRs. TA3.0-46

An example of demonstrating the OPERABILITY of other equipment is taking an inoperable channel or trip system out of the tripped condition to prevent the trip function from occurring during the performance of ~~required testing~~ an SR on another channel in the other trip system. A similar example of demonstrating the OPERABILITY of other equipment is taking an inoperable channel or trip system out of the tripped condition to permit the logic to function and indicate the appropriate response during the performance of ~~required testing~~ an SR on another channel in the same trip system. TA3.0-46

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BASES (continued)

LCO 3.0.6 LCO 3.0.6 establishes an exception to LCO 3.0.2 for support systems that have an LCO specified in the Technical Specifications (TS). This exception is provided because LCO 3.0.2 would require that the Conditions and Required Actions of the associated inoperable supported system LCO be entered solely due to the inoperability of the support system. This exception is justified because the actions that are required to ensure the unit is maintained in a safe condition are specified in the support system LCO's Required Actions. These Required Actions may include entering the supported system's Conditions and Required Actions or may specify other Required Actions.

When a support system is inoperable and there is an LCO specified for it in the TS, the supported system(s) are required to be declared inoperable if determined to be inoperable as a result of the support system inoperability. However, it is not necessary to enter into the supported systems' Conditions and Required Actions unless directed to do so by the support system's Required Actions. The potential confusion and inconsistency of requirements related to the entry into multiple support and supported systems' LCOs' Conditions and Required Actions are eliminated by providing all the actions that are necessary to ensure the unit is maintained in a safe condition in the support system's Required Actions.

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

(continued)

and Required Actions shall be entered in accordance with LCO 3.0.2.

Specification 5.5.1~~85~~⁸⁵, "Safety Function Determination Program (SFDP)," ensures loss of safety function is detected and appropriate actions are taken. Upon entry into LCO 3.0.6, an evaluation shall be made to determine if loss of safety function exists. Additionally, other limitations, remedial actions, or compensatory actions may be identified as a result of the support system inoperability and corresponding exception to entering supported system Conditions and Required Actions. The SFDP implements the requirements of LCO 3.0.6.

BASES

LCO 3.0.6
(continued)

Cross train checks to identify a loss of safety function for those support systems that support multiple and redundant safety systems are required. The cross train check verifies that the supported systems of the redundant OPERABLE support system are OPERABLE, thereby ensuring safety function is retained. If this evaluation determines that a loss of safety function exists, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

~~This loss of safety function does not require the assumption of additional single failures or loss of offsite power. Since operation is being restricted in accordance with the ACTIONS of the support system, any resulting temporary loss of redundancy or single failure protection is taken into account. Similarly, the ACTIONS for inoperable offsite circuit(s) and inoperable diesel generator(s) provide the necessary restriction for cross train inoperabilities. This explicit cross train verification for inoperable AC electrical power sources also acknowledges that supported system(s) are not declared inoperable solely as a result of inoperability of a normal~~

TA3.0-47

(continued)

on emergency electrical power source (refer to the definition of OPERABILITY).

When a loss of safety function is determined to exist, and the SFD requires entry into the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists, consideration must be given to the specific type of function affected. Where a loss of function is solely due to a single technical specification support system (e.g., loss of automatic start due to inoperable instrumentation, or loss of pump suction source due to low tank level) the appropriate LCO is the LCO for the support system. The ACTIONS for a support system LCO adequately addresses the inoperabilities of that system without reliance on entering its supported system LCO. When the loss of function is result of multiple support systems, the appropriate LCO is the LCO for the supported system.

TA3.0-47

LCO 3.0.7

There are certain special tests and operations required to be performed at various times over the life of the unit. These special tests and operations are necessary to demonstrate select unit performance characteristics, to perform special maintenance activities, and to perform special evolutions. Test Exception LCOs {3.1.89, 3.1.10, 3.1.11, and 3.4.189} allow specified Technical Specification (TS) requirements to be changed to permit performances of these special tests and operations, which otherwise could not be performed if required to comply with the requirements of these TS. Unless otherwise specified, all the other TS requirements remain unchanged. This will ensure all appropriate requirements of the MODE or other specified condition not directly associated with or required to be changed to perform the special test or operation will remain in effect.

