



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

January 24, 2002

Mr. David A. Christian  
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SUBJECT: DRAFT SAFETY EVALUATION REGARDING PROPOSED CONVERSION TO  
IMPROVED STANDARD TECHNICAL SPECIFICATIONS - NORTH ANNA  
POWER STATION UNITS 1 AND 2 (TAC NOS. MB0799 AND MB0800)

Dear Mr. Christian:

Enclosure 1 provides the draft Safety Evaluation (SE) of your proposed conversion of the current technical specifications (CTS) for the North Anna Power Station Units 1 and 2 to the improved technical specifications (ITS). The staff has completed the draft SE for review even though we have not yet received all responses to our requests for additional information (RAIs). We will continue to work toward the agreed-upon issuance date of April 1, 2002, assuming resolution of the RAIs and items that are beyond the scope of the conversion.

Please review the enclosed draft SE for accuracy and prepare the certified ITS for the North Anna Power Station for submittal to the NRC to facilitate issuance of the conversion amendment. Please provide your written comments on the draft SE and the certified ITS and Bases within 30 days of the date of this letter. The staff will review your comments and incorporate changes, as appropriate, in the SE before issuing the ITS and the final SE. The staff's conclusions in the enclosed draft SE are not valid until the final SE is issued.

Within 30 days of receipt of this letter, we request that you submit a license condition for Appendix D to the North Anna Power Station license to make enforceable the transfer of those requirements in the CTS being relocated into licensee-controlled documents that are the subject of regulations, as described in the enclosed draft SE. Enclosure 2 contains an acceptable license condition. A similar license condition should also be submitted for (1) each commitment to complete a future action that you have included in your letters on the ITS for North Anna Power Station Units 1 and 2, and (2) the first performance of new and revised surveillance requirements (SRs) for the ITS to be related to the implementation of the ITS. An acceptable license condition for the new and revised SRs is provided in Section 5 of the enclosed draft SE and Enclosure 2.

The draft SE, including four tables attached to the SE that list the changes to the CTS, documents the staff's review of your application dated December 11, 2000, as supplemented by letters dated June 18, July 16, July 20, August 13, August 27, September 27, October 10, October 17, November 8, November 19, November 29, December 2, December 13, 2001, and January 2, 2002. By your supplemental letters, you provided responses to the staff's RAIs dated April 23, May 21, June 1, June 4, June 22, July 2, July 30, July 31, September 6, September 7, September 18, October 3, October 10, October 16, November 7, and December 7, 2001. The additional CTS changes not normally included in a TS conversion amendment (beyond-scope issues) are addressed in Section 3.G.

The staff's review was based on the Standard Technical Specifications, NUREG-1431, Revision 1, "Standard Technical Specifications for Westinghouse Plants," dated April 1995, and on guidance provided in the Commission's "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors," published in the *Federal Register* on July 22, 1993 (58 FR 39132).

Sincerely,

A handwritten signature in black ink, reading "Stephen R. Monarque". The signature is fluid and cursive, with the first name "Stephen" and last name "Monarque" clearly legible.

Stephen R. Monarque, Project Manager, Section 1  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-338 and 50-339

Enclosures:

1. Draft Safety Evaluation
2. Acceptable License Condition

cc w/encls: See next page

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

DRAFT SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. XXX TO FACILITY OPERATING LICENSE NO. NPF-4  
AND AMENDMENT NO. XXX TO FACILITY OPERATING LICENSE NO. NPF-7

VIRGINIA ELECTRIC AND POWER COMPANY  
NORTH ANNA POWER STATION, UNITS 1 AND 2  
DOCKET NOS. 50-338 AND 50-339

1.0 INTRODUCTION

North Anna Power Station, Units 1 and 2 (NAPS) have been operating with Technical Specifications (TS) issued with the original Operating Licenses on October 5, 1970 (for Unit 1), and March 8, 1973 (for Unit 2), as amended. By application dated December 11, 2000, as supplemented June 18, August 13, July 16, July 20, August 27, September 27, October 10, October 17, November 8, November 19, November 29, December 2, December 13, 2001, and January 2, 2002, Virginia Electric and Power Company (the licensee) requested an amendment to the Operating Licenses and TS for the NAPS. Hereinafter, the proposed improved TS for NAPS are referred to as the ITS, the current TS are referred to as the CTS, and the improved standard TS, such as in NUREG-1431, are referred to as the STS. The corresponding Bases are ITS Bases, CTS Bases, and STS Bases, respectively. For convenience, a list of acronyms used in this SE is provided in Attachment 1 to this SE. This proposed amendment would convert the CTS to ITS.

The proposed conversion to the ITS is based upon:

- NUREG-1431, "Standard Technical Specifications for Westinghouse Plants," Revision 1, dated April 1995;
- The current NAPS CTS;
- "Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors" (Final Policy Statement), published on July 22, 1993 (58 FR 39132); and
- 10 CFR 50.36, "Technical Specifications," as amended July 19, 1995 (60 FR 36953).

In addition to basing the ITS on the STS, the Final Policy Statement, and the requirements in 10 CFR 50.36, the licensee retained portions of the CTS as a basis for the ITS. Several post-submittal letters of request for additional information (RAI) and a series of telephone conference calls were required during the course of this review. These RAIs and conference calls were necessary for the staff to clarify the proposed ITS with respect to the guidance in the Final Policy Statement and the STS and the NAPS's plant specific features and design. In addition to information from these RAIs and discussions, the licensee also proposed matters of a generic nature that were not in the STS.

Enclosure 1



The staff requested that the licensee submit such generic issues as proposed changes to the STS through the NRC/Nuclear Energy Institute's Technical Specifications Task Force (TSTF). These generic issues were considered for specific applications in the NAPS ITS. Consistent with the Final Policy Statement, the licensee proposed transferring some CTS requirements to licensee-controlled documents (such as the NAPS Updated Final Safety Analysis Report (UFSAR), for which changes to the documents by the licensee are controlled by a regulation such as 10 CFR 50.59 and may be changed without prior NRC approval). NRC-controlled documents, such as the TS, may not be changed by the licensee without prior NRC approval. In addition, human factors principles were emphasized to add clarity to the CTS requirements being retained in the ITS, and to define more clearly the appropriate scope of the ITS. Further, significant changes were proposed to the CTS Bases to make each ITS requirement clearer and easier to understand.

The overall objective of the proposed amendments, consistent with the Final Policy Statement, is to rewrite, reformat, and streamline the TS for NAPS in accordance with 10 CFR 50.36. Since the licensee submitted the December 11, 2000, application, a number of amendments to the NAPS operating license have been approved. The following table provides the subjects of the amendments and the dates of issuance.

