APPLICATION OF SELECTION CRITERIA

TO THE

NMP2 TECHNICAL SPECIFICATIONS

CONTENTS

1. INTRODUCTION

The purpose of this document is to confirm the results of the BWR Owners Group application of the Technical Specification selection criteria on a plant specific basis for Nine Mile Point Unit 2 (NMP2). Niagara Mohawk Power Corporation (NMPC) has reviewed the application of the selection criteria to each of the Technical Specifications utilized in BWROG report NEDO-31466, "Technical Specification Screening Criteria Application and Risk Assessment," (Reference 1) including Supplement 1 (Reference 1), NUREG-1433 and NUREG-1434, Standard Technical Specifications, General Electric Plants BWR/4 and BWR/6," and applied the criteria to each of the current NMP2 Technical Specifications. Additionally, in accordance with the NRC guidance, this confirmation of the application of selection criteria to NMP2 includes confirming the risk insights from Probabilistic Risk Assessment (PRA) evaluations, provided in the Reference 1, as applicable to NMP2.

2. SELECTION CRITERIA

The Niagara Mohawk Power Corporation used the selection criteria provided in the NRC Final Policy Statement on Technical Specification Improvements of July 22, 1993 to develop the results contained in the attached matrix. Probabilistic Risk Assessment (PRA) insights as used in the BWROG submittal were used, confirmed by NMPC, and are discussed in the next section of this report. The selection criteria and discussion provided in the NRC Final Policy statement are as follows:

<u>Criterion 1</u>: Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary:

<u>Discussion of Criterion 1</u>: A basic concept in the adequate protection of the public health and safety is the prevention of accidents. Instrumentation is installed to detect significant abnormal degradation of the reactor coolant pressure boundary so as to allow operator actions to either correct the condition or to shut down the plant safely, thus reducing the likelihood of a loss-of-coolant accident.

This criterion is intended to ensure that Technical Specifications control those instruments specifically installed to detect excessive reactor coolant system leakage. This criterion should not, however, be interpreted to include instrumentation to detect precursors to reactor coolant pressure boundary leakage or instrumentation to identify the source of actual leakage (e.g., loose parts monitor, seismic instrumentation, valve position indicators).

<u>Criterion 2</u>: A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident or Transient analyses that either assumes the failure of or presents a challenge to the integrity of a fission product barrier:

<u>Discussion of Criterion 2</u>: Another basic concept in the adequate protection of the public health and safety is that the plant shall be operated within the bounds of the initial conditions assumed in the existing Design Basis Accident and Transient analyses and that the plant will be operated to preclude unanalyzed transients and accidents. These analyses consist of postulated events, analyzed in the FSAR, for which a structure, system, or component must meet specified functional goals. These analyses are contained in Chapters 6 and 15 of the FSAR (or equivalent chapters) and are identified as Condition II, III, or IV events (ANSI N18.2) (or equivalent) that either assume the failure of or present a challenge to the integrity of a fission product barrier.

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As used in Criterion 2, process variables are only those parameters for which specific values or ranges of values have been chosen as reference bounds in the Design Basis Accident or Transient Analyses and which are monitored and controlled during power operation such that process values remain within the analysis bounds. Process variables captured by Criterion 2 are not, however, limited to only those directly monitored and controlled from the control room. These could also include other features or characteristics that are specifically assumed in Design Basis Accident or Transient analyses if they cannot be directly observed in the control room (e.g., moderator temperature coefficient and hot channel factors).

The purpose of this criterion is to capture those process variables that have initial values assumed in the Design Basis Accident and Transient analyses, and which are monitored and controlled during power operation. As long as these variables are maintained within the established values, risk to the public safety is presumed to be acceptably low. This criterion also includes active design features (e.g., high pressure/low pressure system valves and interlocks) and operating restrictions (pressure/temperature limits) needed to preclude unanalyzed accidents and transients.

Criterion 3: A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a Design Basis Accident or Transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier:

Discussion of Criterion 3: A third concept in the adequate protection of the public health and safety is that in the event that a postulated Design Basis Accident or Transient should occur, structures, systems, and components are available to function or to actuate in order to mitigate the consequences of the Design Basis Accident or Transient. Safety sequence analyses or their equivalent have been performed in recent years and provide a method of presenting the plant response to an accident. These can be used to define the primary success paths.

A safety sequence analysis is a systematic examination of the actions required to mitigate the consequences of events considered in the plant's Design Basis Accident and Transient analyses, as presented in Chapters 6 and 15 of the plant's FSAR (or equivalent chapters). Such a safety sequence analysis considers all applicable events, whether explicitly or implicitly presented. The primary success path of a safety sequence analysis consists of the combination and sequences of equipment needed to operate (including consideration of the

2. (continued)

single failure criteria), so that the plant response to Design Basis Accidents and Transients limits the consequences of these events to within the appropriate acceptance criteria.

It is the intent of this criterion to capture into Technical Specifications only those structures, systems, and components that are part of the primary success path of a safety sequence analysis. Also captured by this criterion are those support and actuation systems that are necessary for items in the primary success path to successfully function. The primary success path for a particular mode of operation does not include backup and diverse equipment (e.g., rod withdrawal block which is a backup to the average power range monitor high flux trip in the startup mode, safety valves which are backup to low temperature overpressure relief valves during cold shutdown).

<u>Criterion 4</u>: A structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety:

<u>Discussion of Criterion 4</u>: It is the Commission's policy that licensees retain in their Technical Specifications LCOs, action statements, and Surveillance Requirements for the following systems (as applicable), which operating experience and PSA have generally shown to be significant to public health and safety and any other structures, systems, or components that meet this criterion:

- Reactor Core Isolation Cooling/Isolation Condenser,
- Residual Heat Removal,
- Standby Liquid Control, and
- Recirculation Pump Trip.

The Commission recognizes that other structures, systems, or components may meet this criterion. Plant- and design-specific PSAs have yielded valuable insight to unique plant vulnerabilities not fully recognized in the safety analysis report Design Basis Accident or Transient analyses. It is the intent of this criterion that those requirements that PSA or operating experience exposes as significant to public health and safety, consistent with the Commission's Safety Goal and Severe Accident Policies, be retained or included in the Technical Specifications.

The Commission expects that licensees, in preparing their Technical Specification related submittals, will utilize any plant-specific PSA or risk survey and any available literature on risk insights and PSAs. This material should be employed to strengthen the technical bases for those requirements

2. (continued)

that remain in Technical Specifications, when applicable, and to verify that none of the requirements to be relocated contain constraints of prime importance in limiting the likelihood or severity of the accident sequences that are commonly found to dominate risk. Similarly, the NRC staff will also employ risk insights and PSAs in evaluating Technical Specifications related submittals. Further, as a part of the Commissions ongoing program of improving Technical Specifications, it will continue to consider methods to make better use of risk and reliability information for defining future generic Technical Specification requirements.

3. PROBABILISTIC RISK ASSESSMENT INSIGHTS

Introduction and Objectives

The Final Policy Statement includes a statement that NRC expects licensees to utilize the available literature on risk insights to verify that none of the requirements to be relocated contain constraints of prime importance in limiting the likelihood or severity of the accident sequences that are commonly found to dominate risk.

Those Technical Specifications proposed for relocation to other plant controlled documents will be maintained under the 10 CFR 50.59, safety evaluation review program. These specifications have been compared to a variety of Probabilistic Risk Assessment (PRA) material with two purposes: 1) to identify if a component or variable is addressed by PRA, and 2) to judge if the component or variable is risk-important. In addition, in some cases risk was judged independent of any specific PRA material. The intent of the review was to provide a supplemental screen to the deterministic criteria. Those Technical Specifications proposed to remain part of the Improved Technical Specifications were not reviewed. This review was accomplished in Reference 1 except where discussed in Appendix A, "Justification For Specification Relocation," and has been confirmed by NMPC for those Specifications to be relocated. The NMP2 plant-specific Probabilistic Risk Assessment (PRA) was reviewed during this process. Where Reference 1 did not review a Technical Specification against the criteria of Reference 3, NMPC performed a review similar (but not identical) to that described below for Reference 1. The results of these reviews are presented in Appendix B.

Assumptions and Approach

Briefly, the approach used in Reference 1 was the following:

> The risk assessment analysis evaluated the loss of function of the system or component whose LCO was being considered for relocation and qualitatively assessed the associated effect on core damage frequency and offsite releases. The assessment was based on available literature on plant risk insights and PRAs. Table 3-1 lists the PRAs used for making the assessments and is provided at the end of this section. A detailed quantitative calculation of the core damage and offsite release effects was not performed. However, the analysis did provide an indication of the relative significance of those LCOs proposed for relocation on the likelihood or severity of the accident sequences that are commonly found to dominate plant safety risks. The following analysis steps were performed for each LCO proposed for relocation:
>
> a. List the function(s) affected by removal of the LCO item.
>
> b. Determine the effect of loss of the LCO item on the function(s).

3. (continued)

c. Identify compensating provisions, redundancy, and backups related to the loss of the LCO item.

d. Determine the relative frequency (high, medium, and low) of the loss of the function(s) assuming the LCO item is removed from Technical Specifications and controlled by other procedures or programs. Use information from current PRAs and related analyses to establish the relative frequency.

e. Determine the relative significance (high, medium, and low) of the loss of the function(s). Use information from current PRAs and related analyses to establish the relative significance.

f. Apply risk category criteria to establish the potential risk significance or non-significance of the LCO item. Risk categories were defined as follows:

RISK CRITERIA

	Consequence		
Frequency	High	Medium	Low
High	S	S	NS
Medium	S	S	NS
Low	NS	NS	NS

S = Potential Significant Risk Contributor

NS = Risk Non-Significant

g. List any comments or caveats that apply to the above assessment. The output from the above evaluation was a list of LCOs proposed for relocation that could have potential plant safety risk significance if not properly controlled by other procedures or programs. As a result these Specifications will be relocated to other plant controlled documents outside the Technical Specifications.

TABLE 3-1

BWR PRAs USED IN NEDO-31466 (and Supplement 1) RISK ASSESSMENT

- BWR/6 Standard Plant, GESSAR II, 238 Nuclear Island, BWR/6 Standard Plant Probabilistic Risk Assessment, Docket No. STN 50-447, March 1982.

- La Salle County Station, NEDO-31085, Probabilistic Safety Analysis, February 1988.

- Grand Gulf Nuclear Station, IDCOR, Technical Report 86.2GG, Verification of IPE for Grand Gulf, March 1987.

- Limerick, Docket Nos. 50-352, 50-353, 1981, "Probabilistic Risk Assessment, Limerick Generating Station," Philadelphia Electric Company.

- Shoreham, Probabilistic Risk Assessment Shoreham Nuclear Power Station, Long Island Lighting Company, SAI-372-83-PA-01, June 24, 1983.

- Peach Bottom 2, NUREG-75/0104, "Reactor Safety Study," WASH-1400, October 1975.

- Millstone Point 1, NUREG/CR-3085, "Interim Reliability Evaluation Program: Analysis of the Millstone Point Unit 1 Nuclear Power Plant," January 1983.

- Grand Gulf, NUREG/CR-1659, "Reactor Safety Study Methodology Applications Program: Grand Gulf #1 BWR Power Plant," October 1981.

- NEDC-30936P, "BWR Owners' Group Technical Specification Improvement Methodology (with Demonstration for BWR ECCS Actuation Instrumentation) Part 2," June 1987.

4. RESULTS OF APPLICATION OF SELECTION CRITERIA

The selection criteria from Section 2 were applied to the NMP2 Technical Specifications. The attachment is a summary of that application indicating which Specifications are being retained or relocated. Discussions that document the rationale for the relocation of each Specification which failed to meet the selection criteria are provided in Appendix A. No Significant Hazards Considerations (10 CFR 50.92) evaluations for those Specifications relocated are provided with the Discussion of Changes for the specific Technical Specifications. NMPC will relocate those Specifications identified as not satisfying the criteria to licensee controlled documents whose changes are governed by 10 CFR 50.59.

5. REFERENCES

1. NEDO-31466 (and Supplement 1), "Technical Specification Screening Criteria Application and Risk Assessment," November 1987.

2. NUREG-1433 and NUREG-1434, "Standard Technical Specifications, General Electric Plants BWR/4 and BWR/6," Revision 1, April 1995.

3. Final Policy Statement on Technical Specifications Improvements, July 22, 1993 (58 FR 39132).

ATTACHMENT

SUMMARY DISPOSITION MATRIX

FOR

NMP2

SUMMARY DISPOSITION MATRIX FOR NMP2

CTS NUMBER	TITLE	ITS NUMBER	RETAINED/ CRITERION FOR INCLUSION	BASIS FOR INCLUSION/EXCLUSION[a]
1.0	DEFINITIONS	1.1 3.10.2 3.10.3 3.10.4	Yes	See Notes 1 and 4, Page 18.
2.1	SAFETY LIMITS	2.0		
2.1.1	Thermal Power, Low Pressure or Low Flow	2.1.1.1	Yes	See Note 2, Page 18.
2.1.2	Thermal Power, High Pressure and High Flow	2.1.1.2	Yes	See Note 2, Page 18.
2.1.3	Reactor Coolant System Pressure	2.1.2	Yes	See Note 2, Page 18.
2.1.4	Reactor Vessel Water Level	2.1.1.3	Yes	See Note 2, Page 18.
2.2	LIMITING SAFETY SYSTEM SETTINGS			
2.2.1	Reactor Protection System Instrumentation Setpoints	3.3.1.1	Yes	The application of Technical Specification selection criteria is not appropriate. However, the RPS LSSS have been included as part of the RPS Instrumentation Specification, which has been retained since the RPS Instrumentation Functions either actuate to mitigate consequences of design basis accidents and transients or are retained as directed by the NRC as the Functions are part of the RPS.
3.0	LIMITING CONDITIONS FOR OPERATION - APPLICABILITY			
3.0.1	Operational Conditions	LCO 3.0.1	Yes	See Note 3, Page 18.
3.0.2	Noncompliance	LCO 3.0.2	Yes	See Note 3, Page 18.
3.0.3	Generic Actions	LCO 3.0.3	Yes	See Note 3, Page 18.
3.0.4	Entry into Operational Conditions	LCO 3.0.4	Yes	See Note 3, Page 18.

(a) The applicable safety analyses are discussed in the Bases for the individual Technical Specifications.

SUMMARY DISPOSITION MATRIX FOR NMP2

CTS NUMBER	TITLE	ITS NUMBER	RETAINED/ CRITERION FOR INCLUSION	BASIS FOR INCLUSION/EXCLUSION[(a)]
4.0	SURVEILLANCE REQUIREMENTS - APPLICABILITY			
4.0.1	Operational Conditions	SR 3.0.1	Yes	See Note 3, Page 18.
4.0.2	Time of Performance	SR 3.0.2	Yes	See Note 3, Page 18.
4.0.3	Noncompliance	SR 3.0.3	Yes	See Note 3, Page 18.
4.0.4	Entry into Operational Conditions	SR 3.0.4	Yes	See Note 3, Page 18.
4.0.5	ASME Code Class 1, 2, 3 Components	5.5.6	Yes	See Note 3, Page 18.
3/4.1	REACTIVITY CONTROL SYSTEMS	3.1		
3/4.1.1	Shutdown Margin	3.1.1	Yes-2	Not a measured process variable, but is important parameter used to confirm the acceptability of the accident analysis. In addition, the LCO is retained as directed by the NRC.
3/4.1.2	Reactivity Anomalies	3.1.2	Yes-2	Confirms assumptions made in the reload safety analysis.
3/4.1.3	Control Rods			
3/4.1.3.1	Control Rod Operability	3.1.3 3.1.8	Yes-3	Control rods are part of the primary success path in mitigating the consequences of design basis accidents (DBAs) and transients. The scram discharge volume vent and drain valves contribute to the operability of the control rod scram function.
3/4.1.3.2	Control Rod Maximum Scram Insertion Times	3.1.3 3.1.4	Yes-3	Control rods are part of the primary success path in mitigating the consequences of DBAs and transients.
3/4.1.3.3	Control Rod Average Scram Insertion Times	3.1.4	Yes-3	Same as above.
3/4.1.3.4	Four Control Rod Group Scram Insertion Times	3.1.4	Yes-3	Same as above.

(a) The applicable safety analyses are discussed in the Bases for the individual Technical Specifications.

SUMMARY DISPOSITION MATRIX FOR NMP2

CTS NUMBER	TITLE	ITS NUMBER	RETAINED/ CRITERION FOR INCLUSION	BASIS FOR INCLUSION/EXCLUSION[(a)]
	REACTIVITY CONTROL SYSTEMS (continued)			
3/4.1.3.5	Control Rod Scram Accumulators	3.1.5 3.9.5	Yes-3	Control rods are part of the primary success path in mitigating the consequences of DBAs and transients.
3/4.1.3.6	Control Rod Drive Coupling	3.1.3	Yes-3	Same as above.
3/4.1.3.7	Control Rod Position Indication	3.1.3 3.9.4	Yes-3	Same as above.
3/4.1.3.8	Control Rod Drive Housing Support	Deleted	No	Deleted, see CRD Housing Support technical change discussion in the Discussion of Changes for CTS: 3/4.1.3.8.
3/4.1.4	Control Rod Program Controls			
3/4.1.4.1	Rod Worth Minimizer	3.3.2.1.2	Yes-3	Prevents withdrawal of out-of-sequence control rods that might set-up high rod worth conditions beyond CRDA assumptions.
3/4.1.4.2	Rod Sequence Control System	Deleted	No	Deleted, see RSCS technical change discussion in the Discussion of Changes for CTS: 3/4.1.4.2.
3/4.1.4.3	Rod Block Monitor	3.3.2.1.1	Yes-3	Prevents continuous withdrawal of a high worth control rod that would challenge the MCPR Safety Limit and 1 percent cladding plastic strain fuel design limit.
3/4.1.5	Standby Liquid Control System	3.1.7	Yes-4	Retained in accordance with the NRC Final Policy Statement on Technical Specification Improvements due to risk significance.
3/4.2	POWER DISTRIBUTION LIMITS	3.2		
3/4.2.1	Average Planar Linear Heat Generation Rate	3.2.1	Yes-2	Peak cladding temperature following a LOCA is primarily dependent on initial APLHGR. As such, it is an initial condition of a DBA analysis.
3/4.2.2	Average Power Range Monitor Setpoints	3.2.4	Yes-2, 3	APRM system provides input to the RPS to develop scram signals to protect the integrity of the fission product barrier. Also ensures acceptable margins to APLHR, MCPR, and LHGR are maintained.

(a) The applicable safety analyses are discussed in the Bases for the individual Technical Specifications.

SUMMARY DISPOSITION MATRIX FOR NMP2

CTS NUMBER	TITLE	ITS NUMBER	RETAINED/ CRITERION FOR INCLUSION	BASIS FOR INCLUSION/EXCLUSION[a]
	POWER DISTRIBUTION LIMITS (continued)			
3/4.2.3	Minimum Critical Power Ratio (ODYN Option B)	3.2.2	Yes-2	Utilized as an initial condition of the design basis transients. Transient analysis are performed to establish the largest reduction in Critical Power Ratio. This value is added to the fuel cladding integrity safety limit to determine the MCPR value.
3/4.2.4	Linear Heat Generation Rate	3.2.3	Yes-2	LHGR is calculated to avoid exceeding plastic strain limits on fuel rods. As such, it is an initial condition to Design Basis Transient Analyses.
3/4.3	INSTRUMENTATION	3.3		
3/4.3.1	Reactor Protection System Instrumentation	3.3.1.1	Yes-3	Actuates to mitigate consequences of a DBA and/or transient, or it provides an anticipatory scram to ensure the scram discharge volume and thus RPS remains operable, or it is retained as directed by the NRC as it is part of the RPS.
3/4.3.1.6	Main Steam Line Radiation — High	Deleted	No	Deleted. See RPS Instrumentation technical change discussion in the Discussion of Changes for ITS: 3.3.1.1.
3/4.3.2[b]	Isolation Actuation Instrumentation	3.3.5.1 3.3.6.1 3.3.6.2	Yes-3, 4	Actuates to mitigate the consequences of a DBA LOCA, or actuates to mitigate the consequences of a DBA LOCA release to the environment and a fuel handling accident, or actuates to isolate potential leakage paths to secondary containment consistent with safety analysis assumptions, or is retained due to risk significance, or is retained as directed by the NRC as it is part of the isolation system.
3/4.3.2.1.c.1	Main Steam Line Radiation - High	Deleted	No	Deleted, see Primary Containment Isolation Instrumentation technical change discussion in the Discussion of Changes for ITS: 3.3.6.1.
3/4.3.2.2.h	RCIC Drywell Pressure - High	Relocated	No	See Appendix A, Page 1.

(a) The applicable safety analyses are discussed in the Bases for the individual Technical Specifications.

(b) For CTS 3/4.3.2, 3/4.3.3, 3/4.3.6, 3/4.3.7.1, and 3/4.3.9, when an individual instrument is listed, the CTS number consists of the Specification number and the instrument's number from the associated 3.3.X-1 Table. For example, the RCIC Drywell Pressure—High instrument for the Isolation Actuation Instrumentation is numbered 3/4.3.2.2.h, where 3/4.3.2 is the Specification number and "2.h" is the location of the RCIC Drywell Pressure—High instrument in Table 3.3.2-1.

SUMMARY DISPOSITION MATRIX FOR NMP2

CTS NUMBER	TITLE	ITS NUMBER	RETAINED/ CRITERION FOR INCLUSION	BASIS FOR INCLUSION/EXCLUSION[a]
	INSTRUMENTATION (continued)			
3/4.3.3.A,B, C[b]	Emergency Core Cooling System Actuation Instrumentation	3.3.5.1	Yes-3, 4	Actuates to mitigate the consequences of a DBA LOCA or a small break LOCA, or is retained due to risk significance, or is retained as required by the NRC as it is part of the ECCS actuation system.
3/4.3.3.A.2.f	ADS 'A' Manual Inhibit	Relocated	No	See Appendix A, Page 2.
3/4.3.3.B.2.e	ADS 'B' Manual Inhibit	Relocated	No	See Appendix A, Page 2.
3/4.3.3.D, E	Loss of Power Instrumentation	3.3.8.1	Yes-3	Loss of power instrumentation actuates to assure power availability to the ECCS and other safety-related systems in the event of a loss of offsite power. Mitigation of DBAs relies on the availability of the ECCS and other safety-related systems.
3/4.3.4	Recirculation Pump Trip Actuation Instrumentation			
3/4.3.4.1	ATWS Recirculation Pump Trip System Instrumentation	3.3.4.2	Yes-4	Retained in accordance with the NRC Final Policy Statement on Technical Specification Improvements due to risk significance.
3/4.3.4.2	End-of-Cycle Recirculation Pump Trip System Instrumentation	3.3.4.1	Yes-3	EOC-RPT aids the reactor scram in protecting fuel cladding integrity by ensuring the fuel cladding integrity safety limit is not exceeded during a load rejection or turbine trip transient.
3/4.3.5	Reactor Core Isolation Cooling System Actuation Instrumentation	3.3.5.2	Yes-4	Retained in accordance with the NRC Final Policy Statement on Technical Specification Improvements due to risk significance or is retained as required by the NRC as it is part of the RCIC actuation system.
3/4.3.6[b]	Control Rod Block Instrumentation	3.3.2.1		
3/4.3.6.1	Rod Monitor Block	3.3.2.1.1	Yes-3	Prevents continuous withdrawal of a high worth control rod that would challenge the MCPR Safety Limit and 1 percent cladding plastic strain fuel design limit.

(a) The applicable safety analyses are discussed in the Bases for the individual Technical Specifications.

(b) For CTS 3/4.3.2, 3/4.3.3, 3/4.3.6, 3/4.3.7.1, and 3/4.3.9, when an individual instrument is listed, the CTS number consists of the Specification number and the instrument's number from the associated 3.3.X-1 Table. For example, the RCIC Drywell Pressure—High instrument for the Isolation Actuation Instrumentation is numbered 3/4.3.2.2.h, where 3/4.3.2 is the Specification number and "2.h" is the location of the RCIC Drywell Pressure—High instrument in Table 3.3.2-1.

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CTS NUMBER	TITLE	ITS NUMBER	RETAINED/ CRITERION FOR INCLUSION	BASIS FOR INCLUSION/EXCLUSION[a]
	INSTRUMENTATION (continued)			
3/4.3.6.2	Source Range Monitor	Relocated	No	See Appendix A, Page 3.
3/4.3.6.3	Intermediate Range Monitor	Relocated	No	See Appendix A, Page 4.
3/4.3.6.4	Scram Discharge Volume	Relocated	No	See Appendix A, Page 5.
3/4.3.6.5	Reactor Coolant System Recirculation Flow	Relocated	No	See Appendix A, Page 6.
3/4.3.6.6	Reactor Mode Switch	3.3.2.1.3 3.9.2	Yes-3	Reactor Mode Switch-Shutdown Position Control Rod Block ensures the reactor remains subcritical by blocking control rod withdrawal thereby preserving the assumptions of the safety analysis. Reactor Mode Switch-Refuel Position Control Rod Block provides an interlock to preclude fuel loading with control rods withdrawn. Also restricts movement of control rods to prevent reactor criticality during refueling. Operation is assumed in the control rod withdrawal error during refueling accident analysis.
3/4.3.7	Monitoring Instrumentation			
3/4.3.7.1[b]	Radiation Monitoring Instrumentation			
3/4.3.7.1.1	Main Control Room Ventilation Radiation Monitors	3.3.7.1	Yes-3	Actuates to maintain control room habitability so that operation can continue from the control room following DBAs.
3/4.3.7.1.2	Area Monitors	Relocated	No	See Appendix A, Page 7.
3/4.3.7.2	Seismic Monitoring Instrumentation	Relocated	No	See Appendix A, Page 8.
3/4.3.7.3	Meteorological Monitoring Instrumentation	Relocated	No	See Appendix A, Page 9.

(a) The applicable safety analyses are discussed in the Bases for the individual Technical Specifications.

(b) For CTS 3/4.3.2, 3/4.3.3, 3/4.3.6, 3/4.3.7.1, and 3/4.3.9, when an individual instrument is listed, the CTS number consists of the Specification number and the instrument's number from the associated 3.3.X-1 Table. For example, the RCIC Drywell Pressure—High instrument for the Isolation Actuation Instrumentation is numbered 3/4.3.2.2.h, where 3/4.3.2 is the Specification number and "2.h" is the location of the RCIC Drywell Pressure—High instrument in Table 3.3.2-1.

CTS NUMBER	TITLE	ITS NUMBER	RETAINED/ CRITERION FOR INCLUSION	BASIS FOR INCLUSION/EXCLUSION[a]
	INSTRUMENTATION (continued)			
3/4.3.7.4	Remote Shutdown System Instrumentation and Controls	3.3.3.2	Yes-4	Retained as directed by the NRC as it is a significant contributor to risk reduction.
3/4.3.7.5	Accident Monitoring Instrumentation	3.3.3.1	Yes-3	Regulatory Guide 1.97 Type A and Category 1 variables retained. See Appendix A, Page 10 for full discussion of all variables.
3/4.3.7.6	Source Range Monitors	3.3.1.2	Yes	Does not satisfy the selection criteria, however is being retained because the NRC considers it necessary for flux monitoring during shutdown, startup, and refueling operations.
3/4.3.7.7	Traversing In-Core Probe System	Relocated	No	See Appendix A, Page 12.
3/4.3.7.8	Loose-Part Detection System	Relocated	No	See Appendix A, Page 13.
3/4.3.7.9	Radioactive Liquid Effluent Monitoring Instrumentation	Relocated	No	See Appendix A, Page 14.
3/4.3.7.10	Radioactive Gaseous Effluent Monitoring Instrumentation	Relocated	No	See Appendix A, Page 15.
3/4.3.8	Deleted by Amendment 63			
3/4.3.9[b]	Plant Systems Actuation Instrumentation			
3/4.3.9.1	Feedwater System/Main Turbine Trip System	3.3.2.2	Yes-3	Actuates to limit feedwater addition to the reactor vessel on feedwater controller failure consistent with safety analysis assumptions. Limits neutron flux peak and thermal transient to avoid fuel damage.

(a) The applicable safety analyses are discussed in the Bases for the individual Technical Specifications.

(b) For CTS 3/4.3.2, 3/4.3.3, 3/4.3.6, 3/4.3.7.1, and 3/4.3.9, when an individual instrument is listed, the CTS number consists of the Specification number and the instrument's number from the associated 3.3.X-1 Table. For example, the RCIC Drywell Pressure—High instrument for the Isolation Actuation Instrumentation is numbered 3/4.3.2.2.h, where 3/4.3.2 is the Specification number and "2.h" is the location of the RCIC Drywell Pressure—High instrument in Table 3.3.2-1.

SUMMARY DISPOSITION MATRIX FOR NMP2

CTS NUMBER	TITLE	ITS NUMBER	RETAINED/ CRITERION FOR INCLUSION	BASIS FOR INCLUSION/EXCLUSION[a]
	INSTRUMENTATION (continued)			
3/4.3.9.2	Service Water System	Relocated	No	See Appendix A, Page 17.
3/4.4	REACTOR COOLANT SYSTEM	3.4		
3/4.4.1	Recirculation System			
3/4.4.1.1	Recirculation Loops	3.4.1 3.4.2	Yes-2	Recirculation loop flow is an initial condition in the safety analysis. Opening and closing rate of the flow control valves within specified limits functions to mitigate the consequences of a flow controller failure. Failing "as is" is an assumption of the DBA LOCA.
3/4.4.1.2	Jet Pumps	3.4.3	Yes-3	Jet pump operability is assumed in the LOCA analysis to assure adequate core reflood capability.
3/4.4.1.3	Recirculation Loop Flow	3.4.1	Yes-2	Recirculation loop flow mismatch, within limits, is an initial condition in the safety analysis.
3/4.4.1.4	Idle Recirculation Loop Startup	3.4.11	Yes-2	Establishes initial conditions to operation such that operation is prohibited in areas or at temperature rate changes that might cause undetected flaws to propogate, in turn challenging the reactor coolant pressure boundary integrity.
3/4.4.2	Safety/Relief Valves	3.4.4	Yes-3	A minimum number of SRVs is assumed in the safety analyses to mitigate overpressure events.
3/4.4.3	Reactor Coolant System Leakage			
3/4.4.3.1	Leakage Detection Systems	3.4.7	Yes-1	Leak detection is used to indicate a significant abnormal condition of the reactor coolant system pressure boundary.
3/4.4.3.2	Operational Leakage	3.4.5 3.4.6	Yes-2	Leakage beyond limits would indicate an abnormal condition of the reactor coolant system pressure boundary. Operation in this condition is unanalyzed and may result in reactor coolant system pressure boundary failure.
3/4.4.4	Chemistry	Relocated	No	See Appendix A, Page 18.

(a) The applicable safety analyses are discussed in the Bases for the individual Technical Specifications.

SUMMARY DISPOSITION MATRIX FOR NMP2

CTS NUMBER	TITLE	ITS NUMBER	RETAINED/ CRITERION FOR INCLUSION	BASIS FOR INCLUSION/EXCLUSION[(a)]
	REACTOR COOLANT SYSTEM (continued)			
3/4.4.5	Specific Activity	3.4.8	Yes-2	Specific activity provides an indication of the onset of significant fuel cladding failure and is an initial condition for evaluation of the consequences of an accident due to a main steam line break (MSLB) outside containment.
3/4.4.6	Pressure/Temperature Limits			
3/4.4.6.1	Reactor Coolant System	3.4.11	Yes-2	Establishes initial conditions to operation such that operation is prohibited in areas or at temperature rate changes that might cause undetected flaws to propagate in turn challenging the reactor coolant system pressure boundary integrity.
3/4.4.6.2	Reactor Steam Dome	3.4.12	Yes-2	Reactor Steam Dome pressure is an initial condition of the vessel overpressure protection analysis.
3/4.4.7	Main Steam Line Isolation Valves	3.6.1.3	Yes-3	Main steam line isolation within specified time limits ensures the release to the environment is consistent with the assumptions in the MSLB analysis.
3/4.4.8	Structural Integrity	Relocated	No	See Appendix A, Page 19.
3/4.4.9	Residual Heat Removal			
3/4.4.9.1	Hot Shutdown	3.4.9	Yes-4	Retained in accordance with the NRC Final Policy Statement on Technical Specification Improvements due to risk significance.
3/4.4.9.2	Cold Shutdown	3.4.10	Yes-4	Same as above.
3/4.5	EMERGENCY CORE COOLING SYSTEMS	3.5		
3/4.5.1	ECCS — Operating	3.5.1	Yes-3	Functions to mitigate the consequences of a DBA.
3/4.5.2	ECCS — Shutdown	3.5.2	Yes-3	Functions to mitigate the consequences of a vessel draindown event.
3/4.5.3	Suppression Pool	3.5.2 3.6.2.2	Yes-3 Yes-2, 3	Functions to mitigate the consequences of a DBA and a vessel draindown event.

(a) The applicable safety analyses are discussed in the Bases for the individual Technical Specifications.

SUMMARY DISPOSITION MATRIX FOR NMP2

CTS NUMBER	TITLE	ITS NUMBER	RETAINED/ CRITERION FOR INCLUSION	BASIS FOR INCLUSION/EXCLUSION[a]
3/4.6	CONTAINMENT SYSTEMS	3.6		
3/4.6.1	Primary Containment			
3/4.6.1.1	Primary Containment Integrity	3.6.1.1	Yes-3	Primary containment functions to mitigate the consequences of a DBA.
3/4.6.1.2	Primary Containment Leakage	3.6.1.1 3.6.1.3	Yes-3	Primary containment leakage is an assumption utilized in the LOCA safety analysis (but it is not a process variable). Therefore, it is being retained to ensure primary containment operability.
3/4.6.1.3	Primary Containment Air Locks	3.6.1.2	Yes-3	Credit for air tightness is considered in safety analysis to limit offsite dose rates during a DBA.
3/4.6.1.4	Primary Containment Structural Integrity	3.6.1.1	Yes-3	Primary containment functions to mitigate the consequences of a DBA.
3/4.6.1.5	Drywell and Suppression Chamber Internal Pressure	3.6.1.4	Yes-2	Drywell and suppression chamber pressure is an initial condition in the LOCA safety analysis.
3/4.6.1.6	Drywell Average Air Temperature	3.6.1.5	Yes-2	Drywell air temperature is an initial condition in the LOCA safety analysis.
3/4.6.1.7	Primary Containment Purge System	3.6.1.3	Yes-3	Purge isolation valves function to limit DBA consequences involving offsite release of radioactivity.
3/4.6.2	Depressurization Systems			
3/4.6.2.1	Suppression Pool	3.6.1.1 3.6.2.1 3.6.2.2	Yes-2, 3	Drywell-to-suppression chamber bypass leakage within limits helps ensure the pressure suppression function is maintained. Suppression pool water level and temperature are initial conditions in the DBA LOCA analysis and mitigate the consequences of a DBA.
3/4.6.2.2	Suppression Pool and Drywell Spray	3.6.1.6 3.6.2.4	Yes-3	Drywell spray and suppression pool spray are assumed to mitigate the consequences of a DBA LOCA.
3/4.6.2.3	Suppression Pool Cooling	3.6.2.3	Yes-3	Suppression pool cooling functions to limit the consequences of a DBA LOCA.

(a) The applicable safety analyses are discussed in the Bases for the individual Technical Specifications.