TA3.0-26

TA3.0-27

The Applicability of a Test Exception LCO represents a condition not necessarily in compliance with the normal

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requirements of the TS. Compliance with Test Exception LCOs is optional. A special operation may be performed either under the provisions of the appropriate Test Exception LCO or under the other applicable TS requirements. If it is desired to perform the special operation under the provisions of the Test Exception LCO, the requirements of the Test Exception LCO shall be followed.

LCO 3.0.8

LCO 3.0.8 establishes an exception to LCO 3.0.2 for Technical Specification (TS) supported systems due to an inoperability of a non-Technical Specification (non-TS) support system. The specific non-TS support system for which this exception is allowed is listed in LCO 3.0.8. This exception is provided because LCO 3.0.2 would require that the Conditions and Required Actions of the associated inoperable supported system LCO be entered solely due to the inoperability of the support system. This exception is justified because the actions that are required to ensure the unit is maintained in a safe condition are specified in the support system non-TS Required Actions. The NRC has acknowledged that the system listed in LCO 3.0.8 may be inoperable for the specified Delay Time without entering the TS supported system LCO. If the non-TS support system inoperability is not corrected within the Delay Time, then the TS supported system's Conditions and Required Actions must be entered.

PA3.0-22

(continued)

LC0 3.0.9

PA3.0-31

LC0 3.0.9 is provided to clarify the unit applicability of

the LC0's and associated ACTION requirements, especially with respect to systems or components that are common to both units.

In the LC0's and Specifications, parentheses and footnotes may be used to identify system, component, operating parameter, setpoints, etc. specific to one unit. These are considered an integral part of the LC0's and Specifications with which compliance is required for the specified unit.

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B 3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

BASES

SRs SR 3.0.1 through SR 3.0.4 establish the general requirements applicable to all Specifications and apply at all times, unless otherwise stated.

SR 3.0.1 SR 3.0.1 establishes the requirement that SRs must be met during the MODES or other specified conditions in the Applicability for which the requirements of the LCO apply, unless otherwise specified in the individual SRs. This Specification is to ensure that Surveillances are performed to verify the OPERABILITY of systems and components, and that variables are within specified limits. Failure to meet a Surveillance within the specified Frequency, in accordance with SR 3.0.2, constitutes a failure to meet an LCO.

Systems and components are assumed to be OPERABLE when the associated SRs have been met. Nothing in this Specification, however, is to be construed as implying that systems or components are OPERABLE when:

- a. The systems or components are known to be inoperable, although still meeting the SRs; or
- b. The requirements of the Surveillance(s) are known not to be met between required Surveillance performances.

Surveillances do not have to be performed when the unit is in a MODE or other specified condition for which the requirements of the associated LCO are not applicable, unless otherwise specified. The SRs associated with a test exception are only applicable when the [test exception] LCO is used as an allowable exception to the requirements of a Specification.

PA3.0-51

(continued)

Unplanned events may satisfy the requirements (including applicable acceptance criteria) for a given SR. In this case, the unplanned event may be credited as fulfilling the performances of the SR. This allowance includes those SRs whose performance is normally precluded in a given MODE or other specified condition.

TA3.0-52

Surveillances, including Surveillances invoked by Required Actions, do NOT have to be performed on inoperable equipment because the ACTIONS define the remedial measures that apply. Surveillances have to be met and performed in accordance with SR 3.0.2, prior to returning equipment to OPERABLE status.

Upon completion of maintenance, appropriate post maintenance testing is required to declare equipment OPERABLE. This includes ensuring applicable Surveillances

BASES

SR 3.0.1
(continued)

are not failed and their most recent performance is in accordance with SR 3.0.2. Post maintenance testing may not be possible in the current MODE or other specified conditions in the Applicability due to the necessary unit parameters not having been established. In these situations, the equipment may be considered OPERABLE provided testing has been satisfactorily completed to the extent possible and the equipment is not otherwise believed to be incapable of performing its function. This will allow operation to proceed to a MODE or other specified condition where other necessary post maintenance tests can be completed.

SR 3.0.2

SR 3.0.2 establishes the requirements for meeting the specified Frequency for Surveillances and any Required Action with a Completion Time that requires the periodic

(continued)

performance of the Required Action on a "once per . . ." interval.