Amendment Nos.		Description of Change	Date
Unit 1	Unit 2		
225	206	Increase Boron Concentration Limits in Reactor Coolant System during Refueling and Establish Boron Limits for Spent Fuel Pool.	3/20/01
226	207	Pressure-Temperature Limits, Low Temperature Overpressure Protection (LTOP) System Setpoints, and LTOP System effective temperature.	5/02/01
227	208	Increase Fuel Enrichment and Spent Fuel Pool Soluble Boron and Fuel Burnup Credit	6/15/01
228	209	Control Room Emergency Habitability Systems Increase Number of Compressed Air Bottles and revise Differential pressure Limit for Filter Assemblies	12/12/01
229	210	Elimination of Post Accident Sampling System Requirements	12/19/01

The licensee has incorporated these amendments, as appropriate, into the ITS. The license conditions included in the conversion amendment will make enforceable the following aspects of the conversion: (1) the relocation of requirements from the CTS and (2) the implementation schedule for new and revised surveillance requirements (SRs) in the ITS. The Commission's proposed action on the NAPS application for amendment dated December 11, 2000 was published in the *Federal Register* on XXXXX (xx FR xxxxx).

During its review, the staff relied on the Final Policy Statement and the STS as guidance for acceptance of CTS changes. This SE provides a summary basis for the staff's conclusion that the licensee can develop ITS based on STS, as modified by plant-specific changes, and that the use of the ITS is acceptable for continued operation of NAPS. This SE also explains the staff's conclusion that the ITS, which are based on the STS as modified by plant-specific changes, are consistent with the NAPS current licensing basis and the requirements of 10 CFR 50.36.

The staff also acknowledges that, as indicated in the Final Policy Statement, the conversion to ITS is a voluntary process. Therefore, it is acceptable that the ITS differ from the STS to reflect the current licensing basis for NAPS. The staff approves the licensee's changes to the CTS with modifications documented in the licensee's supplemental submittals.

For the reasons stated *infra* in this SE, the staff finds that the ITS issued with these license amendments comply with Section 182a of the Atomic Energy Act, 10 CFR 50.36, and the guidance in the Final Policy Statement, and that they are in accord with the common defense and security and provide adequate protection of the health and safety of the public.

## 2.0 BACKGROUND

Section 182a of the Atomic Energy Act requires that applicants for nuclear power plant operating licenses will state:

[S]uch technical specifications, including information of the amount, kind, and source of special nuclear material required, the place of the use, the specific characteristics of the facility, and such other information as the Commission may, by rule or regulation, deem necessary in order to enable it to find that the utilization . . . of special nuclear material will be in accord with the common defense and security and will provide adequate protection to the health and safety of the public. Such technical specifications shall be a part of any license issued.

In 10 CFR 50.36, the Commission established its regulatory requirements related to the content of TS. In doing so, the Commission placed emphasis on those matters related to the prevention of accidents and the mitigation of accident consequences. As recorded in the Statements of Consideration, "Technical Specifications for Facility Licenses; Safety Analysis Reports" (33 FR 18610, December 17, 1968), the Commission noted that applicants were expected to incorporate into their TS "those items that are directly related to maintaining the integrity of the physical barriers designed to contain radioactivity." Pursuant to 10 CFR 50.36, TS are required to include items in the following five specific categories related to station operation: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation (LCOs); (3) SRs; (4) design features; and (5) administrative controls. However, the rule does not specify the particular requirements to be included in a plant's TS.

For several years, NRC and industry representatives have sought to develop guidelines for improving the content and quality of nuclear power plant TS. On February 6, 1987, the Commission issued an interim policy statement on TS improvements, "Interim Policy Statement on Technical Specification Improvements for Nuclear Power Reactors" (52 FR 3788). During the period from 1989 to 1992, utility owners groups and the staff developed improved STS, such as NUREG-1431, that would establish models of the Commission's policy for each primary reactor type. In addition, the staff, licensees, and owners groups developed generic administrative and editorial guidelines in the form of a "Writer's Guide" for preparing TS, which gives greater consideration to human factors principles and was used throughout the development of licensee-specific ITS.

In September 1992, the Commission issued NUREG-1431, Revision 0, which was developed using the guidance and criteria contained in the Commission's Interim Policy Statement. The STS in NUREG-1431 was established as a model for developing the ITS for Westinghouse plants, in general. The STS reflect the results of a detailed review of the application of the interim policy statement criteria to generic system functions, which were published in a "Split Report" issued to the nuclear steam supply system (NSSS) vendor owners groups in May 1988. STS also reflect the results of extensive discussions concerning various drafts of STS, so that the application of the TS criteria and the Writer's Guide would consistently reflect detailed system configurations and operating characteristics for all reactor designs. As such, the generic Bases presented in NUREG-1431 provide an abundance of information regarding the extent to which the STS present requirements that are necessary to protect public health and safety. The STS in NUREG-1431 apply to NAPS.

On July 22, 1993, the Commission issued its Final Policy Statement, expressing the view that satisfying the guidance in the policy statement also satisfies Section 182a of the Act and 10 CFR 50.36. The Final Policy Statement described the safety benefits of the STS and encouraged licensees to use the STS as the basis for plant-specific TS amendments and for complete conversions to ITS based on the STS. Further, the Final Policy Statement gave guidance for evaluating the required scope of the TS and defined the guidance criteria to be used in determining which of the LCOs and associated SRs should remain in the TS. The Commission noted that, in allowing certain items to be relocated to licensee-controlled documents while requiring that other items be retained in the TS, it was adopting the qualitative standard enunciated by the Atomic Safety and Licensing Appeal Board in *Portland General Electric Co. (Trojan Nuclear Plant)*, ALAB-531, 9 NRC 263, 273 (1979). There, the Appeal Board observed:

[T]here is neither a statutory nor a regulatory requirement that every operational detail set forth in an applicant's safety analysis report (or equivalent) be subject to a technical specification, to be included in the license as an absolute condition of operation which is legally binding upon the licensee unless and until changed with specific Commission approval. Rather, as best we can discern it, the contemplation of both the Act and the regulations is that technical specifications are to be reserved for those matters as to which the imposition of rigid conditions or limitations upon reactor operation is deemed necessary to obviate the possibility of an abnormal situation

or event giving rise to an immediate threat to the public health and safety.

By this approach, existing LCO requirements that fall within or satisfy any of the criteria in the Final Policy Statement should be retained in the TS; those LCO requirements that do not fall within or satisfy these criteria may be relocated to licensee-controlled documents. The Commission codified the four criteria in 10 CFR 50.36 (60 FR 36953, July 19, 1995). The four criteria are as follows:

- Criterion 1            Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.*
- Criterion 2            A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.*
- 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.*
- Criterion 4            A structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety.*

Part 3.0 of this SE explains the staff's conclusion that the conversion of the NAPS CTS to ITS based on STS, as modified by plant-specific changes, is consistent with the NAPS current licensing basis and the requirements and guidance of the Final Policy Statement and 10 CFR 50.36.

### 3.0 EVALUATION

In its review of the NAPS ITS application, the staff evaluated six kinds of changes to the CTS as defined by the licensee. The staff's review also included an evaluation of whether existing regulatory requirements are adequate for controlling future changes to requirements that are removed from the CTS and placed in licensee-controlled documents.