SUMMARY DISPOSITION MATRIX FOR NMP2

CTS NUMBER	TITLE	ITS NUMBER	RETAINED/ CRITERION FOR INCLUSION	BASIS FOR INCLUSION/EXCLUSION[a]
	CONTAINMENT SYSTEMS (continued)			
3/4.6.3	Primary Containment Isolation Valves	3.6.1.3	Yes-3	Isolation valves function to limit DBA consequences.
3/4.6.4	Suppression Chamber/Drywell Vacuum Breakers	3.6.1.7	Yes-3	Suppression chamber-to-drywell vacuum breaker operation is assumed in the LOCA analysis to limit the negative differential pressure across the drywell floor thereby ensuring primary containment integrity.
3/4.6.5	Secondary Containment			
3/4.6.5.1	Secondary Containment Integrity	3.6.4.1	Yes-3	Secondary containment limits the offsite dose in an accident analysis by ensuring a release to containment is delayed and treated prior to release to the environment.
3/4.6.5.2	Secondary Containment Automatic Isolation Dampers	3.6.4.2	Yes-3	Damper operation within time limits establishes secondary containment and limits offsite dose releases to acceptable values.
3/4.6.5.3	Standby Gas Treatment System	3.6.4.3	Yes-3	SGT operation following a DBA acts to mitigate the consequences of offsite dose releases.
3/4.6.6	Primary Containment Atmosphere Control			
3/4.6.6.1	Drywell and Suppression Chamber Hydrogen Recombiner Systems	3.6.3.1	Yes-3	Recombiners operate, post LOCA, to limit hydrogen and oxygen concentrations to below explosive concentrations that might otherwise challenge primary containment integrity.
3/4.6.6.2	Drywell and Suppression Chamber Oxygen Concentration	3.6.3.2	Yes-2	Oxygen concentration is limited such that when combined with hydrogen that is postulated to evolve following a LOCA, the total concentrations remain below explosive levels. Therefore, primary containment integrity is maintained.
3/4.7	PLANT SYSTEMS	3.7		
3/4.7.1	Plant Service Water System			
3/4.7.1.1	Plant Service Water System - Operating	3.7.1	Yes-3	Designed for heat removal for safety-related systems following a DBA. As such, acts to mitigate the consequences of an accident.

(a) The applicable safety analyses are discussed in the Bases for the individual Technical Specifications.

SUMMARY DISPOSITION MATRIX FOR NMP2

CTS NUMBER	TITLE	ITS NUMBER	RETAINED/ CRITERION FOR INCLUSION	BASIS FOR INCLUSION/EXCLUSION[a]
	PLANT SYSTEMS (continued)			
3/4.7.1.2	Plant Service Water System - Shutdown	Deleted	No	Deleted, see PSW System - Shutdown technical change discussion in the Discussion of Changes for CTS: 3/4.7.1.2
3/4.7.2	Revetment - Ditch Structure	Relocated	No	See Appendix A, Page 21.
3/4.7.3	Control Room Outdoor Air Special Filter Train System	3.7.2 3.7.3	Yes-3	Maintains habitability of the control room envelope so that operators can remain in the control room following an accident. As such, it mitigates the consequences of an accident by allowing operators to continue accident mitigation activities from the control room. Also ensures Operability of components in the control room envelope.
3/4.7.4	Reactor Core Isolation Cooling System	3.5.3	Yes-4	Retained in accordance with the NRC Final Policy Statement on Technical Specification Improvements due to risk significance.
3/4.7.5	Snubbers	Deleted	No	Deleted, see Snubbers technical change discussion in the Discussion of Changes for CTS: 3/4.7.5.
3/4.7.6	Sealed Source Contamination	Relocated	No	See Appendix A, Page 22.
3/4.7.7	Main Turbine Bypass System	3.7.5	Yes-3	Acts to mitigate the consequences of a feedwater controller failure - maximum demand transient and a turbine trip with bypass event.
3/4.8	ELECTRICAL POWER SYSTEMS	3.8		
3/4.8.1	AC Sources			
3/4.8.1.1	AC Sources — Operating	3.8.1 3.8.3	Yes-3	Functions to mitigate the consequences of a DBA.
3/4.8.1.2	AC Sources — Shutdown	3.8.2 3.8.3	Yes-3	Functions to mitigate the consequences of a vessel draindown event and is needed to support NRC Final Policy Statement requirement for decay heat removal.

(a) The applicable safety analyses are discussed in the Bases for the individual Technical Specifications.

SUMMARY DISPOSITION MATRIX FOR NMP2

CTS NUMBER	TITLE	ITS NUMBER	RETAINED/ CRITERION FOR INCLUSION	BASIS FOR INCLUSION/EXCLUSION[a]
	ELECTRICAL POWER SYSTEMS (continued)			
3/4.8.2	DC Sources			
3/4.8.2.1	DC Sources — Operating	3.8.4 3.8.6	Yes-3	Functions to mitigate the consequences of a DBA.
3/4.8.2.2	DC Sources — Shutdown	3.8.5 3.8.6	Yes-3	Functions to mitigate the consequences of a vessel draindown event and is being retained to support the NRC Final Policy Statement requirement for decay heat removal.
3/4.8.3	Onsite Power Distribution Systems			
3/4.8.3.1	Distribution — Operating	3.8.7 3.8.8	Yes-3	Functions to mitigate the consequences of a DBA.
3/4.8.3.2	Distribution — Shutdown	3.8.9	Yes-3	Functions to mitigate the consequences of a vessel draindown event and is being retained to support the NRC Final Policy Statement requirement for decay heat removal.
3/4.8.4	Electrical Equipment Protective Devices			
3/4.8.4.1	AC Circuits Inside Primary Containment	Relocated	No	See Appendix A, Page 23.
3/4.8.4.2	Primary Containment Penetration Conductor Overcurrent Protective Devices	Relocated	No	See Appendix A, Page 24.
3/4.8.4.3	Emergency Lighting System - Overcurrent Protective Devices	Relocated	No	See Appendix A, Page 24.
3/4.8.4.4	Reactor Protection System Electric Power Monitoring (RPS Logic)	3.3.8.2	Yes-3	Provides protection for the RPS logic bus powered components against unacceptable voltage and frequency conditions that could degrade the instrumentation so that it would not perform the intended safety function.

(a) The applicable safety analyses are discussed in the Bases for the individual Technical Specifications.

SUMMARY DISPOSITION MATRIX FOR NMP2

CTS NUMBER	TITLE	ITS NUMBER	RETAINED/ CRITERION FOR INCLUSION	BASIS FOR INCLUSION/EXCLUSION[a]
	ELECTRICAL POWER SYSTEMS (continued)			
3/4.8.4.5	Reactor Protection System Electric Power Monitoring (Scram Solenoids)	3.3.8.3	Yes-3	Provides protection for the RPS scram solenoids against unacceptable voltage and frequency conditions that could degrade the instrumentation so that it would not perform the intended safety function.
3/4.9	REFUELING OPERATIONS	3.9		
3/4.9.1	Reactor Mode Switch	3.9.1 3.9.2 3.10.3 3.10.4	Yes-3	Provides an interlock to preclude fuel loading with control rods withdrawn. Operability is assumed in the control rod removal error during refueling and fuel assembly insertion error during refueling accident analysis.
3.9.1.b.4	Fuel Grapple Position	Relocated	No	See Appendix A, Page 26.
3/4.9.2	Instrumentation	3.3.1.2	Yes	Does not satisfy the selection criteria, however is being retained because the NRC considers it necessary for flux monitoring during shutdown, startup, and refueling operations.
3/4.9.3	Control Rod Position	3.9.3	Yes-3	All control rods are required to be fully inserted when loading fuel. This requirement is assumed as an initial condition in the control rod withdrawal error during refueling accident analysis.
3/4.9.4	Decay Time	Deleted	No	Although this LCO satisfied Criterion 2, the activities necessary prior to commencing movement of irradiated fuel ensure that there will always be 24 hours of subcriticality before movement of any irradiated fuel. Hence, this Specification has been deleted. See Decay Time technical change discussion in the Discussion of Changes for CTS: 3/4.9.4.
3/4.9.5	Communications	Relocated	No	See Appendix A, Page 28.
3/4.9.6	Refueling Platform	Relocated	No	See Appendix A, Page 26.
3/4.9.7	Crane Travel — Spent Fuel Storage Pool	Relocated	No	See Appendix A, Page 29.

(a) The applicable safety analyses are discussed in the Bases for the individual Technical Specifications.

SUMMARY DISPOSITION MATRIX FOR NMP2

CTS NUMBER	TITLE	ITS NUMBER	RETAINED/ CRITERION FOR INCLUSION	BASIS FOR INCLUSION/EXCLUSION[a]
	REFUELING OPERATIONS (continued)			
3/4.9.8	Water Level — Reactor Vessel	3.9.6 3.9.7	Yes-2	A minimum amount of water is required to assure adequate scrubbing of fission products following a fuel handling accident.
3/4.9.9	Water Level — Spent Fuel Storage Pool	3.7.6	Yes-2	Same as above.
3/4.9.10	Control Rod Removal			
3/4.9.10.1	Single Control Rod Removal	3.10.4 3.10.5	Yes	See Note 4, Page 18.
3/4.9.10.2	Multiple Control Rod Removal	3.10.6	Yes	See Note 4, Page 18.
3/4.9.11	Residual Heat Removal and Coolant Circulation			
3/4.9.11.1	High Water Level	3.9.8	Yes-4	Retained in accordance with the NRC Final Policy Statement on Technical Specification Improvements due to risk significance.
3/4.9.11.2	Low Water Level	3.9.9	Yes-4	Same as above.
3/4.10	SPECIAL TEST EXCEPTIONS	3.10		
3/4.10.1	Primary Containment Integrity	Deleted	No	The latitude of this Special Test Exception is no longer required at NMP2. See Discussion of Changes for CTS: 3/4.10.1.
3/4.10.2	Rod Sequence Control System	3.10.7	Yes	See Note 4, Page 18.
3/4.10.3	Shutdown Margin Demonstrations	3.10.8	Yes	See Note 4, Page 18.
3/4.10.4	Recirculation Loops	Deleted	No	The latitude of this Special Test Exception is no longer required at NMP2. See Discussion of Changes for CTS: 3/4.10.4.

(a) The applicable safety analyses are discussed in the Bases for the individual Technical Specifications.

CTS NUMBER	TITLE	ITS NUMBER	RETAINED/ CRITERION FOR INCLUSION	BASIS FOR INCLUSION/EXCLUSION[a]
	SPECIAL TEST EXCEPTIONS (continued)			
3/4.10.5	Oxygen Concentration	Deleted	No	Applicable only until the 100% Rated Thermal Power trip tests have been completed or operation beyond 120 EFPD. Both conditions have been satisfied, hence this Specification is no longer needed.
3/4.10.6	Training Startups	Deleted	No	The latitude of this Special Test Exception is no longer required at NMP2. See Discussion of Changes for CTS: 3/4.10.6.
3/4.10.7	Inservice Leak and Hydrostatic Testing	3.10.1	Yes	See Note 4, Page 18.
3/4.11	RADIOACTIVE EFFLUENTS			
3/4.11.1	Liquid Effluents			
3/4.11.1.1	Concentration	Relocated	No	See Appendix A, Page 30.
3/4.11.1.2	Dose	Relocated	No	See Appendix A, Page 31.
3/4.11.1.3	Liquid Radwaste Treatment System	Relocated	No	See Appendix A, Page 32.
3/4.11.1.4	Liquid Holdup Tanks	5.5.8	Yes	Although this Specification does not meet any criteria of the NRC Final Policy Statement, it has been retained in accordance with the NRC letter from W. T. Russell to the industry ITS Chairpersons dated October 25, 1993.
3/4.11.2	Gaseous Effluents			
3/4.11.2.1	Dose Rate	Relocated	No	See Appendix A, Page 33.
3/4.11.2.2	Dose - Noble Gases	Relocated	No	See Appendix A, Page 34.
3/4.11.2.3	Dose - Iodine-131, Iodine-133, Tritium, and Radioactive Material in Particulate Form	Relocated	No	See Appendix A, Page 35.
3/4.11.2.4	Gaseous Radwaste Treatment System	Relocated	No	See Appendix A, Page 36.

(a) The applicable safety analyses are discussed in the Bases for the individual Technical Specifications.

SUMMARY DISPOSITION MATRIX FOR NMP2

CTS NUMBER	TITLE	ITS NUMBER	RETAINED/ CRITERION FOR INCLUSION	BASIS FOR INCLUSION/EXCLUSION[a]
	RADIOACTIVE EFFLUENTS (continued)			
3/4.11.2.5	Ventilation Exhaust Treatment System	Relocated	No	See Appendix A, Page 37.
3/4.11.2.6	Explosive Gas Mixture	5.5.8	Yes	Although this Specification does not meet any criteria of the NRC Final Policy Statement, it has been retained in accordance with the NRC letter from W. T. Russell to the industry ITS Chairpersons, dated October 25, 1993.
3/4.11.2.7	Main Condenser - Offgas	3.7.4	Yes-2	Main condenser offgas activity is an initial condition in the offgas system failure event.
3/4.11.2.8	Venting or Purging	Relocated	No	See Appendix A, Page 38.
3/4.11.3	Solid Radioactive Wastes	Relocated	No	See Appendix A, Page 39.
3/4.11.4	Total Dose	Relocated	No	See Appendix A, Page 40.
3/4.12	RADIOLOGICAL ENVIRONMENTAL MONITORING			
3/4.12.1	Monitoring Program	Relocated	No	See Appendix A, Page 41.
3/4.12.2	Land Use Census	Relocated	No	See Appendix A, Page 42.
3/4.12.3	Interlaboratory Comparison Program	Relocated	No	See Appendix A, Page 43.
5.0	DESIGN FEATURES	4.0	Yes	See Note 5, Page 18.
6.0	ADMINISTRATIVE CONTROLS	5.0	Yes	See Note 6, Page 18.

(a) The applicable safety analyses are discussed in the Bases for the individual Technical Specifications.

SUMMARY DISPOSITION MATRIX FOR NMP2

NOTE 1: DEFINITIONS

This section provides definitions for several defined terms used throughout the remainder of Technical Specifications. They are provided to improve the meaning of certain terms. As such, direct application of the Technical Specification selection criteria is not appropriate. However, only those definitions for defined terms that remain as a result of application of the selection criteria, will remain as definitions in this section of Technical Specifications.

NOTE 2: SAFETY LIMITS/LSSS

Application of Technical Specification selection criteria is not appropriate. However, Safety Limits and Limiting Safety System Settings (as part of Reactor Protection System Instrumentation) will be included in Technical Specifications as required by 10 CFR 50.36.

NOTE 3: 3.0/4.0

These Specifications provide generic guidance applicable to one or more Specifications. The information is provided to facilitate understanding of Limiting Conditions for Operation and Surveillance Requirements. As such, direct application of the Technical Specification selection criteria is not appropriate. However, the general requirements of 3.0/4.0 will be retained in Technical Specifications, as modified consistent with NUREG-1434.

NOTE 4: SPECIAL TEST EXCEPTIONS

These Specifications are provided to allow relaxation of certain Limiting Conditions for Operation under certain specific conditions to allow testing and maintenance. They are directly related to one or more Limiting Conditions for Operation. Direct application of the Technical Specification selection criteria is not appropriate. However, those special test exceptions, directly tied to Limiting Conditions for Operation that remain in Technical Specifications, will also remain as Technical Specifications. Those special test exceptions not applicable at NMP2 have been deleted.

NOTE 5: DESIGN FEATURES

Application of Technical Specification selection criteria is not appropriate. However, Design Features will be included in Technical Specifications as required by 10 CFR 50.36.

NOTE 6: ADMINISTRATIVE CONTROLS

Application of Technical Specification selection criteria is not appropriate. However, Administrative Controls will be included in Technical Specifications as required by 10 CFR 50.36.

3/4.3.2 ISOLATION ACTUATION INSTRUMENTATION

LCO Statement:

The isolation actuation instrumentation channels shown in Table 3.3.2-1 shall be OPERABLE with their Trip Setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3.2-2 and with ISOLATION SYSTEM RESPONSE TIME shown in Table 3.3.2-3.

3/4.3.2.2.h RCIC Drywell Pressure - High

Discussion:

The function of the RCIC Drywell Pressure - High Function is to provide an isolation signal to the RCIC turbine exhaust inboard and outboard vacuum breaker isolation valves. A high drywell pressure signal in conjunction with a RCIC low steam line pressure signal will isolate the valves. The isolation of these portions of the RCIC system is not used to mitigate a design basis accident or transient. The isolation is provided for protection of the RCIC turbine exhaust lines against operation at high pressures which might cause damage to the equipment. Credit for this isolation is not assumed in any design basis analyses.

Comparison to Deterministic Screening Criteria:

1. The RCIC Drywell Pressure - High Function is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. The RCIC Drywell Pressure - High Function is not a process variable that is an initial condition of a DBA or transient analysis.

3. The RCIC Drywell Pressure - High Function is not part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4.1 (Item 84) of NEDO-31466, the loss of the RCIC Drywell Pressure - High Function was found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2 and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the RCIC Drywell Pressure - High Function LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.3.3 ECCS ACTUATION INSTRUMENTATION

LCO Statement:

The emergency core cooling system (ECCS) actuation instrumentation channels shown in Table 3.3.3-1 shall be OPERABLE with their trip setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3.3-2 and with EMERGENCY CORE COOLING SYSTEM RESPONSE TIME as shown in Table 3.3.3-3.

3/4.3.3.A.2.f ADS 'A' - Manual Inhibit.

3/4.3.3.B.2.e ADS 'B' - Manual Inhibit.

Discussion:

The ADS Manual Inhibit switch allows the operator to defeat ADS actuation as directed by the emergency operating procedures under conditions for which ADS would not be desirable. For example, during an ATWS event low pressure ECCS system activation would dilute sodium pentaborate injected by the Standby Liquid Control (SLC) System thereby reducing the effectiveness of the SLC System ability to shutdown the reactor.

Comparison to Deterministic Screening Criteria:

1. The ADS Manual Inhibit switch is not an instrument used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. The ADS Manual Inhibit switch is not used for, nor capable of, monitoring a process variable that is an initial condition of a DBA or transient analyses.

3. The ADS Manual Inhibit switch is not used as part of a primary success path in the mitigation of a DBA or transient. The inhibit feature was added to mitigate the consequences of an ATWS event, which is not a design basis accident or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 112B) of NEDO-31466, the loss of the ADS Manual Inhibit switch was found to be a nonsignificant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the portions of the LCO and Surveillances applicable to the ADS Manual Inhibit switch may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.3.6 CONTROL ROD BLOCK INSTRUMENTATION

LCO Statement:

The control rod block instrumentation channels shown in Table 3.3.6-1 shall be OPERABLE with their Trip Setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3.6-2.

3/4.3.6.2 Source Range Monitor

Discussion:

The Source Range Monitor (SRM) control rod block functions to prevent a control rod withdrawal error during reactor startup utilizing SRM signals to create the rod block signal. SRM signals are used to monitor neutron flux during refueling, shutdown, and startup conditions. No design basis accident (DBA) or transient analysis takes credit for rod block signals initiated by the SRMs.

Comparison to Screening Criteria:

1. The SRM control rod block instrumentation is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a DBA.

2. The SRM control rod block instrumentation is not used to monitor a process variable that is an initial condition of a DBA or transient analyses.

3. The SRM control rod block instrumentation is not a part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 137) of NEDO-31466, the loss of the SRM control rod block function was found to be a nonsignificant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Control Rod Block LCO and Surveillances applicable to SRM instrumentation may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.3.6 CONTROL ROD BLOCK INSTRUMENTATION

LCO Statement:

The control rod block instrumentation channels shown in Table 3.3.6-1 shall be OPERABLE with their Trip Setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3.6-2.

3/4.3.6.3 Intermediate Range Monitor

Discussion:

The Intermediate Range Monitor (IRM) control rod block functions to prevent a control rod withdrawal error during reactor startup utilizing IRM signals to create the rod block signal. IRMs are provided to monitor the neutron flux levels during refueling, shutdown, and startup conditions. No design basis accident (DBA) or transient analysis takes credit for rod block signals initiated by IRMs.

Comparison to Screening Criteria:

1. The IRM control rod block instrumentation is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a DBA.

2. The IRM control rod block instrumentation is not used to monitor a process variable that is an initial condition of a DBA or transient analyses.

3. The IRM control rod block instrumentation is not a part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 138) of NEDO-31466, the loss of the IRM control rod block function was found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Control Rod Block LCO and Surveillances applicable to IRM instrumentation may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.3.6 CONTROL ROD BLOCK INSTRUMENTATION

LCO Statement:

The control rod block instrumentation channels shown in Table 3.3.6-1 shall be OPERABLE with their Trip Setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3.6-2.

3/4.3.6.4 Scram Discharge Volume

Discussion:

The Scram Discharge Volume (SDV) control rod block functions to prevent control rod withdrawals, utilizing SDV signals to create the rod block signal if water is accumulating in the SDV. The purpose of measuring the SDV water level is to ensure that there is sufficient volume remaining to contain the water discharged by the control rod drives during a scram, thus ensuring that the control rods will be able to insert fully. This rod block signal provides an indication to the operator that water is accumulating in the SDV and prevents further rod withdrawals. With continued water accumulation, a reactor protection system initiated scram signal will occur. Thus, the SDV water level rod block signal provides an opportunity for the operator to take action to avoid a subsequent scram. No design basis accident (DBA) or transient takes credit for rod block signals initiated by the SDV instrumentation.

Comparison to Screening Criteria:

1. The SDV control rod block instrumentation is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a DBA.

2. The SDV control rod block instrumentation is not used to monitor a process variable that is an initial condition of a DBA or transient analyses.

3. The SDV control rod block instrumentation is not a part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 139) of NEDO-31466, the loss of the SDV control rod block function was found to be a nonsignificant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Control Rod Block LCO and Surveillances applicable to SDV instrumentation may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.3.6 CONTROL ROD BLOCK INSTRUMENTATION

LCO Statement:

The control rod block instrumentation channels shown in Table 3.3.6-1 shall be OPERABLE with their Trip Setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3.6-2.

3/4.3.6.5 Reactor Coolant System Recirculation Flow

Discussion:

An increase in reactor recirculation flow causes an increase in neutron flux which results in an increase in reactor power. However, this increase in neutron flux is monitored by the neutron monitoring system which has the capability of providing a reactor scram, when required. No design basis accident (DBA) or transient analysis takes credit for rod block signals initiated by the reactor coolant recirculation system.

Comparison to Screening Criteria:

1. The Reactor Coolant System (RCS) recirculation flow control rod block instrumentation is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a DBA.

2. The RCS recirculation flow control rod block instrumentation is not used to monitor a process variable that is an initial condition of a DBA or transient analyses.

3. The RCS recirculation flow control rod block instrumentation is not a part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 140) of NEDO-31466, the loss of the RCS recirculation flow control rod block function was found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Control Rod Block LCO and Surveillances applicable to RCS recirculation flow instrumentation may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.3.7.1 RADIATION MONITORING INSTRUMENTATION

LCO Statement:

The radiation monitoring instrumentation channels shown in Table 3.3.7.1-1 shall be OPERABLE with their Alarm/Trip setpoints within the specified limits.

3/4.3.7.1.2 Area Monitors-Criticality Monitor (New Fuel Storage Vault) and Control Room Direct Radiation Monitor

Discussion:

The area radiation monitors are used to indicate when the radiation in the area has exceeded its allowable setpoint. There are no automatic functions that are performed by these instruments. The instruments are not used to mitigate a design basis accident (DBA) or transient. Information provided by these instruments on the radiation levels would have limited or no use in identifying/assessing core damage.

Comparison to Deterministic Screening Criteria:

1. These area monitors are not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a DBA.

2. These area monitors are not used to monitor a process variable that is an initial condition of a DBA or transient analyses.

3. These area monitors do not act as part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 150) of NEDO-31466, the loss of these area monitors was found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Area Monitors/ Criticality Monitor (New Fuel Storage Vault) and Control Room Direct Radiation Monitor LCO and Surveillances máy be relocated to other plant controlled documents outside the Technical Specifications.

3/4.3.7.2 SEISMIC MONITORING INSTRUMENTATION

LCO Statement:

The seismic monitoring instrumentation shown in Table 3.3.7.2-1 shall be OPERABLE.

Discussion:

In the event of an earthquake, seismic monitoring instrumentation is required to determine the magnitude of the seismic event. These instruments do not perform any automatic action. They are used to measure the magnitude of the seismic event for comparison to the design basis of the plant to ensure the design margins for plant equipment and structures have not been violated. Since the determination of the magnitude of the seismic event is performed after the event has occurred, this instrumentation has no bearing on the mitigation of any design basis accident (DBA) or transient.

Comparison to Screening Criteria:

1. Seismic monitoring instrumentation is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a DBA.

2. Seismic monitoring instrumentation is not used to monitor a process variable that is an initial condition of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

3. Seismic monitoring instrumentation is not part of the primary success path that functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

4. As discussed in Sections 3.5 and 6 and summarized in Table 4-1 (item 151) of NEDO-31466, the loss of the Seismic Monitoring Instrumentation was found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Seismic Monitoring Instrumentation LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.3.7.3 METEOROLOGICAL MONITORING INSTRUMENTATION

LCO Statement:

The meteorological monitoring instrumentation channels shown in Table 3.3.7.3-1 shall be OPERABLE.

Discussion:

Meteorological instrumentation is used to measure environmental parameters that may affect distribution of fission products and gases following a design basis accident (DBA), but it is not an input assumption for any DBA analysis and does not mitigate the accident. Meteorological information is required to evaluate the need for initiating protective measures to protect the health and safety of the public.

Comparison to Deterministic Screening Criteria:

1. These instruments are not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a DBA.

2. These instruments are not used to monitor a process variable that is an initial condition in a DBA or transient analyses.

3. These instruments do not act as a part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 152) of NEDO-31466, the loss of meteorological monitoring instrumentation was found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2 and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Meteorological Monitoring Instrumentation LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.3.7.5 ACCIDENT MONITORING INSTRUMENTATION

LCO Statement:

The accident monitoring instrumentation channels shown in Table 3.3.7.5-1 shall be OPERABLE.

Discussion:

Each individual accident monitoring parameter has a specific purpose, however, the general purpose for all accident monitoring instrumentation is to provide sufficient information to confirm an accident is proceeding per prediction, i.e. automatic safety systems are performing properly, and deviations from expected accident course are minimal.

Comparison to Deterministic Screening Criteria:

The NRC position on application of the deterministic screening criteria to post-accident monitoring instrumentation is documented in letter dated May 7, 1988 from T.E. Murley (NRC) to R.F. Janecek (BWROG). The position was that the post-accident monitoring instrumentation table list should contain, on a plant specific basis, all Regulatory Guide 1.97 Type A instruments specified in the plant's Safety Evaluation Report (SER) on Regulatory Guide 1.97, and all Regulatory Guide 1.97 Category 1 instruments. Accordingly, this position has been applied to the NMP2 Regulatory Guide 1.97 instruments. Those instruments meeting these criteria have remained in Technical Specifications. The instruments not meeting these criteria have been relocated from the Technical Specifications to plant controlled documents.

The following summarizes the NMP2 position for those instruments currently in Technical Specifications.

From NMP2 USAR Table 7.5-2, "Conformance to R.G. 1.97, Revision 3."

Type A Variables

1. Reactor vessel pressure
2. Reactor vessel water level
3. Suppression pool bulk average water temperature
4. Drywell pressure
5. Drywell bulk average air temperature
6. Primary containment oxygen concentration
7. Primary containment hydrogen concentration

Other Type, Category 1 Variables

1. Suppression pool water level
2. Suppression chamber air space pressure
3. Drywell area high range radiation level
4. Primary containment isolation valve position

For other post-accident monitoring instrumentation currently in Technical Specifications, their loss is not risk-significant since the variable they monitored did not qualify as a Type A or Category 1 variable (one that is important to safety and needed by the operator, so that the operator can perform necessary normal actions).

Conclusion

Since the screening criteria have not satisfied for non-Regulatory Guide 1.97 Type A or Category 1 variable instruments, their associated LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications. The instruments to be relocated are as follows:

1. Suppression chamber air temperature

3/4.3.7.7 TRAVERSING IN-CORE PROBE SYSTEM

LCO Statement:

The traversing in-core probe system shall be OPERABLE with:

a. Five movable detectors, drives and readout equipment to map the core, and

b. Indexing equipment to allow all five detectors to be calibrated in a common location.

Discussion:

The traversing in-core probe (TIP) system is used for calibration of the LPRM detectors. The TIP system is positioned axially and radially throughout the core to calibrate the local power range monitors (LPRMs). When not in use the TIP instruments are retracted into a storage position outside the drywell. The TIP system supports the operability of the LPRMs. With LPRM operability addressed there is no need to address the TIP system in the Technical Specifications.

Comparison to Screening Criteria:

1. The TIP system is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. The TIP system is not used to monitor a process variable that is an initial condition of a DBA or transient analyses.

3. The TIP system is not a part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 183) of NEDO-31466, the loss of the TIP system was found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2 and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the TIP System LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.3.7.8 LOOSE-PART DETECTION SYSTEM

LCO Statement:

The loose-part detection system shall be OPERABLE.

Discussion:

The loose-part detection system is used to detect loose parts in the reactor vessel. The instrumentation does not indicate that there is a degradation in the primary pressure boundary but indicates that there might be a remote chance of damage to a component due to a loose part. Fuel failure due to fuel bundle flow blockage from a lost part will be detected by the radiation monitors in the offgas stream.

Comparison to Screening Criteria:

1. The loose-part detection system is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. The loose-part detection system is not used to monitor a process variable that is an initial condition of a DBA or transient analyses.

3. The loose-part detection system is not part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 187) of NEDO-31466, the loss of the loose-part detection system was found to be a nonsignificant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Loose-Part Detection System LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.3.7.9 RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

LCO Statement:

The radioactive liquid effluent monitoring instrumentation channels shown in Table 3.3.7.9-1 shall be OPERABLE with their Alarm/Trip setpoints set to ensure that the limits of Specification 3.11.1.1 are not exceeded. The Alarm/Trip setpoints of these channels shall be determined and adjusted in accordance with the methodology and parameters in the OFFSITE DOSE CALCULATION MANUAL (ODCM).

Discussion:

The radioactive liquid effluent monitoring instrumentation is neither a safety system nor is connected to the reactor coolant system. This instrumentation is used for the purpose of showing conformance to the discharge limits of 10 CFR part 20. It is not installed to detect excessive reactor coolant leakage. The radioactive liquid effluent monitors are used routinely to provide continuous check on the release of radioactive liquid effluent from the normal plant liquid effluent flowpaths. These Technical Specifications require the Licensee to maintain operability of various liquid effluent monitors and establish setpoints in accordance with the Offsite dose Calculation Manual (ODCM). The Alarm/Trip setpoints are established to ensure that the alarm/trip will occur prior to exceeding the limits of 10 CFR Part 20. Plant DBA analyses do not assume any action, either automatic or manual, resulting from radioactive effluent monitors.

Comparison to Screening Criteria:

1. The radioactive liquid effluent monitoring instrumentation is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. The radioactive liquid effluent monitoring instrumentation is not used to monitor a process variable that is an initial condition of a DBA or transient analyses.

3. The radioactive liquid effluent monitoring instrumentation is not part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6 and summarized in Table 4-1 (item 188) of NEDO 31466, the loss of radioactive liquid effluent monitoring instrumentation was found to be a non-significant risk contributor to core damage and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2 and concurs with this assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Radioactive Liquid Effluent Monitoring Instrumentation LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.3.7.10 RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

LCO Statement:

The radioactive gaseous effluent monitoring instrumentation channels shown in Table 3.3.7.10-1 shall be OPERABLE with their Alarm/Trip setpoints set to ensure that the limits of Specification 3.11.2.1 are not exceeded. The Alarm/Trip setpoints of these channels shall be determined and adjusted in accordance with the methodology and parameters in the ODCM.

Discussion:

The radioactive gaseous effluent monitoring instrumentation is neither a safety system nor is it connected to the reactor coolant system. The primary function of this instrumentation is to show conformance to the discharge limits of 10 CFR Part 20. This instrumentation is not installed to detect excessive reactor coolant leakage. The radioactive gaseous effluent monitors are used routinely to provide continuous check on the releases of radioactive gaseous effluents from the normal plant gaseous effluent flowpaths. These Technical Specifications require the Licensee to maintain operability of various effluent monitors and establish setpoints in accordance with the ODCM. The alarm/trip setpoint are established to ensure that the alarm/trip will occur prior to exceeding the limits of 10 CFR Part 20. Plant DBA analyses do not assume any action, either automatic or manual, resulting from radioactive effluent monitors. In addition, the explosive gas monitor instrumentation is provided to ensure that the concentration of potentially explosive gas mixtures contained in the gaseous radwaste treatment system is adequately monitored, which will help ensure that the concentration is maintained below the flammability limit of hydrogen. However, the offgas system is designed to contain detonations and will not affect the function of any safety related equipment. The concentration of hydrogen in the offgas stream is not an initial assumption of any design basis accident (DBA) or transient analysis.

Comparison to Screening Criteria

1. The radioactive gaseous effluent monitoring instrumentation is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a DBA.

2. The radioactive gaseous effluent monitoring instrumentation is not used to monitor a process variable that is an initial condition of a DBA or transient. Excessive system hydrogen is not an indication of a DBA or transient.

3. The radioactive gaseous effluent monitoring instrumentation is not part of a primary success path in the mitigation of a DBA or transient. Excessive discharge is not considered to initiate a primary success path in mitigating a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (items 189 and 306) of NEDO-31466, the loss of the radioactive gaseous effluent monitoring instrumentation was found to be a non-significant risk contributor to core damage

4. frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Radioactive Gaseous Effluent Monitoring Instrumentation LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

LCO Statement:

The plant systems actuation instrumentation channels shown in Table 3.3.9-1 shall be OPERABLE with their Trip Setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3.9-2.

3/4.3.9.2 Service Water System

Discussion:

The function of the Service Water System instrumentation channels is to either ensure the Ultimate Heat Sink is functioning following an earthquake or other non-design basis event, to ensure that indication is available to perform surveillances, or to ensure the intake structure deicer heater system operates automatically. No design basis analysis takes credit for any of these instruments. In addition, other Technical Specifications continue to ensure that the intake deicer heaters are Operable when required, and an SR will continue to ensure that the service water supply header discharge temperature is within limits (thus an indicator must be Operable to measure the temperature).

Comparison to Screening Criteria:

1. The Service Water System instrumentation is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a DBA.

2. The Service Water System instrumentation is not used to monitor a process variable that is an initial condition of a DBA or transient analyses.

3. The Service Water System instrumentation is not a part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Appendix B (Pages 1 of 4 and 2 of 4) of this document, the loss of the Service Water System instrumentation function was found to be a non-significant risk contributor to core damage frequency and offsite releases.

Conclusion:

Since the screening criteria have not been satisfied, the Service Water System instrumentation LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.4.4 CHEMISTRY

LCO Statement:

The chemistry of the reactor coolant system (RCS) shall be maintained within the limits specified in Table 3.4.4-1.

Discussion:

Poor reactor coolant water chemistry may contribute to the long term degradation of system materials and thus is not of immediate importance to the plant operator. Reactor coolant water chemistry is monitored for a variety of reasons. One reason is to reduce the possibility of failures in the reactor coolant system pressure boundary caused by corrosion. Severe chemistry transients have resulted in failure of thin walled LPRM instrument dry tubes in a relatively short period of time. However, these LPRM dry tube failures result in loss of the LPRM function and are readily detectable. In summary, the chemistry monitoring activity serves a long term preventative rather than mitigative purpose.

Comparison to Screening Criteria:

1. Reactor coolant water chemistry is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. Reactor coolant water chemistry is not used to monitor a process variable that is an initial condition of a DBA or transient.

3. Reactor coolant water chemistry is not part of any primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 211) of NEDO-31466, the reactor coolant water chemistry was found to be a nonsignificant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Reactor Coolant System Chemistry LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.4.8 STRUCTURAL INTEGRITY

LCO Statement:

The structural integrity of ASME Code Class 1, 2, and 3 components shall be maintained in accordance with Specification 4.4.8.