SR 3.0.2 permits a ~~25% allowance~~ extension of the interval specified in the Frequency. This CL3.0-53 ~~allowance~~ extension facilitates Surveillance scheduling and considers plant operating conditions that may not be suitable for conducting the Surveillance (e.g., transient conditions or other ongoing Surveillance or maintenance activities).

The 25% ~~allowance~~ extension does not significantly degrade the reliability that results from performing the Surveillance at its specified Frequency. This is based on the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the SRs. The exceptions to SR 3.0.2 are those Surveillances for which the 25% extension of the interval specified in the Frequency does not apply. These exceptions are stated in the individual Specifications. An example of where SR 3.0.2 does not apply is ~~the Containment Leakage Rate Testing Program~~ Surveillance with a TP3.0-54 Frequency of "in accordance with 10 CFR 50, Appendix J, as modified by approved exemptions." The requirements of regulations take precedence over the TS. The TS cannot in and of themselves extend a test interval specified in the regulations. Therefore, there is a Note in the Frequency

BASES

SR 3.0.2
(continued)

~~stating, "SR 3.0.2 is not applicable."~~

As stated in SR 3.0.2, the 25% extension also does not apply to the initial portion of a periodic Completion Time that requires performance on a "once per . . ." basis. The 25% extension applies to each performance after the initial performance. The initial performance of the Required

(continued)

Action, whether it is a particular Surveillance or some other remedial action, is considered a single action with a single Completion Time. One reason for not allowing the 25% extension to this Completion Time is that such an action usually verifies that no loss of function has occurred by checking the status of redundant or diverse components or accomplishes the function of the inoperable equipment in an alternative manner.

~~Also, as stated in SR 3.0.2, the 25% extension does not apply to SRS with a specified Frequency of 24 months. This is to ensure performance is within equipment performance expectations. This is consistent with present industry analysis that supports refueling cycle intervals up to, but not longer than, 24 months.~~

CL3.0-53

The provisions of SR 3.0.2 are not intended to be used repeatedly merely as an operational convenience to extend Surveillance intervals (other than those consistent with refueling intervals) or periodic Completion Time intervals beyond those specified.

SR 3.0.3

SR 3.0.3 establishes the flexibility to defer declaring affected equipment inoperable or an affected variable outside the specified limits when a Surveillance has not been completed within the specified Frequency. A delay period of up to 24 hours or up to the limit of the specified Frequency, whichever is less, applies from the point in time that it is discovered that the Surveillance has not been performed in accordance with SR 3.0.2, and not at the time that the specified Frequency was not met.

This delay period provides adequate time to complete Surveillances that have been missed. This delay period permits the completion of a Surveillance before complying

(continued)

BASES

SR 3.0.3
(continued)

with Required Actions or other remedial measures that might preclude completion of the Surveillance.

The basis for this delay period includes consideration of unit conditions, adequate planning, availability of personnel, the time required to perform the Surveillance, the safety significance of the delay in completing the required Surveillance, and the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the requirements. When a Surveillance with a Frequency based not on time intervals, but upon specified unit conditions or operational situations, is discovered not to have been performed when specified, SR 3.0.3 allows the full delay period of 24 hours to perform the Surveillance.

SR 3.0.3 also provides a time limit for completion of Surveillances that become applicable as a consequence of MODE changes imposed by Required Actions.

Failure to comply with specified Frequencies for SRs is expected to be an infrequent occurrence. Use of the delay period established by SR 3.0.3 is a flexibility which is not intended to be used as an operational convenience to extend Surveillance intervals.

If a Surveillance is not completed within the allowed delay period, then the equipment is considered inoperable or the variable is considered outside the specified limits and the Completion Times of the Required Actions for the applicable LCO Conditions begin immediately upon expiration of the delay period. If a Surveillance is failed within the delay period, then the equipment is inoperable, or the variable is outside the specified limits and the Completion Times of the Required Actions for the applicable LCO Conditions begin immediately upon the failure of the Surveillance.

(continued)

Completion of the Surveillance within the delay period allowed by this Specification, or within the Completion Time of the ACTIONS, restores compliance with SR 3.0.1.