In its review, the staff identified the need for clarifications and additions to the December 11, 2000, ITS application in order to establish an appropriate regulatory basis for translation of CTS requirements into ITS. The staff's comments were documented as requests for additional information (RAIs) and forwarded in letters dated April 23, May 21, June 1, June 4, June 22, July 2, July 30, July 31, September 6, September 7, September 18, October 3, October 10, October 16, November 7, and December 7, 2001. The licensee provided responses to the RAIs in supplemental letters dated June 18, July 16, July 20, August 13, August 27, September 27, October 10, October 17, November 8, November 19, November 29,

December 2, December 13, 2001, and January 2, 2002. The letters clarified the licensee's basis for translating the CTS requirements into ITS. For items that have been reviewed by the staff as stated in this Draft Safety Evaluation, the staff finds that the licensee's submittals, including the responses to the RAIs, provide sufficient detail to allow the staff to reach a conclusion regarding the adequacy of the licensee's proposed changes to the CTS.

Following are the five types of CTS changes:

- A        Administrative - changes to the CTS that result in no changes to existing restrictions and flexibility (i.e., nontechnical changes in the presentation of CTS requirements).
- M        More Restrictive - changes to the CTS that result in added restrictions or reduced flexibility (i.e., additional TS requirements).
- L        Less Restrictive "Specific" - changes to the CTS that result in reduced restrictions or added flexibility (i.e., changes, deletions, and relaxations of CTS requirements).
- LA       Removed Details - changes to the CTS that move details out of the CTS and into the Bases, UFSAR, or other appropriate licensee-controlled documents (i.e., design details, system descriptive details, and procedural details). This type of change is included with Relocations Specifications in Table R as described below.
- R        Relocations Specifications - relaxations in which whole CTS specifications are removed from the CTS to licensee-controlled documents.

The ITS application included a justification for each proposed change to the CTS in a numbered discussion of change (DOC), using the above letter designations as appropriate. In addition, the ITS application included an explanation of each difference between ITS and STS requirements in a numbered justification for difference (JFD).

The changes to the CTS, as presented in the ITS application, are listed and described in the following four tables attached to this SE:

- Table A - Administrative (A) Changes to the CTS
- Table M - More Restrictive (M) Changes to the CTS
- Table L - Less Restrictive (L) Changes to the CTS
- Table R - Relocated Specifications (R) and Removed Details (LA) from the CTS

These tables provide a summary description of the proposed changes to the CTS, references to the specific CTS requirements that are being changed, and the specific ITS requirements that incorporate the changes. The tables are only meant to summarize the changes being made to the CTS. The details as to what the actual changes are and how they are being made to the CTS or ITS are provided in the licensee's application and supplemental letters.

## **A. Administrative Changes**

Administrative (nontechnical) changes are intended to incorporate human factors principles into the form and structure of the ITS so that plant operations personnel can use them more easily. These changes are editorial in nature or involve the reorganization or reformatting of CTS requirements without affecting technical content or operational restrictions. Every section of the ITS reflects this type of change. In order to ensure consistency, the staff and the licensee have used the STS as guidance to reformat and make other administrative changes. Among the changes proposed by the licensee and found acceptable by the staff are:

- Identifying plant-specific wording for system names, etc.;
- Splitting up requirements currently grouped under a single current specification and moving them to more appropriate locations in two or more specifications of ITS;
- Combining related requirements currently presented in separate specifications of the CTS into a single specification of ITS;
- Presentation changes that involve rewording or reformatting for clarity (including moving an existing requirement to another location within the TS) but which do not involve a change in requirements;
- Wording changes and additions that are consistent with CTS interpretation and practice, and that more clearly or explicitly state existing requirements;
- Deletion of TS which no longer apply;
- Deletion of details that are strictly informational and have no regulatory basis; and
- Deletion of redundant TS requirements that exist elsewhere in the TS.

Table A lists the administrative changes being made in the NAPS ITS conversion. Table A is organized in STS order by each A-type DOC to the CTS, provides a summary description of the administrative change that was made, and provides CTS and ITS references. The staff reviewed all of the administrative and editorial changes proposed by the licensee and finds them acceptable because they are compatible with the Writer's Guide and the STS, do not result in any change in operating requirements, and are consistent with the Commission's regulations.

## **B. Technical Changes - More Restrictive**

The licensee, in electing to implement the specifications of the STS, proposed a number of requirements more restrictive than those in the CTS. The ITS requirements in this category include requirements that are either new, more conservative than corresponding requirements in the CTS, or have additional restrictions that are not in the CTS but are in the STS. Examples of more restrictive requirements are placing an LCO on plant equipment which is not required by the CTS to be operable, more restrictive requirements to restore inoperable equipment, and more restrictive SRs. Table M lists the more restrictive changes being made in the NAPS ITS conversion. Table M is organized in STS order by each M-type DOC to the CTS and provides a summary description of the more restrictive change that was adopted, and the CTS and ITS references. These changes are additional restrictions on plant operation that enhance safety and are acceptable.

### **C. Technical Changes - Less Restrictive**

Less restrictive requirements include deletions and relaxations to portions of the CTS requirements that are being retained in the ITS. When requirements have been shown to give little or no safety benefit, their relaxation or removal from the TS may be appropriate. In most cases, relaxations previously granted to individual plants on a plant-specific basis were the result of: (1) generic NRC actions, (2) new staff positions that have evolved from technological advancements and operating experience, or (3) resolution of the owners groups' comments on the STS. The staff reviewed generic relaxations contained in the STS and found them acceptable because they are consistent with current licensing practices and the Commission's regulations. The NAPS design was also reviewed to determine if the specific design basis and licensing basis for NAPS are consistent with the technical basis for the model requirements in the STS, and thus provide a basis for the ITS.

All of the less restrictive changes to the CTS have been evaluated and found to involve deletions and relaxations to portions of the CTS requirements that can be grouped in the following seven categories:

- Relaxation of LCO Requirement (Category 1)
- Relaxation of Applicability (Category 2)
- Relaxation of Completion Time (Category 3)
- Relaxation of Required Action (Category 4)
- Deletion of Surveillance Requirements (Category 5)
- Relaxation of Surveillance Requirements Acceptance Criteria (Category 6)
- Relaxation of Surveillance Frequency (Category 7)
- Deletion of Reporting requirements (Category 8)

The following discussions address why portions of various specifications within each of these eight categories of information or specific requirements are not required to be included in ITS:

#### **1. Relaxation of LCO Requirement (Category 1)**

The CTS contain LCOs that are overly restrictive because they specify limits on operational and system parameters and on system operability beyond those necessary to meet safety analysis assumptions. The CTS also contain administrative controls that do not contribute to the safe operation of the plant. The ITS, consistent with the guidance in the STS, omit such operational limits and administrative controls. This category of change includes (1) deletion of equipment or systems addressed by the CTS LCOs that are not required or assumed to function by the applicable safety analyses; (2) addition of explicit exceptions to the CTS LCO requirements (e.g., mode entry restrictions equivalent to those of ITS LCO 3.0.4) consistent with the guidance of the STS and normal plant operations to provide necessary operational flexibility but without a significant safety impact; and (3) deletion of miscellaneous administrative controls such as reporting requirements, sometimes contained in action requirements, that have no effect on safety. Deletion of such administrative controls allows operators to more clearly focus on issues important to safety. The ITS LCOs and administrative controls resulting from these changes will continue to maintain an adequate degree of protection consistent with the safety analysis, while providing an improved focus on issues

important to safety and necessary operational flexibility without adversely affecting the safe operation of the plant. Therefore, these less restrictive changes, which are consistent with STS and fall within Category 1, are acceptable.