Discussion:

The inspection programs for ASME Code Class 1, 2, and 3 components ensure that the structural integrity of these components will be maintained throughout the components life. Other Technical Specifications require important systems to be operable (for example, ECCS 3/4.5.1) and in a ready state for mitigative action. This Technical Specification is more directed toward prevention of component degradation and continued long term maintenance of acceptable structural conditions. Hence it is not necessary to retain this specification to ensure immediate operability of safety systems.

Further, this Technical Specification prescribes inspection requirements which are performed during plant shutdown. It therefore does not directly address the response to design basis accidents (DBA).

Comparison to Screening Criteria:

1. The inspections stipulated by this specification are not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a DBA.

2. The inspections stipulated by this specification do not monitor process variables that are initial assumptions in a DBA or transient analyses.

3. The ASME Code Class 1, 2, and 3 components inspected per this Specification are assumed to function to mitigate a DBA. Their capability to perform this function is addressed by other Technical Specifications. This Technical Specification, however, only specifies inspection requirements for these components; and these inspections can only be performed when the plant is shutdown. Therefore, Criterion 3 is not satisfied.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 216) of NEDO-31466, the assurance of operability of the entire system as verified in the system operability specification dominates the risk contribution of the system. As such, the lack of a long term assurance of structural integrity as stipulated by this Specification was found to be a non-significant risk contributor to core damage frequency and offsite releases. Furthermore, the requirement is currently covered by 10 CFR 50.55a and the plant's Inservice Inspection Program. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Structural Integrity LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.7.2 REVETMENT-DITCH STRUCTURE

LCO Statement:

The Revetment-Ditch Structure shall be structurally sound and capable of limiting wave action as intended. The Revetment-Ditch Structure shall be maintained so that the elevation of each survey point listed in Table 3.7.2-1 is not more than 1.0 foot below the listed elevation.

Discussion:

The purpose of the Revetment-Ditch Structure is to protect the plant fill and foundation from wave erosion, expected during the probable maximum windstorm for a maximum still water elevation of 254 feet. A windstorm is not a design basis accident or transient, thus the Revetment-Ditch Structure is not credited in any safety analysis. In addition, the Revetment-Ditch Structure can sustain a high degree of damage and still perform its function. The Revetment-Ditch Structure Technical Specification requirements were put in place to ensure that severe damage will not go undetected for a substantial period of time and if severe damage occurs, facility actions will be taken to repair the Revetment-Ditch Structure.

Comparison to Screening Criteria:

1. Revetment-Ditch Structure requirements are not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a DBA.

2. Revetment-Ditch Structure requirements are not process variables that are initial conditions of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

3. Revetment-Ditch Structure requirements are not part of the primary success path that function or actuate to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

4. As discussed in Appendix B (Page 3 of 4 and 4 of 4) of this document, NMPC found Revetment-Ditch Structure requirements not being met to be a non-significant risk contributor to core damage frequency and offsite releases.

Conclusion:

Since the screening criteria have not been satisfied, the Revetment-Ditch Structure LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.7.6 SEALED SOURCE CONTAMINATION

LCO Statement:

Each sealed source containing radioactive material either in excess of 100 microcuries of beta-and/or gamma-emitting material or 5 microcuries of alpha-emitting material shall be free of 0.005 microcurie or more of removable contamination.

Discussion:

The limitations on sealed source contamination are intended to ensure that the total body or individual organ irradiation doses does not exceed allowable limits in the event of ingestion or inhalation. This is done by imposing a maximum limitation of ≤ 0.005 microcuries of removable contamination on each sealed source. This requirement and the associated Surveillance Requirements bear no relation to the conditions or limitations which are necessary to ensure safe reactor operation.

Comparison to Screening Criteria:

1. Sealed source contamination is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. Sealed source contamination is not a process variable that is an initial condition of a DBA or transient.

3. Sealed source contamination is not used in any part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 267) of NEDO-31466, the sealed source contamination being not within limits was found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Sealed Source Contamination LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.8.4.1 AC CIRCUITS INSIDE PRIMARY CONTAINMENT

LCO Statement:

The AC circuits inside primary containment that are not provided with primary and backup containment penetration conductor overcurrent protective devices shall be deenergized.

Discussion:

The circuits involved in this LCO are kept normally de-energized and do not participate in plant safety actions. These circuits are primarily for lighting, utility outlets and convenient power plugs, to be used in the event of plant walkdowns, maintenance and in-situ test and/or observations. Therefore, they are of non-Class 1E nature.

They are properly separated from all other Class 1E circuits and operation or failure of these non-Class 1E circuits do not impose any degradation on Class 1E circuits. Thus, in any event, these circuits have no impact on plant safety systems.

Comparison to Screening Criteria:

1. The AC circuits described in this Specification are de-energized during operation and are not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. The AC circuits described in this Specification are not used to monitor a process variable that is an initial condition of a DBA or transient.

3. The AC circuits described in this Specification are not part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 275) of NEDO-31466, the AC circuits inside primary containment governed by this specification were found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the AC Circuits Inside Primary Containment LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.8.4.2 PRIMARY CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

3/4.8.4.3 EMERGENCY LIGHTING SYSTEM - OVERCURRENT PROTECTIVE DEVICES

LCO Statement:

3/4.8.4.2 All primary containment penetration conductor overcurrent protective devices shall be OPERABLE.

3/4.8.4.3 The emergency lighting system overcurrent protective devices shall be OPERABLE.

Discussion:

The primary feature of these protective devices is to open the control and/or power circuit whenever the load conditions exceed the present current demands. This is to protect the circuit conductors against damage or failure due to overcurrent heating effects.

The continuous monitoring of the operating status of the overcurrent protection devices is impracticable and not covered as part of the control room monitoring, except after trip condition indication.

In the event of failure of this protective device to trip the circuit, the upstream protective device is expected to operate and isolate the faulty circuit. Thus, the upper level (back-up) protection will prevent loss of redundant power source. In the worst case fault condition, a single division of protective functions can be lost. However, this scenario is covered under a single failure criterion.

The overcurrent protection devices ensure the pressure integrity of the containment penetration. With failure of the device it is postulated that the wire insulation will degrade resulting in a containment leak path during a LOCA. However, containment leakage is not a process variable and is not considered as part of the primary success path. Containment penetration degradation will be identified during the normal containment leak rate tests required by 10 CFR Part 50, Appendix J.

Comparison to Screening Criteria:

1. The primary containment penetration conductor and emergency lighting system overcurrent protective devices are not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. The primary containment penetration conductor and emergency lighting system overcurrent protective devices specific circuits are not used to monitor a process variable that is an initial condition of a DBA or transient.

3/4.8.4.2 PRIMARY CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES (continued)

3/4.8.4.3 EMERGENCY LIGHTING SYSTEM - OVERCURRENT PROTECTIVE DEVICES (continued)

3. The specific circuits of the primary containment penetration conductor and emergency lighting system overcurrent protective devices are not part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 276) of NEDO-31466, the loss of the circuits associated with the primary containment penetration conductor and emergency lighting system overcurrent protective devices was found to be a nonsignificant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Primary Containment Penetration Conductor and Emergency Lighting System Overcurrent Protective Devices LCOs and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.9.1.b.4 REACTOR MODE SWITCH — FUEL GRAPPLE POSITION

3/4.9.6 REFUELING PLATFORM

LCO Statement:

3.9.1.b.4: CORE ALTERATIONS shall not be performed using equipment associated with a Refuel position interlock unless at least the following associated Refuel position interlocks are OPERABLE for such equipment: Fuel Grapple Position.

3/4.9.6: The refueling platform shall be OPERABLE and used for handling fuel assemblies or control rods within the reactor pressure vessel.

Discussion:

OPERABILITY of the refueling platform equipment (crane, main hoist including fuel grapple position, and auxiliary hoist) ensures that only the hoists of the refueling platform will be used to handle fuel within the reactor pressure vessel, hoists have sufficient load capacity for handling fuel assemblies and/or control rods and the core internals and pressure vessel are protected from excessive lifting force if they are inadvertently engaged during lifting operations. Although the interlocks designed to provide the above capabilities can prevent damage to the refueling platform equipment and core internals, they are not assumed to function to mitigate the consequences of a design basis accident. Further, in analyzing the control rod withdrawal error during refueling, if any one of the operations involved in initial failure or error is followed by any other single equipment failure or single operator error, the necessary safety actions are taken (e.g., rod block or scram) automatically prior to violation of any limits. Hence the refueling platform interlocks are not part of the primary success path in mitigating the control rod withdrawal error during refueling.

Comparison to Screening Criteria:

1. The refueling platform and associated instrumentation is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. The refueling platform and associated instrumentation is not used to monitor a process variable that is an initial condition of a DBA or transient.

3. The refueling platform and associated instrumentation is not part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 287) of NEDO-31466, the refueling platform and associated instrumentation was found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Reactor Mode Switch — Fuel Grapple Position and Refueling Platform LCOs and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.9.5 COMMUNICATIONS

LCO Statement:

Direct communications shall be maintained between the control room and refueling floor personnel.

Discussion:

Communication between the control room and refueling floor personnel is maintained to ensure that refueling personnel can be promptly informed of significant changes in the plant status or core reactivity condition during refueling. The communications allow for coordination of activities that require interaction between the control room and refueling floor personnel (such as the insertion of a control rod prior to loading fuel). However, the refueling system design accident or transient response does not take credit for communications.

Comparison to Screening Criteria:

1. Communications during any mode of plant operation is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. Communications during any mode of plant operation is not used to indicate status of, or monitor a process variable that is an initial condition of a DBA or transient.

3. Communication during any mode of plant operation does not contribute to a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 286) of NEDO-31466, the loss of communication was found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Communications LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.9.7 CRANE TRAVEL - SPENT FUEL STORAGE POOL

LCO Statement:

Loads in excess of 1000 pounds shall be prohibited from travel over fuel assemblies in the spent fuel storage pool racks unless handled by a single failure-proof handling system.

Discussion:

The restriction on movement of loads in excess of the nominal weight of a fuel assembly over other fuel assemblies in the storage pool ensures that in the event the load is dropped, the activity release will be limited to that contained in a single fuel assembly and any possible distortion of the fuel in the storage racks will not result in a critical array. Administrative monitoring of loads moving over the fuel storage racks serves as a backup to the crane interlocks.

Although this Technical Specification supports the maximum refueling accident assumption in the design basis accident (DBA), the crane travel limits are not monitored and controlled during operation; they are checked on a periodic basis to ensure operability. The deterministic criteria for Technical Specification retention are, therefore, not satisfied.

Comparison to Screening Criteria:

1. The crane travel limits are not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a DBA.

2. The maximum severity assumed for the fuel handling DBA is limited by the limits placed on the crane travel. These crane travel limits are not, however, process variables monitored and controlled by the operator; they are interlocks. Therefore, Criterion 2 is not satisfied.

3. The crane travel limits are not a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a DBA.

4. Traditional PRAs do not review risks associated with the spent fuel storage pool. Design basis analyses indicate that the release associated with fuel assembly damage in the spent fuel storage pool due to crane accidents is significantly lower than releases of concern evaluated by PRAs.

Conclusion:

Since the screening criteria have not been satisfied, the Crane Travel - Spent Fuel Storage Pool LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.11.1.1 CONCENTRATION

LCO Statement:

The concentration of radioactive material released in liquid effluents to UNRESTRICTED AREAS (see Figure 5.1.3-1) shall be limited to the concentrations specified in 10 CFR 20, Appendix B, Table II, Column 2, for radionuclides other than dissolved or entrained noble gases. For dissolved or entrained noble gases, the concentration shall be limited to 2 x 10^{-4} micorcurie/ml total activity.

Discussion:

10 CFR Part 20, BII(2) refers to releases to an unrestricted area of radioactive material in concentrations that exceed the specified limits. No screening criteria apply because the process variable of the LCO is not an initial condition of a DBA or transient analysis. Neither does the system comprise a part of the safety sequence analysis or a part of the primary coolant pressure boundary. Effluent control is for protection against radiation hazards from licensed activities, not accidents.

Comparison to Screening Criteria:

1. The radioactive liquid effluent - concentration limits are not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. The radioactive liquid effluent - concentration limits are not a process variable that is an initial condition of a DBA or transient.

3. The radioactive liquid effluent - concentration limits are not utilized in a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 296) of NEDO-31466, liquid releases during normal operation are a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Concentration LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.11.1.2 DOSE

LCO Statement:

The dose or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released, from each unit, to UNRESTRICTED AREAS (see Figure 5.1.3-1) shall be limited:

a. During any calendar quarter to less than or equal to 1.5 mrem to the whole body and to less than or equal to 5 mrem to any organ, and

b. During any calendar year to less than or equal to 3 mrem to the whole body and to less than or equal to 10 mrem to any organ.

Discussion:

Limitations of the quarterly and annual projected doses to members of the public which results from cumulative liquid effluent discharges during normal operation over extended periods is intended to assure compliance with the dose objectives of 10 CFR Part 50, Appendix I. These limits are not related to protection of the public from any design bases accident or transient.

Comparison to Screening Criteria:

1. The radioactive liquid effluent - dose limits are not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant boundary prior to a design basis accident (DBA).

2. The radioactive liquid effluent - dose limits are not a process variable that is an initial condition of a DBA or transient.

3. The radioactive liquid effluent - dose limits are not utilized in any aspect for a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 297) of NEDO-31466, the radioactive liquid effluent dose projected value was found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Dose LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.11.1.3 LIQUID RADWASTE TREATMENT SYSTEM

LCO Statement:

The liquid radwaste treatment system shall be OPERABLE, and appropriate portions of the system shall be used to reduce releases of radioactivity when the projected doses due to the liquid effluent, from the unit, to UNRESTRICTED AREAS (see Figure 5.1.3-1) would exceed 0.06 mrem to the whole body or 0.2 mrem to any organ in a 31-day period.

Discussion:

The requirement for a liquid radwaste treatment system in 10 CFR Part 50, Appendix A, GDC 60, pertains to controlling the release of site liquid effluents during normal operational occurrences. No loss of primary coolant is involved; neither is an accident condition assumed or implied. The limits for release in 10 CFR Part 50, Appendix I, Sec. II.A, for liquids are design objectives for operation.

Comparison to Screening Criteria:

1. The liquid radwaste treatment system is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. The liquid radwaste treatment system is not used to monitor a process variable that is an initial condition of a DBA or transient.

3. The liquid radwaste treatment system is not part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 298) of NEDO-31466, the loss of the liquid radwaste treatment system was found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Liquid Radwaste Treatment System LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.11.2.1 DOSE RATE

LCO Statement:

The dose rate from radioactive materials released in gaseous effluents from the site to areas at or beyond the SITE BOUNDARY (see Figure 5.1.3-1) shall be limited to the following:

a. For noble gases: Less than or equal to 500 mrem/yr to the whole body and less than or equal to 3000 mrem/yr to the skin, and

b. For iodine-131, for iodine-133, for tritium, and for all radionuclides in particulate form with half-lives greater than 8 days: Less than or equal to 1500 mrem/yr to any organ.

Discussion:

This LCO limits the dose rate due to gaseous effluents in unrestricted areas at any time to a value less than the yearly dose limit of 10 CFR Part 20. This provides reasonable assurance that no member of the public is exposed to annual average concentrations which exceed the limits of 10 CFR Part 20 Appendix B, Table II. This is a limit which applies to normal operation of the plant. It is not assumed as an initial condition of any design basis accident or transient analysis and is not relied upon to limit the consequences of such events.

Comparison to Screening Criteria:

1. The gaseous effluent - dose rate limits are not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. The gaseous effluent - dose rate limits are not a process variable that is an initial condition of a DBA or transient.

3. The gaseous effluent - dose rate limits are not utilized in any part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 300) of NEDO-31466, the gaseous effluent - dose rate was found to be a non-significant risk contributor to core damage frequency and offsite releases during operation. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Dose Rate LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.11.2.2 DOSE - NOBLE GASES

LCO Statement:

The air dose from noble gases released in gaseous effluents, from each unit, to areas at or beyond the SITE BOUNDARY (see Figure 5.1.3-1) shall be limited to the following:

a. During any calendar quarter: Less than or equal to 5 mrad for gamma radiation and less than or equal to 10 mrad for beta radiation, and

b. During any calendar year: Less than or equal to 10 mrad for gamma radiation and less than or equal to 20 mrad for beta radiation.

Discussion:

Limitation of the quarterly and annual air doses from noble gases in plant gaseous effluents during normal operation over extended periods is intended to assure compliance with the dose objectives of 10 CFR Part 50, Appendix I. These limits are not related to protection of the public from the consequences of any design basis accident or transient.

Comparison to Screening Criteria:

1. The gaseous effluents - dose-noble gas limits are not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. The gaseous effluent - dose-noble gas limits are not a process variable that is an initial condition of a DBA or transient.

3. The gaseous effluent - dose-noble gas limits are not utilized in any capacity as part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 301) of NEDO-31466, the gaseous effluent - dose-noble gas values during normal operation were found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Dose-Noble Gases LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.11.2.3 DOSE - IODINE-131, IODINE-133, TRITIUM, AND RADIOACTIVE MATERIAL IN PARTICULATE FORM

LCO Statement:

The dose to a MEMBER OF THE PUBLIC from iodine-131, iodine-133, tritium, and all radioactive material in particulate form with half-lives greater than 8 days in gaseous effluents released, from each unit, to areas at or beyond the SITE BOUNDARY (see Figure 5.1.3-1) shall be limited to the following:

a. During any calendar quarter: Less than or equal to 7.5 mrem to any organ, and

b. During any calendar year: Less than or equal to 15 mrem to any organ.

Discussion:

Limitation of the quarterly and annual projected doses to members of the public from radionuclides other than noble gases during normal operation over extended periods is intended to assure compliance with the dose objectives of 10 CFR Part 50, Appendix I. These limits are not related to protection of the public from the consequences of any design basis accident or transient.

Comparison to Screening Criteria:

1. The gaseous effluents - dose-iodine-131, iodine-133, tritium, and radioactive material in particulate form limits are not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. The gaseous effluent - dose-iodine-131, iodine-133, tritium, and radioactive material in particulate form limits are not a process variable that is an initial condition of a DBA or transient.

3. The gaseous effluent - dose-iodine-131, iodine-133, tritium, and radioactive material in particulate form limits are not utilized in any capacity in a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 302) of NEDO-31466, the gaseous effluent - dose-iodine-131, iodine-133, tritium, and radionuclides in particulate form releases during normal operations were found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Dose-Iodine-131, Iodine-133, Tritium, and Radioactive Material in Particulate Form LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.11.2.4 GASEOUS RADWASTE TREATMENT SYSTEM

LCO Statement:

The GASEOUS RADWASTE TREATMENT SYSTEM shall be in operation.

Discussion:

The gaseous radwaste treatment (offgas) system reduces the activity level of the non-condensible fission product gases from fuel defects removed from the main condenser prior to their release to the environs.

The operability of the gaseous radwaste treatment (offgas) system as well as the ventilation exhaust treatment system is required to meet the requirements of 10 CFR Part 50.36a and General Design Criteria 60 of Appendix A to 10 CFR Part 50 (i.e., releases of radioactive materials in gaseous effluents will be kept "as low as reasonably achievable"). The operability of the offgas system is not assumed in the analysis of any design bases accident or transient. However, offgas activity is an initial condition of a design basis accident and is being retained in ITS LCO 3.7.5. Therefore, there is no need to retain this requirement.

Comparison to Screening Criteria:

1. The gaseous radwaste treatment system is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. Although offgas activity is an initial condition of a DBA, this process variable is addressed by another Technical Specification. The gaseous radwaste treatment system is not used to monitor any other process variable that is an initial condition of a DBA or transient. As such, Criterion 2 is not satisfied.

3. The gaseous radwaste treatment system is not part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 303) of NEDO-31466, the loss of the gaseous radwaste treatment system was found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Gaseous Radwaste Treatment System LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.11.2.5 VENTILATION EXHAUST TREATMENT SYSTEM

LCO Statement:

The VENTILATION EXHAUST TREATMENT SYSTEM shall be OPERABLE and appropriate portions of this system shall be used to reduce releases of radioactivity when the projected doses in 31 days from iodine and particulate releases, from each unit, to areas at or beyond the SITE BOUNDARY (see Figure 5.1.3-1) would exceed 0.3 mrem to any organ of a MEMBER OF THE PUBLIC.

Discussion:

The LCO is intended to provide reasonable assurance that releases of radioactive materials during normal operation of the plant are "as low as reasonably achievable" (ALARA) and to help assure compliance with the dose objectives 10 CFR Part 50, Appendix I. Additionally, the only ventilation exhaust treatment systems covered by this specification are those installed for turbine buildings' ventilation. These objectives are not related to protection of the public from any design basis accident or transient.

Comparison to Screening Criteria:

1. The ventilation exhaust treatment system is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. The ventilation exhaust treatment system is not used to monitor a process variable that is an initial condition of a DBA or transient.

3. The ventilation exhaust treatment system is not part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Sections 3.5 and 6, and summarized in Table 4-1 (item 305) of NEDO-31466, the loss of the ventilation exhaust treatment system was found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Ventilation Exhaust Treatment System LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.11.2.8 VENTING OR PURGING

LCO Statement:

VENTING OR PURGING of the drywell and/or suppression chamber shall be through the standby gas treatment system.

Discussion:

The drywell vent and purge system is used primarily to control containment pressure during reactor operation and also used to reduce drywell airborne radioactivity levels before personnel entry. This LCO is intended to provide reasonable assurance that releases from normal drywell purging operations will not exceed the annual dose limits of 10 CFR Part 20 for unrestricted areas. These limits are not related to protection of the public from the consequences of any DBA or transient.

Comparison to Screening Criteria:

1. Venting or purging of the drywell is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. Venting or purging of the drywell has no relationship to any process variable that is an initial condition of a DBA or transient.

3. The venting or purging of the drywell during normal operation is not part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Section 6, and summarized in Table 4-1 (item 318) of NEDO-31466, Supplement 1, drywell venting or purging, as controlled by this specification, was found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Venting or Purging LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.11.3 SOLID RADIOACTIVE WASTES

LCO Statement:

Radioactive wastes shall be solidified or dewatered in accordance with the PROCESS CONTROL PROGRAM to meet shipping and transportation requirements during transit and disposal site requirements when received at the disposal site.

Discussion:

The solid radwaste system is a logical continuation of the liquid radwaste system. It operates by the same requirement for effluent control, identified as 10 CFR Part 50, Appendix A, GDC 60. The system serves to control operational release of solid waste, not accidental release.

Comparison to Screening Criteria:

1. The solid radwaste system is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. The solid radwaste system is not used to monitor a process variable that is an initial condition of a DBA or transient.

3. The solid radwaste system is not part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Section 3.5 and 6, and summarized in Table 4-1 (item 308) of NEDO-31466, solid radioactive waste was found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Solid Radioactive Wastes LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.11.4 TOTAL DOSE

LCO Statement:

The annual (calendar year) dose or dose commitment to any MEMBER OF THE PUBLIC due to releases of radioactivity and to radiation from uranium fuel cycle sources shall be limited to less than or equal to 25 mrem to the whole body or any organ, except the thyroid, which shall be limited to less than or equal to 75 mrem.

Discussion:

This LCO limits the annual doses to individual members of the public from all plant sources. The LCO is intended to assure that normal operation of the plant is in compliance with the provisions of 40 CFR Part 190. These limits are not related to protection of the public from any design basis accident or transient.

Comparison to Screening Criteria:

1. The total dose limits are not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. The total dose limits are not a process variable that is an initial condition of a DBA or transient.

3. The total dose limits are not utilized in any capacity as part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Section 3.5 and 6.0, and summarized in Table 4-1 (item 304) of NEDO-31466, the total dose limits were found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Total Dose LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.12.1 MONITORING PROGRAM

LCO Statement:

The Radiological Environmental Monitoring Program shall be conducted as specified in Table 3.12.1-1.

Discussion:

The radiological environmental monitoring program required by this specification provides measurements of radiation and of radioactive materials in those exposure pathways and for those radionuclides which lead to the highest potential radiation exposures for members of the public resulting from station operations. This program monitors the long-term impact of normal plant operations and is not related to protection for the public from the consequences of any DBA or transient.

Comparison to Screening Criteria:

1. The radiological environmental monitoring program is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. The radiological environmental monitoring program is not used to monitor any process variables that are an initial condition of a DBA or transient.

3. The radiological environmental monitoring program is not part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Section 3.5 and 6, and summarized in Table 4-1 (item 309) of NEDO-31466, the radiological environmental monitoring program was found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Monitoring Program LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.12.2 LAND USE CENSUS

LCO Statement:

A land use census shall be conducted and shall identify within a distance of 5 miles the location in each of the 16 meteorological sectors of the nearest milk animal and the nearest residence, and the nearest garden of greater than 500 square feet producing broad leaf vegetation. For elevated releases as defined in Regulatory Guide 1.111, Revision 1, July 1977, the land use census shall also identify within a distance of 3 miles the locations in each of the 16 meteorological sectors of all milk animals and all gardens of greater than 500 square feet producing broadleaf vegetation.

Discussion:

The land use census required by this specification supports the measurement of radiation and of radioactive materials in those exposure pathways and for those radionuclides which lead to the highest potential radiation exposures for members of the public resulting from station operations. This program ensures that changes in the use of areas at or beyond the SITE BOUNDARY are identified and changes made to the radiological environmental monitoring program, if required.

Comparison to Screening Criteria:

1. The land use census is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. The land use census is not a process variables that is an initial condition of a DBA or transient.

3. The land use census is not utilized in any capacity as a primary success path in the mitigation of a DBA or transient.

4. As discussed in Section 3.5 and 6, and summarized in Table 4-1 (item 309) of NEDO-31466, the land use census was found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Land Use Census LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.12.3 INTERLABORATORY COMPARISON PROGRAM

LCO Statement:

Analyses shall be performed on all radioactive materials, supplied as part of an Interlaboratory Comparison Program that has been approved by the Commission, that correspond to samples required by Table 3.12.1-1. Participation in this program shall include media for which environmental samples are routinely collected and for which intercomparison samples are available.

Discussion:

The interlaboratory comparison program required by this specification confirms the accuracy of the measurements of radiation and of radioactive materials in those exposure pathways and for those radionuclides which lead to the highest potential radiation exposures for members of the public resulting from station operation. This program ensures independent checks on the precision and accuracy of the instrumentation used in the measurements of radioactive material for the radiological environmental monitoring program are performed.

Comparison to Screening Criteria:

1. The interlaboratory comparison program is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA).

2. The interlaboratory comparison program is not used to monitor a process variable that is an initial condition of a DBA or transient.

3. The interlaboratory comparison program is not utilized in any capacity as part of a primary success path in the mitigation of a DBA or transient.

4. As discussed in Section 3.5 and 6, and summarized in Table 4-1 (item 309) of NEDO-31466, the interlaboratory comparison program was found to be a non-significant risk contributor to core damage frequency and offsite releases. NMPC has reviewed this evaluation, considers it applicable to NMP2, and concurs with the assessment.

Conclusion:

Since the screening criteria have not been satisfied, the Interlaboratory Comparison Program LCO and Surveillances may be relocated to other plant controlled documents outside the Technical Specifications.

3/4.3.9 PLANT SYSTEMS ACTUATION INSTRUMENTATION

LCO Statement:

The plant systems actuation instrumentation channels shown in Table 3.3.9-1 shall be OPERABLE with their Trip Setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3.9-2.

3/4.3.9.2 Service Water System

Description of Requirement:

Service Water System instruments are provided to support continued operation of the system. The function of the Discharge Bay Level channels is to align the discharge of the Service Water System to one of the intake structures when a high discharge bay level occurs (a high discharge bay level is indicative of a crushed discharge pipe). The function of the Intake Tunnel 1 and 2 Water Temperature channels is to provide indication of the intake tunnel water temperatures and to automatically turn on the deicer heaters when a low temperature occurs. The function of the Service Water Bay channels is to open valves to bypass the trash racks and traveling screens, which will then dump water into the pump suction bay, on a low level in the intake bay. The function of the Service Water Pumps Discharge Strainer Differential Pressure, Trains A and B channels is to start a backwash cycle of the strainer on a high differential pressure. The function of the Service Water Supply Header Discharge Water Temperature channels is to provide indication of this parameter. The function of the Service Water Inlet Pressure for EDG*2 (HPCS, Division III) channels is to isolate the Division 1 and 2 Service Water headers from the Division 3 DG on a low pressure (which would be indicative of a pipe break in the Division 3 DG service water piping).

Risk Justification:

a. Discharge Bay Level

The discharge tunnel is seismic category II and complies with Regulatory Guide 1.27. While the tunnel is not credited with surviving a seismic event, it is not likely that it would fail in such a manner that all flow through the discharge tunnel is blocked. If the structure does fail during a seismic event, indications of discharge bay level are provided in the control room and the alignment of an intake structure to provide a discharge path can be performed from the control room using remote manual controls. Under normal conditions, the discharge bay level is 15 ft below the level that automatic actions are taken. Pump flow and current instruments would provide adequate information should a discharge bay failure threaten pump integrity.

b. Intake Tunnel 1 and 2 Water Temperature

The deicer heaters are only needed when the intake structure water temperature is $< 38°F$. Surveillances will be maintained in the Technical Specifications to ensure the water temperature is $\geq 38°F$ or that the heaters are energized. If the temperature

is too low, controls are provided in the control room to energize the deicer heaters. In addition, the formation of frazil ice only occurs when the water is supercooled, and the water temperature decrease is normally gradual. Thus this event is relatively slow in developing and the operators would have sufficient time to turn on the heaters. Also, other indications in the control room (e.g., pump flow rate and intake bay level) would indicate a problem if frazil ice forms sufficiently in the intake structure to restrict suction flow.

c. Service Water Bay

If the traveling water screens fail or become clogged with alewife fish following an earthquake, controls are provided in the control room to perform the function of the instruments. Also, this event is relatively slow in developing, thus the operators would have sufficient time to perform the actions. In addition, other alarms and indicators, both safety and non-safety related, would alert the operator to a problem.

d. Service Water Pumps Discharge Strainer Differential Pressure, Trains A and B

The service water strainers are normally continuously cycled to backwash, therefore they would never experience a high differential pressure, and the instruments would not be needed. In addition, there are individual SW pump and header pressures in the control room to alert the operators of a problem.

e. Service Water Supply Header Discharge Water Temperature

This instrumentation provides indication only; no automatic features are associated with this instrumentation. The Technical Specifications continue to require the service water supply header discharge temperature to be monitored, thus if this instrumentation were inoperable, the operators would be required to monitor the temperature via an alternate method or to take the actions required by the Technical Specifications (i.e., shutdown the unit).

f. Service Water Inlet Pressure for EDG*2 (HPCS, Division III)

The Service Water piping to the Division 3 DG is seismic class I; thus it is not assumed to break during a seismic event. It is installed to enhance the reliability of the SW System. In addition, if a break in the pipe did occur, indications are provided in the control room to identify the event (e.g., sump monitors, flow indicators) and to isolate the piping from the Division 1 and 2 SW flow paths.

<u>Conclusion:</u>

Based on the above insights and a risk assessment performed as described in Section 3 of this document, the Relative Probability for all instruments is low, the Relative Significance for all instruments is low, and the Risk Category for all instruments is non-significant.

3/4.7.2 REVETMENT-DITCH STRUCTURE

LCO Statement:

The Revetment-Ditch Structure shall be structurally sound and capable of limiting wave action as intended. The Revetment-Ditch Structure shall be maintained so that the elevation of each survey point listed in Table 3.7.2-1 is not more than 1.0 foot below the listed elevation.

Description of Requirement:

The purpose of the Revetment-Ditch Structure is to protect the plant fill and foundation from wave erosion, expected during the probable maximum windstorm for a maximum still water elevation of 254 feet. Although flooding caused by PMP (probable maximum precipitation) and wave action is part of the Nine Mile Point Unit 2 design basis, it is not a Chapter 15 accident or transient; thus the Revetment-Ditch Structure is not credited in any safety analysis. In addition, the Revetment-Ditch Structure can sustain a high degree of damage and still perform its function. The Revetment-Ditch Structure Technical Specification requirements were put in place to ensure that severe damage will not go undetected for a substantial period of time and if severe damage occurs, facility actions will be taken to repair the Revetment-Ditch Structure.

Risk Justification:

a. Function affected by removal of LCO: Revetment-Ditch Structure's capability of limiting wave action as intended.

b. Effect of loss of the LCO item on the function: Loss of verification of elevation of survey points of the Revetment-Ditch to assure soundness.

c. Compensating provisions, redundancy and backups related to the loss of the LCO item:

   As stated above, the Revetment-Ditch Structure can sustain a high degree of damage and still perform its function of protecting the site from erosion. Furthermore, the Revetment-Ditch Structure will not be damaged unless a severe earthquake or storm were to occur at the site. In addition, adequate warnings of impending severe wind storms such as weather forecasts and visual observations are available that provide ample time to take preventative measures. The occurrence of high lake water level and/or high winds result in actuation of various action levels in the Emergency Plan. Based on the above, wave erosion is not a risk significant issue.

d. Probability of loss of function: Low

e. Relative Significance: Low

f. Risk Criterion: NS

g. Comments: An analysis of the risk of external plant flooding was performed in the NMP2 Individual Plant Examination for External Events (IPEEE) which was completed and submitted to the NRC in June 1995. In the NMP2 IPEEE it is indicated that the plant was designed using the probable maximum precipitation (PMP) estimates from HMR-33 which resulted in a probable maximum flood (PMF) of 260.6 feet. This is below the 261' elevation where water can enter the interior of the plant. A detailed analysis using the guidance of GL 89-22 and HMR-51 and HMR-52 (which increased previous estimates regarding the intensity of local precipitation) resulted in a PMF of 262.5 feet.

   Both of these flood levels are based on superimposing the maximum regulated lake level, the maximum probable precipitation and the maximum wave action. The flood level is dominated by the amount of the assumed probable maximum precipitation. Therefore, the Revetment-Ditch Structure has little effect on the potential for flooding of safety significant equipment at NMP2. Furthermore, it would require at least two storms to affect safety related structures; one to fail the Revetment-Ditch Structure and the second to cause significant erosion and structural failure. It is assumed to be an incredible event for two storms of such intensity to occur in short succession to threaten safety related structures. Therefore, although not specifically analyzed in the NMP2 IPEEE, it is judged that the probability of damage to safety related structures due to wave action is very low and not risk significant.

<u>Conclusion:</u>

Based on the above insights and a risk assessment performed as described in Section 3 of this document, the Relative Probability is low, the Relative Significance is low, and the Risk Category is non-significant.

1.0 USE AND APPLICATION

1.1 Definitions

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

Term	Definition
ACTIONS	ACTIONS shall be that part of a Specification that prescribes Required Actions to be taken under designated Conditions within specified Completion Times.
AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)	The APLHGR shall be applicable to a specific planar height and is equal to the sum of the LHGRs for all the fuel rods in the specified bundle at the specified height divided by the number of fuel rods in the fuel bundle at the height.
CHANNEL CALIBRATION	A CHANNEL CALIBRATION shall be the adjustment, as necessary, of the channel output such that it responds within the necessary range and accuracy to known values of the parameter that the channel monitors. The CHANNEL CALIBRATION shall encompass the entire channel, including the required sensor, alarm, display, and trip functions, and shall include the CHANNEL FUNCTIONAL TEST. Calibration of instrument channels with resistance temperature detector (RTD) or thermocouple sensors may consist of an inplace qualitative assessment of sensor behavior and normal calibration of the remaining adjustable devices in the channel. The CHANNEL CALIBRATION may be performed by means of any series of sequential, overlapping, or total channel steps so that the entire channel is calibrated.
CHANNEL CHECK	A CHANNEL CHECK shall be the qualitative assessment, by observation, of channel behavior during operation. This determination shall include, where possible, comparison of the channel indication and status to other indications or status derived from independent instrument channels measuring the same parameter.