SR 3.0.4 SR 3.0.4 establishes the requirement that all applicable SRs must be met before entry into a MODE or other specified condition in the Applicability.

BASES

SR 3.0.4 (continued) This Specification ensures that system and component OPERABILITY requirements and variable limits are met before entry into MODES or other specified conditions in the Applicability for which these systems and components ensure safe operation of the unit.

The provisions of this Specification should not be interpreted as endorsing the failure to exercise the good practice of restoring systems or components to OPERABLE status before entering an associated MODE or other specified condition in the Applicability.

However, in certain circumstances, failing to meet an SR will not result in SR 3.0.4 restricting a MODE change or other specified condition change. When a system, subsystem, division, component, device, or variable is inoperable or outside its specified limits, the associated SR(s) are not required to be performed, per SR 3.0.1, which states that surveillances do not have to be performed on inoperable equipment. When equipment is inoperable, SR 3.0.4 does not apply to the associated SR(s) since the requirement for the SR(s) to be performed is removed. Therefore, failing to perform the Surveillance(s) within the specified Frequency does not result in an SR 3.0.4 restriction to changing MODES or other specified conditions of the Applicability. However, since the LCO is not met in this instance, LCO

(continued)

3.0.4 will govern any restrictions that may (or may not) apply to MODE or other specified condition changes.

The provisions of SR 3.0.4 shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS. In addition, the provisions of LCO 3.0.4 shall not prevent changes in MODES or other specified conditions in the Applicability that result from any unit shutdown.

The precise requirements for performance of SRs are specified such that exceptions to SR 3.0.4 are not necessary. The specific time frames and conditions necessary for meeting the SRs are specified in the Frequency, in the Surveillance, or both. This allows performance of Surveillances when the prerequisite condition(s) specified in a Surveillance procedure require entry into the MODE or other specified condition in the Applicability of the associated LCO prior to the performance or completion of a Surveillance. A Surveillance that could

BASES

SR 3.0.4
(continued)

not be performed until after entering the LCO Applicability, would have its Frequency specified such that it is not "due" until the specific conditions needed are met. Alternately, the Surveillance may be stated in the form of a Note as not required (to be met or performed) until a particular event, condition, or time has been reached. Further discussion of the specific formats of SRs' annotation is found in Section 1.4, Frequency.

SR 3.0.4 is only applicable when entering MODE 4 from MODE 5, MODE 3 from MODE 4, Mode 2 from MODE 3, or MODE 1 from MODE 2. Furthermore, SR 3.0.4 is applicable when entering any other specified condition in the Applicability only while operating in MODE 1, 2, or 3 or 4. The requirements of SR 3.0.4 do not apply in MODES 5 and 6, or in other

specified conditions of the Applicability (unless in MODE 1, 2, 3 or 4) because the ACTIONS of individual Specifications sufficiently define the remedial measures to be taken.

PACKAGE 3.0

LIMITING CONDITION FOR OPERATION
APPLICABILITY

SURVEILLANCE REQUIREMENT APPLICABILITY

PART F

JUSTIFICATION FOR DIFFERENCES
(JFD)

from

NUREG-1431
IMPROVED STANDARD TECHNICAL SPECIFICATIONS

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
UNITS 1 AND 2

Improved Technical Specifications
Conversion Submittal

PART F

PACKAGE 3.0

LIMITING CONDITION FOR OPERATION APPLICABILITY SURVEILLANCE REQUIREMENT APPLICABILITY

JUSTIFICATION FOR DIFFERENCES FROM IMPROVED STANDARD TECHNICAL SPECIFICATIONS (NUREG-1431) AND BASES

See Part E for specific proposed wording and location of referenced deviations.

Difference Category	Difference Number 3.0-	Justification for Differences
TA	21	Incorporated Nuclear Regulatory Commission (NRC) approved TSTF-6, Rev. 1.
PA	22	A new Specification 3.0.8 has been included to provide clarification on how the ITS relates to the TRM for snubber inoperabilities. Under CTS, a snubber may be inoperable for 72 hours prior to declaring the supported system inoperable. ITS LCO 3.0.8 and its associated Bases preserve this current TS flexibility when the snubber requirements have been relocated to the TRM.
TA	23	This change incorporates TSTF-104.
TA	24	This change incorporates TSTF-166.
	25	Not used.