## 2. Relaxation of Applicability (Category 2)

Reactor operating conditions are used in CTS to define when LCO features are required to be operable. CTS applicability requirements can be specifically defined terms of reactor conditions, such as hot shutdown, cold shutdown, reactor critical, or power operating conditions. CTS applicability requirements can also be more general. Depending on the circumstances, the CTS may require that an LCO be maintained within limits in "all modes" or "any operating mode." Generalized applicability conditions are not contained in STS; therefore, ITS eliminates CTS requirements such as "all modes" or "any operating mode," replacing them with ITS-defined modes or applicable conditions that are consistent with the application of the plant safety analysis assumptions for operability of the required features.

In another application of this category of change, CTS requirements may be eliminated during conditions for which the safety function of the specified safety system is met because the feature is performing its intended safety function. Deleting applicability requirements that are indeterminate or which are inconsistent with application of accident analyses assumptions is acceptable because when LCOs cannot be met, the TS are satisfied by exiting the specified LCO's applicability, thus taking the plant out of the conditions that require the safety system to be operable. Therefore, these changes, which are consistent with STS and fall within Category 2, are acceptable.

## 3 Relaxation of Completion Time (Category 3)

Upon discovery of a failure to meet an LCO, the TS specify times for completing Required Actions of the associated TS conditions. Required Actions establish remedial measures that must be taken within specified completion times. These times define limits during which operation in a degraded condition is permitted.

Incorporating completion time extensions is acceptable because completion times take into account the operable status of the redundant systems of TS-required features, the capacity and capability of remaining features, a reasonable time for repairs or replacement of required features, vendor-developed standard repair times, and the low probability of a design-basis accident (DBA) occurring during the repair period. Therefore, required action completion time extensions, which are consistent with STS and fall within Category 6, are acceptable.

## 4. Relaxation of Required Actions (Category 4)

An LCO is the lowest functional capability or performance level of equipment required for safe operation of the facility. When an LCO is not met, the CTS specify actions to be taken until the equipment is restored to its required capability or performance level, or remedial measures are established. Compared to CTS-required actions, the ITS actions result in extending the time period for taking the plant outside the applicability into



shutdown conditions. For example, changes in this category include providing an option to (1) isolate a system, (2) place equipment in the state assumed by the safety analysis, (3) satisfy alternate criteria, (4) take manual actions in place of automatic actions, (5) "restore to operable status" within a specified time frame, (6) place alternate equipment into service, or (7) use more conservative TS setpoints. The resulting ITS actions continue to provide measures that conservatively compensate for the inoperable equipment. The ITS actions are commensurate with safety importance of the inoperable equipment, plant design, and industry practice and do not compromise safe operation of the plant. Therefore, these changes, which are consistent with STS and fall within Category 4, are acceptable.

5. Deletion of Surveillance Requirements (Category 5)

CTS require maintaining the LCO equipment operable by conducting SRs in accordance with the plant specific equipment. The changes in this type relate to elimination of surveillance requirements in CTS that were no longer required or equipment had been replaced or the features that required surveillance actions had been replaced, or features with surveillance activities to be duplicated by other new ITS requirements. These changes fall in Category 5 and are consistent with the STS, and therefore are acceptable.

6. Relaxation of Surveillance Requirements Acceptance Criteria (Category 6)

Upon discovery of a failure to meet an LCO, TS specify times for completing Required Actions of the associated TS conditions. Required Actions establish remedial measures that must be taken within specified completion times (allowed outage times). These times define limits during which operation in a degraded condition is permitted.

Incorporating completion time extensions is acceptable because completion times take into account the operability status of the redundant systems of TS required features, the capacity and capability of remaining features, a reasonable time for repairs or replacement of required features, vendor-developed standard repair times, and the low probability of a design basis accident (DBA) occurring during the repair period. These changes are consistent with STS, and allowed outage time extensions specified as Type 6 are acceptable.

7. Relaxation of Surveillance Frequency (Category 7)

Prior to placing the plant in a specified operational mode or other condition stated in the applicability of an LCO, and in accordance with the specified SR frequency thereafter, the CTS require verifying the operability of each LCO-required component by meeting the SRs associated with the LCO. This usually entails performance of testing to demonstrate the operability of the LCO-required components, or the verification that specified parameters are within LCO limits. A successful demonstration of operability requires meeting the specified acceptance criteria as well as any specified conditions for the conduct of the test. Relaxations of CTS SRs include relaxing both the acceptance criteria and the conditions of performance. These CTS SR relaxations are consistent with the STS.

Relaxations of CTS SR acceptance criteria provide operational flexibility, consistent with the guidance of the STS, but do not reduce the level of assurance of operability provided by the successful performance of the surveillance. Such revised acceptance criteria are acceptable because they remain consistent with the application of the plant safety analysis assumptions for operability of the LCO-required features.

Relaxations of CTS SR performance conditions include not requiring testing of de-energized equipment (e.g., instrumentation channel checks) and equipment that is already performing its intended safety function (e.g., position verification of valves locked in their safety actuation position). These changes are acceptable because the existing surveillances are not necessary to ensure the capability of the affected components to perform their intended functions. Another relaxation of SR performance conditions is the allowance to verify the position of valves in high radiation areas by administrative means. This change is acceptable because licensee controls regarding access to high radiation areas make the likelihood of mispositioning such valves negligible.

Finally, the ITS permits the use of an actual, as well as a simulated, actuation signal to satisfy SRs for automatically actuated systems. This is acceptable because TS-required features cannot distinguish between an "actual" signal and a "test" signal.

These relaxations of CTS SRs optimize test requirements for the affected safety systems and increase operational flexibility. Therefore, because of the reasons stated, less restrictive changes to CTS SRs falling within Category 7 are acceptable.

#### 8. Deletion of Reporting requirements (Category 8)

CTS include requirements to submit special reports to the NRC when specified limits or conditions are not met. Typically, the time period for the report to be issued is "within 30 days." However, the ITS eliminates the TS requirements for special reports and instead relies on the reporting requirements of 10 CFR 50.73. The changes to the reporting requirements are acceptable because 10 CFR 50.73 provides adequate reporting requirements, and the special reports do not affect continued plant operation.