(continued)

1.1 Definitions (continued)

CHANNEL FUNCTIONAL TEST	A CHANNEL FUNCTIONAL TEST shall be the injection of a simulated or actual signal into the channel as close to the sensor as practicable to verify OPERABILITY, including required alarm, interlock, display, and trip functions, and channel failure trips. The CHANNEL FUNCTIONAL TEST may be performed by means of any series of sequential, overlapping, or total channel steps so that the entire channel is tested.
CORE ALTERATION	CORE ALTERATION shall be the movement of any fuel, sources, or reactivity control components, within the reactor vessel with the vessel head removed and fuel in the vessel. The following exceptions are not considered to be CORE ALTERATIONS: a. Movement of source range monitors, local power range monitors, intermediate range monitors, traversing incore probes, or special movable detectors (including undervessel replacement); and b. Control rod movement, provided there are no fuel assemblies in the associated core cell. Suspension of CORE ALTERATIONS shall not preclude completion of movement of a component to a safe position.
CORE OPERATING LIMITS REPORT (COLR)	The COLR is the unit specific document that provides cycle specific parameter limits for the current reload cycle. These cycle specific limits shall be determined for each reload cycle in accordance with Specification 5.6.5. Plant operation within these limits is addressed in individual Specifications.
DOSE EQUIVALENT I-131	DOSE EQUIVALENT I-131 shall be that concentration of I-131 (microcuries/gram) that alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134, and I-135 actually present. The thyroid dose conversion factors used for this calculation shall be those listed in Table III of TID-14844, AEC, 1962, "Calculation of Distance Factors for Power and Test Reactor Sites;" Table E-7 of

(continued)

1.1 Definitions

DOSE EQUIVALENT I-131 (continued)	Regulatory Guide 1.109, Rev. 1, NRC, 1977; or ICRP 30, Supplement to Part 1, page 192-212, Table titled, "Committed Dose Equivalent in Target Organs or Tissues per Intake of Unit Activity."
EMERGENCY CORE COOLING SYSTEM (ECCS) RESPONSE TIME	The ECCS RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its ECCS initiation setpoint at the channel sensor until the ECCS equipment is capable of performing its safety function (i.e., the valves travel to their required positions, pump discharge pressures reach their required values, etc.). Times shall include diesel generator starting and sequence loading delays, where applicable. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured.
END OF CYCLE RECIRCULATION PUMP TRIP (EOC-RPT) SYSTEM RESPONSE TIME	The EOC-RPT SYSTEM RESPONSE TIME shall be that time interval from initial movement of the turbine stop valves or turbine control valves to complete suppression of the electric arc between the fully open contacts of the recirculation pump circuit breaker. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured.
ISOLATION SYSTEM RESPONSE TIME	The ISOLATION SYSTEM RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its isolation initiation setpoint at the channel sensor until the isolation valves travel to their required positions. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured.
LEAKAGE	LEAKAGE shall be: a. <u>Identified LEAKAGE</u> 1. LEAKAGE into the drywell such as that from pump seals or valve packing, that is captured and conducted to a sump or collecting tank; or

(continued)

1.1 Definitions

LEAKAGE (continued)	2. LEAKAGE into the drywell atmosphere from sources that are both specifically located and known either not to interfere with the operation of leakage detection systems or not to be pressure boundary LEAKAGE; b. Unidentified LEAKAGE All LEAKAGE into the drywell that is not identified LEAKAGE; and c. Pressure Boundary LEAKAGE LEAKAGE through a nonisolable fault in a Reactor Coolant System (RCS) component body, pipe wall, or vessel wall.
LINEAR HEAT GENERATION RATE (LHGR)	The LHGR shall be the heat generation rate per unit length of fuel rod. It is the integral of the heat flux over the heat transfer area associated with the unit length.
LOGIC SYSTEM FUNCTIONAL TEST	A LOGIC SYSTEM FUNCTIONAL TEST shall be a test of all required logic components (i.e., all required relays and contacts, trip units, solid state logic elements, etc.) of a logic circuit, from as close to the sensor as practicable up to, but not including, the actuated device, to verify OPERABILITY. The LOGIC SYSTEM FUNCTIONAL TEST may be performed by means of any series of sequential, overlapping, or total system steps so that the entire logic system is tested.
MAXIMUM FRACTION OF LIMITING POWER DENSITY (MFLPD)	The MFLPD shall be the largest value of the fraction of limiting power density (FLPD) in the core. The FLPD shall be the LHGR existing at a given location divided by the specified LHGR limit for that bundle type.
MINIMUM CRITICAL POWER RATIO (MCPR)	The MCPR shall be the smallest critical power ratio (CPR) that exists in the core for each class of fuel. The CPR is that power in the assembly that is calculated by application of the appropriate correlation(s) to cause some point in the assembly to experience boiling transition, divided by the actual assembly operating power.

(continued)

1.1 Definitions (continued)

MODE	A MODE shall correspond to any one inclusive combination of mode switch position, average reactor coolant temperature, and reactor vessel head closure bolt tensioning specified in Table 1.1-1 with fuel in the reactor vessel.
OPERABLE—OPERABILITY	A system, subsystem, division, component, or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified safety function(s) and when all necessary attendant instrumentation, controls, normal or emergency electrical power, cooling and seal water, lubrication, and other auxiliary equipment that are required for the system, subsystem, division, component, or device to perform its specified safety function(s) are also capable of performing their related support function(s).
PHYSICS TESTS	PHYSICS TESTS shall be those tests performed to measure the fundamental nuclear characteristics of the reactor core and related instrumentation. These tests are: a. Described in Chapter 14, Initial Test Program of the FSAR; b. Authorized under the provisions of 10 CFR 50.59; or c. Otherwise approved by the Nuclear Regulatory Commission.
RATED THERMAL POWER (RTP)	RTP shall be a total reactor core heat transfer rate to the reactor coolant of 3467 MWt.
REACTOR PROTECTION SYSTEM (RPS) RESPONSE TIME	The RPS RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its RPS trip setpoint at the channel sensor until de-energization of the scram pilot valve solenoids. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured.

(continued)

1.1 Definitions (continued)

SHUTDOWN MARGIN (SDM)	SDM shall be the amount of reactivity by which the reactor is subcritical or would be subcritical assuming that: a. The reactor is xenon free; b. The moderator temperature is 68°F; and c. All control rods are fully inserted except for the single control rod of highest reactivity worth, which is assumed to be fully withdrawn. With control rods not capable of being fully inserted, the reactivity worth of these control rods must be accounted for in the determination of SDM.
STAGGERED TEST BASIS	A STAGGERED TEST BASIS shall consist of the testing of one of the systems, subsystems, channels, or other designated components during the interval specified by the Surveillance Frequency, so that all systems, subsystems, channels, or other designated components are tested during *n* Surveillance Frequency intervals, where *n* is the total number of systems, subsystems, channels, or other designated components in the associated function.
THERMAL POWER	THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.
TURBINE BYPASS SYSTEM RESPONSE TIME	The TURBINE BYPASS SYSTEM RESPONSE TIME consists of two components: a. The time from initial movement of the main turbine stop valve or control valve until 80% of the turbine bypass capacity is established; and b. The time from initial movement of the main turbine stop valve or control valve until initial movement of the turbine bypass valve. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured.

Table 1.1-1 (page 1 of 1)
MODES

MODE	TITLE	REACTOR MODE SWITCH POSITION	AVERAGE REACTOR COOLANT TEMPERATURE (°F)
1	Power Operation	Run	NA
2	Startup	Refuel[a] or Startup/Hot Standby	NA
3	Hot Shutdown[a]	Shutdown	> 200
4	Cold Shutdown[a]	Shutdown	≤ 200
5	Refueling[b]	Shutdown or Refuel	NA

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

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

1.0 USE AND APPLICATION

1.2 Logical Connectors

PURPOSE

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

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

BACKGROUND

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

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

EXAMPLES

The following examples illustrate the use of logical connectors.

(continued)

1.2 Logical Connectors

EXAMPLES (continued)

EXAMPLE 1.2-1

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. LCO not met.	A.1 Verify . . . AND A.2 Restore . . .	

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

(continued)

1.2 Logical Connectors

EXAMPLES (continued)

EXAMPLE 1.2-2

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. LCO not met.	A.1 Trip . . . OR A.2.1 Verify . . . AND A.2.2.1 Reduce . . . OR A.2.2.2 Perform . . . OR A.3 Align . . .	

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

1.0 USE AND APPLICATION

1.3 Completion Times

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

DESCRIPTION

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

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

Once a Condition has been entered, subsequent divisions, subsystems, components, or variables expressed in the Condition, discovered to be inoperable or not within limits, will not result in separate entry into the Condition unless specifically stated. The Required Actions of the Condition continue to apply to each additional failure, with Completion Times based on initial entry into the Condition. However, when a subsequent division, subsystem, component, or variable expressed in the Condition is discovered to be inoperable or not within limits, the Completion Time(s) may be extended. To apply this Completion Time extension, two criteria must first be met. The subsequent inoperability:

(continued)

1.3 Completion Times

DESCRIPTION (continued)

a. Must exist concurrent with the first inoperability; and

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

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

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

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

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

The above Completion Time extension does not apply to a Completion Time with a modified "time zero." This modified "time zero" may be expressed as a repetitive time (i.e., "once per 8 hours," where the Completion Time is referenced from a previous completion of the Required Action versus the time of Condition entry) or as a time modified by the phrase "from discovery . . ." Example 1.3-3 illustrates one use of this type of Completion Time. The 10 day Completion Time specified for Conditions A and B in Example 1.3-3 may not be extended.

(continued)

1.3 Completion Times (continued)

EXAMPLES

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

EXAMPLE 1.3-1

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3. AND B.2 Be in MODE 4.	12 hours 36 hours

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

The Required Actions of Condition B are to be in MODE 3 within 12 hours AND in MODE 4 within 36 hours. A total of 12 hours is allowed for reaching MODE 3 and a total of 36 hours (not 48 hours) is allowed for reaching MODE 4 from the time that Condition B was entered. If MODE 3 is reached within 6 hours, the time allowed for reaching MODE 4 is the next 30 hours because the total time allowed for reaching MODE 4 is 36 hours.

If Condition B is entered while in MODE 3, the time allowed for reaching MODE 4 is the next 36 hours.

(continued)

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-2

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One pump inoperable.	A.1 Restore pump to OPERABLE status.	7 days
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3. AND B.2 Be in MODE 4.	12 hours 36 hours

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

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

While in LCO 3.0.3, if one of the inoperable pumps is restored to OPERABLE status and the Completion Time for Condition A has not expired, LCO 3.0.3 may be exited and operation continued in accordance with Condition A.

(continued)

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-2 (continued)

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

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

(continued)

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-3

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One Function X subsystem inoperable.	A.1 Restore Function X subsystem to OPERABLE status.	7 days AND 10 days from discovery of failure to meet the LCO
B. One Function Y subsystem inoperable.	B.1 Restore Function Y subsystem to OPERABLE status.	72 hours AND 10 days from discovery of failure to meet the LCO
C. One Function X subsystem inoperable. AND One Function Y subsystem inoperable.	C.1 Restore Function X subsystem to OPERABLE status. OR C.2 Restore Function Y subsystem to OPERABLE status.	72 hours 72 hours

(continued)

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-3 (continued)

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

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

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

(continued)

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-4

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more valves inoperable.	A.1 Restore valve(s) to OPERABLE status.	4 hours
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3. AND B.2 Be in MODE 4.	12 hours 36 hours

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

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

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

(continued)

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-5

ACTIONS

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

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more valves inoperable.	A.1 Restore valve to OPERABLE status.	4 hours
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3. AND B.2 Be in MODE 4.	12 hours 36 hours

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

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

(continued)

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-5 (continued)

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

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

EXAMPLE 1.3-6

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One channel inoperable.	A.1 Perform SR 3.x.x.x. OR A.2 Reduce THERMAL POWER to ≤ 50% RTP.	Once per 8 hours 8 hours
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3.	12 hours

(continued)

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-6 (continued)

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

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

(continued)

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-7

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One subsystem inoperable.	A.1 Verify affected subsystem isolated.	1 hour AND Once per 8 hours thereafter
	AND	
	A.2 Restore subsystem to OPERABLE status.	72 hours
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3.	12 hours
	AND	
	B.2 Be in MODE 4.	36 hours

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

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

(continued)

1.3 Completion Times

EXAMPLES	EXAMPLE 1.3-7 (continued) is met after Condition B is entered, Condition B is exited and operation may continue in accordance with Condition A, provided the Completion Time for Required Action A.2 has not expired.
IMMEDIATE COMPLETION TIME	When "Immediately" is used as a Completion Time, the Required Action should be pursued without delay and in a controlled manner.

1.0 USE AND APPLICATION

1.4 Frequency

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

DESCRIPTION

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

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

Sometimes special situations dictate when the requirements of a Surveillance are to be met. They are "otherwise stated" conditions allowed by SR 3.0.1. They may be stated as clarifying Notes in the Surveillance, as part of the Surveillance, or both. Example 1.4-4 discusses these special situations.

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

The use of "met" or "performed" in these instances conveys specified meanings. A Surveillance is "met" only when the acceptance criteria are satisfied. Known failure of the requirements of a Surveillance, even without a Surveillance specifically being "performed," constitutes a Surveillance not "met." "Performance" refers only to the requirement to specifically determine the ability to meet the acceptance criteria. SR 3.0.4 restrictions would not apply if both the following conditions are satisfied:

(continued)

1.4 Frequency

DESCRIPTION (continued)

a. The Surveillance is not required to be performed; and

b. The Surveillance is not required to be met or, even if required to be met, is not known to be failed.

EXAMPLES

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

EXAMPLE 1.4-1

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
Perform CHANNEL CHECK.	12 hours

Example 1.4-1 contains the type of SR most often encountered in the Technical Specifications (TS). The Frequency specifies an interval (12 hours) during which the associated Surveillance must be performed at least one time. Performance of the Surveillance initiates the subsequent interval. Although the Frequency is stated as 12 hours, an extension of the time interval to 1.25 times the interval specified in the Frequency is allowed by SR 3.0.2 for operational flexibility. The measurement of this interval continues at all times, even when the SR is not required to be met per SR 3.0.1 (such as when the equipment is inoperable, a variable is outside specified limits, or the unit is outside the Applicability of the LCO). If the interval specified by SR 3.0.2 is exceeded while the unit is in a MODE or other specified condition in the Applicability of the LCO, and the performance of the Surveillance is not otherwise modified (refer to Examples 1.4-3 and 1.4-4), then SR 3.0.3 becomes applicable.

(continued)

1.4 Frequency

EXAMPLES

EXAMPLE 1.4-1 (continued)

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

EXAMPLE 1.4-2

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
Verify flow is within limits.	Once within 12 hours after ≥ 25% RTP AND 24 hours thereafter

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

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

(continued)

1.4 Frequency

EXAMPLES

EXAMPLE 1.4-2 (continued)

"Thereafter" indicates future performances must be established per SR 3.0.2, but only after a specified condition is first met (i.e., the "once" performance in this example). If reactor power decreases to < 25% RTP, the measurement of both intervals stops. New intervals start upon reactor power reaching 25% RTP.

EXAMPLE 1.4-3

SURVEILLANCE REQUIREMENTS

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

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

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

(continued)

1.4 Frequency

EXAMPLES

EXAMPLE 1.4-3 (continued)

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

EXAMPLE 1.4-4

SURVEILLANCE REQUIREMENTS

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

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

NIAGARA MOHAWK
NINE MILE POINT UNIT 2
IMPROVED TECHNICAL SPECIFICATIONS

CHAPTER 1.0:
USE AND APPLICATION

<u>CURRENT TECHNICAL SPECIFICATION MARKUP</u>
<u>AND</u>
<u>DISCUSSION OF CHANGES</u>

A.1

1.0 DEFINITIONS

Note to Definitions

~~The following terms are defined so that these specifications may be uniformly interpreted.~~ The defined terms of this section appear in capitalized type and are applicable throughout these Technical Specifications and Bases. A.1

ACTIONS

~~1.1~~ ACTIONS shall be that part of a Specification ~~which~~ that prescribes Required Actions ~~remedial measures required~~ to be taken under designated conditions within specified Completion Times. A.1

~~AVERAGE PLANAR EXPOSURE~~

~~1.2 The AVERAGE PLANAR EXPOSURE shall be applicable to a specific planar height and is equal to the sum of the exposure of all the fuel rods in the specified bundle at the specified height divided by the number of fuel rods in the fuel bundle.~~ A.2

AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)

~~1.3~~ The ~~AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)~~ shall be applicable to a specific planar height and is equal to the sum of the ~~LINEAR HEAT GENERATION RATES~~ LHGRs for all the fuel rods in the specified bundle at the specified height divided by the number of fuel rods in the fuel bundle at the height. A.1

CHANNEL CALIBRATION

A.1 ~~1.4~~ A CHANNEL CALIBRATION shall be the adjustment, as necessary, of the channel output ~~so~~ such that it responds within the required range and accuracy to known values of the parameter ~~which~~ that the channel monitors. The CHANNEL CALIBRATION shall encompass the entire channel, including the sensor ~~and~~ alarm, display, and ~~and/or~~ trip functions, and shall include the CHANNEL FUNCTIONAL TEST. Insert 1 The CHANNEL CALIBRATION may be performed by means of any series of sequential, overlapping, or total channel steps ~~such~~ so that the entire channel is calibrated. A.1 A.3 A.4

CHANNEL CHECK

~~1.5~~ A CHANNEL CHECK shall be the qualitative assessment, of channel behavior during operation ~~by observation~~. This determination shall include, where possible, comparison of the channel indication and~~/or~~ status ~~with~~ to other indications ~~and/~~or status derived from independent instrument channels measuring the same parameter. A.1

CHANNEL FUNCTIONAL TEST

A.1 ~~1.6~~ A CHANNEL FUNCTIONAL TEST shall be ~~:~~ A.1

~~a. Analog channels -~~ the injection of a simulated or actual signal into the channel as close to the sensor as practicable to verify OPERABILITY, including required alarm, interlock, display, and~~/or~~ trip functions, and channel failure trips. A.1 A.3

~~b. Bistable channels - the injection of a simulated signal into the sensor to verify OPERABILITY including alarm and/or trip functions.~~ A.3 L.1

A.4

INSERT 1

Calibration of instrument channels with resistance temperature detector (RTD) or thermocouple sensors may consist of an in-place qualitative assessment of sensor behavior and normal calibration of the remaining adjustable devices in the channel.

A.1

DEFINITIONS

CHANNEL FUNCTIONAL TEST

1.6 (Continued) A.1

means of

The CHANNEL FUNCTIONAL TEST may be performed by any series of sequential, overlapping, or total channel steps so that the entire channel is tested. A.1

CORE ALTERATION

sources A5

A.1 1.7 CORE ALTERATION shall be the movement of any fuel, or reactivity control components, within the reactor vessel with the vessel head removed and fuel in the vessel. The following exceptions are not considered to be CORE ALTERATIONS: A.1

a. Movement of source range monitors, local power range monitors, intermediate range monitors, traversing incore probes, or special movable detectors (including undervessel replacement); and

b. Control rod movement, provided there are no fuel assemblies in the associated core cell. A.1

Suspension of CORE ALTERATIONS shall not preclude completion of movement to a safe position.

~~CORE~~ MAXIMUM FRACTION OF LIMITING POWER DENSITY (MFLPD)

A.1

1.8 The ~~CORE MAXIMUM FRACTION OF LIMITING POWER DENSITY (CMFLPD)~~ shall be the ~~highest~~ largest value of the ~~(FLPD)~~ fraction of limiting power density ~~which exists~~ in the core. A.6

Insert definition of FLPD from page 1-3

CRITICAL POWER RATIO

is

1.9 The ~~CRITICAL POWER RATIO (CPR) shall be the ratio of~~ that power in the assembly ~~which~~ that is calculated by application of ~~an approved critical power~~ the appropriate correlation(s) to cause some point in the assembly to experience boiling transition, divided by the actual ~~fuel~~ assembly operating power. A.6

Insert into MCPR definition page 1-5

DOSE EQUIVALENT I-131

that

1.10 DOSE EQUIVALENT I-131 shall be that concentration of I-131, ~~expressed in~~ (microcuries/~~gram~~) gram ~~which~~ alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134, and I-135 actually present. The thyroid dose conversion factors used for this calculation shall be those listed in Table III of TID-14844, AEC, 1962, "Calculation of Distance Factors for Power and Test Reactor Sites." A.1

Add two additional thyroid dose conversion factor methods L.2

~~E - AVERAGE DISINTEGRATION ENERGY~~

~~1.11 Ē shall be the average, weighted in proportion to the concentration of each radionuclide in the reactor coolant at the time of sampling, of the sum of the average beta and gamma energies per disintegration, expressed in MeV, for isotopes, with half-lives greater than 15 minutes, making up at least 95% of the total non-iodine activity in the coolant.~~ A.2

A.1

DEFINITIONS

(ECCS)

EMERGENCY CORE COOLING SYSTEM RESPONSE TIME

A.1

~~1.12~~ The EMERGENCY CORE COOLING SYSTEM (ECCS) RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its ECCS actuation setpoint at the channel sensor until the ECCS equipment is capable of performing its safety function (i.e., the valves travel to their required positions, pump

INITIATION

A.1

DEFINITIONS

EMERGENCY CORE COOLING SYSTEM (ECCS) RESPONSE TIME

A.1 1.12 (Continued) A.1

means of

discharge pressures reach their required values, etc. Times shall include diesel generator starting and sequence loading delays, where applicable. The response time may be measured by any series of sequential, overlapping, or total steps so that the entire response time is measured. A.1

END-OF-CYCLE RECIRCULATION PUMP TRIP (EOC-RPT) SYSTEM RESPONSE TIME

EOC-RPT

1.13 The END-OF-CYCLE RECIRCULATION PUMP TRIP SYSTEM RESPONSE TIME shall be that time interval to complete suppression of the electric arc between the fully open contacts of the recirculation pump circuit breaker from initial movement of the associated: A.1

a. Turbine stop valves, and or
b. Turbine control valves.

A.1

means of

The response time may be measured by any series of sequential, overlapping, or total steps so that the entire response time is measured.

FRACTION OF LIMITING POWER DENSITY

A.6

1.14 The FRACTION OF LIMITING POWER DENSITY (FLPD) shall be the LINEAR HEAT GENERATION RATE (LHGR) existing at a given location divided by the specified LHGR limit for that bundle type. INSERT into CMFLPD Definition Page 1-2

FRACTION OF RATED THERMAL POWER

1.15 The FRACTION OF RATED THERMAL POWER (FRTP) shall be the measured THERMAL POWER divided by the RATED THERMAL POWER. LA.1

FREQUENCY NOTATION

1.16 The FREQUENCY NOTATION specified for the performance of Surveillance Requirements shall correspond to the intervals defined in Table 1.1. A.8

GASEOUS RADWASTE TREATMENT SYSTEM

1.17 A GASEOUS RADWASTE TREATMENT SYSTEM shall be any system designed and installed to reduce radioactive gaseous effluents by collecting offgases from the main condenser evacuation system and providing for delay or holdup for the purpose of reducing the total radioactivity prior to release to the environment. A.2

A.9 IDENTIFIED LEAKAGE

A.10 A.1

1.18 IDENTIFIED LEAKAGE shall be: the drywell that from

A.1

1. a. Leakage into collection systems, such as pump seals or valve packing leaks, that is captured and conducted to a sump or collecting tank, or A.1

A.1 A.1

a. Identified LEAKAGE A.9

A.1

INSERT definition of Unidentified LEAKAGE from PAGE 1-9

INSERT definition of Pressure Boundary LEAKAGE from PAGE 1-5 A.9

DEFINITIONS

~~IDENTIFIED~~ LEAKAGE A.9

~~1.18 (Continued)~~

2.X Leakage into the ~~containment~~ drywell atmosphere from sources that are both specifically located and known either not to interfere with the operation of ~~the~~ leakage detection systems or not to be PRESSURE BOUNDARY LEAKAGE. A.1 A.1 A9

ISOLATION SYSTEM RESPONSE TIME

~~1.19~~ A.1 The ISOLATION SYSTEM RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its isolation ~~actuation~~ initiation setpoint at the channel sensor until the isolation valves travel to their required positions. ~~Times shall include diesel generator starting and sequence loading delays where applicable.~~ A.1 A.11 The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured. A.1

~~LIMITING CONTROL ROD PATTERN~~

~~1.20 A LIMITING CONTROL ROD PATTERN shall be a pattern that results in the core being on a thermal hydraulic limit, i.e., operating on a limiting value for APLHGR, LHGR, or MINIMUM CRITICAL POWER RATIO (MCPR).~~ A.2

LINEAR HEAT GENERATION RATE (LHGR)

~~1.21 LINEAR HEAT GENERATION RATE (LHGR)~~ The shall be the heat generation per unit length of fuel rod. It is the integral of the heat flux over the heat transfer area associated with the unit length. A.1

A3 required

LOGIC SYSTEM FUNCTIONAL TEST

~~1.22~~ A LOGIC SYSTEM FUNCTIONAL TEST shall be a test of all required logic components, (i.e., all required relays and contacts, ~~all~~ trip units, solid state logic elements, etc.) of a logic circuit, from as close to the sensor as practicable ~~through and~~ up to, but not including the actuated device, to verify OPERABILITY. The LOGIC SYSTEM FUNCTIONAL TEST may be performed by means of any series of sequential, overlapping, or total system steps so that the entire logic system is tested. A.1 A.1 A.1 L.1 A.3 A.13

~~MEMBER(S) OF THE PUBLIC~~

~~1.23 MEMBER(S) OF THE PUBLIC shall include all persons who are not occupationally associated with the Nine Mile Point Nuclear Station and James A. FitzPatrick Nuclear Power Plant. This category does not include employees of Niagara Mohawk Power Corporation, the New York State Power Authority, their contractors or vendors. Also excluded from this category are persons who enter the site to service equipment or to make deliveries. This category does include persons who use portions of the site for recreational, occupational, or other purposes not associated with Nine Mile Point Nuclear Station and James A. FitzPatrick Nuclear Power Plant.~~ A.2

A.1

DEFINITIONS

MILK SAMPLING LOCATION

A.2

1.24 A MILK SAMPLING LOCATION is a location where 10 or more head of milk animals are available for the collection of milk samples.

A.1

MINIMUM CRITICAL POWER RATIO ← (MCPR)

critical power ratio

1.25 The ~~MINIMUM CRITICAL POWER RATIO (MCPR)~~ shall be the smallest CPR ~~which~~ that exists in the core for each class of fuel A.1 Insert definition of CPR from page 1-2

A.6

OFFSITE DOSE CALCULATION MANUAL

1.26 The OFFSITE DOSE CALCULATION MANUAL (ODCM) shall contain the current methodology and parameters used in the calculation of offsite doses that result from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring Alarm/Trip Setpoints, and in the conduct of the environmental radiological monitoring program.

A.14 moved to Section 5.5

OPERABLE - OPERABILITY

division A.1 safety A.15

A.1 ~~1.27~~ A system, subsystem, ~~train~~, component, or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s) and normal or emergency when all necessary attendant instrumentation, controls, electrical power, cooling ~~or~~ and seal water, lubrication, ~~or~~ and other auxiliary equipment that are required for the system, subsystem, ~~train~~, division, component, or device to perform its specified safety function(s) are also capable of performing their related support function(s).

A.1

MODE A.1 A.15

~~OPERATIONAL/CONDITION - CONDITION~~

~~1.28~~ A ~~OPERATIONAL CONDITION / i.e., CONDITION~~ shall ~~be~~ correspond to any one inclusive combination of mode switch position, ~~and~~ average reactor coolant temperature, ~~as~~ and reactor vessel head closure bolt tensioning specified in Table ~~1.2~~ 1.1-1 with fuel in the reactor vessel.

A.16

PHYSICS TESTS

A.1

~~1.29~~ PHYSICS TESTS shall be those tests performed to measure the fundamental nuclear characteristics of the reactor core and related instrumentation ~~and~~ These tests are:

a. ~~(1)~~ described in Chapter 14 Initial Test Program of the FSAR; b. ~~(2)~~ authorized under the provisions of 10 CFR 50.59; or c. ~~(3)~~ otherwise approved by the Nuclear Regulatory Commission.

PRESSURE BOUNDARY LEAKAGE

A.1 A.9

~~1.30~~ ~~PRESSURE BOUNDARY~~ LEAKAGE ~~shall be leakage~~ through a nonisolable fault in a ~~reactor coolant system~~ RCS component body, pipe wall, or vessel wall.

A.1

PRIMARY CONTAINMENT INTEGRITY

1.31 PRIMARY CONTAINMENT INTEGRITY shall exist when:

a. All primary containment penetrations required to be closed during accident conditions are either:

A.17

A.1

DEFINITIONS

~~PRIMARY CONTAINMENT INTEGRITY~~

~~1.31 (Continued)~~

1. ~~Capable of being closed by an OPERABLE primary containment automatic isolation system, or~~

2. ~~Closed by at least one manual valve, blind flange, or deactivated automatic valve secured in its closed position, except as provided in Specification 3.6.3.~~

b. ~~All primary containment equipment hatches are closed and sealed.~~

c. ~~Each primary containment air lock is in compliance with the requirements of Specification 3.6.1.3.~~

d. ~~The primary containment leakage rates are within the limits of Specification 3.6.1.2.~~

e. ~~The suppression pool is in compliance with the requirements of Specification 3.6.2.1.~~

f. ~~The sealing mechanism associated with each primary containment penetration (e.g., welds, bellows, or O-rings) is OPERABLE.~~

A.17

PROCESS CONTROL PROGRAM

1.32 The PROCESS CONTROL PROGRAM (PCP) shall contain the current formula sampling, analyses, tests, and determinations to be made to assure that the processing and packaging of radioactive wastes, based on demonstrated processing of actual or simulated wet or liquid wastes, will be accomplished in such a way as to assure compliance with 10 CFR 20, 10 CFR 61, 10 CFR 71, and Federal and State regulations and other requirements governing the transport and disposal of radioactive waste.

A.18 moved to chapter 5.0

~~PURGE - PURGING~~

~~1.33 PURGE and PURGING shall be the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, concentration, or other operating condition, in such a manner that replacement air or gas is required to purify the confinement.~~

A.2

RATED THERMAL POWER (RTP)

1.34 RATED THERMAL POWER RTP shall be a total reactor core heat transfer rate to the reactor coolant of 3467 MWt.

A.1

REACTOR PROTECTION SYSTEM (RPS) RESPONSE TIME

1.35 The RPS REACTOR PROTECTION SYSTEM RESPONSE TIME shall be the that time interval from when the monitored parameter exceeds its RPS trip setpoint at the channel sensor

A.1

A.1

DEFINITIONS

REACTOR PROTECTION SYSTEM RESPONSE TIME

~~1.35~~ (Continued) A.1

until deenergization of the scram pilot valve solenoids. The response time may be measured by any series of sequential, overlapping, or total steps so that the entire response time is measured. means of :

REPORTABLE EVENT

~~1.36 A REPORTABLE EVENT shall be any of those conditions specified in 10 CFR 50.73.~~ A.2

ROD DENSITY

~~1.37 ROD DENSITY shall be the number of control rod notches inserted as a fraction of the total number of control rod notches. All rods fully inserted is equivalent to 100% ROD DENSITY.~~ LA.2

SECONDARY CONTAINMENT INTEGRITY

~~1.38 SECONDARY CONTAINMENT INTEGRITY shall exist when:~~ A.17

~~a. All reactor building and auxiliary bay penetrations required to be closed during accident conditions are either:~~

~~1. Capable of being closed by an OPERABLE reactor building automatic isolation system, or~~

~~2. Closed by at least one manual valve, blind flange, or deactivated automatic valve or damper secured in its closed position, except as provided in Table 3.6.5.2-1 of Specification 3.6.5.2.~~

~~b. All auxiliary bay hatches are closed and sealed.~~

~~c. The standby gas treatment system is in compliance with the requirements of Specification 3.6.5.3.~~

~~d. At least one door in each access to the reactor building and auxiliary bays is closed except during normal entry and exit.~~

~~e. The sealing mechanism associated with each reactor building and auxiliary bay penetration (e.g., welds, bellows, or O-rings) is OPERABLE.~~

~~f. The pressure within the reactor building and auxiliary bays is less than or equal to the value required by Specification 4.6.5.1.a.~~

SHUTDOWN MARGIN (SDM)

SDM that: a.

~~1.39~~ ~~SHUTDOWN MARGIN~~ shall be the amount of reactivity by which the reactor is subcritical or would be subcritical assuming all control rods are fully inserted except for the single control rod of highest reactivity worth which is A.1

move to after part b. on next page

A.1

DEFINITIONS

SHUTDOWN MARGIN (SDM)

b. The moderator temperature is

A.1

1.~~39~~ ~~(Continued)~~

Insert 3 A.20

Except Insert 3

C. Continued

~~assumed to be fully withdrawn and the reactor is in the shutdown condition,~~ ~~cold (i.e.,~~ 68°F), and xenon free.

a. The reactor is

~~SITE BOUNDARY~~

~~1.40 The SITE BOUNDARY shall be that line around the Nine Mile Point Nuclear Station beyond which the land is not owned, leased, or otherwise controlled by the Niagara Mohawk Power Corporation or the New York State Power Authority.~~

A.2

~~SOLIDIFICATION~~

~~1.41 SOLIDIFICATION shall be the conversion of wet wastes into a form that meets shipping and burial ground requirements.~~

~~SOURCE CHECK~~

~~1.42 A SOURCE CHECK shall be the qualitative assessment of channel response when the channel sensor is exposed to a source of increased radioactivity.~~

LA.3

STAGGERED TEST BASIS

A.1 ~~1.43~~ A STAGGERED TEST BASIS shall consist of: Insert 4 A.21

~~a. A test schedule for n systems, subsystems, trains, or other designated components obtained by dividing the specified test interval into n equal subintervals.~~

~~b. The testing of one system, subsystem, train, or other designated component at the beginning of each subinterval.~~

THERMAL POWER

A.1 ~~1.44~~ THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.

TURBINE BYPASS SYSTEM RESPONSE TIME

components

~~1.45~~ The TURBINE BYPASS SYSTEM RESPONSE TIME consists of two ~~time intervals~~:

A.1

a. The ~~Time~~ time from initial movement of the main turbine stop valve or control valve until 80% of the turbine bypass capacity is established, and

b. The ~~the~~ time from initial movement of the main turbine stop valve or control valve until initial movement of the turbine bypass valve.

The ~~Either~~ response time may be measured by means of any series of sequential, overlapping, or total steps ~~,~~ so that ~~both~~ the entire response time ~~components are~~ is measured.

A.20 **INSERT 3**

With control rods not capable of being fully inserted, the reactivity worth of these control rods must be accounted for in the determination of SDM.