Difference Category	Difference Number 3.0-	Justification for Differences
TA	26	This change incorporates TSTF-136.
TA	27	This change incorporates TSTF-12, Revision 1.
	28	Not used.
	29	Not used.
	30	Not used.
PA	31	A new Specification 3.0.9 has been included to provide clarification on how the ITS relates to the two unit PI plant. This clarification is necessary since PI uses a single TS book for both units.
CL	32	CTS provisions for varying the Surveillance Requirement (SR) interval by plus or minus 25% have been included in the ITS. Clarification is also included which limits 24 month intervals to 24 months without any further extension. The current plus or minus provisions are part of the very successful SR program at PI. (See Discussion of Change (DOC) A3.0-14 for further discussion.)
	33 to 40	Not used.

Difference Category	Difference Number 3.0-	Justification for Differences
PA	41	Included throughout the Bases are reference corrections, renumbering and relettering of paragraphs and minor wording changes which have been made to accommodate changes to the Specifications and PI unique needs. These changes are not identified by change numbers.
PA	42	Clarification is provided that the potential exists for additional LCO applicability due to mode changes. These changes are consistent with the approved Ginna ITS.
PA	43	The Prairie Island (PI) specific title "systems operations" is included to accurately describe the personnel involved and eliminate confusion. Clarification is also provided on when initiation of shutdown is required. Shutdown can be initiated any time during the 6 hour period providing the shutdown is controlled and orderly and within the maximum cooldown rate as discussed in this paragraph of Bases 3.0.3.
PA	44	The provisions allowed in the brackets are not used in the PI ITS and therefore the contents of these brackets have not been included in the PI ITS.
	45	Not used.

Difference Category	Difference Number 3.0-	Justification for Differences
TA	46	This change incorporates TSTF-165.
TA	47	This change incorporates TSTF-273, Revision 2.
	48	Not used.
	49	Not used.
	50	Not used.
PA	51	Since this discussion is supporting the use of Test Exception LCOs, clarification is provided.
TA	52	This change incorporates TSTF-8, Revision 2.
CL	53	NUREG-1431 allows a 25% extension of the specified interval. Since the PI ITS allows $\pm 25\%$ of the specified interval in accordance with CTS provisions, the term "extension" is not always meaningful and has been changed to "allowance" where either +25% or -25% could be applied. Clarification is also included that 24 month intervals are not allowed to be extended by 25%.
TA	54	This change incorporates TSTF-52, Revision 3.

PACKAGE 3.0

LIMITING CONDITION FOR OPERATION
APPLICABILITY

SURVEILLANCE REQUIREMENT APPLICABILITY

PART G

NO SIGNIFICANT HAZARDS DETERMINATION
(NSHD)

and

ENVIRONMENTAL ASSESSMENT

for

CHANGES TO PRAIRIE ISLAND
CURRENT TECHNICAL SPECIFICATIONS

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
UNITS 1 AND 2

Improved Technical Specifications
Conversion Submittal

PART G

PACKAGE 3.0

LIMITING CONDITION FOR OPERATION APPLICABILITY SURVEILLANCE REQUIREMENT APPLICABILITY

NO SIGNIFICANT HAZARDS DETERMINATION AND ENVIRONMENTAL ASSESSMENT

NO SIGNIFICANT HAZARDS DETERMINATION

The proposed changes to the Operating License have been evaluated to determine whether they constitute a significant hazards consideration as required by 10CFR Part 50, Section 50.91 using the standards provided in Section 50.92.

For ease of review, the changes are evaluated in groupings according to the type of change involved. A single generic evaluation may suffice for some of the changes while others may require specific evaluation in which case the appropriate reference change numbers are provided.

A - Administrative (GENERIC NSHD)

(A3.0-01, A3.0-02, A3.0-04, A3.0-09, A3.0-12, A3.0-13, A3.0-14, A3.0-17, A3.0-18)

Most administrative changes have not been marked-up in the Current Technical Specifications, and may not be specifically referenced to a discussion of change. This No Significant Hazards Determination (NSHD) may be referenced in a discussion of change by the prefix "A" if the change is not obviously an administrative change and requires an explanation.