CTS also include requirements for reports to be made to the NRC on data gathered as part of routine plant programs. These requirements are removed from the ITS. The requirement to report test frequency changes that occur due to consecutive SR failures has been deleted since the test schedule is already covered by the TS. In addition, a historical review has shown the SR has never failed. These changes are consistent with STS, are specified as Type 8, and are acceptable.

Table L includes all L changes and is organized by ITS section. The table specifies: the section designation; a summary description of the change; CTS and ITS LCO references; a reference to the specific change type as discussed above; and a characterization of the DOC.

For the reasons presented above, these less restrictive requirements are acceptable because they will not affect the safe operation of the plant. The ITS requirements are consistent with current licensing practices, operating experience, and plant accident and transient analyses, and provide reasonable assurance that public health and safety will be protected.

Table L is organized in STS order by each L-type DOC. For each change, the table lists (1) the DOC identifier (e.g., 3.1.1 followed by L1 means STS 3.1.1, DOC L1); (2) a summary description of the change; (3) the reference numbers of the associated ITS requirements; (4) the reference numbers of the associated CTS requirements; and (5) the less restrictive change category.

#### **D. Technical Changes - Less Restrictive removal of Details (R and LA)**

When requirements have been shown to give little or no safety benefit, their removal from the TS may be appropriate. These are grouped as LA changes in the R Tables. In most cases, relaxations previously granted to individual plants on a plant-specific basis were the result of (1) generic NRC actions, (2) new staff positions that have evolved from technological advancements and operating experience, or (3) resolution of the Owners Groups comments on STS. The staff reviewed generic relaxations contained in the STS and found them acceptable because they are consistent with current licensing practices and the Commission's regulations. The NAPS design was also reviewed to determine if the specific design basis and licensing basis are consistent with the technical basis for the model requirements in the STS and thus provide a basis for ITS. A significant number of changes to the CTS involved the removal of specific requirements and detailed information from individual specifications evaluated to be Types 1 through 5 that follow:

##### **Type 1 - Removing Details of System Design and System Description, Including Design Limits**

The design of the facility is required to be described in the UFSAR by 10 CFR 50.34. In addition, the quality assurance (QA) requirements of Appendix B to 10 CFR Part 50 require that plant design be documented in controlled procedures and drawings and maintained in accordance with an NRC-approved QA plan (UFSAR Chapter 17). In 10 CFR 50.59, controls are specified for changing the facility as described in the UFSAR (including the Technical Requirements Manual, (TRM)), and in 10 CFR 50.54(a) criteria are specified for changing the QA plan. The ITS Bases also contain descriptions of system design. ITS 5.5.11 specifies controls for changing the Bases. Removing details of system design from the CTS is acceptable because this information will be adequately controlled in the UFSAR (including TRM) in accordance with 10 CFR 50.59 or the ITS Bases, as appropriate. Cycle-specific design limits are contained in the Core Operating Limits Report (COLR). ITS Section 5.6, Administrative Controls, includes the programmatic requirements for the COLR.

##### **Type 2 - Removing Descriptions of System Operation**

The plans for the normal and emergency operation of the facility are required to be described in the UFSAR by 10 CFR 50.34. ITS 5.4.1.a requires written procedures to be established, implemented, and maintained for plant operating procedures including procedures recommended in Regulatory Guide (RG) 1.33, Revision 2, Appendix A, February 1978. Controls specified in 10 CFR 50.59 apply to changes in procedures as described in the UFSAR. The ITS Bases also contain descriptions of system operation. The NAPS CTS include instrumentation trip setpoints and Allowable Values. Trip setpoints are instrument field settings. Allowable Values are the limiting values of the instrument trip setpoints before the LCO is exceeded, and the relationship between the trip setpoints and the Allowable Values is determined through the setpoints methodology

approved by the staff. Trip setpoints are system operation details that can be adequately controlled by licensee-controlled documents without adversely affecting safe operation of the plant. Allowable Values are specified in the ITS, while trip setpoints are relocated to the TRM.

It is acceptable to remove details of system operation from the TS because this type of information will be adequately controlled in the UFSAR (including TRM) and the TS Bases, as appropriate.

#### **Type 3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting**

Details for performing TS Actions and SRs are more appropriately specified in the plant procedures required by ITS 5.4.1, and described in the UFSAR and ITS Bases. For example, control of the plant conditions appropriate to perform a surveillance test is an issue for procedures and scheduling and has previously been determined to be unnecessary as a TS restriction. As indicated in GL 91-04, allowing this procedural control is consistent with the vast majority of other SRs that do not dictate plant conditions for surveillances. Prescriptive procedural information in an ITS action requirement is unlikely to contain all procedural considerations necessary for the plant operators to complete the actions required, and referral to plant procedures is therefore required in any event. Other changes to procedural details include those associated with limits retained in the ITS. For example, the ITS requirement may refer to programmatic requirements such as COLR, included in ITS Section 5.6, which specifies the scope of the limits contained in the COLR and mandates NRC approval of the analytical methodology. The QA Program is approved by the NRC and contained in UFSAR Chapter 17, and changes to the QA Program are controlled by 10 CFR 50.54(a). The Offsite Dose Calculation Manual (ODCM) is required by ITS 5.5.1. The TRM is incorporated by reference in to the UFSAR, and changes to the TRM are controlled by 10 CFR 50.59. The Inservice Test (IST) program is required by ITS 5.5.7

#### **Type 4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms**

Details for performance requirements for indication-Only Instrumentations and Alarms are more appropriately specified in the plant procedures required by ITS 5.4.1, the UFSAR, and the Bases. For example, CTS 4.6.1.1.d states, "Each time containment integrity is established after vacuum has been broken by pressure testing the butterfly isolation valves in the containment purge lines and the containment vacuum ejector line." ITS SR 3.6.3.4 states, "Perform leakage rate testing for containment purge valves with resilient seals." This changes the CTS by moving the details performance requirement specifically naming butterfly valves and the containment vacuum air ejector line to the Bases. Prescriptive procedural information in an action requirement is unlikely to contain all procedural considerations necessary for the plant operators to complete the actions required, and referral to plant procedures, based on TS Bases is therefore required in any event. The removal of these kinds of procedural details from the CTS is acceptable because they will be adequately controlled by NRC requirements, the UFSAR, plant procedures, Bases, as appropriate. This approach provides an effective level of regulatory control and provides for a more appropriate change control process. Removal

of requirements for indication-only instrumentation is acceptable because such instrumentation usually does not support system operability. Therefore, it is acceptable to remove Type 4 details from the CTS and place them in licensee-controlled documents.