A.21 **INSERT 4**

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

A.1

DEFINITIONS A.9

UNIDENTIFIED LEAKAGE

b. All — into the drywell that

1.46 UNIDENTIFIED LEAKAGE ~~shall be all leakage which~~ is not IDENTIFIED LEAKAGE; A.1

~~UNRESTRICTED AREA~~

~~1.47 An UNRESTRICTED AREA shall be any area at or beyond the SITE BOUNDARY, access to which is not controlled by the Niagara Mohawk Power Corporation or the New York State Power Authority for purposes of protection of individuals from exposure to radiation and radioactive materials, or any area within the SITE BOUNDARY used for residential quarters or for industrial, commercial institutional, and/or recreational purposes.~~

~~VENTILATION EXHAUST TREATMENT SYSTEM~~

~~1.48 A VENTILATION EXHAUST TREATMENT SYSTEM shall be any system designed and installed to reduce gaseous radioiodine or radioactive material in particulate form in effluents by passing ventilation or vent exhaust gases through charcoal absorbers and/or HEPA filters for the purpose of removing iodines or particulates from the gaseous exhaust stream prior to the release to the environment (such a system is not considered to have any effect on noble gas effluents). Engineered safety features (ESF) atmospheric cleanup systems are not considered to be VENTILATION EXHAUST TREATMENT SYSTEM components.~~ A.2

~~VENTING~~

~~1.49 VENTING shall be the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, concentration, or other operating condition, in such a manner that replacement air or gas is not provided or required during VENTING. Vent, used in system names, does not imply a VENTING process.~~ A.2

CORE OPERATING LIMITS REPORT (COLR)

A.1

1.50 The ~~CORE OPERATING LIMITS REPORT~~ COLR is the unit-specific document that provides CORE OPERATING LIMITS for the current ~~operating~~ reload cycle. These cycle-specific ~~CORE OPERATING~~ LIMITS shall be determined for each reload cycle in accordance with Specification ~~6.9.1.9~~ 5.6.5. Plant operation within these ~~Operating Limits~~ is addressed in individual specifications.

Cycle specific parameter limits

A.1

TABLE 1.1

SURVEILLANCE FREQUENCY NOTATIONS

NOTATION	FREQUENCY
S	At least once per 12 hours
D	At least once per 24 hours
W	At least once per 7 days
M	At least once per 31 days
Q	At least once per 92 days
SA	At least once per 184 days
A	At least once per 366 days
R	At least once per 18 months (550 days)
S/U	Prior to each reactor startup
P	Prior to each radioactive release
NA	Not applicable

A.8

Chapter 1.0

A.1

A.1

MODE

TITLE

A.1

MODES

M.1

TABLE ~~1.2~~ 1.1-1

~~OPERATIONAL CONDITIONS~~ MODES

Refuel(a) or

A.1

~~CONDITION~~ MODE TITLE	REACTOR MODE SWITCH POSITION	AVERAGE REACTOR COOLANT TEMPERATURE °F
1. Power Operation	Run	~~Any temperature~~ NA
2. Startup	Startup/Hot Standby	~~Any temperature~~ NA
3. Hot Shutdown	Shutdown ~~*,#~~	> 200°F ~~#~~
4. Cold Shutdown	Shutdown ~~**,†~~	≤ 200°F ~~##~~
5. Refueling ~~††~~ (b)	Shutdown or Refuel ~~*,#~~	~~≤ 140°F~~ NA

A.1 A.22 A.1 A.12 A.12 A.7 A.22 M.1 (a) M.1 A.1

~~TABLE NOTATIONS~~

A.22 moved to LCO 3.10.2

~~* The reactor mode switch may be placed in the Run or Startup/Hot Standby position to test the switch interlock functions provided that the control rods are verified to remain fully inserted by a second licensed operator or other technically qualified member of the unit technical staff.~~

A.22 moved to LCO 3.10.3 and LCO 3.10.4

~~** The reactor mode switch may be placed in the Refuel position while a single control rod is being moved provided that the one-rod-out interlock is OPERABLE.~~

A.22 moved to LCO 3.10.4

~~† The reactor mode switch may be placed in the Refuel position while a single control rod drive is being removed from the reactor pressure vessel per Specification 3.9.10.1.~~

A.7 One or more reactor

(b) ~~††~~ ~~Fuel in the reactor vessel with the~~ vessel head closure bolts less than fully tensioned, ~~or with the head removed.~~

A.1

~~\# See Special Test Exceptions 3.10.1 and 3.10.3.~~ A.12

~~\#\# See Special Test Exception 3.10.7.~~ A.12

M.1

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

A.19

add proposed Sections 1.2, 1.3, and 1.4 as shown in the NMP-2 ITS

A.1

Chapter 1.0

3/4.1 REACTIVITY CONTROL SYSTEMS

3/4.1.1 SHUTDOWN MARGIN

LIMITING CONDITIONS FOR OPERATION

3.1.1 The SHUTDOWN MARGIN shall be equal to or greater than:

a. 0.38% delta k/k with the highest worth rod analytically determined, or

b. 0.28% delta k/k with the highest worth rod determined by test.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, 3, 4, and 5.

ACTION:

With the SHUTDOWN MARGIN less than specified:

a. In OPERATIONAL CONDITION 1 or 2, reestablish the required SHUTDOWN MARGIN within 6 hours or be in at least HOT SHUTDOWN within the next 12 hours.

b. In OPERATIONAL CONDITION 3 or 4, immediately verify all insertable control rods to be inserted and suspend all activities that could reduce the SHUTDOWN MARGIN. In OPERATIONAL CONDITION 4, establish SECONDARY CONTAINMENT INTEGRITY within 8 hours.

c. In OPERATIONAL CONDITION 5, suspend CORE ALTERATIONS and other activities that could reduce the SHUTDOWN MARGIN and insert all insertable control rods within 1 hour. Establish SECONDARY CONTAINMENT INTEGRITY within 8 hours.

SURVEILLANCE REQUIREMENTS

4.1.1 The SHUTDOWN MARGIN shall be determined to be equal to or greater than specified at any time during the fuel cycle:

a. By measurement, prior to or during the first startup after each refueling.

b. By measurement, within 500 MWD/T before the core average exposure at which the predicted SHUTDOWN MARGIN, including uncertainties and calculation biases, is equal to the specified limit.

c. Within 12 hours after detection of a withdrawn control rod that is immovable, as a result of excessive friction or mechanical interference, or is untrippable, ~~except that the above required SHUTDOWN MARGIN shall be verified~~ acceptable with an increased allowance for the withdrawn worth of the immovable or untrippable control rod. A.20

See Discussion of Changes for ITS: 3.1.1, Shutdown Margin, in Section 3.1

ADMINISTRATIVE

A.1 In the conversion of the Nine Mile Point Unit 2 current Technical Specifications (CTS) to the proposed plant specific Improved Technical Specifications (ITS), certain wording preferences or conventions are adopted that do not result in technical changes (either actual or interpretational). Editorial changes, reformatting, and revised numbering are adopted to make the ITS consistent with the BWR Standard Technical Specifications, NUREG-1434, Rev. 1 (i.e., the Improved Standard Technical Specifications (ISTS)).

A.2 The definitions of AVERAGE PLANER EXPOSURE, E-AVERAGE DISINTEGRATION ENERGY, GASEOUS RADWASTE TREATMENT SYSTEM, LIMITING CONTROL ROD PATTERN, MEMBER(S) OF THE PUBLIC, MILK SAMPLING LOCATION, PURGE-PURGING, REPORTABLE EVENT, SITE BOUNDARY, SOLIDIFICATION, UNRESTRICTED AREA, VENTILATION EXHAUST TREATMENT SYSTEM, and VENTING are deleted since specific Specifications referring to them no longer contain their use, or no longer are retained in the NMP2 ITS. Discussion of the technical aspects of this change are addressed in each Specification where the phrase was used. The removal of a definition is considered administrative, with no impact of its own.

A.3 As a requirement for OPERABILITY of a Technical Specification channel, not all channels will have a "required" sensor, alarm, or channel failure trip function. Conversely, some channels may have a "required" display or interlock function. This is perceived as the intent of the NMP2 CTS definitions of CHANNEL CALIBRATION, CHANNEL FUNCTIONAL TEST, and LOGIC SYSTEM FUNCTIONAL TEST, and therefore, the revised wording in the ITS for these definitions more accurately reflects this intent.

Since the list of equipment functions in the definition of CHANNEL FUNCTIONAL TEST (e.g., alarm and/or trip functions) is intended to provide examples of attributes which must potentially be OPERABLE, dependent on whether it is "required" or not, the list can be applied to both analog and bistable channels, and the separate definition/requirement for analog and bistable channels can be combined into one common definition.

Additionally, the phrase "or actual," in reference to the injected signal for the CHANNEL FUNCTIONAL TEST, has been added as an explicit option to the currently required simulated signal. Some tests are performed by insertion of the actual signal into the logic (e.g., rod block interlocks). For others, there is no reason why an actual signal would preclude satisfactory performance of the test. Use of an actual signal instead of a "simulated" signal will not affect the performance of the channel. OPERABILITY can be adequately demonstrated in either case since the channel itself can not discriminate between "actual" or "simulated."

ADMINISTRATIVE

A.3 (cont'd) Various interpretations of the NMP2 CTS definitions of CHANNEL CALIBRATION, CHANNEL FUNCTIONAL TEST, and LOGIC SYSTEM FUNCTIONAL TEST could lead to a conclusion that these changes introduce some degree of flexibility and/or restriction. However, it is generally accepted that these changes reflect the underlying intent of the NMP2 CTS requirement and are therefore appropriately considered as "Administrative" changes.

A.4 Specific CHANNEL CALIBRATION requirements for thermocouples or RTDs have been added. The intent of a CHANNEL CALIBRATION is to adjust the channel output so that the channel responds with known range and accuracy. Most instrument channels contain an adjustable transmitter (sensor) which is also subject to drift. Thus, for most channels, a CHANNEL CALIBRATION includes adjustments to the sensor to re-establish proper input/output relationships. Certain types of sensing elements, by their design, construction, and application have an inherent resistance to drift. They are designed such that they have a fixed input/output response which cannot be adjusted or changed once installed. When a credible mechanism that can cause change or drift in this fixed response does not exist, it is unnecessary to test them in the same manner as the other remaining devices in the channel to demonstrate proper operation. RTDs and thermocouples are sensing elements that fall into such a category.

Thus, for these sensors, the appropriate calibration at the Frequencies specified in the NMP2 Technical Specifications would consist of a verification of OPERABILITY of the sensing element and a calibration of the remaining adjustable devices in the channel. Calibration of the adjustable devices in the channel is performed by applying the sensing elements' (RTDs or thermocouples) fixed input/output relationships to the remainder of the channel and making the necessary adjustments to ensure range and accuracy.

This NMP2 ITS "verification of OPERABILITY" of the sensing element (RTDs or thermocouples) is considered to be explicitly defining the currently accepted method for calibration of these instruments. As such, this change is considered to be administrative.

A.5 Currently, there are no sources loaded in the core. However, to be consistent with NUREG-1434, Rev. 1, it is proposed to be added to the CORE ALTERATION definition. This provides no operating restrictions but at the same time if sources are loaded in the future, the CORE ALTERATION definition will be correct.

ADMINISTRATIVE (continued)

A.6 The current definitions of CRITICAL POWER RATIO and FRACTION OF LIMITING POWER DENSITY, as editorially marked up, have been incorporated into the proposed definitions of MINIMUM CRITICAL POWER RATIO and MAXIMUM FRACTION OF LIMITING POWER DENSITY, respectively. No separate use of CPR or FLPD is made in the NMP2 ITS.

A.7 The intent of applying the MODE definition only when fuel is in the vessel, as specified in CTS Table 1.2, footnote ††, has been moved to the definition of MODE (refer also to Discussion of Change comment A.16). Since the vessel head can only be removed if the head closure bolts are less than fully tensioned, there is no purpose in including "or with the head removed."

A.8 The definition of FREQUENCY NOTATION has been deleted since the abbreviations in Table 1.1 are no longer used. All Surveillance Requirement Frequencies in the NMP2 ITS are directly specified.

A.9 The current definitions for IDENTIFIED LEAKAGE, PRESSURE BOUNDARY LEAKAGE, and UNIDENTIFIED LEAKAGE have been combined into one proposed defined term: LEAKAGE. The definitions of each of the categories of LEAKAGE are consistent with the current NMP2 definitions.

A.10 As specified in the second portion of the current definition of IDENTIFIED LEAKAGE (proposed LEAKAGE definition), the intended leakage is that which occurs into the drywell space (i.e., containment atmosphere). The "collection systems" specified in the first portion of the definitions are intended to be those for collection of leakages into the drywell space. This change is a clarification of the term, and therefore the revised wording more accurately reflects this intent.

A.11 The ISOLATION SYSTEM RESPONSE TIME definition has been modified to not include diesel generator starting and loading times. These times have been deleted since they are redundant to the diesel generator Surveillance Requirements in CTS 3.8.1.1 (proposed LCO 3.8.1, AC Sources — Operating). This deletion was recommended in both NUREG-1366 and Generic Letter 93-05. Since the actual technical requirements are not changing, this change is considered administrative.

ADMINISTRATIVE (continued)

A.12 CTS Table 1.2, footnotes # and ##, referencing Special Test Exceptions 3.10.1, 3.10.3, and 3.10.7 have been deleted. These footnotes only serve as a cross reference and are not needed. This is consistent with the BWR STS, NUREG-1434, Rev. 1.

A.13 The definition of LOGIC SYSTEM FUNCTIONAL TEST (LSFT) has been modified to exclude the actuated device. The actuated device is to be tested as part of a system functional test, which is specified in the system Specification. Deleting the actuated device from the definition of LSFT eliminates the confusion as to whether a previously performed LSFT is rendered invalid if the final actuated device is discovered to be inoperable as a consequence of another Surveillance (e.g., valve cycling). In instances where the NMP2 CTS does not contain a corresponding "system functional test," which would test the actuated device, one is added in the NMP2 ITS. Therefore, this change is seen as presenting the same technical requirements; however, part of the current requirements will be moved to other Specifications.

A.14 The definition of OFFSITE DOSE CALCULATION MANUAL has been moved to proposed Specification 5.5.1 in accordance with the BWR Standard Technical Specifications, NUREG-1434, Rev. 1. Any technical changes to this definition is addressed in the Discussion of Changes for ITS: Section 5.5.

A.15 The non-specific "necessary...electrical power" requirement is intended to be a requirement for only one source of power to be able to declare OPERABILITY; however, this definition had a history of being both "normal and emergency" in older (pre-1980) licensed TS. To minimize the potential for confusion, the intent of the NMP2 CTS requirement is more explicitly stated in the NMP2 ITS as "normal or emergency electrical power." Similarly, "specified function" could be misinterpreted. The NMP2 CTS intent is to address "safety function(s)" and not necessarily to also encompass any non-safety functions a system may also perform. These additions provide clarification of the NMP2 CTS requirement without any modification of intent.

A.16 OPERATIONAL CONDITION-CONDITION has been replaced with a definition of MODE to be consistent with terminology used in the NMP2 ITS. Since their use is interchangeable, this change is considered to be editorial. Two additional clarifying statements are added to indicate that defined MODES in proposed Table 1.1-1 apply only when fuel is in the reactor vessel and that reactor vessel head closure bolt tensioning is a parameter. This intent is conveyed by CTS Table 1.2, footnote ††.

ADMINISTRATIVE (continued)

A.17 The definitions of PRIMARY CONTAINMENT INTEGRITY and SECONDARY CONTAINMENT INTEGRITY have been deleted. This was done because of the confusion associated with these definitions compared to their use in their respective LCOs. The change is editorial in that all the requirements are specifically addressed in the LCOs for the Primary Containment and Secondary Containment, along with the remainder of the LCOs in the Containment Systems Section. Therefore the change is an administrative presentation preference.

A.18 The definition of PROCESS CONTROL PROGRAM has been moved to the Administrative Controls Chapter (Chapter 5.0). Any technical changes to this definition is addressed in the Discussion of Changes for CTS: 6.13.

A.19 The following sections are added to the Technical Specifications. These additions aid in the understanding and use of the new format and presentation style. Some conventions in applying the Technical Specifications to unusual situations have been the subject of debate and varying interpretation between the licensee and the NRC Staff. Because the guidance in these proposed sections establishes positions not previously formalized, the guidance is considered administrative. These sections are consistent with the BWR STS, NUREG-1434, Rev. 1. The added sections are as follows:

SECTION 1.2 - LOGIC CONNECTORS

Section 1.2 provides specific examples of the logical connectors "AND" and "OR" and the numbering sequence associated with their use.

SECTION 1.3 - COMPLETION TIMES

Section 1.3 provides proper use and interpretation of Completion Times. The Section also provides specific examples that aid the user in understanding Completion Times.

SECTION 1.4 - FREQUENCY

Section 1.4 provides proper use and interpretation of the Surveillance Frequency. The Section also provides specific examples that aid the user in understanding Surveillance Frequency.

ADMINISTRATIVE (continued)

A.20 The definition of SHUTDOWN MARGIN has been modified to address stuck control rods. This is consistent with the NMP2 CTS requirement found in CTS 4.1.1.c to account for the worth of a stuck control rod. The movement of this requirement to the SDM definition is considered to be editorial.

A.21 The definition of STAGGERED TEST BASIS has been modified to be consistent with its usage throughout the NMP2 ITS. The intent of the frequency of testing components on a STAGGERED TEST BASIS is not changed. The revised definition allows the minimum Surveillance interval to be specified in the Surveillance Requirements' Frequency column of the applicable LCOs, independent of the number of subsystems. This represents an editorial preference to the current TS presentation.

A.22 CTS Table 1.2, footnotes *, **, and †, have been moved to LCO requirements in the Special Operations Section (currently titled "Special Test Exceptions"). Any technical changes to these footnotes are addressed in the Discussion of Changes for ITS: 3.10.2, ITS: 3.10.3, and ITS: 3.10.4.

RELOCATED SPECIFICATIONS

None

TECHNICAL CHANGES - MORE RESTRICTIVE

M.1 CTS Table 1.2 has been modified by a) the addition of the head closure status (proposed footnote (a)) to Conditions (MODES) 3 and 4, b) the addition of the refuel mode switch position to MODE 2 (including footnote (a)), and c) the deletion of the coolant temperature limit of MODE 5. These changes address plant conditions not previously satisfying a defined MODE, or satisfying more than one MODE. The intent of these changes is to provide clarity and completeness in avoiding any potential misinterpretation, and as such could be considered administrative. However, since the changes eliminate the potential to interpret certain plant conditions such that no MODE, or a less restrictive MODE would exist, this change is discussed and justified as a "more restrictive" change. Specifically:

- STARTUP MODE will now include the mode switch position of "Refuel" when the head bolts are fully tensioned (footnote "(a)"). This is currently a plant condition which has no corresponding MODE and could therefore be incorrectly interpreted as not requiring the application of the majority of Technical Specifications. By defining

TECHNICAL CHANGES - MORE RESTRICTIVE

M.1 (cont'd)

this plant condition as STARTUP MODE, sufficiently conservative restrictions will be applied by the applicable LCOs.

- Clarifying the shutdown MODES with a new footnote stating "all reactor vessel head bolts fully tensioned" eliminates the overlap in defined MODES when the mode switch is in "Shutdown" position: with the vessel head detensioned, both the definition of REFUEL as well as COLD SHUTDOWN could apply. It is not the intent of the Technical Specification to allow an option of whether to apply REFUEL applicable LCOs or to apply COLD SHUTDOWN applicable LCOs. This change precludes an unacceptable interpretation.

- The definition of REFUEL would cease to be applicable when average coolant temperature exceeded 140° F. With the mode switch in "Refuel" a plant condition which has no corresponding MODE exists. This could therefore be incorrectly interpreted as not requiring the application of the majority of Technical Specifications. By defining the REFUEL MODE as including plant conditions with no specific coolant temperature range, sufficiently conservative restrictions will be applied by the applicable LCOs during all fueled conditions with the vessel head bolts detensioned.

TECHNICAL CHANGES - LESS RESTRICTIVE

"Generic"

LA.1 The definition of FRACTION OF RATED POWER (FRTP) in CTS 1.15 is used only in one proposed Specification (ITS 3.2.3). As such, the definition has been moved to the Bases for ITS 3.2.3, Average Power Range Monitor (APRM) Gain and Setpoint. The requirements of ITS 3.2.3 and the associated Surveillance Requirements are sufficient to ensure APRM gains and setpoints are appropriately controlled. The information in the definition of FRTP is not required in the ITS for proper interpretation of the Specification. However, for additional clarity, the definition of FRTP has been included in the Bases. This is consistent with the BWR STS, NUREG-1434, Rev. 1. Therefore, the relocated definition is not required to be in the ITS to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS.

LA.2 The definition of ROD DENSITY in CTS 1.37 is used in only one proposed Specification (ITS 3.1.2). As such, the definition has been moved to the

TECHNICAL CHANGES - LESS RESTRICTIVE

LA.2 (cont'd) Bases for ITS 3.1.2, "Reactivity Anomalies." The requirements of ITS 3.1.2 and the associated Surviellance Requirements are sufficient to ensure the reactivity anomaly is appropriately controlled and determined. The information in the definition of ROD DENSITY is not required in the ITS for proper interpretation. However, for additional clarity, the definition of rod density has been included in the Bases. Therefore, the relocated definition is not required to be in the ITS to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS.

LA.3 The definition of SOURCE CHECK in CTS 1.42 is used in only one proposed Specification (ITS 3.4.7). As such, the definition has been moved to the Bases for ITS 3.4.7, "RCS Leakage Detection System." The requirements of ITS 3.4.7 and the associated Surveillance Requirements are sufficient to ensure a source check is correctly performed. The information in the definition of SOURCE CHECK is not required in the ITS for proper interpretation. However, for additional clarity, the definition of source check has been included in the Bases. Therefore, the relocated definition is not required to be in the ITS to provide adequate protection of the public health and safety. Changes to the Bases will be controlled by the provisions of the proposed Bases Control Program described in Chapter 5 of the ITS.

"Specific"

L.1 The proposed CHANNEL FUNCTIONAL TEST (CFT) definition combining analog and bistable channel requirements results in an allowance for the bistable channel test signal to be injected "as close to the sensor as practicable" in lieu of "into the sensor," as is currently required by the CFT definition. Also, the proposed definition of LOGIC SYSTEM FUNCTIONAL TEST (LSFT) allows the signal to be injected "as close to the sensor as practicable" in lieu of "from the sensor," as is currently required by the LSFT definition. Injecting a signal at the sensor would in some cases involve significantly increased probabilities of initiating undesired circuits during the test since several logic channels are often associated with a particular sensor. Performing the test by injection of a signal at the sensor requires jumpering of the other logic channels to prevent their initiation during the test, or increases the scope of the test to include multiple tests of the other logic channels. Either method significantly increases the difficulty of performing the surveillance. Allowing initiation of the signal close to the sensor provides a complete test of the logic channel while significantly reducing this probability of undesired initiation.

TECHNICAL CHANGES - LESS RESTRICTIVE (continued)

L.2 CTS 1.10 states that the DOSE EQUIVALENT I-131 is calculated using the thyroid dose conversion factors found in Table III of TID 14844, "Calculation of Distance Factors for Power and Test Reactor Sites." The ITS allows DOSE EQUIVALENT I-131 to be calculated using any one of three thyroid dose conversion factors; TID-14844 (1962), Table E-7 of Regulatory Guide 1.109, Rev. 1 (1977), or Supplement 1 to ICRP-30 (1980). TID-14844 thyroid dose conversion factors result in higher doses and lower allowable activity levels than the other two references and are, therefore, conservative.

Using thyroid dose conversion factors other than those given in TID-14844 results in lower doses and higher allowable activity but is justified by the discussion given in the Federal Register (FR page 23360 Vl 56 No 98 May 21, 1991). This discussion accompanied the final rulemaking on 10 CFR 20 by the NRC. In that discussion, the NRC stated that they were incorporating modifications to existing concepts and recommendations of the ICRP and NCRP into NRC regulations. Incorporation of the methodology of ICRP-30 into the part 20 revision was specifically mentioned with the changes being made resulting from changes in the scientific techniques and parameters used in calculating dose. In a response to a specific question as to whether or not the ICRP 30 dose parameters should be used, the NRC stated that "Appropriate parameters for calculating organ doses can be found in ICRP-30 and its supplements.....". Lastly, Commissioner Curtis provided additional views of the revised 10 CFR 20 with respect to the backfit rule. In that discussion, he stated that the AEC, when they issued the original part 20, had emphasized that the standards were subject to change with the development of new knowledge and experience. He went on to say that the limits given in the revised 10 CFR 20 were based on up-to-date metabolic models and dose factors. This Federal Register entry shows clearly that, in general, the NRC was updating 10 CFR 20 to incorporate ICRP-30 recommendations and data. Given this discussion, it is concluded that using ICRP thyroid dose conversion factors to calculate DOSE EQUIVALENT I-131 is acceptable. Also, the Reg Guide 1.109 thyroid dose conversion factors are higher than the ICRP-30 thyroid dose conversion factors for all five iodine isotopes in question. Therefore, using Reg Guide 1.109 thyroid dose conversion factors to calculate DOSE EQUIVALENT I-131 is more conservative than ICRP-30 and is therefore acceptable.

NIAGARA MOHAWK
NINE MILE POINT UNIT 2
IMPROVED TECHNICAL SPECIFICATIONS

CHAPTER 1.0:
USE AND APPLICATION

NUREG-1434 ITS MARKUP
AND
JUSTIFICATION FOR DEVIATIONS

<CTS>

1.0 USE AND APPLICATION

1.1 Definitions

NOTE

<1.0> The defined terms of this section appear in capitalized type and are applicable throughout these Technical Specifications and Bases.

Term	Definition
<1.1> ACTIONS	ACTIONS shall be that part of a Specification that prescribes Required Actions to be taken under designated Conditions within specified Completion Times.
<1.3> AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)	The APLHGR shall be applicable to a specific planar height and is equal to the sum of the (LHGRs) [heat generation rate per unit length of fuel rod] for all the fuel rods in the specified bundle at the specified height divided by the number of fuel rods in the fuel bundle (at the height). S1
<1.4> CHANNEL CALIBRATION	A CHANNEL CALIBRATION shall be the adjustment, as necessary, of the channel output such that it responds within the necessary range and accuracy to known values of the parameter that the channel monitors. The CHANNEL CALIBRATION shall encompass the entire channel, including the required sensor, alarm, display, and trip functions, and shall include the CHANNEL FUNCTIONAL TEST. Calibration of instrument channels with resistance temperature detector (RTD) or thermocouple sensors may consist of an inplace qualitative assessment of sensor behavior and normal calibration of the remaining adjustable devices in the channel. The CHANNEL CALIBRATION may be performed by means of any series of sequential, overlapping, or total channel steps so that the entire channel is calibrated.
<1.5> CHANNEL CHECK	A CHANNEL CHECK shall be the qualitative assessment, by observation, of channel behavior during operation. This determination shall include, where possible, comparison of the channel indication and status to other indications or

(continued)

<CTS>

1.1 Definitions

<1.5> CHANNEL CHECK (continued)

status derived from independent instrument channels measuring the same parameter.

<1.6> CHANNEL FUNCTIONAL TEST

A CHANNEL FUNCTIONAL TEST shall be the injection of a simulated or actual signal into the channel as close to the sensor as practicable to verify OPERABILITY, including required alarm, interlock, display, and trip functions, and channel failure trips. The CHANNEL FUNCTIONAL TEST may be performed by means of any series of sequential, overlapping, or total channel steps so that the entire channel is tested.

<1.7> CORE ALTERATION

CORE ALTERATION shall be the movement of any fuel, sources, or reactivity control components, within the reactor vessel with the vessel head removed and fuel in the vessel. The following exceptions are not considered to be CORE ALTERATIONS:

a. Movement of source range monitors, local power range monitors, intermediate range monitors, traversing incore probes, or special movable detectors (including undervessel replacement); and Z3

b. Control rod movement, provided there are no fuel assemblies in the associated core cell.

Suspension of CORE ALTERATIONS shall not preclude completion of movement of a component to a safe position.

<1.50> CORE OPERATING LIMITS REPORT (COLR)

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

<1.10> DOSE EQUIVALENT I-131

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

(continued)

<CTS>

1.1 Definitions

<1.10> DOSE EQUIVALENT I-131 (continued)	conversion factors used for this calculation shall be those listed in ~~[~~Table III of TID-14844, AEC, 1962, "Calculation of Distance Factors for Power and Test Reactor Sites"~~ or those listed in~~ Table E-7 of Regulatory Guide 1.109, Rev. 1, NRC, 1977~~, or ICRP 30, Supplement to Part 1, page 192-212, Table titled, "Committed Dose Equivalent in Target Organs or Tissues per Intake of Unit Activity"~~]~~. (1) (1) (1)
<1.12> EMERGENCY CORE COOLING SYSTEM (ECCS) RESPONSE TIME	The ECCS RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its ECCS initiation setpoint at the channel sensor until the ECCS equipment is capable of performing its safety function (i.e., the valves travel to their required positions, pump discharge pressures reach their required values, etc.). Times shall include diesel generator starting and sequence loading delays, where applicable. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured..
<1.13> END OF CYCLE RECIRCULATION PUMP TRIP (EOC-RPT) SYSTEM RESPONSE TIME	The EOC-RPT SYSTEM RESPONSE TIME shall be that time interval from initial movement of the turbine stop valves or turbine control valves ~~signal generation by [the associated turbine stop valve limit switch or from when the turbine control valve hydraulic oil control oil pressure drops below the pressure switch setpoint]~~ to complete suppression of the electric arc between the fully open contacts of the recirculation pump circuit breaker. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured~~, [except for the breaker arc suppression time, which is not measured but is validated to conform to the manufacturer's design value]~~. (1) (4)
<1.19> ISOLATION SYSTEM RESPONSE TIME	The ISOLATION SYSTEM RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its isolation initiation setpoint at the channel sensor until the isolation valves travel to their required positions. ~~Times shall include diesel generator starting and sequence loading~~ (5)

(continued)

<CTS>

1.1 Definitions

<1.19> ISOLATION SYSTEM RESPONSE TIME (continued) — 6

~~delays, where applicable.~~ The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured.

~~L_a~~ — ~~The maximum allowable primary containment leakage rate, L_a, shall be [ ]% of primary containment air weight per day at the calculated peak containment pressure (P_a).~~ — 3

<1.18> <1.30> <1.46> LEAKAGE

LEAKAGE shall be:

a. Identified LEAKAGE

1. LEAKAGE into the drywell such as that from pump seals or valve packing, that is captured and conducted to a sump or collecting tank; or

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

b. Unidentified LEAKAGE

All LEAKAGE into the drywell that is not identified LEAKAGE; and — 2

~~c. Total LEAKAGE~~

~~Sum of the identified and unidentified LEAKAGE;~~ — 8

~~d.~~ c 8 Pressure Boundary LEAKAGE

LEAKAGE through a nonisolable fault in a Reactor Coolant System (RCS) component body, pipe wall, or vessel wall.

<1.21> 1 [LINEAR HEAT GENERATION RATE (LHGR) — The LHGR shall be the heat generation rate per unit length of fuel rod. It is the integral of the heat flux over the heat transfer area associated with the unit length.] 1

(continued)

<CTS>

1.1 Definitions (continued)

<1.22> LOGIC SYSTEM FUNCTIONAL TEST	A LOGIC SYSTEM FUNCTIONAL TEST shall be a test of all required logic components (i.e., all required relays and contacts, trip units, solid state logic elements, etc.) of a logic circuit, from as close to the sensor as practicable up to, but not including, the actuated device, to verify OPERABILITY. The LOGIC SYSTEM FUNCTIONAL TEST may be performed by means of any series of sequential, overlapping, or total system steps so that the entire logic system is tested.
1 <1.8> <1.14> MAXIMUM FRACTION OF LIMITING POWER DENSITY (MFLPD)	6 (FLPD) FLPD The MFLPD shall be the largest value of the fraction of limiting power density in the core. The fraction of limiting power density shall be the LHGR existing at a given location divided by the specified LHGR limit for that bundle type. 1
<1.9> <1.25> MINIMUM CRITICAL POWER RATIO (MCPR)	The MCPR shall be the smallest critical power ratio (CPR) that exists in the core (for each class of fuel). The CPR is that power in the assembly that is calculated by application of the appropriate correlation(s) to cause some point in the assembly to experience boiling transition, divided by the actual assembly operating power.
<1.28> MODE	A MODE shall correspond to any one inclusive combination of mode switch position, average reactor coolant temperature, and reactor vessel head closure bolt tensioning specified in Table 1.1-1 with fuel in the reactor vessel.
OPERABLE—OPERABILITY <1.27>	A system, subsystem, division, component, or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified safety function(s) and when all necessary attendant instrumentation, controls, normal or emergency electrical power, cooling and seal water, lubrication, and other auxiliary equipment that are required for the system, subsystem, division, component, or device to perform its specified safety function(s) are also capable of performing their related support function(s).

(continued)

<CTS>

1.1 Definitions (continued)

<1.29> **PHYSICS TESTS**

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

1 a. Described in Chapter ~~X~~14, Initial Test Program~~y~~ of the FSAR;

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

c. Otherwise approved by the Nuclear Regulatory Commission.

~~**PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR)**~~

~~The PTLR is the unit specific document that provides the reactor vessel pressure and temperature limits, including heatup and cooldown rates, for the current reactor vessel fluence period. These pressure and temperature limits shall be determined for each fluence period in accordance with Specification 5.6.6. Plant operation within these operating limits is addressed in LCO 3.4.11, "RCS Pressure and Temperature (P/T) Limits."~~ 7

<1.34> **RATED THERMAL POWER (RTP)**

RTP shall be a total reactor core heat transfer rate to the reactor coolant of ~~3833~~ 3467 MWt. 1

<1.35> **REACTOR PROTECTION SYSTEM (RPS) RESPONSE TIME**

The RPS RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its RPS trip setpoint at the channel sensor until de-energization of the scram pilot valve solenoids. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured.

<1.39> <4.1.1.c> **SHUTDOWN [redacted] (SDM)**

SDM shall be the amount of reactivity by which the reactor is subcritical or would be subcritical assuming that:

a. The reactor is xenon free;

b. The moderator temperature is 68°F; and

(continued)

<CTS>

1.1 Definitions

<1.39>
<4.1.1.c>

SHUTDOWN MARGIN (SDM) (continued)

c. All control rods are fully inserted except for the single control rod of highest reactivity worth, which is assumed to be fully withdrawn. With control rods not capable of being fully inserted, the reactivity worth of these control rods must be accounted for in the determination of SDM.

<1.43> STAGGERED TEST BASIS

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

<1.44> THERMAL POWER

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

<1.45>
1

[TURBINE BYPASS SYSTEM RESPONSE TIME

The TURBINE BYPASS SYSTEM RESPONSE TIME consists of two components:

a. The time from initial movement of the main turbine stop valve or control valve until 80% of the turbine bypass capacity is established; and

b. The time from initial movement of the main turbine stop valve or control valve until initial movement of the turbine bypass valve.

The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured.]

<CTS>

<Table 1.2>

Table 1.1-1 (page 1 of 1)
MODES

MODE	TITLE	REACTOR MODE SWITCH POSITION	AVERAGE REACTOR COOLANT TEMPERATURE (°F)
1	Power Operation	Run	NA
2	Startup	Refuel[a] or Startup/Hot Standby	NA
3	Hot Shutdown[a]	Shutdown	> [200] 1
4	Cold Shutdown[a]	Shutdown	≤ [200]
5	Refueling[b]	Shutdown or Refuel	NA

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

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

<CTS>
<DOC A.19>

1.0 USE AND APPLICATION

1.2 Logical Connectors

PURPOSE

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

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

BACKGROUND

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

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

EXAMPLES

The following examples illustrate the use of logical connectors.

(continued)

1.2 Logical Connectors

EXAMPLES (continued)

EXAMPLE 1.2-1

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. LCO not met.	A.1 Verify . . . AND A.2 Restore . . .	

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

(continued)

1.2 Logical Connectors

EXAMPLES (continued)

EXAMPLE 1.2-2

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. LCO not met.	A.1 Trip . . . OR A.2.1 Verify . . . AND A.2.2.1 Reduce . . . OR A.2.2.2 Perform . . . OR A.3 Align . . .	