These proposed changes are editorial in nature. They involve reformatting, renaming, renumbering, or rewording of existing Technical Specifications to provide consistency with NUREG-1431 or conformance with the Writer's Guide, or change of current plant terminology to conform to NUREG-1431. Some administrative changes involve relocation of requirements within the Technical Specifications without affecting their

A - Administrative (continued)

technical content. Clarifications within the new Prairie Island Improved Technical Specifications which do not impose new requirements on plant operation are also considered administrative.

1. The proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated

The proposed conversion of Prairie Island Current Technical Specifications to conform to NUREG-1431 involves reformatting, rewording, changes in terminology and relocating requirements. These changes are simply editorial, or do not involve technical changes and thus they do not impact any initiators of previously analyzed events or assumed mitigation of accident or transient events. Therefore, these changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously analyzed.

These proposed administrative changes do not involve physical modification of the plant, no new or different type of equipment will be installed or removed associated with these administrative changes, nor will there be changes in parameters governing normal plant operation. The proposed administrative changes do not impose new or different requirements on plant operation. Therefore, these administrative changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The proposed amendment will not involve a significant reduction in the margin of safety.

These proposed administrative changes do not impact any safety analysis assumptions. Therefore, these changes do not involve a reduction in the plant margin of safety.

M - More restrictive (GENERIC NSHD)

(M3.0-03, M3.0-06, M3.0-07, M3.0-11, M3.0-16, M3.0-19)

This proposed Technical Specifications revision involves modifying the Current Technical Specifications to impose more stringent requirements upon plant operations to achieve consistency with the guidance of NUREG-1431, correct discrepancies or remove ambiguities from the specifications. These more restrictive Technical Specifications have been evaluated against the plant design, safety analyses, and other Technical Specifications requirements to ensure the plant will continue to operate safely with these more stringent specifications.

1. The proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated

The proposed changes provide more stringent requirements for operation of the plant. These more stringent requirements do not result in operation that will increase the probability of initiating an analyzed event and do not alter assumptions relative to mitigation of an accident or transient event.

These more restrictive requirements continue to ensure process variables, structures, systems, and components are maintained consistent with the safety analyses and licensing basis. Therefore, these changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously analyzed.

The proposed changes do not involve a physical alteration of the plant; that is, no new or different type of equipment will be installed, nor do they change the methods governing normal plant operation.

These more stringent requirements do impose different operating restrictions. However, these operating restrictions are consistent with the boundaries established by the assumptions made in the plant safety analyses and licensing bases. Therefore, these changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

M - More restrictive (continued)

3. The proposed amendment will not involve a significant reduction in the margin of safety.

The imposition of more stringent requirements on plant operation either has no impact on the plant margin of safety or increases the margin of safety. Each change in this category is by definition providing additional restrictions to enhance plant safety by:

- a) increasing the analytical or safety limit;
- b) increasing the scope of the specifications to include additional plant equipment;
- c) adding requirements to current specifications;
- d) increasing the applicability of the specification;
- e) providing additional actions;
- f) decreasing restoration times;
- g) imposing new surveillances; or
- h) decreasing surveillance intervals.

These changes maintain requirements within the plant safety analyses and licensing bases. Therefore, these changes do not involve a significant reduction in a margin of safety.

R - Relocation (GENERIC NSHD)
(None in this Package)

This License Amendment Request (LAR) proposes to relocate requirements contained in the Current Technical Specifications out of the Technical Specifications into licensee controlled programs. These requirements are relocated because they 1) do not meet the Technical Specifications selection criteria defined in 10 CFR 50.36; or 2) are mandated by current Nuclear Regulatory Commission (NRC) regulations and are therefore unnecessary in the Technical Specifications.

In the NRC Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors (dated 7/16/93), the NRC stated:

... since 1969, there has been a trend towards including in Technical Specifications not only those requirements derived from the analyses and evaluations included in the safety analysis report but also essentially all other Commission requirements governing the operation of nuclear power reactors. . . . This has contributed to the volume of Technical Specifications and to the several-fold increase, since 1969, in the number of license amendment applications to effect changes to the Technical Specifications. It has diverted both staff and licensee attention from the more important requirements in these documents to the extent that it has resulted in an adverse but unquantifiable impact on safety.