#### Type 5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Other changes to procedural details include those associated with limits retained in the ITS. For example, the ITS requirement may refer to programmatic requirements such as COLR, included in ITS Section 5.5, which specifies the scope of the limits contained in the COLR and mandates NRC approval of the analytical methodology. Removal of requirements for programmatic requirements such as COLR is acceptable because such program usually does not support system operability. Therefore, it is acceptable to remove Type 5 details from the CTS and place them in licensee-controlled documents with references to ITS Section 5.0.

Table R is organized in STS order by each LA- and R-type DOC. It includes the following: (1) the DOC identifier (e.g., 3.1.1 followed by LA1 means STS 3.1.1, DOC LA1); (2) the reference numbers of the associated CTS requirements; (3) a summary description of the relocated details and requirements; (4) the name of the licensee-controlled document to contain the relocated details and requirements (location); (5) the regulation (or ITS Specification) for controlling future changes to relocated requirements (change control process); and (6) a characterization of the type of change (not applicable to R-type DOCs).

The staff has concluded that these types of detailed information and specific requirements do not need to be included in the ITS to ensure the effectiveness of the ITS to adequately protect the health and safety of the public. Accordingly, these requirements may be moved to one of the following licensee-controlled documents for which changes are adequately governed by a regulatory or TS requirement:

- Bases controlled in accordance with ITS 5.5.13, "Technical Specifications (TS) Bases Control Program."
- UFSAR (which includes the TRM as Appendix T) controlled by 10 CFR 50.59.
- Programmatic documents required by ITS Section 5.5 and controlled by ITS Section 5.4.
- Inservice Inspection (ISI) and IST Programs controlled by 10 CFR 50.55a.
- OCDM controlled by ITS 5.5.1.
- COLR controlled by ITS 5.6.4.
- PTLR controlled by ITS 5.6.5.
- QA Plan, as approved by the NRC and referenced in the UFSAR, controlled by 10 CFR Part 50, Appendix B, and 10 CFR 50.54(a).
- Site Emergency Plan controlled by 10 CFR 50.54(q).

To the extent that information has been relocated to licensee-controlled documents, such information is not required to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to public health and safety. Further, where such information is contained

in LCOs and associated requirements in the CTS, the staff has concluded that they do not fall within any of the four criteria set forth in 10 CFR 50.36(c)(2)(ii) and discussed in the Final Policy Statement (see Section 2.0 of this SE). Accordingly, existing detailed information, such as generally described above, may be removed from the CTS and not included in the ITS.

#### **E. Relocated Specifications (R) from the CTS**

The Final Policy Statement states that LCOs and associated requirements that do not satisfy or fall within any of the four specified criteria (now contained in 10 CFR 50.36(c)(2)(ii)) may be relocated from existing TS (an NRC-controlled document) to appropriate licensee-controlled documents. This section of the SE discusses the relocation of entire specifications in the CTS to licensee-controlled documents. These specifications include the LCOs, Action Statements (i.e., Actions), and associated SRs. In its application and its supplements, the licensee proposed relocating such specifications from the CTS to the UFSAR, which includes the TRM, the Environmental Manual (EM), and the ODCM, as appropriate. The NRC staff has reviewed the licensee's submittals and finds that relocation of these requirements to the UFSAR, TRM, EM, and ODCM is acceptable in that changes to the UFSAR, TRM, EM, and ODCM will be adequately controlled by 10 CFR 50.59, 10 CFR 50.54(a), 10 CFR 50.55a, and ITS 5.5.1, as applicable. These provisions will continue to be implemented by appropriate station procedures (i.e., operating procedures, maintenance procedures, surveillance and testing procedures, and work control procedures).

Table R lists all specifications that are being relocated from the CTS to licensee-controlled documents. Table R is combined with LA; however the relocated LA items are organized as described in Section 3.0.D above.

Table R lists all specifications that are being relocated from the CTS to licensee-controlled documents. Table R includes: (1) references to the DOCs, (2) references to the relocated CTS specifications, (3) summary descriptions of the relocated CTS specifications, (4) names of the documents that will contain the relocated specifications (i.e., the new location), and (5) the methods for controlling future changes to the relocated specifications (i.e., the regulatory control process).

The staff's evaluation of each relocated specification listed in Table R is provided below, mostly in CTS order. New locations for relocated CTS are listed in Table R of Attachments to the SE.

1.           3.1.1.3.1   BORON DILUTION - Reactor Coolant Flow  
CTS 3.1.1.3.1 requires a minimum reactor coolant system flow of 3000 gpm in all MODES. Various accident analyses assume adequate reactor coolant flow for heat removal and boron mixing. However, a specific flow rate is not assumed as an initial condition of any design basis accident or transient and is not credited for mitigation of any design basis accident or transient. Other specifications in the ITS contains adequate controls to ensure that RCS flow meets the general accident analysis assumption. In MODES 1, 2, and 3, at least one Reactor Coolant Pump (RCP) is required to be in operation, which provides flow in excess of 3000 gpm. In MODE 4, either an RCP or Residual Heat Removal (RHR) train is required to be in operation, and in MODES 5 and 6, at least one RHR train is required to be in

operation. The ITS Bases state that when an RHR train is required to provide RCS flow, the flow rate must be sufficient for decay heat removal and boron mixing. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Boron Dilution - Reactor Coolant Flow LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

2. 3.1.2.1 FLOW PATHS – Shutdown

CTS 3.1.2.1 provides requirements on the boration systems flow paths during shutdown. The boration systems are part of the Chemical and Volume Control System (CVCS) and provide the means to control the chemical neutron absorber (boron) concentration in the RCS and to help maintain the shutdown margin. The boration system is not assumed to be OPERABLE to mitigate the consequences of a design basis accident or transient. In the case of the boron dilution accident, the accident is addressed by preventing its occurrence or by terminating the event before the required shutdown margin is lost, not by boration. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Flow Paths – Shutdown LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

3. 3.1.2.2 FLOW PATHS – Operating

CTS 3.1.2.2 provides requirements on the boration systems flow paths during operation. The boration systems are part of the CVCS and provides the means to control the chemical neutron absorber (boron) concentration in the RCS and to help maintain the shutdown margin. The boration system is not assumed to be OPERABLE to mitigate the consequences of a design basis accident or transient. The Emergency Core Cooling System (ECCS) and Refueling Water Storage Tank are credited in the accident analyses. In the case of the boron dilution accident, the accident is addressed by preventing its occurrence or by terminating the event before the required shutdown margin is lost, not by boration. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Flow Paths – Operating LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

4. 3.1.2.3 CHARGING PUMP – Shutdown

CTS 3.1.2.3 provides requirements on the charging pumps during shutdown when used as part of the boration system. The charging pumps in the boration system are part of the CVCS and provide the means to control the chemical neutron absorber (boron) concentration in the RCS and to help maintain the shutdown margin. The charging pumps in the boration system are not assumed to be OPERABLE to mitigate the consequences of a design basis accident or transient. In the case of the boron dilution accident, the accident is addressed by preventing its occurrence or by terminating the event before the required shutdown margin is lost, not by boration. OPERABILITY of the charging pumps is required as part of

the Emergency Core Cooling System, which is addressed in other specifications. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Charging Pump – Shutdown LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