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

<CTS>
<DOC A.19>

1.0 USE AND APPLICATION

1.3 Completion Times

PURPOSE

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

BACKGROUND

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

DESCRIPTION

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

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

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

(continued)

1.3 Completion Times

DESCRIPTION (continued)

However, when a <u>subsequent</u> division, subsystem, component, or variable expressed in the Condition is discovered to be inoperable or not within limits, the Completion Time(s) may be extended. To apply this Completion Time extension, two criteria must first be met. The subsequent inoperability:

a. Must exist concurrent with the <u>first</u> inoperability; and

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

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

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

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

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

The above Completion Time extension does not apply to a Completion Time with a modified "time zero." This modified "time zero" may be expressed as a repetitive time (i.e., "once per 8 hours," where the Completion Time is referenced from a previous completion of the Required Action versus the time of Condition entry) or as a time modified by the phrase "from discovery . . ." Example 1.3-3 illustrates one use of this type of Completion Time. The 10 day Completion Time specified for Conditions A and B in Example 1.3-3 may not be extended.

(continued)

1.3 Completion Times (continued)

EXAMPLES

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

EXAMPLE 1.3-1

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3. AND B.2 Be in MODE 4.	12 hours 36 hours

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

The Required Actions of Condition B are to be in MODE 3 within 12 hours AND in MODE 4 within 36 hours. A total of 12 hours is allowed for reaching MODE 3 and a total of 36 hours (not 48 hours) is allowed for reaching MODE 4 from the time that Condition B was entered. If MODE 3 is reached within 6 hours, the time allowed for reaching MODE 4 is the next 30 hours because the total time allowed for reaching MODE 4 is 36 hours.

If Condition B is entered while in MODE 3, the time allowed for reaching MODE 4 is the next 36 hours.

(continued)

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-2

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One pump inoperable.	A.1 Restore pump to OPERABLE status.	7 days
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3. AND B.2 Be in MODE 4.	12 hours 36 hours

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

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

While in LCO 3.0.3, if one of the inoperable pumps is restored to OPERABLE status and the Completion Time for Condition A has not expired, LCO 3.0.3 may be exited and operation continued in accordance with Condition A.

(continued)

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-2 (continued)

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

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

(continued)

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-3

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One Function X subsystem inoperable.	A.1 Restore Function X subsystem to OPERABLE status.	7 days AND 10 days from discovery of failure to meet the LCO
B. One Function Y subsystem inoperable.	B.1 Restore Function Y subsystem to OPERABLE status.	72 hours AND 10 days from discovery of failure to meet the LCO
C. One Function X subsystem inoperable. AND One Function Y subsystem inoperable.	C.1 Restore Function X subsystem to OPERABLE status. OR C.2 Restore Function Y subsystem to OPERABLE status.	72 hours 72 hours

(continued)

1.3 Completion Times

EXAMPLES

<u>EXAMPLE 1.3-3</u> (continued)

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

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

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

(continued)

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-4

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more valves inoperable.	A.1 Restore valve(s) to OPERABLE status.	4 hours
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3. AND B.2 Be in MODE 4.	12 hours 36 hours

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

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

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

(continued)

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-5

ACTIONS

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

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more valves inoperable.	A.1 Restore valve to OPERABLE status.	4 hours
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3. AND B.2 Be in MODE 4.	12 hours 36 hours

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

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

(continued)

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-5 (continued)

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

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

EXAMPLE 1.3-6

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One channel inoperable.	A.1 Perform SR 3.x.x.x. OR A.2 Reduce THERMAL POWER to ≤ 50% RTP.	Once per 8 hours 8 hours
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3.	12 hours

(continued)

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-6 (continued)

2 d

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

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

(continued)

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-7

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One subsystem inoperable.	A.1 Verify affected subsystem isolated.	1 hour AND Once per 8 hours thereafter
	AND	
	A.2 Restore subsystem to OPERABLE status.	72 hours
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3.	12 hours
	AND	
	B.2 Be in MODE 4.	36 hours

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

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

(continued)

1.3 Completion Times

EXAMPLES	<u>EXAMPLE 1.3-7</u> (continued) is met after Condition B is entered, Condition B is exited and operation may continue in accordance with Condition A, provided the Completion Time for Required Action A.2 has not expired.
IMMEDIATE COMPLETION TIME	When "Immediately" is used as a Completion Time, the Required Action should be pursued without delay and in a controlled manner.

<CTS>
<DOC A.19>

1.0 USE AND APPLICATION

1.4 Frequency

PURPOSE

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

DESCRIPTION

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

Limiting Condition for Operation

2

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

Sometimes special situations dictate when the requirements of a Surveillance are to be met. They are "otherwise stated" conditions allowed by SR 3.0.1. They may be stated as clarifying Notes in the Surveillance, as part of the Surveillance, or both. Example 1.4-4 discusses these special situations.

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

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

(continued)

1.4 Frequency

DESCRIPTION (continued)

criteria. SR 3.0.4 restrictions would not apply if both the following conditions are satisfied:

a. The Surveillance is not required to be performed; and

b. The Surveillance is not required to be met or, even if required to be met, is not known to be failed.

EXAMPLES

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

EXAMPLE 1.4-1

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
Perform CHANNEL CHECK.	12 hours

Example 1.4-1 contains the type of SR most often encountered in the Technical Specifications (TS). The Frequency specifies an interval (12 hours) during which the associated Surveillance must be performed at least one time. Performance of the Surveillance initiates the subsequent interval. Although the Frequency is stated as 12 hours, an extension of the time interval to 1.25 times the interval specified in the Frequency is allowed by SR 3.0.2 for operational flexibility. The measurement of this interval continues at all times, even when the SR is not required to be met per SR 3.0.1 (such as when the equipment is inoperable, a variable is outside specified limits, or the unit is outside the Applicability of the LCO). If the interval specified by SR 3.0.2 is exceeded while the unit is in a MODE or other specified condition in the Applicability of the LCO, and the performance of the Surveillance is not otherwise modified (refer to Examples 1.4-3 and 1.4-4), then SR 3.0.3 becomes applicable.

(continued)

1.4 Frequency

EXAMPLES

EXAMPLE 1.4-1 (continued)

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

EXAMPLE 1.4-2

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
Verify flow is within limits.	Once within 12 hours after ≥ 25% RTP AND 24 hours thereafter

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

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

(continued)

1.4 Frequency

EXAMPLES

EXAMPLE 1.4-2 (continued)

"Thereafter" indicates future performances must be established per SR 3.0.2, but only after a specified condition is first met (i.e., the "once" performance in this example). If reactor power decreases to < 25% RTP, the measurement of both intervals stops. New intervals start upon reactor power reaching 25% RTP.

EXAMPLE 1.4-3

SURVEILLANCE REQUIREMENTS

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

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

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

(continued)

1.4 Frequency

EXAMPLES

EXAMPLE 1.4-3 (continued)

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

EXAMPLE 1.4-4

SURVEILLANCE REQUIREMENTS

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

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

1. The brackets have been removed and the proper plant specific information has been provided.

2. Typographical/grammatical error corrected.

3. A Primary Containment Leakage Rate Testing Program has been added to Section 5.5, consistent with the letter from C. I. Grimes to D. J. Modeen, dated November 2, 1995. This letter transmitted the draft ITS pages marked up to reflect Appendix J, Option B testing requirements. The Program includes the definition of L_a, therefore, the definition in Section 1.1 is not needed. This change is also consistent with TSTF-52.

4. This optional allowance has been deleted. NMP2 measures the breaker arc suppression time.

5. The ISOLATION SYSTEM RESPONSE TIME definition has been modified to not include diesel generator starting and loading times. These times have been deleted since they are redundant to the diesel generator Surveillance Requirements in LCO 3.8.1, AC Sources — Operating. This deletion was recommended in both NUREG-1366 and Generic Letter 93-05.

6. An acronym has been provided for fraction of limiting power density (FLPD), consistent with the acronym provided in the applicable LCO (ITS 3.2.4).

7. The utilization of a Pressure and Temperature Limits Report (PTLR) requires the development, and NRC approval, of detailed methodologies for future revisions to P/T limits. At this time, NMP2 does not have the necessary methodologies submitted to the NRC for review and approval. Therefore, the proposed presentation removes references to the PTLR and proposes that the specific limits and curves be included in the P/T Limits Specification (ITS 3.4.11).

8. The term "total LEAKAGE" has not been adopted in the NMP2 ITS. The term is used in ISTS 3.4.5. The ISTS LCO 3.4.5.c limits total LEAKAGE to ≤ 30 gpm. ISTS Section 1.1 defines total LEAKAGE as the sum of the identified and unidentified LEAKAGE. Thus, ISTS 3.4.5.c allows the identified LEAKAGE to be as high as 30 gpm, provided the unidentified LEAKAGE IS 0 gpm. The NMP2 CTS requires the identified LEAKAGE to be ≤ 25 gpm. NMP2 does not desire to increase the identified LEAKAGE limit. Therefore, the LCO requirement has been changed in ITS LCO 3.4.5 to limit identified LEAKAGE to ≤ 25 gpm, instead of the ISTS less restrictive allowance of total LEAKAGE ≤ 30 GPM. Since the ITS LCO 3.4.5 does not use the term "total LEAKAGE," the ISTS definition of LEAKAGE has been changed in ITS 1.1 to delete the "total LEAKAGE" portion of

8. (continued)

the definition. Due to this deletion, the "pressure boundary LEAKAGE" portion of the definition has been renumbered. This change is consistent with the current licensing basis.

GENERIC NO SIGNIFICANT HAZARDS EVALUATION
ITS: CHAPTER 1.0 - USE AND APPLICATION

ADMINISTRATIVE CHANGES
("A.x" Labeled Comments/Discussions)

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

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

   The proposed change involves reformatting, renumbering, and rewording the existing Technical Specifications. The reformatting, renumbering, and rewording process involves no technical changes to the existing Technical Specifications. As such, this change is administrative in nature and does not impact initiators of analyzed events or assumed mitigation of accident or transient events. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

   The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in methods governing normal plant operation. The proposed change will not impose any new or eliminate any old requirements. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

   The proposed change will not reduce a margin of safety because it has no impact on any safety analyses assumptions. This change is administrative in nature. Therefore, the change does not involve a significant reduction in a margin of safety.

TECHNICAL CHANGES - MORE RESTRICTIVE
("M.x" Labeled Comments/Discussions)

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

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

   The proposed change provides more stringent requirements for operation of the facility. 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. The more restrictive requirements continue to ensure process variables, structures, systems, and components are maintained consistent with the safety analyses and licensing basis. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

   The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in the methods governing normal plant operation. The proposed change does impose different requirements. However, these changes are consistent with the assumptions in the safety analyses and licensing basis. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

   The imposition of more restrictive requirements either has no impact on or increases the margin of plant safety. As provided in the discussion of the change, each change in this category is by definition, providing additional restrictions to enhance plant safety. The change maintains requirements within the safety analyses and licensing basis. Therefore, this change does not involve a significant reduction in a margin of safety.

"GENERIC" LESS RESTRICTIVE CHANGES:
RELOCATING DETAILS TO TECHNICAL SPECIFICATION BASES, USAR, TRM, OR OTHER PLANT CONTROLLED DOCUMENTS
("LA.x" Labeled Comments/Discussions)

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

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

   The proposed change relocates certain details from the Technical Specifications to the Bases, USAR, TRM, or other plant controlled documents. The Bases, USAR, TRM, and other plant controlled documents containing the relocated information will be maintained in accordance with 10 CFR 50.59. In addition to 10 CFR 50.59 provisions, the Technical Specification Bases are subject to the change control provisions in the Administrative Controls Chapter of the ITS. The USAR is subject to the change control provisions of 10 CFR 50.71(e), and the plant procedures and other plant controlled documents are subject to controls imposed by plant administrative procedures, which endorse applicable regulations and standards. Since any changes to the Bases, USAR, TRM, or other plant controlled documents will be evaluated per the requirements of the Bases Control Program in Chapter 5.0 of the ITS or 10 CFR 50.59, no increase (significant or insignificant) in the probability or consequences of an accident previously evaluated will be allowed. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

   The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or a change in the methods governing normal plant operation. The proposed change will not impose or eliminate any requirements, and adequate control of the information will be maintained. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

   The proposed change will not reduce a margin of safety because it has no impact on any safety analysis assumptions. In addition, the details to be transposed from the Technical Specifications to the Bases, USAR, TRM, or other plant controlled

"GENERIC" LESS RESTRICTIVE CHANGES:
RELOCATING DETAILS TO TECHNICAL SPECIFICATION BASES, USAR, TRM, OR OTHER PLANT CONTROLLED DOCUMENTS
("LA.x" Labeled Comments/Discussions)

3. (continued)

documents are the same as the existing Technical Specifications. Since any future changes to these details in the Bases, USAR, TRM, or other plant controlled documents will be evaluated per the requirements of 10 CFR 50.59, no reduction (significant or insignificant) in a margin of safety will be allowed. Based on 10 CFR 50.92, the existing requirement for NRC review and approval of revisions, to these details proposed for relocation, does not have a specific margin of safety upon which to evaluate. However, since the proposed change is consistent with the BWR Standard Technical Specifications, NUREG-1434, Rev. 1, approved by the NRC Staff, revising the Technical Specifications to reflect the approved level of detail ensures no significant reduction in the margin of safety.

L.1 CHANGE

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

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

   Testing of bistable instrument channels during CHANNEL FUNCTIONAL TESTS such that the test signal does not include the "sensor" and performing LOGIC SYSTEM FUNCTIONAL TESTS such that the test signal does not include the "sensor" will significantly reduce the complications associated with performance of a surveillance on a sensor that provides input to multiple logic channels. The sensor will still be checked during a channel calibration. This reduction of complication will not affect the failure probability of the equipment but may reduce the probability of personnel error during the surveillance. Such reductions will not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

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

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

   This change does not involve a change to the limits or limiting condition of operation; only the method for performing a surveillance is changed. Since the proposed method affects only a single logic channel rather than potentially affecting multiple logic channels simultaneously, the change does not involve a significant reduction in a margin of safety.

L.2 CHANGE

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

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

   The proposed use of Regulatory Guide 1.109 and ICRP 30 thyroid dose conversion factors to calculate DOSE EQUIVALENT I-131 is a change in analysis methodology which does not include a physical change to the plant, a new mode of plant operation, or a change in surveillance frequency. Therefore, the probability of a previously analyzed accident would not increase. If Regulatory Guide 1.109 and ICRP 30 thyroid dose conversion factors are used to calculate maximum dose equivalent iodine specific activity, the total iodine activity (in units of μCi/gm) will increase and this activity is used to calculate the doses resulting from a Main Steam Line Break (MSLB). The calculated thyroid doses resulting from a MSLB would not increase as the same dose conversion factors used to calculate the DOSE EQUIVALENT I-131 thyroid activity would also be used to calculate the offsite thyroid doses. However, these dose conversion factors would be less than TID-14844 thyroid dose conversion factors used to calculate doses given in the USAR. Thyroid doses resulting from other accidents previously analyzed would decrease as the current USAR doses were calculated using TID-14844 dose conversion factors. Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

   The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated because the proposed change does not introduce a new mode of plant operation and does not require physical modification of the plant.

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

   The proposed change only refines the method of calculating thyroid doses and DOSE EQUIVALENT I-131 activity and in all cases, except the MSLB, would result in a significant increase in the margin of safety as the calculated doses would decrease significantly. The MSLB thyroid doses will not change significantly. Therefore, the proposed change does not involve a significant reduction in a margin of safety.

NIAGARA MOHAWK
NINE MILE POINT UNIT 2
IMPROVED TECHNICAL SPECIFICATIONS

CHAPTER 2.0:
SAFETY LIMITS

<u>IMPROVED TECHNICAL SPECIFICATIONS</u>

2.0 SAFETY LIMITS (SLs)

2.1 SLs

2.1.1 Reactor Core SLs

2.1.1.1 With the reactor steam dome pressure < 785 psig or core flow < 10% rated core flow:

THERMAL POWER shall be ≤ 25% RTP.

2.1.1.2 With the reactor steam dome pressure ≥ 785 psig and core flow ≥ 10% rated core flow:

MCPR shall be ≥ 1.09 for two recirculation loop operation or ≥ 1.10 for single recirculation loop operation.

2.1.1.3 Reactor vessel water level shall be greater than the top of active irradiated fuel.

2.1.2 Reactor Coolant System Pressure SL

Reactor steam dome pressure shall be ≤ 1325 psig.

2.2 SL Violations

With any SL violation, the following actions shall be completed within 2 hours:

2.2.1 Restore compliance with all SLs; and

2.2.2 Insert all insertable control rods.

B 2.0 SAFETY LIMITS (SLs)

B 2.1.1 Reactor Core SLs

BASES

BACKGROUND

GDC 10 (Ref. 1) requires, and SLs ensure, that specified acceptable fuel design limits are not exceeded during steady state operation, normal operational transients, and anticipated operational occurrences (AOOs).

The fuel cladding integrity SL is set such that no fuel damage is calculated to occur if the limit is not violated. Because fuel damage is not directly observable, a stepback approach is used to establish an SL, such that the MCPR is not less than the limit specified in Specification 2.1.1.2. MCPR greater than the specified limit represents a conservative margin relative to the conditions required to maintain fuel cladding integrity.

The fuel cladding is one of the physical barriers that separate the radioactive materials from the environs. The integrity of this cladding barrier is related to its relative freedom from perforations or cracking. Although some corrosion or use related cracking may occur during the life of the cladding, fission product migration from this source is incrementally cumulative and continuously measurable. Fuel cladding perforations, however, can result from thermal stresses, which occur from reactor operation significantly above design conditions.

While fission product migration from cladding perforation is just as measurable as that from use related cracking, the thermally caused cladding perforations signal a threshold beyond which still greater thermal stresses may cause gross, rather than incremental, cladding deterioration. Therefore, the fuel cladding SL is defined with a margin to the conditions that would produce onset of transition boiling (i.e., MCPR = 1.00). These conditions represent a significant departure from the condition intended by design for planned operation. The MCPR fuel cladding integrity SL ensures that during normal operation and during AOOs, at least 99.9% of the fuel rods in the core do not experience transition boiling.

Operation above the boundary of the nucleate boiling regime could result in excessive cladding temperature because of the onset of transition boiling and the resultant sharp

(continued)

BASES

BACKGROUND (continued)	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 reactor vessel water level SL ensures that adequate core cooling capability is maintained during all MODES of reactor operation. Establishment of Emergency Core Cooling System initiation setpoints higher than this safety limit provides margin such that the safety limit will not be reached or exceeded.

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 fuel design criterion that a MCPR limit is to be established, such that at least 99.9% of the fuel rods in the core would not be expected to experience the onset of transition boiling.

The Reactor Protection System setpoints (LCO 3.3.1.1, "Reactor Protection System (RPS) Instrumentation"), in combination with other LCOs, are designed to prevent any anticipated combination of transient conditions for Reactor Coolant System water level, pressure, and THERMAL POWER level that would result in reaching the MCPR Safety Limit.

2.1.1.1 Fuel Cladding Integrity

GE critical power correlations are applicable for all critical power calculations at pressures ≥ 785 psig and core flows ≥ 10% of rated flow. For operation at low pressures or low flows, another basis is used, as follows:

> Since the pressure drop in the bypass region is essentially all elevation head, the core pressure drop at low power and flows will always be > 4.5 psi. Analyses (Ref. 2) show that with a bundle flow of 28×10^3 lb/hr, bundle pressure drop is nearly independent of bundle power and has a value of 3.5 psi. Thus, the bundle flow with a 4.5 psi driving head will be > 28×10^3 lb/hr. Full scale ATLAS test

(continued)

BASES

APPLICABLE SAFETY ANALYSES

2.1.1.1 Fuel Cladding Integrity (continued)

data taken at pressures from 14.7 psia to 800 psia indicate that the fuel assembly critical power at this flow is approximately 3.35 MWt. With the design peaking factors, this corresponds to a THERMAL POWER > 50% RTP. Thus, a THERMAL POWER limit of 25% RTP for reactor pressure < 785 psig is conservative.

2.1.1.2 MCPR

The fuel cladding integrity SL is set such that no fuel damage is calculated to occur if the limit is not violated. Since the parameters that result in fuel damage are not directly observable during reactor operation, the thermal and hydraulic conditions that result in the onset of transition boiling have been used to mark the beginning of the region in which fuel damage could occur. Although it is recognized that the onset of transition boiling would not result in damage to BWR fuel rods, the critical power at which boiling transition is calculated to occur has been adopted as a convenient limit. However, the uncertainties in monitoring the core operating state and in the procedures used to calculate the critical power result in an uncertainty in the value of the critical power. Therefore, the fuel cladding integrity SL is defined as the critical power ratio in the limiting fuel assembly for which more than 99.9% of the fuel rods in the core are expected to avoid boiling transition, considering the power distribution within the core and all uncertainties.

The MCPR SL is determined using a statistical model that combines all the uncertainties in operating parameters and the procedures used to calculate critical power. The probability of the occurrence of boiling transition is determined using the approved General Electric Critical Power correlations. Details of the fuel cladding integrity SL calculation are given in References 3 and 4. Reference 3 also includes a tabulation of the uncertainties used in the determination of the MCPR SL and Reference 4 also provides the nominal values of the parameters used in the MCPR SL statistical analysis.

(continued)

BASES

APPLICABLE SAFETY ANALYSES (continued)	<u>2.1.1.3 Reactor Vessel Water Level</u> During MODES 1 and 2, the reactor vessel water level is required to be above the top of the active irradiated fuel to provide core cooling capability. With fuel in the reactor vessel during periods when the reactor is shut down, consideration must be given to water level requirements due to the effect of decay heat. If the water level should drop below the top of the active irradiated fuel during this period, the ability to remove decay heat is reduced. This reduction in cooling capability could lead to elevated cladding temperatures and clad perforation in the event that the water level becomes < 2/3 of the core height. The reactor vessel water level SL has been established at the top of the active irradiated fuel to provide a point that can be monitored and to also provide adequate margin for effective action.
SAFETY LIMITS	The reactor core SLs are established to protect the integrity of the fuel clad barrier to prevent the release of radioactive materials to the environs. SL 2.1.1.1 and SL 2.1.1.2 ensure that the core operates within the fuel design criteria. SL 2.1.1.3 ensures that the reactor vessel water level is greater than the top of the active irradiated fuel in order to prevent elevated clad temperatures and resultant clad perforations.
APPLICABILITY	SLs 2.1.1.1, 2.1.1.2, and 2.1.1.3 are applicable in all MODES.
SAFETY LIMIT VIOLATIONS	<u>2.2</u> Exceeding an SL may cause fuel damage and create a potential for radioactive releases in excess of 10 CFR 100, "Reactor Site Criteria," limits (Ref. 5). Therefore, it is required to insert all insertable control rods and restore compliance with the SL within 2 hours. The 2 hour Completion Time ensures that the operators take prompt remedial action and the probability of an accident occurring during this period is minimal.

(continued)

BASES (continued)

REFERENCES

1. 10 CFR 50, Appendix A, GDC 10.

2. GE Service Information Letter No. 516, Supplement 2, "Core Flow Indication in the Low-Flow Region," January 19, 1996.

3. NEDE-24011-P-A, "GE Standard Application for Reactor Fuel," (revision specified in the COLR).

4. Supplemental Reload Licensing Report for Nine Mile Point Nuclear Station Unit 2 (revision specified in the COLR).

5. 10 CFR 100.

B 2.0 SAFETY LIMITS (SLs)

B 2.1.2 Reactor Coolant System (RCS) Pressure SL

BASES

BACKGROUND

The SL on reactor steam dome pressure protects 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. Establishing an upper limit on reactor steam dome pressure ensures continued RCS integrity. According to 10 CFR 50, Appendix A, GDC 14, "Reactor Coolant Pressure Boundary," and GDC 15, "Reactor Coolant System Design" (Ref. 1), the reactor coolant pressure boundary (RCPB) shall be designed with sufficient margin to ensure that the design conditions are not exceeded during normal operation and anticipated operational occurrences (AOOs).

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 are hydrostatically tested at 125% of design pressure, in accordance with ASME Code requirements, prior to initial operation when there is no fuel in the core. Any further hydrostatic testing with fuel in the core may be done under LCO 3.10.1, "Inservice Leak and Hydrostatic Testing Operation." Following inception of unit operation, RCS components shall be pressure tested in accordance with the requirements of ASME Code, Section XI (Ref. 3).

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" (Ref. 4). If this occurred in conjunction with a fuel cladding failure, the number of protective barriers designed to prevent radioactive releases from exceeding the limits would be reduced.

APPLICABLE SAFETY ANALYSES

The RCS safety/relief valves and the Reactor Protection System Reactor Vessel Steam Dome Pressure—High Function have settings established to ensure that the RCS pressure SL will not be exceeded.

(continued)

BASES

APPLICABLE SAFETY ANALYSES (continued)	The RCS pressure SL has been selected such that it is at a pressure below which it can be shown that the integrity of the system is not endangered. The reactor pressure vessel is designed to ASME, Boiler and Pressure Vessel Code, Section III, 1971 Edition, including Addenda through the winter of 1972 (Ref. 5), which permits a maximum pressure transient of 110%, 1375 psig, of design pressure 1250 psig. The SL of 1325 psig, as measured in the reactor steam dome, is equivalent to 1375 psig at the lowest elevation of the RCS. The RCS is designed to ASME Code, Section III, 1977 Edition, including Addenda through the summer of 1977 (Ref. 6), for the reactor recirculation piping, which permits a maximum pressure transient of 110% of design pressures of 1250 psig for suction piping up to the reactor recirculation pump, 1650 psig for discharge piping up to and including the discharge blocking valve, and 1550 psig for the piping after the discharge blocking valve. The RCS pressure SL is selected to be the lowest transient overpressure allowed by the applicable codes.
SAFETY LIMITS	The maximum transient pressure allowable in the RCS pressure vessel under the ASME Code, Section III, is 110% of design pressure. The maximum transient pressure allowable in the RCS piping, valves, and fittings is 110% of design pressures of 1250 psig for suction piping up to the reactor recirculation pump, 1650 psig for discharge piping up to and including the discharge blocking valve, and 1550 psig for the piping after the discharge blocking valve. The most limiting of these allowances is the 110% of the reactor vessel and the suction piping up to the reactor recirculation pump design pressures; therefore, the SL on maximum allowable RCS pressure is established at 1325 psig as measured at the reactor steam dome.
APPLICABILITY	SL 2.1.2 applies in all MODES.
SAFETY LIMIT VIOLATIONS	<u>2.2</u> Exceeding the RCS pressure SL may cause RCS failure and create a potential for radioactive releases in excess of 10 CFR 100, "Reactor Site Criteria," limits (Ref. 4). Therefore, it is required to insert all insertable control

(continued)

BASES

SAFETY LIMIT VIOLATIONS	2.2 (continued) rods and restore compliance with the SL within 2 hours. The 2 hour Completion Time ensures that the operators take prompt remedial action and also assures that the probability of an accident occurring during this period is minimal.
REFERENCES	1. 10 CFR 50, Appendix A, GDC 14, GDC 15, and GDC 28. 2. ASME, Boiler and Pressure Vessel Code, Section III, Article NB-7000. 3. ASME, Boiler and Pressure Vessel Code, Section XI, Article IWA-5000. 4. 10 CFR 100. 5. ASME, Boiler and Pressure Vessel Code, Section III, 1971 Edition, Addenda, winter of 1972. 6. ASME, Boiler and Pressure Vessel Code, Section III, 1977 Edition, Addenda, summer of 1977.

A.1

Chapter 2.0

2.0 SAFETY LIMITS AND LIMITING SAFETY SYSTEM SETTINGS — A.2 moved to LCO 3.3.1.1

2.1 SAFETY LIMITS

THERMAL POWER, Low Pressure or Low Flow

2.1.1.1 2.1.1 THERMAL POWER shall not exceed 25% of RATED THERMAL POWER with the reactor vessel steam dome pressure less than 785 psig or core flow less than 10% of rated flow.

APPLICABILITY: OPERATIONAL CONDITIONS 1 and 2. — M.1

ACTION:

2.2 With THERMAL POWER exceeding 25% of RATED THERMAL POWER and the reactor vessel steam dome pressure less than 785 psig or core flow less than 10% of rated flow, be in at least HOT SHUTDOWN within 2 hours ~~and comply with the requirements of Specification 6.7.~~ — A.3

THERMAL POWER, High Pressure and High Flow — A.4

2.1.1.2 2.1.2 The MINIMUM CRITICAL POWER RATIO (MCPR)* shall not be less than 1.09 with two recirculation loop operation and shall not be less than 1.10 with single recirculation loop operation with the reactor vessel steam dome pressure greater than 785 psig and core flow greater than 10% of rated flow. — M.2

APPLICABILITY: OPERATIONAL CONDITIONS 1 and 2. — M.1

ACTION: — A.4

2.2 With MCPR* less than 1.09, with two recirculation loop operation or less than 1.10 with single loop operation, the reactor vessel steam dome pressure greater than 785 psig, and core flow greater than 10% of rated flow, be in at least HOT SHUTDOWN within 2 hours ~~and comply with the requirements of Specification 6.7.~~ — M.2 — A.3

REACTOR COOLANT SYSTEM PRESSURE

2.1.2 2.1.3 The reactor coolant system pressure, as measured in the reactor vessel steam dome, shall not exceed 1325 psig.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, 3, and 4. — M.1

ACTION:

2.2 With the reactor coolant system pressure as measured in the reactor vessel steam dome above 1325 psig, be in at least HOT SHUTDOWN with reactor coolant system pressure less than or equal to 1325 psig within 2 hours ~~and comply with the requirements of Specification 6.7.~~ — A.3

REACTOR VESSEL WATER LEVEL

2.1.1.3 2.1.4 The reactor vessel water level shall be above the top of the active irradiated fuel.

~~* MCPR values are applicable to Cycle 7 operation only.~~ — A.4

A.1

Chapter 2.0

SAFETY LIMITS AND LIMITING SAFETY SYSTEM SETTINGS A.2 Moved to LCO 3.3.1.1

SAFETY LIMITS REACTOR VESSEL WATER LEVEL

2.1.4 (Continued)

APPLICABILITY: OPERATIONAL CONDITIONS 3, 4, and 5 M.1

ACTION:

2.2 With the reactor vessel water level at or below the top of the active irradiated fuel, ~~manually initiate the ECCS to~~ restore the water level within 2 hours ~~after depressurizing the reactor vessel, if required.~~ L.1 ~~Comply with the requirements of Specification 6.7.~~ A.3

2.2 LIMITING SAFETY SYSTEM SETTINGS

REACTOR PROTECTION SYSTEM INSTRUMENTATION SETPOINTS

2.2.1 The reactor protection system instrumentation setpoints shall be set consistent with the Trip Setpoint values shown in Table 2.2.1-1.

A.2 Moved to LCO 3.3.1.1

APPLICABILITY: As shown in Table 3.3.1-1.

ACTION:

With a reactor protection system instrumentation setpoint less conservative than the value shown in the Allowable Values column of Table 2.2.1-1, declare the channel inoperable and apply the applicable ACTION statement requirement of Specification 3.3.1 until the channel is restored to OPERABLE status with its setpoint adjusted consistent with the Trip Setpoint value.

TABLE 2.2.1-1

REACTOR PROTECTION SYSTEM INSTRUMENTATION SETPOINTS

FUNCTIONAL UNIT	TRIP SETPOINT	ALLOWABLE VALUE
1. Intermediate Range Monitor, - Neutron Flux - High	≤120/125 divisions of full scale	≤122/125 divisions of full scale
2. Average Power Range Monitor:		
a. Neutron Flux - Upscale, Setdown	≤15% of RATED THERMAL POWER	≤20% of RATED THERMAL POWER
b. Flow-Biased Simulated Thermal Power - Upscale		
1) Flow-Biased 2) High-Flow-Clamped	≤0.58 (W-ΔW)[(a)] + 59%, with a maximum of ≤113.5% of RATED THERMAL POWER	≤0.58 (W-ΔW)[(a)] + 62%, with a maximum of ≤115.5% of RATED THERMAL POWER
c. Fixed Neutron Flux - Upscale	≤118% of RATED THERMAL POWER	≤120% of RATED THERMAL POWER
d. Inoperative	NA	NA
e. 2-Out-Of-4 Voter	NA	NA
3. Reactor Vessel Steam Dome Pressure - High	≤1052 psig	≤1072 psig
4. Reactor Vessel Water Level - Low, Level 3	≥159.3 in. above instrument zero*	≥157.8 in. above instrument zero
5. Main Steam Line Isolation Valve - Closure	≤8% closed	≤12% closed
6. Main Steam Line Radiation [(b)] - High	≤3.0 x full-power background	≤3.6 x full-power background
7. Drywell Pressure - High	≤1.68 psig	≤1.88 psig

* See Bases Figure B3/4 3-1.

(a) The Average Power Range Monitor Scram Function varies as a function of recirculation loop drive flow (W). ΔW is defined as the difference in indicated drive flow (in percent of drive flow which produces rated core flow) between two loop and single loop operation at the same core flow. ΔW=0 for two loop operation. ΔW=5% for single loop operation.

(b) See footnote (**) to Table 3.3.2-2 for trip setpoint during hydrogen addition test.

A.1

A.2

moved to LCO 3.3.1.1

Chapter 2.0

TABLE 2.2.1-1 (Continued)

REACTOR PROTECTION SYSTEM INSTRUMENTATION SETPOINTS

FUNCTIONAL UNIT	TRIP SETPOINT	ALLOWABLE VALUE
8. Scram Discharge Volume Water Level - High		
a. Level Transmitter/Trip Unit	$\leq$43.4 in.	$\leq$49.5 in.
b. Float Switch	$\leq$48.5 in.	$\leq$49.5 in.
9. Turbine Stop Valve - Closure	$\leq$5% closed	$\leq$7% closed
10. Turbine Control Valve Fast Closure, Trip Oil Pressure - Low	$\geq$530 psig	$\geq$465 psig
11. Reactor Mode Switch Shutdown Position	NA	NA
12. Manual Scram	NA	NA

A.1

A.2

Moved to LCO 3.3.1.1

Chapter 2.0

DISCUSSION OF CHANGES
ITS: CHAPTER 2.0 - SAFETY LIMITS

ADMINISTRATIVE

A.1 In the conversion of the Nine Mile Point Unit 2 current Technical Specifications (CTS) to the proposed plant specific Improved Technical Specifications (ITS), certain wording preferences or conventions are adopted that do not result in technical changes (either actual or interpretational). Editorial changes, reformatting, and revised numbering are adopted to make the ITS consistent with the BWR Standard Technical Specifications, NUREG-1434, Rev. 1 (i.e., the Improved Standard Technical Specifications (ISTS)).

A.2 The CTS 2.2 requirements for the Limiting Safety System Settings are being moved to Section 3.3 of the ITS in accordance with the format of the BWR Standard Technical Specifications, NUREG-1434, Revision 1. Any technical changes to these requirements will be discussed in the Discussion of Changes for ITS: 3.3.1.1.

A.3 The details contained in the Actions of CTS 2.1.1, 2.1.2, 2.1.3, and 2.1.4 to comply with the requirements of Specification 6.7 are proposed to be deleted. The format of the proposed Technical Specifications does not include providing cross references. In addition, Specification 6.7 has been deleted from the Technical Specifications (see Discussion of Changes for CTS: 6.7 in proposed Chapter 5.0). Therefore, the existing references to Specification 6.7 serve no functional purpose and its removal is an administrative change.

A.4 Footnote * to CTS 2.1.1 and its Action, which states that the MCPR Safety Limit is applicable to Cycle 7 operation only, has been deleted. When the core is modified due to a new reload, analyses must be performed to ensure all assumptions related to fuel limits are still valid. If the MCPR Safety Limit is affected, then a Technical Specification change would have to be made prior to starting up after a refueling outage. Therefore, this footnote is just a reminder to not to forget to change the Technical Specifications if needed. In addition, when the ITS are implemented, NMP2 will be in Cycle 8.

RELOCATED SPECIFICATIONS

None.