Thus, relocation of unnecessary requirements from the Current Technical Specifications should result in an overall improvement in plant safety through more focused attention to the requirements that are most important to plant safety.

1. The proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated

These proposed changes relocate requirements for structures, systems, components or variables which did not meet the criteria for inclusion in the improved Technical Specifications or duplicate regulatory requirements. The affected structures, systems, components or variables are not assumed to be initiators of analyzed events and are not assumed to mitigate accident or transient events.

These relocated operability requirements will continue to be maintained pursuant

R - Relocation (continued)

to 10 CFR 50.59, other regulatory requirements (as applicable for the document to which the requirement is relocated), or the Administrative Controls section of these proposed improved Technical Specifications.

Therefore, these changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously analyzed.

These proposed changes do not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in parameters governing normal plant operation. The proposed changes do not impose any different requirements and adequate control of existing requirements will be maintained. Thus, these changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The proposed amendment will not involve a significant reduction in the margin of safety.

These proposed changes will not reduce the margin of safety because they do not impact any safety analysis assumptions. In addition, the relocated requirements for the affected structure, system, component or variables are the same as the current Technical Specifications. Since future changes to these requirements will be evaluated per the requirements of 10 CFR 50.59, other regulatory requirements (as applicable for the document to which the requirement is relocated), or the Administrative Control section of the Improved Technical Specifications, proper controls are in place to maintain the plant margin of safety. Therefore, these changes do not involve a significant reduction in the margin of safety.

LR - Less restrictive, Relocated details (GENERIC NSHD)
(None in this package)

Some information in the Prairie Island Current Technical Specifications that is descriptive in nature regarding the equipment, system(s), actions or surveillances identified by the specification has been removed from the proposed specification and relocated to the proposed Bases, Updated Safety Analysis Report or licensee controlled procedures. The relocation of this descriptive information to the Bases of the Improved Technical Specifications, Updated Safety Analysis Report or licensee controlled procedures is acceptable because these documents will be controlled by the Improved Technical Specifications required programs, procedures or 10CFR50.59. Therefore, the descriptive information that has been moved continues to be maintained in an appropriately controlled manner.

1. The proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated

The proposed changes relocate detailed, descriptive requirements from the Technical Specifications to the Bases, Updated Safety Analysis Report or licensee controlled procedures. These documents containing the relocated requirements will be maintained under the provisions of 10CFR50.59, a program or procedure based on 10CFR50.59 evaluation of changes, or NRC approved methodologies. Since these documents to which the Technical Specifications requirements have been relocated are evaluated under 10CFR50.59 or its guidance, or in accordance with NRC approved methodologies, no increase in the probability or consequences of an accident previously evaluated will be allowed without prior NRC approval. Therefore, these changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously analyzed.

These proposed changes do not necessitate physical alteration of the plant; that is, no new or different type of equipment will be installed, or change parameters governing normal plant operation. The proposed changes will not impose any different requirements and adequate control of the information will be maintained. Thus, these changes do not create the possibility of a new or

LR - Less restrictive, Relocated details (continued)

different kind of accident from any accident previously evaluated.

3. The proposed amendment will not involve a significant reduction in the margin of safety.

The proposed changes will not reduce a margin of safety because it has no impact on any safety analysis assumptions. In addition, the requirements to be transposed from the Technical Specifications to the Bases, Updated Safety Analysis Report or licensee controlled procedures are the same as the existing Technical Specifications. Since future changes to these requirements will be evaluated under 10CFR50.59 or its guidance, or in accordance with NRC approved methodologies, no reduction in a margin of safety will be allowed without prior NRC approval. Therefore, these changes do not involve a significant reduction in a margin of safety.

ENVIRONMENTAL ASSESSMENT

The Nuclear Management Company has evaluated the proposed changes and determined that:

1. The changes do not involve a significant hazards consideration, or
2. The changes do not involve a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or
3. The changes do not involve a significant increase in individual or cumulative occupational radiation exposure.

Accordingly, the proposed changes meet the eligibility criteria for categorical exclusion set forth in 10 CFR Part 51 Section 51.22(c)(9). Therefore, pursuant to 10 CFR Part 51 Section 51.22(b), an environmental assessment of the proposed changes is not required.