5. 3.1.2.4 Charging Pumps – Operating

CTS 3.1.2.4 provides requirements on the charging pumps during operation when used as part of the boration system. The charging pumps in the boration system are part of the CVCS and provide the means to control the chemical neutron absorber (boron) concentration in the RCS and to help maintain the shutdown margin. The charging pumps in the boration system are not assumed to be OPERABLE to mitigate the consequences of a design basis accident or transient. The ECCS and Refueling Water Storage Tank are credited in the accident analyses. In the case of the boron dilution accident, the accident is addressed by preventing its occurrence or by terminating the event before the required shutdown margin is lost, not by boration. OPERABILITY of the charging pumps is required as part of the ECCS, which is addressed in other specifications. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Charging Pumps – Operating LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

6. Unit 1; 3.1.2.5 BORIC ACID TRANSFER PUMPS – Shutdown

Unit 1 CTS 3.1.2.5 provides requirements on the boric acid transfer pumps during shutdown. The boric acid transfer pumps are part of the CVCS and provides the means to control the chemical neutron absorber (boron) concentration in the RCS and to help maintain the shutdown margin. The boric acid transfer pumps are not assumed to be OPERABLE to mitigate the consequences of a design basis accident or transient. In the case of the boron dilution accident, the accident is addressed by preventing its occurrence or by terminating the event before the required shutdown margin is lost, not by boration. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Boric Acid Transfer Pumps – Shutdown LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

7. Unit 1; 3.1.2.6 BORIC ACID TRANSFER PUMPS – Operating

Unit 1 CTS 3.1.2.6 provides requirements on the boric acid transfer pumps during operation. The boric acid transfer pumps are part of the CVCS and provides the means to control the chemical neutron absorber (boron) concentration in the RCS and to help maintain the shutdown margin. The boric acid transfer pumps are not assumed to be OPERABLE to mitigate the consequences of a design basis accident or transient. The ECCS and Refueling Water Storage Tank are credited in the accident analyses. In the case of the boron dilution accident, the accident is addressed by preventing its occurrence or by terminating the event before the required shutdown margin is lost, not by boration. The staff has determined that the



screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Boric Acid Transfer Pumps – Operating LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

8. 3.1.2.7 BORATED WATER SOURCES – Shutdown

CTS 3.1.2.7 provides requirements on the borated water sources during shutdown. The borated water sources - shutdown are part of the CVCS and provide the means to control the chemical neutron absorber (boron) concentration in the RCS and to help maintain the shutdown margin. The borated water sources are not assumed to be OPERABLE to mitigate the consequences of a design basis accident or transient. In the case of the boron dilution accident, the accident is addressed by preventing its occurrence or by terminating the event before the required shutdown margin is lost, not by boration. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Borated Water Sources – Shutdown LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

9. 3.1.2.8 BORATED WATER SOURCES – Operating

CTS 3.1.2.8 provides requirements on the borated water sources during operation. The borated water sources - operating are part of the CVCS and provide the means to control the chemical neutron absorber (boron) concentration in the RCS and to help maintain the shutdown margin. The borated water sources are not assumed to be OPERABLE to mitigate the consequences of a design basis accident or transient. The ECCS and Refueling Water Storage Tank are credited in the accident analyses and are required by other specifications. In the case of the boron dilution accident, the accident is addressed by preventing its occurrence or by terminating the event before the required shutdown margin is lost, not by boration. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Borated Water Sources – Operating LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

10. 3.1.3.3 POSITION INDICATOR CHANNELS – Shutdown

CTS 3.1.3.3 provides requirements on the rod position indicator channels during shutdown (MODES 3, 4, and 5 with the reactor trip system breakers in the closed position). The control rod position indicator channels provide indicator of rod position to the operator. This indicator is used by the operator to verify that the rods are correctly positioned, and to verify the rods are inserted into the core following a reactor trip. Rod position indicator is also used during reactor startup. However, no DBA or Transient initiated in MODES 3, 4, or 5 with the reactor trip system breakers in the closed position assumes operator action to manually trip the reactor or to take some alternative action if an automatic reactor trip does not occur. With the reactor critical, rod position indicator is used to verify that the insertion, sequence, and overlap limits are met. These are related to SHUTDOWN

MARGIN and core power distribution limits. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Position Indicator Channels – Shutdown LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

11. 3.3.3.1 RADIATION MONITORING INSTRUMENTATION

CTS 3.3.3.1 states the radiation monitoring instrumentation channels shown in Table 3.3-6 shall be OPERABLE with their alarm/trip setpoints within the specified limits. Portions of the Radiation Monitoring Instrumentation specification, as shown in the CTS markup, are addressed in ITS 3.4.15, RCS Leakage Detection Instrumentation, and ITS 3.3.3, Post Accident Monitoring (PAM) Instrumentation. Those portions are not addressed in this change. The Radiation Monitoring Instrumentation monitors radiation levels in selected plant locations and indicates abnormal or unusually high radiation levels. The radiation monitors are not assumed in the accident analyses to provide signals to prevent initiation of a DBA or transient or to mitigate a DBA or transient. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Radiation Monitoring LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

12. 3.3.3.2 MOVABLE INCORE DETECTORS

CTS 3.3.3.2 provides requirements on the Movable Incore Detector Instrumentation when required to monitor the flux distribution within the core. The Movable Incore Detector System is used for periodic surveillance of the power distribution, and for calibration of the excore detectors. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Movable Incore Detectors LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

13. 3.3.3.3 SEISMIC INSTRUMENTATION

CTS 3.3.3.3 for Unit 1 states the Seismic Monitoring Instrumentation shown in Table 3.3-7 shall be OPERABLE. The Seismic Monitoring Instrumentation is used to record data for use in evaluating the effect of a seismic event. The Seismic Monitoring Instrumentation is not used to mitigate a DBA or transient. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Seismic Instrumentation LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

14. 3.3.3.4 METEOROLOGICAL INSTRUMENTATION

CTS 3.3.3.4 for Unit 1 states the Meteorological Monitoring Instrumentation shown in Tables 3.3-8 and 4.3-5 shall be OPERABLE. The Meteorological Monitoring Instrumentation is used to record meteorological data for use in evaluating the

effect of an accidental radioactive release from the plant. The Meteorological Monitoring Instrumentation is not used to mitigate a DBA or transient. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Meteorological Instrumentation LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

15. 3.3.3.9 LOOSE PARTS MONITORING SYSTEM

Unit 1 CTS 3.3.3.9 requires the OPERABILITY of the loose parts detection instrumentation which can detect loose metallic parts in the Reactor Coolant System in order to avoid damage to the Reactor Coolant System components. The Unit 2 Technical Specifications do not contain this Specification. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Loose Parts Monitoring System LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