TECHNICAL CHANGES - MORE RESTRICTIVE

M.1 The APPLICABILITY of each of the SLs in CTS 2.1.1, 2.1.2, 2.1.3, and 2.1.4 is extended to all MODES of operation. Although it is physically impossible to violate some SLs in some MODES, any SL violation should

TECHNICAL CHANGES - MORE RESTRICTIVE

M.1 (cont'd) receive the same attention and response. This change represents an additional restriction on plant operation.

M.2 Limits on steam dome pressure and core flow in CTS 2.1.2 (ITS 2.1.1.2) are now specified as "greater than or equal to" instead of "greater than." The Safety Limits in CTS 2.1 do not address the situation when steam dome pressure and core flow are equal to the limits. This change resolves a discontinuity between the Safety Limits in CTS 2.1.1 (ITS 2.1.1.1) and CTS 2.1.2 (ITS 2.1.1.2).

TECHNICAL CHANGES - LESS RESTRICTIVE

"Generic"

None

"Specific"

L.1 The required action of CTS 2.1.4 has been made less specific to allow operator flexibility in determining the best method to restore the reactor vessel water level. Directions for the methods of restoring reactor vessel water level (manually initiate the ECCS, after depressurizing the reactor vessel, if required) are removed from the Technical Specifications. This detail of how to restore the reactor vessel water level is not necessary to ensure restoration of the reactor vessel water level in a timely manner. The action to restore compliance with the Safety Limit has been maintained in ITS SL 2.2.1, which provides a 2 hour Completion Time for restoration of the limit. The time frame for completion of the action is consistent with the allowed time to restore other Safety Limit violations and allows appropriate actions to be evaluated by the operator and completed in a timely manner. In addition, restoration of reactor vessel water level is part of a coordinated response to an unplanned transient governed by Emergency Operating Procedures.

DISCUSSION OF CHANGES
ITS: CHAPTER 2.0 - SAFETY LIMITS BASES

The Bases of the current Technical Specifications for this chapter (pages B 2-1 through B 2-9) have been completely replaced by revised Bases that reflect the format and applicable content of NMP2 ITS Chapter 2.0, consistent with the BWR Standard Technical Specifications, NUREG-1434, Rev. 1. The revised Bases are as shown in the NMP2 ITS Bases.

<CTS>

2.0 SAFETY LIMITS (SLs)

2.1 SLs

2.1.1 Reactor Core SLs

<2.1.1> 2.1.1.1 With the reactor steam dome pressure < 785 psig or core flow < 10% rated core flow:

THERMAL POWER shall be ≤ 25% RTP.

<2.1.2> 2.1.1.2 With the reactor steam dome pressure ≥ 785 psig and core flow ≥ 10% rated core flow:

1 MCPR shall be ≥ ~~[1.07]~~ 1.09 for two recirculation loop operation or ≥ ~~[1.08]~~ 1.10 for single recirculation loop operation.

<2.1.4> 2.1.1.3 Reactor vessel water level shall be greater than the top of active irradiated fuel.

<2.1.3> 2.1.2 Reactor Coolant System Pressure SL

Reactor steam dome pressure shall be ≤ 1325 psig.

2.2 SL Violations

<2.1.1 Act>
<2.1.2 Act>
<2.1.3 Act>
TSTF-05
<2.1.4 Act>

With any SL violation, the following actions shall be completed within 2 hours:

~~2.2.1 Within 1 hour, notify the NRC Operations Center, in accordance with 10 CFR 50.72.~~

~~2.2.2 Within 2 hours:~~

2.2.1 Restore compliance with all SLs; and

2.2.2 Insert all insertable control rods.

~~2.2.3 Within 24 hours, notify the [General Manager—Nuclear Plant and Vice President—Nuclear Operations].~~

TSTF-65 changes not shown

(continued)

2.0 SLs

2.2 ~~SL Violations (continued)~~

~~2.2.4 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 and the [General Manager—Nuclear Plant and Vice President—Nuclear Operations].~~

~~2.2.5 Operation of the unit shall not be resumed until authorized by the NRC.~~

TSTF-5

TSTF-65 changes not shown

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

B 2.0 SAFETY LIMITS (SLs)

B 2.1.1 Reactor Core SLs

BASES

BACKGROUND

GDC 10 (Ref. 1) requires, and SLs ensure, that specified acceptable fuel design limits are not exceeded during steady state operation, normal operational transients, and anticipated operational occurrences (AOOs).

1 The fuel cladding integrity SL is set such that no ~~significant~~ fuel damage is calculated to occur if the limit is not violated. Because fuel damage is not directly observable, a stepback approach is used to establish an SL, such that the MCPR is not less than the limit specified in Specification 2.1.1.2 ~~for [both General Electric Company (GE) and Advanced Nuclear Fuel Corporation (ANF) fuel]~~. 2 MCPR greater than the specified limit represents a conservative margin relative to the conditions required to maintain fuel cladding integrity.

The fuel cladding is one of the physical barriers that separate the radioactive materials from the environs. The integrity of this cladding barrier is related to its relative freedom from perforations or cracking. Although some corrosion or use related cracking may occur during the life of the cladding, fission product migration from this source is incrementally cumulative and continuously measurable. Fuel cladding perforations, however, can result from thermal stresses, which occur from reactor operation significantly above design conditions.

While fission product migration from cladding perforation is just as measurable as that from use related cracking, the thermally caused cladding perforations signal a threshold beyond which still greater thermal stresses may cause gross, rather than incremental, cladding deterioration. Therefore, the fuel cladding SL is defined with a margin to the conditions that would produce onset of transition boiling (i.e., MCPR = 1.00). These conditions represent a significant departure from the condition intended by design for planned operation. The MCPR fuel cladding integrity SL ensures that during normal operation and during AOOs, at least 99.9% of the fuel rods in the core do not experience transition boiling.

(continued)

BASES

BACKGROUND (continued)

Operation above the boundary of the nucleate boiling regime could result in excessive cladding temperature because of the onset of transition boiling 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.

3 <INSERT B2.1.1 BKGRD>

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 fuel design criterion that an MCPR limit is to be established, such that at least 99.9% of the fuel rods in the core would not be expected to experience the onset of transition boiling. 6

The Reactor Protection System setpoints (LCO 3.3.1.1, "Reactor Protection System (RPS) Instrumentation"), in combination with other LCOs, are designed to prevent any anticipated combination of transient conditions for Reactor Coolant System water level, pressure, and THERMAL POWER level that would result in reaching the MCPR ~~limit~~ Safety Limit. 5

2.1.1.1 ~~a~~ 1 <u>Fuel Cladding Integrity</u> ~~[General Electric Company (GE) Fuel]~~ 2

GE critical power correlations are applicable for all critical power calculations at pressures ≥ 785 psig and core flows ≥ 10% of rated flow. For operation at low pressures or low flows, another basis is used, as follows:

> Since the pressure drop in the bypass region is essentially all elevation head, the core pressure drop at low power and flows will always be > 4.5 psi. Analyses (Ref. 2) show that with a bundle flow of 28 x 10^3 lb/hr, bundle pressure drop is nearly independent of bundle power and has a value of 3.5 psi. Thus, the bundle flow with a 4.5 psi driving head will be > 28 x 10^3 lb/hr. Full scale ATLAS test data taken at pressures from 14.7 psia to 800 psia

(continued)

3

INSERT B 2.1.1 BKGRD

The reactor vessel water level SL ensures that adequate core cooling capability is maintained during all MODES of reactor operation. Establishment of Emergency Core Cooling System initiation setpoints higher than this safety limit provides margin such that the safety limit will not be reached or exceeded.

BASES

APPLICABLE SAFETY ANALYSES

2.1.1.1a 4 Fuel Cladding Integrity ~~[General Electric Company (GE) Fuel]~~ 2 (continued)

indicate that the fuel assembly critical power at this flow is approximately 3.35 MWt. With the design peaking factors, this corresponds to a THERMAL POWER > 50% RTP. Thus, a THERMAL POWER limit of 25% RTP for reactor pressure < 785 psig is conservative.

~~2.1.1.1b Fuel Cladding Integrity [Advanced Nuclear Fuel Corporation (ANF) Fuel]~~

~~The use of the XN-3 correlation is valid for critical power calculations at pressures > 580 psig and bundle mass fluxes > 0.25 x 10^6 lb/hr-ft^2 (Ref. 3). For operation at low pressures or low flows, the fuel cladding integrity SL is established by a limiting condition on core THERMAL POWER, with the following basis:~~

~~Provided that the water level in the vessel downcomer is maintained above the top of the active fuel, natural circulation is sufficient to ensure a minimum bundle flow for all fuel assemblies that have a relatively high power and potentially can approach a critical heat flux condition. For the ANF 9x9 fuel design, the minimum bundle flow is > 30 x 10^3 lb/hr. For the ANF 8x8 fuel design, the minimum bundle flow is > 28 x 10^3 lb/hr. For all designs, the coolant minimum bundle flow and maximum flow area are such that the mass flux is always > 0.25 x 10^6 lb/hr-ft^2. Full scale critical power tests taken at pressures down to 14.7 psia indicate that the fuel assembly critical power at 0.25 x 10^6 lb/hr-ft^2 is approximately 3.35 MWt. At 25% RTP, a bundle power of approximately 3.35 MWt corresponds to a bundle radial peaking factor of > 3.0, which is significantly higher than the expected peaking factor. Thus, a THERMAL POWER limit of 25% RTP for reactor pressures < 785 psig is conservative.~~

4

(continued)

BASES

APPLICABLE SAFETY ANALYSES (continued)

2.1.1.2a 4 MCPR [GE/Fuel] 2

The fuel cladding integrity SL is set such that no ~~significant~~ fuel damage is calculated to occur if the limit is not violated. Since the parameters that result in fuel damage are not directly observable during reactor operation, the thermal and hydraulic conditions that result in the onset of transition boiling have been used to mark the beginning of the region in which fuel damage could occur. Although it is recognized that the onset of transition boiling would not result in damage to BWR fuel rods, the critical power at which boiling transition is calculated to occur has been adopted as a convenient limit. However, the uncertainties in monitoring the core operating state and in the procedures used to calculate the critical power result in an uncertainty in the value of the critical power. Therefore, the fuel cladding integrity SL is defined as the critical power ratio in the limiting fuel assembly for which more than 99.9% of the fuel rods in the core are expected to avoid boiling transition, considering the power distribution within the core and all uncertainties.

The MCPR SL is determined using a statistical model that combines all the uncertainties in operating parameters and the procedures used to calculate critical power. The probability of the occurrence of boiling transition is determined using the approved General Electric Critical Power correlations. Details of the fuel cladding integrity SL calculation are given in Reference ~~9~~ 3 and 4. Reference ~~9~~ 3 also includes a tabulation of the uncertainties used in the determination of the MCPR SL and ~~of~~ Reference 4 also provides the nominal values of the parameters used in the MCPR SL statistical analysis. 7

~~2.1.1.2b MCPR [ANF Fuel]~~

~~The MCPR SL ensures sufficient conservatism in the operating MCPR limit that, in the event of an AOO from the limiting condition of operation, at least 99.9% of the fuel rods in the core would be expected to avoid boiling transition. The margin between calculated boiling transition (i.e., MCPR = 1.00) and the MCPR SL is based on a detailed statistical procedure that considers the uncertainties in monitoring the core operating state. One specific uncertainty included in the SL is the uncertainty inherent~~ 4

(continued)

BASES

APPLICABLE SAFETY ANALYSES

2.1.1.2b MCPR [ANF Fuel] (continued)

in the XN-3 critical power correlation. Reference 3 describes the methodology used in determining the MCPR SL.

4

The XN-3 critical power correlation is based on a significant body of practical test data, providing a high degree of assurance that the critical power, as evaluated by the correlation, is within a small percentage of the actual critical power being estimated. As long as the core pressure and flow are within the range of validity of the XN-3 correlation, the assumed reactor conditions used in defining the SL introduce conservatism into the limit because bounding high radial power factors and bounding flat local peaking distributions are used to estimate the number of rods in boiling transition. Still further conservatism is induced by the tendency of the XN-3 correlation to overpredict the number of rods in boiling transition. These conservatisms and the inherent accuracy of the XN-3 correlation provide a reasonable degree of assurance that there would be no transition boiling in the core during sustained operation at the MCPR SL. If boiling transition were to occur, there is reason to believe that the integrity of the fuel would not be compromised. Significant test data accumulated by the NRC and private organizations indicate that the use of a boiling transition limitation to protect against cladding failure is a very conservative approach. Much of the data indicate that BWR fuel can survive for an extended period of time in an environment of boiling transition.

5

2.1.1.3 Reactor Vessel Water Level

During MODES 1 and 2, the reactor vessel water level is required to be above the top of the active irradiated fuel to provide core cooling capability. With fuel in the reactor vessel during periods when the reactor is shut down, consideration must be given to water level requirements due to the effect of decay heat. If the water level should drop below the top of the active irradiated fuel during this period, the ability to remove decay heat is reduced. This reduction in cooling capability could lead to elevated cladding temperatures and clad perforation in the event that the water level becomes < 2/3 of the core height. The reactor vessel water level SL has been established at the top of the

(continued)

BASES

APPLICABLE SAFETY ANALYSES

2.1.1.3 Reactor Vessel Water Level (continued)

active irradiated fuel to provide a point that can be monitored and to also provide adequate margin for effective action.

SAFETY LIMITS

The reactor core SLs are established to protect the integrity of the fuel clad barrier to prevent the release of radioactive materials to the environs. SL 2.1.1.1 and SL 2.1.1.2 ensure that the core operates within the fuel design criteria. SL 2.1.1.3 ensures that the reactor vessel water level is greater than the top of the active irradiated fuel in order to prevent elevated clad temperatures and resultant clad perforations.

6

APPLICABILITY

SLs 2.1.1.1, 2.1.1.2, and 2.1.1.3 are applicable in all MODES.

SAFETY LIMIT VIOLATIONS

~~2.2.1~~

~~If any SL is violated, the NRC Operations Center must be notified within 1 hour, in accordance with 10 CFR 50.72 (Ref. 4).~~

TSTF-05

2.2.2 TSTF-05 4 5 7

Exceeding an SL may cause fuel damage and create a potential for radioactive releases in excess of 10 CFR 100, "Reactor Site Criteria," limits (Ref. 4). Therefore, it is required to insert all insertable control rods and restore compliance with the SL within 2 hours. The 2 hour Completion Time ensures that the operators take prompt remedial action and the probability of an accident occurring during this period is minimal.

(continued)

BASES

SAFETY LIMIT VIOLATIONS (continued)

~~2.2.3~~

~~If any SL is violated, the [senior management of the nuclear plant and the utility Vice President—Nuclear Operations] shall be notified within 24 hours. The 24 hour period provides time for plant operators and staff to take the appropriate immediate action and assess the condition of the unit before reporting to the appropriate utility management.~~

TSTF-05

~~2.2.4~~

~~If any 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. 6]. A copy of the report shall also be provided to the [senior management of the nuclear plant and the utility Vice President—Nuclear Operations].~~

TSTF-65 changes not shown

~~2.2.5~~

~~If any 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. 10 CFR 50, Appendix A, GDC 10.
2. 3 NEDE-24011-P-A, ~~(latest approved revision)~~ "GE Standard Application for Reactor Fuel," (revision specified in the COLR). 7
~~3. XN-NF524(A), Revision 1, November 1983.~~ 7
~~4. 10 CFR 50.72.~~
5. 4 5 10 CFR 100. 7
~~6. 10 CFR 50.73.~~

TSTF-05

2. GE Service Information Letter No. 516 Supplement 2, "Core Flow Indication in the Low-Flow Region," January 19, 1996. 7

4. Supplemental Reload Licensing Report For Nine Mile Point Nuclear Station-Unit 2, (revision specified in COLR). 7

B 2.0 SAFETY LIMITS (SLs)

B 2.1.2 Reactor Coolant System (RCS) Pressure SL

BASES

BACKGROUND

The SL on reactor steam dome pressure protects 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. Establishing an upper limit on reactor steam dome pressure ensures continued RCS integrity. According to 10 CFR 50, Appendix A, GDC 14, "Reactor Coolant Pressure Boundary," and GDC 15, "Reactor Coolant System Design" (Ref. 1), the reactor coolant pressure boundary (RCPB) shall be designed with sufficient margin to ensure that the design conditions are not exceeded during normal operation and anticipated operational occurrences (AOOs).

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 are hydrostatically tested at 125% of design pressure, in accordance with ASME Code requirements, prior to initial operation when there is no fuel in the core. Any further hydrostatic testing with fuel in the core may be done under LCO 3.10.1, "Inservice Leak and Hydrostatic Testing Operation." Following inception of unit operation, RCS components shall be pressure tested in accordance with the requirements of ASME Code, Section XI (Ref. 3).

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" (Ref. 4). If this occurred in conjunction with a fuel cladding failure, the number of protective barriers designed to prevent radioactive releases from exceeding the limits would be reduced.

(continued)

BASES (continued)

APPLICABLE SAFETY ANALYSES

The RCS safety/relief valves and the Reactor Protection System Reactor Vessel Steam Dome Pressure—High Function have settings established to ensure that the RCS pressure SL will not be exceeded.

The RCS pressure SL has been selected such that it is at a pressure below which it can be shown that the integrity of the system is not endangered. The reactor pressure vessel is designed to ASME, Boiler and Pressure Vessel Code, Section III, [1971 Edition], including Addenda through the [winter of 1972] (Ref. 5), which permits a maximum pressure transient of 110%, 1375 psig, of design pressure 1250 psig. The SL of 1325 psig, as measured in the reactor steam dome, is equivalent to 1375 psig at the lowest elevation of the RCS. The RCS is designed to ASME Code, Section III, 1974 Edition, (Ref. 6), for the reactor recirculation piping, which permits a maximum pressure transient of 110% of design pressures of 1250 psig for suction piping and 1650 psig for discharge piping. The RCS pressure SL is selected to be the lowest transient overpressure allowed by the applicable codes.

2 7 7 including Addenda through the summer of 1977 7

up to the reactor recirculation pumps 7

up to and including the discharge blocking valves and 1550 psig for the piping after the discharge blocking valve

SAFETY LIMITS

The maximum transient pressure allowable in the RCS pressure vessel under the ASME Code, Section III, is 110% of design pressure. The maximum transient pressure allowable in the RCS piping, valves, and fittings is 110% of design pressures of 1250 psig for suction piping and 1500 psig for discharge piping. The most limiting of these allowances is the 110% of the suction piping design pressure; therefore, the SL on maximum allowable RCS pressure is established at 1325 psig as measured at the reactor steam dome.

1650 5 7

reactor vessel and the 7 up to the Reactor recirculation pump

APPLICABILITY

SL 2.1.2 applies in all MODES.

SAFETY LIMIT VIOLATIONS

2.2.1

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

TSTF-05

(continued)

BASES

SAFETY LIMIT VIOLATIONS (continued)

2.2.2 TSTF-5

5

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). Therefore, it is required to insert all insertable control rods and restore compliance with the SL within 2 hours. The 2 hour Completion Time ensures that the operators take prompt remedial action and also assures that the probability of an accident occurring during this period is minimal.

~~2.2.3~~

~~If any SL is violated, the appropriate [senior management of the nuclear plant and the utility Vice President—Nuclear Operations] shall be notified within 24 hours. The 24 hour period provides time for plant operators and staff to take the appropriate immediate action and assess the condition of the unit before reporting to the appropriate utility management.~~

TSTF-65 changes not shown

TSTF-05

~~2.2.4~~

~~If any 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 [senior management of the nuclear plant and the utility Vice President—Nuclear Operations].~~

~~2.2.5~~

~~If any 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.~~

BASES (continued)

REFERENCES

1. 10 CFR 50, Appendix A, GDC 14, GDC 15, and GDC 28.
2. ASME, Boiler and Pressure Vessel Code, Section III, Article NB-7000.
3. ASME, Boiler and Pressure Vessel Code, Section XI, Article IW-5000. A 6
4. 10 CFR 100.
5. ASME, Boiler and Pressure Vessel Code, Section III, 1971 Edition, Addenda, winter of 1972. 2
6. ASME, Boiler and Pressure Vessel Code, 1974 Edition, Addenda, summer of 1977. 7
7. ~~10 CFR 50.72.~~
8. ~~10 CFR 50.73.~~

TSTF-05

JUSTIFICATION FOR DEVIATIONS FROM NUREG-1434, REVISION 1
ITS BASES: CHAPTER 2.0 - SAFETY LIMITS

1. The word significant has been deleted since the NMP2 Safety Limits are set to ensure no fuel damage occurs.

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

3. A description of the reactor vessel water level SL has been added, consistent with the background description of the other SLs.

4. NMP2 does not use ANF fuel. As a result, the Bases discussions for ANF fuel Safety Limits have been deleted and the requirements have been renumbered to reflect this change.

5. Editorial change made for clarity.

6. Typographical/grammatical error corrected.

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

GENERIC NO SIGNIFICANT HAZARDS EVALUATION
ITS: CHAPTER 2.0 - SAFETY LIMITS

ADMINISTRATIVE CHANGES
("A.x" Labeled Comments/Discussions)

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

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

   The proposed change involves reformatting, renumbering, and rewording the existing Technical Specifications. The reformatting, renumbering, and rewording process involves no technical changes to the existing Technical Specifications. As such, this change is administrative in nature and does not impact initiators of analyzed events or assumed mitigation of accident or transient events. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

   The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in methods governing normal plant operation. The proposed change will not impose any new or eliminate any old requirements. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

   The proposed change will not reduce a margin of safety because it has no impact on any safety analyses assumptions. This change is administrative in nature. Therefore, the change does not involve a significant reduction in a margin of safety.

TECHNICAL CHANGES - MORE RESTRICTIVE
("M.x" Labeled Comments/Discussions)

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

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

   The proposed change provides more stringent requirements for operation of the facility. 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. The more restrictive requirements continue to ensure process variables, structures, systems, and components are maintained consistent with the safety analyses and licensing basis. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

   The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in the methods governing normal plant operation. The proposed change does impose different requirements. However, these changes are consistent with the assumptions in the safety analyses and licensing basis. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

   The imposition of more restrictive requirements either has no impact on or increases the margin of plant safety. As provided in the discussion of the change, each change in this category is by definition, providing additional restrictions to enhance plant safety. The change maintains requirements within the safety analyses and licensing basis. Therefore, this change does not involve a significant reduction in a margin of safety.

NO SIGNIFICANT HAZARDS EVALUATION
ITS: CHAPTER 2.0 - SAFETY LIMITS

L.1 CHANGE

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

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

   This change proposes to remove the explicit details of methods for restoring reactor vessel water level (manually initiate the ECCS, after depressurizing the reactor vessel, if required). The method used to restore reactor vessel water level is not assumed in the initiation of any analyzed event. Therefore, the proposed change does not affect the probability of an accident. Also, the consequences of an accident are not affected by this change since the action to restore compliance with the reactor vessel water level Safety Limit within 2 hours is maintained in ITS SL 2.2.1. In addition, restoration of the reactor vessel water level Safety Limit is part of a coordinated response to an unplanned transient governed by Emergency Operating Procedures. Since restoration of the reactor vessel water level Safety Limit will still be required as part of the coordinated response to the event, consequences of previously analyzed accidents are not impacted by the removal of the explicit method for restoring reactor vessel water level. Therefore, this change does not significantly increase the consequences of any previously analyzed accident.

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

   The proposed change will not create the possibility of an accident. This change will not physically alter the plant (no new or different type of equipment will be installed). The change does not affect methods governing normal plant operation or the planned response to off-normal conditions. Therefore, this change will not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

   This change proposes to remove the explicit details of methods for restoring reactor vessel water level (manually initiate the ECCS, after depressurizing the reactor vessel, if required). If the reactor vessel water level Safety Limit is violated, restoration of reactor vessel water level is required by ITS SL 2.2.1. In addition, restoration of the reactor vessel water level Safety Limit is part of a coordinated response to an unplanned transient governed by Emergency Operating Procedures. The requirements

L.1 CHANGE

3. (continued)

of ITS SL 2.2.1 are considered to be adequate to ensure the reactor vessel water level is restored to within required limits. Since restoration of the reactor vessel water level will still be required by both Technical Specifications and as part of the coordinated response to the transient, the margin of safety is not impacted by this change. Therefore, this change does not involve a significant reduction in a margin of safety.

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SECTION 3.0:
LCO AND SR APPLICABLITY

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 LCO 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 and LCO 3.0.6.

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 2 within 7 hours;

b. MODE 3 within 13 hours; and

c. MODE 4 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, and 3.

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.

(continued)

3.0 LCO APPLICABILITY

LCO 3.0.4 (continued)	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, and 3.
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 5.5.11, "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. 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	Special Operations LCOs in Section 3.10 allow specified Technical Specifications (TS) requirements to be changed to permit performance of special tests and operations. Unless otherwise specified, all other TS requirements remain unchanged. Compliance with Special Operations LCOs is optional. When a Special Operations LCO is desired to be met but is not met, the ACTIONS of the Special Operations LCO shall be met. When a Special Operations LCO is not

(continued)

3.0 LCO APPLICABILITY

LCO 3.0.7 (continued)	desired to be met, entry into a MODE or other specified condition in the Applicability shall only be made in accordance with the other applicable Specifications.

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	The specified Frequency for each SR is met if the Surveillance is performed within 1.25 times the interval specified in the Frequency, 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 above interval extension does not apply. If a Completion Time requires periodic performance on a "once per . . ." basis, the above Frequency extension applies to each performance after the initial performance. 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 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.

(continued)

3.0 SR APPLICABILITY (continued)

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, and 3.

B 3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

BASES

LCOs	LCO 3.0.1 through LCO 3.0.7 establish the general requirements applicable to all Specifications in Sections 3.1 through 3.10 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 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

(continued)

BASES

LCO 3.0.2 (continued)

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 Condition no longer exists. The individual LCO's ACTIONS specify the Required Actions where this is the case. An example of this is in LCO 3.4.11, "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. Additionally, if intentional entry into ACTIONS would result in redundant equipment being inoperable, alternatives should be used instead. Doing so limits the time both subsystems/divisions of a safety function are inoperable and limits the time 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. In this case, the Completion Times of the associated Required Actions would apply from the point in time that the new Specification becomes applicable and the ACTIONS Condition(s) are entered.

(continued)

BASES (continued)

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.

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 the load dispatcher to ensure the stability and availability of the electrical grid. 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.

(continued)

BASES

LCO 3.0.3 (continued)

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 Specification 3.0.3 allow 37 hours for the unit to be in MODE 4 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 4, or other applicable MODE, is not reduced. For example, if MODE 2 is reached in 2 hours, then the time allowed for reaching MODE 3 is the next 11 hours, because the total time for reaching MODE 3 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, and 3, 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 4 and 5 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, or 3) 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 3.7.6, "Spent Fuel Storage Pool Water Level." LCO 3.7.6 has an Applicability of "During movement of irradiated fuel

(continued)

BASES

LCO 3.0.3 (continued)	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 3.7.6 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 3.7.6 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:

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.

(continued)

BASES

LCO 3.0.4 (continued)

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.

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

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:

(continued)

BASES

LCO 3.0.5 (continued)

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.

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's 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 plant is maintained in a safe condition are specified in the support systems' 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.

(continued)

BASES

LCO 3.0.6 (continued)

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' LCO's Conditions and Required Actions are eliminated by providing all the actions that are necessary to ensure the plant 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 5.5.11, "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 division checks to identify a loss of safety function for those support systems that support safety systems are required. The cross division 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.

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BASES (continued)

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. Special Operations LCOs in Section 3.10 allow specified 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.

The Applicability of a Special Operations LCO represents a condition not necessarily in compliance with the normal requirements of the TS. Compliance with Special Operations LCOs is optional. A special operation may be performed either under the provisions of the appropriate Special Operations LCO or under the other applicable TS requirements. If it is desired to perform the special operation under the provisions of the Special Operations LCO, the requirements of the Special Operations LCO shall be followed. When a Special Operations LCO requires another LCO to be met, only the requirements of the LCO statement are required to be met regardless of that LCO's Applicability (i.e., should the requirements of this other LCO not be met, the ACTIONS of the Special Operations LCO apply, not the ACTIONS of the other LCO). However, there are instances where the Special Operations LCO's ACTIONS may direct the other LCO's ACTIONS be met. The Surveillances of the other LCO are not required to be met, unless specified in the Special Operations LCO. If conditions exist such that the Applicability of any other LCO is met, all the other LCO's requirements (ACTIONS and SRs) are required to be met concurrent with the requirements of the Special Operations LCO.

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 in Sections 3.1 through 3.10 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 to be not 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 Special Operations LCO are only applicable when the Special Operations LCO is used as an allowable exception to the requirements of a Specification.

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.

(continued)

BASES

SR 3.0.1 (continued)

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. Some examples of this process are:

a. Control rod drive maintenance during refueling that requires scram testing at ≥ 800 psig. However, if other appropriate testing is satisfactorily completed and the scram time testing of SR 3.1.4.3 is satisfied, the control rod can be considered OPERABLE. This allows startup to proceed to reach 800 psig to perform other necessary testing.

b. Reactor Core Isolation Cooling (RCIC) maintenance during shutdown that requires system functional tests at a specified pressure. Provided other appropriate testing is satisfactorily completed, startup can proceed with RCIC considered OPERABLE. This allows operation to reach the specified pressure to complete the necessary post maintenance testing.

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 25% extension of the interval specified in the Frequency. This 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).

(continued)

BASES

SR 3.0.2 (continued)

The 25% 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. The requirements of regulations take precedence over the TS. Therefore, when a test interval is specified in the regulations, the test interval cannot be extended by the TS, and the SR includes a Note in the Frequency 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 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.

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 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

(continued)

BASES

SR 3.0.3 (continued)

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.

If a Surveillance is not completed within the allowed delay period, then the equipment is considered inoperable or the variable then 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.

(continued)

BASES (continued)

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 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, on equipment that is inoperable, 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 SR 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

(continued)

BASES

SR 3.0.4 (continued)

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

NIAGARA MOHAWK
NINE MILE POINT UNIT 2
IMPROVED TECHNICAL SPECIFICATIONS

SECTION 3.0:
LCO AND SR APPLICABILITY

CURRENT TECHNICAL SPECIFICATION MARKUP
AND
DISCUSSION OF CHANGES

A.1

3/4.0 APPLICABILITY

A.2

3.0 LIMITING CONDITIONS FOR OPERATION (LCO)

LCO 3.0.1 ~~Compliance with the Limiting Conditions for Operation contained in the succeeding specifications is required during the OPERATIONAL CONDITIONS or other conditions specified therein; except that upon failure to meet the Limiting Conditions for Operation, the associated ACTION requirements shall be met.~~ Insert 1 A.3

LCO 3.0.2 ~~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 intervals. If the Limiting Condition for Operation is restored prior to expiration of the specified time intervals, completion of the ACTION requirements is not required.~~ Insert 2 A.4

LCO 3.0.3 ~~When a Limiting Condition for Operation is not met, except as provided in the associated ACTION requirements, within 1 hour ACTION shall be initiated to place the unit in an OPERATIONAL CONDITION in which the specification does not apply by placing it, as applicable, in:~~ Insert 3 A.5

1. ~~At least STARTUP within the next 6 hours,~~
2. ~~At least HOT SHUTDOWN within the following 6 hours, and~~
3. ~~At least COLD SHUTDOWN within the subsequent 24 hours.~~

~~Where corrective measures are completed that permit operation under the ACTION requirements, the ACTION may be taken in accordance with the specified time limit as measured from the time of failure to meet the Limiting Condition for Operation. Exceptions to these requirements are stated in the individual specifications.~~

~~This Specification is not applicable in OPERATIONAL CONDITIONS 4 or 5.~~

LCO 3.0.4 ~~Entry into an OPERATIONAL CONDITION or other specified condition shall not be made unless the conditions for the Limiting Condition for Operation are met without reliance on provisions contained in the ACTION requirements. This provision shall not prevent passage through or to OPERATIONAL CONDITIONS as required to comply with ACTION requirements. Exceptions to these requirements are stated in the individual specifications.~~

Insert 4

See insert for Discussion of Changes comment number 5

Add proposed LCO 3.0.5, Insert 5 L.2

Add proposed LCO 3.0.6, Insert 6 A.7

Add proposed LCO 3.0.7, Insert 7 A.8

A.3 INSERT 1

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

A.4 INSERT 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.

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.

A.5 INSERT 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 2 within 7 hours;

b. MODE 3 within 13 hours; and

c. MODE 4 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, and 3.

INSERT 4

A.6 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 L.1 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 A.6 in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

A.6 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, and 3.

L.2 INSERT 5

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.

A.7 INSERT 6

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, additional evaluations and limitations may be required in accordance with Specification 5.5.11, "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.

When a support system's Required Actions 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.

A.8 INSERT 7

LCO 3.0.7 Special Operations LCOs in Section 3.10 allow specified Technical Specifications (TS) requirements to be changed to permit performance of special tests and operations. Unless otherwise specified, all other TS requirements remain unchanged. Compliance with Special Operations LCOs is optional. When a Special Operations LCO is desired to be met but is not met, the ACTIONS of the Special Operations LCO shall be met. When a Special Operations LCO is not desired to be met, entry into a MODE or other specified condition in the Applicability shall only be made in accordance with the other applicable Specifications.

A.1

3.0 SURVEILLANCE REQUIREMENTS (SR) APPLICABILITY A.2

SR 3.0.1 4.0.1 Surveillance Requirements (SRs) shall be met during the OPERATIONAL CONDITIONS (MODES) or other conditions specified (in the Applicability) for individual Limiting Conditions for Operation (LCOs) unless otherwise stated in an individual Surveillance Requirement (the SR). Insert 8 A.2 A.9

SR 3.0.2 4.0.2 ~~Each Surveillance Requirement shall be performed within the specified time interval with a maximum allowable extension not to exceed 25% of the surveillance interval.~~ Insert 9

See Insert for discussion of changes comment numbers

SR 3.0.3 4.0.3 ~~Failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by Specification 4.0.2, shall constitute noncompliance with the OPERABILITY requirements for a Limiting Condition for Operation.~~ A.9 moved to SR 3.0.1 ~~The time limits of the ACTION requirements are applicable at the time it is identified that a Surveillance Requirement has not been performed. The ACTION requirements may be delayed for up to 24 hours to permit the completion of the surveillance when the allowable outage time limits of the ACTION requirements are less than 24 hours.~~ Insert 10 L.1 ~~Surveillance Requirements do not have to be performed on inoperable equipment.~~ A.9 moved to SR 3.0.1

A.2

SR 3.0.4 4.0.4 ~~Entry into an OPERATIONAL CONDITION or other specified applicable condition shall not be made unless the Surveillance Requirement(s) associated with the Limiting Condition for Operation have been performed within the applicable surveillance interval or as otherwise specified. This provision shall not prevent passage through or to OPERATIONAL CONDITIONS as required to comply with ACTION requirements.~~ Insert 11 A.11

4.0.5 Surveillance Requirements for inservice inspection and testing of ASME Code Class 1, 2, and 3 components shall be applicable as follows:

a. Inservice inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable addenda as required by 10 CFR 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50.55a(g)(6)(i).

b. Surveillance intervals specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable addenda for the inservice inspection and testing activities required by the ASME Boiler and Pressure Vessel Code and applicable addenda shall be applicable as follows in these Technical Specifications:

A.12 moved to Specification 5.5.6

A-9

INSERT 8

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.

INSERT 9

A-10 The specified Frequency for each SR is met if the Surveillance is performed within 1.25 times the interval specified in the Frequency, as measured from the previous performance or as measured from the time a specified condition of the Frequency is met.

M-1 For Frequencies specified as "once," the above interval extension does not apply.

L-3 If a Completion Time requires periodic performance on a "once per ....." basis, the above Frequency extension applies to each performance after the initial performance.

A-10 Exceptions to this Specification are stated in the individual Specifications.

INSERT 10

L-4

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.

A.11

INSERT 11

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, and 3.

A.1

APPLICABILITY SR

3.0 SURVEILLANCE REQUIREMENTS A.2

4.0.5 (Continued)

ASME BOILER AND PRESSURE VESSEL CODE AND APPLICABLE ADDENDA TERMINOLOGY FOR INSERVICE INSPECTION AND TESTING ACTIVITIES	REQUIRED FREQUENCIES FOR PERFORMING INSERVICE INSPECTION AND TESTING ACTIVITIES
Weekly	At least once per 7 days
Monthly	At least once per 31 days
Quarterly or every 3 months	At least once per 92 days
Semiannually or every 6 months	At least once per 184 days
Every 9 months	At least once per 276 days
Yearly or annually	At least once per 366 days

A.12 moved to Specification 5.5.6

c. The provisions of Specification 4.0.2 are applicable to the above required frequencies for performing inservice inspection and testing activities.

d. Performance of the above inservice inspection and testing activities shall be in addition to other specified Surveillance Requirements.

e. Nothing in the ASME Boiler and Pressure Vessel Code shall be construed to supersede the requirements of any Technical Specification.

f. The Inservice Inspection Program for piping identified in NRC Generic Letter 88-01 shall be performed in accordance with the staff positions on schedule, methods, personnel and sample expansion included in this generic letter.

ADMINISTRATIVE

A.1 In the conversion of the Nine Mile Point Unit 2 current Technical Specifications (CTS) to the proposed plant specific Improved Technical Specifications (ITS), certain wording preferences or conventions are adopted that do not result in technical changes (either actual or interpretational). Editorial changes, reformatting, and revised numbering are adopted to make the ITS consistent with the BWR Standard Technical Specifications, NUREG-1434, Rev. 1 (i.e., the Improved Standard Technical Specifications (ISTS)).

A.2 Editorial rewording and renumbering is made consistent with the overall NUREG-1434, Rev. 1 ISTS conventions. During the NMP2 ITS development certain wording preferences or conventions were adopted which resulted in no technical changes (either actual or interpretational) to the Technical Specifications. In the specific case of the Applicability Section, the new section number is 3.0 with the current 3.0 series being renumbered LCO 3.0.X and the current 4.0 series being renumber SR 3.0.X.

A.3 The following administrative changes have been made to CTS 3.0.1:

The phrase "Compliance with...is required" is replaced with the phrase "LCOs shall be met." This change was made to be consistent with other LCO 3.0 Specifications and the concept of an LCO being met, versus complying with an LCO.

"OPERATIONAL CONDITIONS" is changed to "MODES" and "Conditions specified therein" was changed to "specified conditions in the Applicability," to be consistent with the BWR STS NUREG-1434, Rev. 1, terminology.

The phrase "that upon failure to meet the Limiting Conditions for Operation, the associated ACTION requirements shall be met" was changed to "as provided in LCO 3.0.2 and LCO 3.0.7." LCO 3.0.2 addresses the requirement of meeting the associated ACTIONS when not meeting a Limiting Condition for Operation. LCO 3.0.7 addresses another situation when an LCO requirement is allowed not to be met. The requirements remain essentially unchanged, albeit in a combination of proposed LCO 3.0.1 and LCO 3.0.2. The added exception to LCO 3.0.7 is discussed below in comment A.8.

A.4 The following administrative changes have been made to CTS 3.0.2:

The lead-in sentence "Noncompliance with a Specification shall exist when..." is replaced with "Upon discovery of a failure to meet an LCO..." This elimination of the definition of "noncompliance" is administrative in that the Technical Specifications make no use of it. This first sentence is conceptually relocated from CTS 3.0.1 (see comment A.3 above). The addition of the

ADMINISTRATIVE

A.4 (cont'd) exceptions to LCO 3.0.5 and LCO 3.0.6 are due to their inclusion in NMP2 ITS. Refer to the associated discussion below in comment L.2 and A.7 respectively.

The phrase "restored" is changed to "met or is no longer applicable;" "time intervals" is changed to "Completion Time(s);" and "Action requirements" is changed to "Required Action(s)," to be consistent with the BWR STS, NUREG-1434, Rev. 1, terminology. Also, the phrase "unless otherwise stated" is added consistent with current NMP2 TS exceptions found in a few LCOs. This clarity avoids potential misapplication of those requirements.

A.5 The following administrative changes have been made to CTS 3.0.3:

The phrase "except as provided in the associated Action requirements" is replaced with "and the associated Actions are not met, an associated Action is not provided, or if directed by the associated Actions" to cover all potential possibilities that require entry into LCO 3.0.3.

"OPERATIONAL CONDITION" is changed to "MODE or other specified condition" to be consistent with the BWR STS, NUREG-1434, Rev. 1.

The times to reach each MODE are revised to include the 1 hour allowed by CTS 3.0.3 for initiating the shutdown. Also, the time represents the total time allowed from the entry into LCO 3.0.3, replacing the current presentation where each time is referenced as "the next," or "the following," or "the subsequent."

The phrase "under the ACTION requirements...failure to meet the Limiting Condition for Operation" is changed to "in accordance with the LCO or Actions, completion of the actions required by LCO 3.0.3 is not required," to specifically state that LCO 3.0.3 actions do not have to be completed.

The sentence "This Specification is not applicable in OPERATIONAL CONDITION 4 or 5" is changed to "LCO 3.0.3 is only applicable in MODES 1, 2, and 3." This administrative change is made in conjunction with relocating all current exceptions to LCO 3.0.3 for Specifications whose Applicability is other than MODES 1, 2, or 3, to be encompassed by the proposed LCO 3.0.3.

ADMINISTRATIVE (continued)

A.6 The following administrative changes have been made to CTS 3.0.4:

The phrase "Entry into an OPERATIONAL CONDITION or other specified condition" has been changed to "When an LCO is not met, entry into a MODE or other specified condition in the Applicability..." This new wording is consistent with the terminology of the BWR STS NUREG-1434, Rev. 1. The phrase "This provision shall not prevent passage through OPERATIONAL CONDITIONS as required to comply with ACTION requirements..." is reworded to "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."

The sentence "Exceptions to these requirements are stated in the individual specifications" has been changed to "Exceptions to this Specification are stated in the individual Specifications" for consistency of terminology, since CTS 3.0.4 is a Specification.

The sentence "LCO 3.0.4 is only applicable for entry into a MODE or other specified condition in the Applicability in MODES 1, 2, and 3," has also been added. This new wording is consistent with the BWR STS, NUREG-1434, Rev. 1. A review of the current and proposed Specifications has been performed to determine the affects of this allowance on the current and proposed Specifications. The review has determined that this change does not provide any additional allowances to change MODES beyond those that currently exist, except where justified in individual Specifications (as described in the individual Specifications Discussion of Changes). Therefore, this change is considered administrative.

A.7 LCO 3.0.6 is added to provide guidance regarding the appropriate ACTIONS to be taken when a single inoperability (a support system) also results in the inoperability of one or more related systems (supported system(s)). In the current TS, based on the intent and interpretation provided by the NRC over the years, there has been an ambiguous approach to the combined support/supported inoperability. Some of this history is summarized:

- Guidance provided in the June 13, 1979 NRC memorandum from Brian K. Grimes (Assistant Director for Engineering and Projects) to Samuel E. Bryan (Assistant Director for Field Coordination) would indicate an intent/interpretation consistent with the proposed LCO 3.0.6 - without the necessity of also requiring additional ACTIONS. That is, only the inoperable support system ACTIONS need be taken.

ADMINISTRATIVE

A.7 (cont'd)

- Guidance provided by the NRC in their April 10, 1980 letter to all Licensees, regarding the definition of OPERABILITY and its impact as a support system on the remainder of the current TS, would indicate a similar philosophy of not taking ACTIONS for the inoperable supported equipment. However, in this case, additional actions (similar to the proposed Safety Function Determination Program actions) were addressed and required.

- Generic Letter 91-18 and a plain-English reading of the existing TS provide an interpretation that inoperability, even as a result of a Technical Specification support system inoperability, requires all associated ACTIONS to be taken.

- Certain current Specifications contain ACTIONS such as "Declare the {supported system} inoperable and take the ACTIONS of {its Specification}." In many cases the supported system would likely already be considered inoperable. The implication of this presentation is that the ACTIONS of the inoperable supported system would not have been taken without the specific direction to do so.

Considering the history of disagreement and misunderstandings in this area, the BWR STS NUREG-1434, Rev. 1, was developed, with the Industry input and approval of the NRC, to include LCO 3.0.6, and a new program, Specification 5.5.11, Safety Function Determination Program. Since its function is to clarify existing ambiguities and to maintain actions within the realm of previous interpretations, this new provision is deemed to be administrative in nature.

A.8 LCO 3.0.7 is added to provide guidance regarding the meeting of Special Operations LCOs in Section 3.10. These Special Operations LCOs allow specified Technical Specification requirements to be changed (made applicable in part or whole, or suspended) to permit the performance of special tests or operations which otherwise could not be performed. If the Special Operations LCOs did not exist, many of the special tests and operations necessary to demonstrate select plant performance characteristics, special maintenance activities and special evolutions could not be performed. LCO 3.0.7 eliminates the confusion which would otherwise exist as to which LCOs apply during the performance of a special test or operation. This is consistent with the intent of the current Special Test Exceptions; however, without this specific allowance to change the requirements of another LCO, a conflict of requirements could be incorrectly interpreted to exist. Therefore, this change provides only administrative clarity.

ADMINISTRATIVE (continued)

A.9 The following administrative changes have been made to CTS 4.0.1 and CTS 4.0.3:

Proposed SR 3.0.1 is constructed to more completely present the relationship between Surveillance Requirements and meeting the requirements of the LCO. In this regard, the concepts within CTS 4.0.3 are combined with CTS 4.0.1 into proposed SR 3.0.1.

The second sentence of SR 3.0.1 (as shown in Insert 8), "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," is proposed to clarify existing intent that is not explicitly stated.

The concept (editorially rewritten) found in the first sentence of CTS 4.0.3, has been moved to the third sentence of SR 3.0.1; "Failure to perform a Surveillance within the specified Frequency shall be failure to meet the LCO, except as provided in SR 3.0.3." The sentence "Surveillance requirements do not have to be performed on inoperable equipment" is moved from the last sentence of CTS 4.0.3, to proposed SR 3.0.1. Since all LCOs do not deal exclusively with equipment OPERABILITY, a clarifying phrase is also added: "or variables outside specified limits."

A.10 The following administrative change has been made to CTS 4.0.2:

The first paragraph, "The specified Frequency for each Surveillance Requirement is met if the Surveillance is performed within 1.25 times the interval specified in the Frequency, as measured from the previous performance or as measured from the time a specified condition of the Frequency is met," was added to clearly establish what constituted meeting the specified Frequency of each Surveillance Requirement. Also, the sentence "Exceptions to this Specification are stated in the individual Specifications" is added to acknowledge the explicit use of exceptions in various Surveillances.

A.11 The following administrative change has been made to CTS 4.0.4:

The phrase "Entry into an OPERATIONAL CONDITION or other specified applicable condition" has been changed to "Entry into a MODE or other specified condition in the Applicability of an LCO." This new wording is consistent with the terminology of the BWR STS, NUREG-1434, Rev. 1.

ADMINISTRATIVE

A.11 (cont'd) The phrase "...passage through or to OPERATIONAL CONDITIONS as required to comply with the ACTION requirements," is reworded to "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."

The sentence "SR 3.0.4 is only applicable for entry into a MODE or other specified condition in the Applicability in MODES 1, 2, and 3" has also been added. This new wording is consistent with the BWR STS, NUREG-1434, Rev. 1. A review of the current and proposed Specifications has been performed to determine the affects of this allowance on the current and proposed Specifications. The review has determined that this change does not provide any additional allowances to change MODES beyond those that currently exist, except where justified in individual Specifications (as described in the individual Specifications Discussion of Changes). Therefore, this change is considered administrative.

A.12 The technical content of CTS 4.0.5 has been moved to Specification 5.5.6. Any technical changes to this requirement will be addressed in the Discussion of Changes for ITS: Section 5.5.

RELOCATED SPECIFICATIONS

None

TECHNICAL CHANGES - MORE RESTRICTIVE

M.1 The statement, "For Frequencies specified as "once," the above interval extension does not apply," was added to CTS 4.0.2 (proposed SR 3.0.2) to clarify that the 1.25 times the interval specified in the Frequency does not apply to certain Surveillances. This is because the interval extension concept is based on scheduling flexibility for repetitive performances, and these Surveillances are not repetitive in nature, and essentially have no "interval...as measured from the previous performance." This precludes the ability to extend these performances, and is therefore an additional restriction. The current Specification can be seen to allow the extension to apply to all Surveillances.

TECHNICAL CHANGES - LESS RESTRICTIVE

"Generic"

None

"Specific"

L.1 The CTS 3.0.4 phrase "unless the conditions for the Limiting Condition for Operation are met without reliance on provisions contained in the ACTION requirements" was changed to "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 change removes an unduly restrictive requirement. For an LCO which has ACTIONS permitting continued operation for an unlimited period of time, entry into a MODE or other specified condition should be permitted in accordance with these ACTIONS. The restriction on a change in MODE or other specified condition should apply only where the ACTIONS establish a specified time interval in which the LCO must be met or a shutdown is required.

This phrase was changed to be consistent with Generic Letter 87-09 except that the Generic Letter 87-09 version of the Specification 3.0.4 phrase "...and the associated ACTION requires a shutdown if they are not met within a specified time interval," was changed to "...permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time."

This statement is consistent with the Generic Letter 87-09 guidance regarding the changing of MODES while relying upon the ACTION requirements when they permit continued operation for an unlimited period of time. This change also provides consistency for use of proposed LCO 3.0.4, since it is the permitting of continued operation for an unlimited period of time, not the requirement to shutdown, that determines the applicability of LCO 3.0.4.

L.2 LCO 3.0.5 is added to provide an exception to LCO 3.0.2 for instances where restoration of inoperable equipment to an OPERABLE status could not be performed while continuing to comply with Required Actions. Many Technical Specification ACTIONS require an inoperable component to be removed from service, such as: maintaining an isolation valve closed, disarming a control rod, or tripping an inoperable instrument channel. To allow the performance of Surveillance Requirements to demonstrate the OPERABILITY of the equipment being returned to service or to demonstrate the OPERABILITY of other equipment, which otherwise could not be performed without returning the equipment to service, an exception to these Required Actions is necessary. LCO 3.0.5 is necessary to establish an allowance that, although informally

TECHNICAL CHANGES - LESS RESTRICTIVE

L.2 (cont'd) utilized in restoration of inoperable equipment, is not formally recognized in the CTS. Without this allowance certain components could not be restored to OPERABLE status and a plant shutdown would ensue. Clearly, it is not the intent or desire that the Technical Specifications preclude the return to service of a suspected OPERABLE component to confirm its OPERABILITY. This allowance is deemed to represent a more stable, safe operation than requiring a plant shutdown to complete the restoration and confirmatory testing.

L.3 The statement "If a Completion Time requires periodic performance on a "once per..." basis, the above Frequency extension applies to each performance after the initial performance," was added to CTS 4.0.2 (proposed SR 3.0.2) to allow the 1.25 times the interval specified in the Frequency concept to apply to periodic Required Actions. This provides the consistency in scheduling flexibility for all performances of periodic requirements, whether they are Surveillances or Required Actions. The intent remains to perform the activity, on the average, once during each specified interval.

L.4 Proposed SR 3.0.3 allows that, at the time it is discovered that the Surveillance has not been performed, the requirement to declare the equipment inoperable (LCO not met) may be delayed for up to 24 hours regardless as to whether the Completion Times of the Actions are 24 hours or less, as is currently allowed in CTS 4.0.3. This is based on NRC Generic Letter 87-09 which states, "It is overly conservative to assume that systems or components are inoperable when a surveillance has not been performed. The opposite is in fact the case, the vast majority of surveillances demonstrate that systems or components in fact are operable. When a Surveillance is missed, it is primarily a question of operability that has not been verified by the performance of the required surveillance."

Based on consideration of plant conditions, adequate planning, availability of personnel, the time required to perform the Surveillance and the safety significance of the delay in completing the Surveillance, the NRC concluded in the Generic Letter that 24 hours is an acceptable time limit for completing a missed Surveillance when the allowable outage times of the ACTIONS are less than the 24 hour limit or a shutdown is required to comply with ACTIONS.

However, it stands to reason that since 24 hours has been determined to be an acceptable time limit for completing the Surveillance, this 24 hour deferral should apply to all systems or components, regardless of whether or not their ACTIONS Completion Time is 24 hours or less. This is primarily because shorter Completion Times are generally provided for more safety significant Required Actions. Therefore, if a 24 hour delay can be safely applied to a Required Action with a short (e.g., 2 hour) Completion Time, there should be

TECHNICAL CHANGES - LESS RESTRICTIVE

L.4 (cont'd) less of a safety impact when a 24 hour delay is applied to a Required Action with a long (e.g., 7 day) Completion Time. Furthermore, consistent application of the 24 hour delay regardless of Completion Time is critical to eliminating potential confusion and misapplication. For example, some ACTIONS have more than one Completion Time; some > 24 hours and others ≤ 24 hours. The confusion associated with the application of the 24 hour deferral to the Completion Times of this example's Required Actions, illustrates the potential for misapplication throughout the Technical Specifications. In addition, the limit of 24 hours is not applicable if the specified Frequency of the missed Surveillance is less than 24 hours. In cases such as these, the specified Frequency would dictate the delay period. Therefore, the proposed SR 3.0.3 has eliminated the restriction that the extension only apply to outage times less than 24 hours, as is currently allowed in CTS 4.0.3.

The second and third paragraphs of proposed SR 3.0.3 are added to clearly state the actions to take if the Surveillance is not performed within the delay period or the Surveillance fails when performed. This clarification will help avoid confusion as to when the Completion Time(s) of the Required Action(s) begin in various situations.

The Bases of the current Technical Specifications for this section (pages B 3/4 0-1 through B 3/4 0-6) have been completely replaced by revised Bases that reflect the format and applicable content of the NMP2 ITS Section 3.0, consistent with the BWR STS, NUREG-1434, Rev. 1. The revised Bases are as shown in the NMP2 ITS Bases.

<CTS>

3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

<3.0.1>

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 LCO 3.0.7.

<3.0.2>

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.

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.

<3.0.3>

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 2 within 7 hours;

b. MODE 3 within 13 hours; and

c. MODE 4 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, and 3.

<3.0.4>

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 Applicability for an unlimited period of time. This

(continued)

<CTS>

3.0 LCO APPLICABILITY

<3.0.4>

LCO 3.0.4 (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.

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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.~~

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

~~[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 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.]~~

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LCO 3.0.5

<DOC L.2>

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.

(continued)

<CTS>

3.0 LCO APPLICABILITY (continued)

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LCO 3.0.6 <DOC A.7>

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, ~~additional~~ an evaluation~~s and limitations may be required~~ shall be performed in accordance with Specification 5.5.(12), "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. (1) 2

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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 <DOC A.8>

Special Operations LCOs in Section 3.10 allow specified Technical Specifications (TS) requirements to be changed to permit performance of special tests and operations. Unless otherwise specified, all other TS requirements remain (LCO 3.0.1) unchanged. Compliance with Special Operations LCOs is optional. When a Special Operations LCO is desired to be met but is not met, the ACTIONS of the Special Operations LCO shall be met. When a Special Operations LCO is not desired to be met, entry into a MODE or other specified condition in the Applicability shall only be made in accordance with the other applicable Specifications. 3

<CTS>

3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

<4.0.1>

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.

<4.0.2>

SR 3.0.2 The specified Frequency for each SR is met if the Surveillance is performed within 1.25 times the interval specified in the Frequency, 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 above interval extension does not apply.

If a Completion Time requires periodic performance on a "once per . . ." basis, the above Frequency extension applies to each performance after the initial performance.

Exceptions to this Specification are stated in the individual Specifications.

<4.0.3>

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

(continued)

<CTS>

3.0 SR APPLICABILITY

<4.0.3>

SR 3.0.3 (continued) declared not met, and the applicable Condition(s) must be entered.

<4.0.4>

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, and 3.

[~~Reviewers'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.~~]

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1. The bracketed "Reviewer's Note" has been deleted. This information is for the NRC reviewer to be keyed in to what is needed to meet this requirement. This is not meant to be retained in the final version of the plant specific submittal.

2. The appropriate LCO number has been provided.

3. Typographical/grammatical error corrected.

B 3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

BASES

LCOs

LCO 3.0.1 through LCO 3.0.7 establish the general requirements applicable to all Specifications in Sections 3.1 through 3.10 and apply at all times, unless otherwise stated. 1

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 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

(continued)

BASES

LCO 3.0.2 (continued)

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 exists. The individual LCO's ACTIONS specify the Required Actions where this is the case. An example of this is in LCO 3.4.11, "RCS Pressure and Temperature (P/T) Limits."

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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/divisions of a safety function are inoperable and limits the time other conditions exist which 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.

Additionally, if intentional entry into ACTIONS

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may

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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. In this case, the Completion Times of the associated Required Actions would

(continued)

BASES

LCO 3.0.2 (continued)

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.

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 the load dispatcher to ensure the stability and availability of the electrical grid. 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

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BASES

LCO 3.0.3 (continued)

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 Specification 3.0.3 allow 37 hours for the unit to be in MODE 4 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 4, or other applicable MODE, is not reduced. For example, if MODE 2 is reached in 2 hours, then the time allowed for reaching MODE 3 is the next 11 hours, because the total time for reaching MODE 3 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, and 3, 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 4 and 5 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, or 3) because the ACTIONS of individual Specifications sufficiently define the remedial measures to be taken.

(continued)

BASES

LCO 3.0.3 (continued)

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 3.7.8, "Fuel Pool Water Level." LCO 3.7.8 has an Applicability of "During movement of irradiated fuel assemblies in the ~~associated~~ fuel storage pool." Therefore, this LCO can be applicable in any or all MODES. If the LCO and the Required Actions of LCO 3.7.7 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 3.7.7 of "Suspend movement of irradiated fuel assemblies in the associated fuel storage pool(s)" 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 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

(continued)

BASES

LCO 3.0.4 (continued)

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. Exceptions may apply to all the ACTIONS or to a specific Required Action of a Specification.

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.

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

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~~[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 Condition, either 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.

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BASES (continued)

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 SRs to demonstrate:

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required testing

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 ~~allowed SRs~~. This Specification does not provide time to perform any other preventive or corrective maintenance.

required testing to demonstrate OPERABILITY

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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 SRs.

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 ~~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 ~~an SR~~ 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

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BASES

LCO 3.0.6 (continued)

system. This exception is justified because the actions that are required to ensure the plant 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. 'S' 2

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 plant is maintained in a safe condition in the support system's Required Actions. 2

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.

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Specification 5.5.12, "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.

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BASES

LCO 3.0.6 (continued)

Cross division checks to identify a loss of safety function for those support systems that support safety systems are required. The cross division 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.

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. Special Operations LCOs in Section 3.10 allow specified 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.

The Applicability of a Special Operations LCO represents a condition not necessarily in compliance with the normal requirements of the TS. Compliance with Special Operations LCOs is optional. A special operation may be performed either under the provisions of the appropriate Special Operations LCO or under the other applicable TS requirements. If it is desired to perform the special operation under the provisions of the Special Operations LCO, the requirements of the Special Operations LCO shall be followed. When a Special Operations LCO requires another LCO to be met, only the requirements of the LCO statement are required to be met regardless of that LCO's Applicability (i.e., should the requirements of this other LCO not be met, the ACTIONS of the Special Operations LCO apply, not the ACTIONS of the other LCO). However, there are instances where the Special Operations LCO's ACTIONS may direct the other LCOs' ACTIONS be met. The Surveillances of

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(continued)

BASES

LCO 3.0.7 (continued)	the other LCO are not required to be met, unless specified in the Special Operations LCO. If conditions exist such that the Applicability of any other LCO is met, all the other LCO's requirements (ACTIONS and SRs) are required to be met concurrent with the requirements of the Special Operations LCO.

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 in Sections 3.1 through 3.10 and apply at all times, unless otherwise stated. 1

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 to be not 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 Special Operations LCO are only applicable when the Special Operations LCO is used as an allowable exception to the requirements of a Specification.

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.

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BASES

SR 3.0.1 (continued)

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. Some examples of this process are:

a. Control rod drive maintenance during refueling that requires scram testing at ~~[~~ ≥ 800 psi~~]~~. However, if other appropriate testing is satisfactorily completed and the scram time testing of SR 3.1.4.3 is satisfied, the control rod can be considered OPERABLE. This allows startup to proceed to reach ~~[~~800 psi~~]~~ to perform other necessary testing.

b. Reactor Core Isolation Cooling (RCIC) maintenance during shutdown that requires system functional tests at a specified pressure. Provided other appropriate testing is satisfactorily completed, startup can proceed with RCIC considered OPERABLE. This allows operation to reach the specified pressure to complete the necessary post maintenance testing.

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 25% extension of the interval specified in the Frequency. This 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).

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BASES

SR 3.0.2 (continued)

The 25% 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 a Surveillance with a 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 stating "SR 3.0.2 is not applicable."~~

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Insert SR3.0.2

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.

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 it is discovered that the Surveillance has

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<u>INSERT SR 3.0.2</u>

Therefore, when a test interval is specified in the regulations, the test interval cannot be extended by the TS, and the SR includes a Note in the Frequency stating "SR 3.0.2 is not applicable."

BASES

SR 3.0.3 (continued)

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.

If a Surveillance is not completed within the allowed delay period, then the equipment is considered inoperable or the variable then 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)

BASES

SR 3.0.3 (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.

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 (2) 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 , on equipment that is inoperable, (8) 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 SR (2) 3.0.4 shall not prevent changes in MODES or other specified conditions in the Applicability that result from any unit shutdown.

(continued)

BASES

SR 3.0.4 (continued)

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.

MODE
2

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

1. The LCO and SR Applicability only apply to Specifications in Sections 3.1 through 3.10; they do not apply to Specifications in Chapters 4.0 and 5.0. Therefore, this statement has been added for clarity.

2. Typographical/grammatical error corrected.

3. The correct LCO number or plant specific nomenclature, as appropriate, has been provided.

4. The correct LCO title and fuel pool description has been provided. The NMP2 Spent Fuel Storage Pool design is similar to that described in the BWR/4 Improved Technical Specifications, NUREG-1433, Revision 1; thus the words have been changed to be consistent with the wording in NUREG-1433, Revision 1.

5. The paragraph has been moved, consistent with change package BWR-26, C.1. This change was inadvertently left out when NUREG-1434, Revision 1 was promulgated.

6. The bracketed "Reviewer's Note" has been deleted. This information is for the NRC reviewer to be keyed in to what is needed to meet this requirement. This is not meant to be retained in the final version of the plant specific submittal.

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

8. These words have been added for clarity. Failing to perform the Surveillance(s) within the specified Frequency does not result in an SR 3.0.4 restriction only if the equipment is already inoperable.

9. The original wording of the Bases of LCO 3.0.2 is confusing in that it begins to discuss inoperability of redundant equipment without introducing this topic. This topic of inoperable redundant equipment seems to be more appropriate for the Bases of LCO 3.0.3, but an appropriate discussion is already provided there. The proposed wording retains the intent while presenting the material in the appropriate context of LCO 3.0.2. This change is also being proposed in TSTF-122.

10. Changes have been made to reflect these changes made to the Specifications in Section 3.6.

GENERIC NO SIGNIFICANT HAZARDS EVALUATION
ITS: SECTION 3.0 - LCO AND SR APPLICABILITY

ADMINISTRATIVE CHANGES
("A.x" Labeled Comments/Discussions)

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

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

   The proposed change involves reformatting, renumbering, and rewording the existing Technical Specifications. The reformatting, renumbering, and rewording process involves no technical changes to the existing Technical Specifications. As such, this change is administrative in nature and does not impact initiators of analyzed events or assumed mitigation of accident or transient events. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

   The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in methods governing normal plant operation. The proposed change will not impose any new or eliminate any old requirements. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

   The proposed change will not reduce a margin of safety because it has no impact on any safety analyses assumptions. This change is administrative in nature. Therefore, the change does not involve a significant reduction in a margin of safety.

TECHNICAL CHANGES - MORE RESTRICTIVE
("M.x" Labeled Comments/Discussions)

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

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

   The proposed change provides more stringent requirements for operation of the facility. 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. The more restrictive requirements continue to ensure process variables, structures, systems, and components are maintained consistent with the safety analyses and licensing basis. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

   The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in the methods governing normal plant operation. The proposed change does impose different requirements. However, these changes are consistent with the assumptions in the safety analyses and licensing basis. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

   The imposition of more restrictive requirements either has no impact on or increases the margin of plant safety. As provided in the discussion of the change, each change in this category is by definition, providing additional restrictions to enhance plant safety. The change maintains requirements within the safety analyses and licensing basis. Therefore, this change does not involve a significant reduction in a margin of safety.

L.1 CHANGE

In accordance with the criteria set forth in 10 CFR 50.92, NMP2 has evaluated this proposed Technical Specifications change and determined it does not represent a significant hazards consideration. The following is provided in support of this conclusion.

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

   The change to Specification 3.0.4 will allow MODE or other specified condition changes while the plant is in the ACTIONS which do not prohibit continued operation for an unlimited time in the MODE or other specified condition in the Applicability. Since it has been previously determined that continued operation is acceptable for these affected LCOs, and making a MODE or other specified condition change to enter or move through the Applicability results in the same probability and consequences as initially being in the Applicability when the ACTIONS are entered due to an inoperable component, there is no significant increase in the probability or consequences of an accident previously evaluated. In addition, exception to Specification 3.0.4 has already been taken in many of the individual existing ACTION statements. Incorporating the proposed change into LCO 3.0.4 will ensure that exceptions will be consistently applied when justified. Deletion of the individual exceptions will have no impact upon the requirements in the Specifications since the exception to existing Specification 3.0.4 will now be contained within proposed LCO 3.0.4.

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

   The proposed change does not necessitate a physical alteration of the plant (no new or different type of equipment will be installed) or changes in parameters governing normal plant operation. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

   The change to Specification 3.0.4 will allow MODE or other specified condition changes while the plant is in the ACTIONS which do not prohibit continued operation for an unlimited period of time in the MODE or other specified condition in the Applicability. Since it has been previously determined that continued operation is acceptable for these affected LCOs and making a MODE or other specified condition change to enter or move through the Applicability results in the same consequences as initially being in the Applicability when the ACTIONS are entered due to an inoperable component, there is no significant reduction in the margin of safety. In

L.1 CHANGE

3. (continued)

addition, exceptions to Specification 3.0.4 are already contained within many of the applicable existing ACTION statements. Incorporating the exceptions within proposed LCO 3.0.4 will ensure their consistent application.

L.2 CHANGE

In accordance with the criteria set forth in 10 CFR 50.92, NMP2 has evaluated this proposed Technical Specifications change and determined it does not represent a significant hazards consideration. The following is provided in support of this conclusion.

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

   The addition of LCO 3.0.5 allows restoration of equipment to service under administrative controls when it has been removed from service or declared inoperable to comply with ACTIONS. Temporarily returning inoperable equipment to service may in some cases increase the probability of a previously evaluated accident. However, the potential impact of temporarily returning the equipment to service is considered to be insignificant since the equipment will be restored to a condition which is expected to provide the required safety function. As stated in Generic Letter 87-09, "The vast majority of surveillances do in fact demonstrate that systems or components are operable." Also, returning the equipment to service will promote timely restoration of the operability of the equipment and reduce the probability of any events that may have been prevented by such operable equipment. Therefore, the change does not involve a significant increase in the probability of an accident previously evaluated.

   Since the equipment to be restored is already out of service, the availability of the equipment has been previously considered in the evaluation of consequences of an accident. Temporarily returning the equipment to service in a state which is expected to function as required to mitigate the consequences of a previously analyzed accident will promote timely restoration of the operability of the equipment and restore the capabilities of the equipment to mitigate the consequences of any events as previously analyzed. Therefore, the change does not involve a significant increase in the consequences of an accident previously evaluated.

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

   The proposed change does not introduce a new mode of plant operation and does not involve physical modification to the plant. Operation with the inoperable equipment temporarily restored to service is not considered a new mode of operation since existing procedures and administrative controls prevent the restoration of equipment to service until it is considered capable of providing the required safety functions.

L.2 CHANGE

2. (continued)

Performance of the surveillance is considered to be a confirmatory check of that capability which demonstrates that the equipment is indeed operable in the majority of the cases. For those times when equipment which may be temporarily returned to service under administrative controls is subsequently determined to be inoperable, the resulting condition is comparable to the equipment having been determined to be inoperable during operation, with continued operation for a specified time allowed to complete required actions. Since this condition has been previously evaluated in the development of the current Technical Specifications, the possibility of a new or different kind of accident from any accident previously evaluated is not created.

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

Temporarily returning inoperable equipment to service for the purpose of confirming operability places the plant in a condition which has been previously evaluated and determined to be acceptable for short periods. Additionally, the equipment has been determined to be in a condition which provides the previously determined margin of safety. The performance of the surveillance simply confirms the expected result and capability of the equipment. Therefore, the change does not involve a significant reduction in a margin of safety.

L.3 CHANGE

In accordance with the criteria set forth in 10 CFR 50.92, NMP2 has evaluated this proposed Technical Specifications change and determined it does not represent a significant hazards consideration. The following is provided in support of this conclusion.

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

   The application of the 25% extension to Required Action Completion Times which have a specified frequency on a periodic "once per" basis has been determined to not significantly degrade the reliability that results from performing the surveillance at a specified frequency. As stated in Generic Letter 87-09, "The vast majority of surveillances do in fact demonstrate that systems or components are operable." Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

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

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

   The application of the 25% extension to Required Action Completion Times which have a specified frequency on a periodic "once per" basis has been determined to not significantly degrade the reliability that results from performing the surveillance at a specified frequency. As stated in Generic Letter 87-09, "The vast majority of surveillances do in fact demonstrate that systems or components are operable." Therefore, the proposed change does not involve a significant reduction in the margin of safety.

L.4 CHANGE

In accordance with the criteria set forth in 10 CFR 50.92, NMP2 has evaluated this proposed Technical Specifications change and determined it does not represent a significant hazards consideration. The following is provided in support of this conclusion.

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

   The change does not result in any hardware or operating procedure changes. The Surveillance Frequencies are not assumed to be the initiator of any analyzed event. The change will not allow continuous operation such that a single failure will preclude the associated function from being performed. This change will allow delay in the entry into the Required Actions for up to 24 hours when a Surveillance Requirement has not been performed within the requirements of proposed SR 3.0.2. It is overly conservative to assume that systems or components are inoperable when a Surveillance Requirement has not been performed. In fact, the opposite is the case; the vast majority of Surveillance Requirements performed demonstrate that systems or components are operable. When a Surveillance Requirement is not performed within the requirements of SR 3.0.2, it is primarily a question of operability that has not been verified by the performance of the Surveillance Requirement. Therefore, the probability of occurrence or the consequences of an accident previously evaluated are not significantly increased since the most likely outcome of performing a Surveillance is that it does in fact demonstrate the system or component is operable.

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

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

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

   The increased time allowed for the performance of a Surveillance Requirement discovered to have not been performed within the requirements of SR 3.0.2 is acceptable based on the small probability of an event requiring the associated component. The requested allowance will provide sufficient time to perform the missed Surveillances in an orderly manner. Without the 24 hour delay, it is possible that the missed Surveillance would force a plant shutdown; thus, the plant could be shutting down while the missed Surveillance is being performed. As a result of the delay, the potential for human error will be reduced. As such, any reduction in the margin of safety will be insignificant and offset by the benefit gained in plant safety due to avoidance of unnecessary plant transients and shutdowns.