16. 3.3.3.11 EXPLOSIVE GAS MONITORING INSTRUMENTATION

CTS 3.3.3.11 requires the Explosive Gas Monitoring Instrumentation be OPERABLE. The Explosive Gas Monitoring Instrumentation is used to ensure that the oxygen limits of the Waste Gas Holdup System are not exceeded. The oxygen concentration limit in the Waste Gas Holdup Tank ensures that the concentration of potentially explosive gas mixtures in the Waste Gas Holdup System is maintained below the flammability limits. This instrumentation is not credited in preventing or mitigating any DBA or transient as the safety analysis concerning the Waste Gas Holdup System assumes a storage tank rupture with no mitigation. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Explosive Gas Monitoring Instrumentation LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

17. 3.4.6.3 PRIMARY TO SECONDARY LEAKAGE

CTS 3.4.6.3 provides limits on primary to secondary leakage in addition to the limits in CTS 3.4.6.2 and ITS 3.4.13. These additional limits lower the amount of allowed primary to secondary leakage when the reactor is operating above 50% power and were implemented to reduce the probability of a steam generator tube rupture following the Unit 1 steam generator tube rupture event at NAPS Unit 1 on July 15, 1987. The CTS 3.4.6.2 leakage limits were continued to be used in the accident analysis, not the addition limits in CTS 3.4.6.3. The NAPS Units 1 and 2 steam generators have been replaced with models that are not susceptible to the fatigue induced cracks which resulted in the tube rupture. As a result, these additional limits are not needed to lower the probability of a steam generator tube rupture. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Primary to Secondary Leakage LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

18. 3.4.6.4 PRIMARY TO SECONDARY LEAKAGE DETECTION SYSTEMS

CTS 3.4.6.4 states requirements on primary to secondary leakage detection systems. These leakage detection systems are in addition to those systems required by CTS 3.4.6.1 and ITS 3.4.15 and were installed to monitor the stringent primary to secondary leakage limits in CTS 3.4.6.3. These additional primary to secondary leakage detection systems were added to the Technical Specifications following the Unit 1 steam generator tube rupture (SGTR) event at NAPS Unit 1 on July 15, 1987. Subsequently, the NAPS Units 1 and 2 steam generators have been replaced and steam generator primary to secondary leakage is insignificant. As a result, the requirements in ITS 3.4.15 are sufficient to indicate significant abnormal RCS leakage. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Primary to Secondary Leakage Detection Systems LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

19. 3.4.7 CHEMISTRY

CTS 3.4.7 provides limits on the oxygen, chloride and fluoride content in the RCS to minimize corrosion. Minimizing corrosion of the RCS will reduce the potential for RCS leakage or failure due to stress corrosion, and ultimately ensure the structural integrity of the RCS. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Chemistry LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

20. 3.4.9.2 PRESSURIZER

CTS 3.4.9.2 states that the pressurizer temperature shall be limited to a maximum heatup of 100°F or cooldown of 200°F in any one hour period and a maximum spray water temperature and pressurizer temperature differential of 320°F. The pressurizer temperature limits are placed on the pressurizer to prevent non-ductile failure. The limits meet the requirements given in the ASME Boiler and Pressure Vessel Code, Section III, Appendix G. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Pressurizer LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

21. 3.4.10.1 STRUCTURAL INTEGRITY - ASME Code Class 1, 2 & 3 Components

CTS 3.4.10.1 provides requirements for the ASME Code Class 1, 2 and 3 components to ensure their structural integrity. These requirements are in addition to the requirements in CTS 4.0.5. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Structural Integrity - ASME Code Class 1, 2 & 3 Components LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

22. 3.4.11.1 REACTOR VESSEL HEAD VENT

CTS 3.4.11.1 provides requirements on the reactor vessel head vents. The reactor coolant head vents are provided to exhaust noncondensable gases or steam, which could inhibit core cooling, from the RCS. The reactor vessel head vents are not credited in any UFSAR accident analysis. The reactor vessel head vents are included in the Emergency Operating Procedures for mitigation of beyond design basis accidents. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Reactor Vessel Head Vent LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

23. 3.5.4.2 HEAT TRACING

CTS 3.5.4.2 states, "At least two independent channels of heat tracing shall be OPERABLE for the boron injection tank and for the heat traced portions of the associated flow paths." The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Boron Injection Tank Heat Tracing LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

24. 3.7.1.6 STEAM TURBINE ASSEMBLY

CTS 3.7.1.6 states that the structural integrity of the steam turbine assembly shall be maintained in MODES 1 and 2. The steam turbine assembly is used to provide the motive force for the main electrical generator. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Steam Turbine Assembly LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

25. 3.7.1.7 TURBINE OVERSPEED

CTS 3.7.1.7 states that at least one turbine overspeed protection system shall be OPERABLE in MODES 1, 2, and 3. The turbine overspeed protection system is used to prevent a turbine overspeed condition that could result in turbine damage. The turbine overspeed protection system serves no accident mitigation function in any MODE. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Turbine Overspeed LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

26. 3.7.2.1 STEAM GENERATOR PRESSURE / TEMPERATURE LIMITATION

CTS 3.7.2.1 states that the temperature of both the primary and secondary coolants in the steam generators shall be greater than 70° when the pressure of either coolant in the steam generator is greater than 200 psig at all times. The Steam Generator Pressure/Temperature Limitation serves no accident mitigation

function in any MODE. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Steam Generator Pressure / Temperature Limitation LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

27. 3.7.3.1 COMPONENT COOLING WATER SUBSYSTEM - Operating

CTS 3.7.3.1 states that three component cooling (CC) water system loops shall be OPERABLE. It is applicable when either unit is in MODES 1, 2, 3, or 4. The primary function of the CC System is to provide cooling water to the RHR heat exchangers. Unlike other Westinghouse plants, the RHR at NAPS does not share components with the Emergency Core Cooling System (ECCS), and thus does not play a role in DBA mitigation. At NAPS, this post-accident heat removal function is provided primarily by the Recirculation Spray System and the Low Head Safety Injection pumps. For this reason, CC is not required for DBA mitigation, and, like RHR, does not meet Criterion 3 of 10 CFR 50.36(c)(2)(ii) for retention in the Technical Specifications for MODES 1, 2, 3, and 4. Other plants use CC for DBA mitigation functions other than ECCS, such as containment cooling, but the CC system at NAPS does not. This makes the CC System at NAPS different from the CC System described in the IST, and retaining the CC requirement for supporting RHR or any other components not assumed in DBA analysis is inappropriate. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Component Cooling Water Subsystem - Operating LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

28. 3.7.3.2 COMPONENT COOLING WATER SUBSYSTEM - Shutdown

CTS 3.7.3.2 states that two CC loops shall be OPERABLE. It is applicable when both units are in MODES 5 or 6. The primary function of the CC System is to provide cooling water to the RHR heat exchangers, but does not warrant its own LCO. If insufficient CC is available for RHR, RHR is declared inoperable and the Conditions and Actions for CC in CTS are the same as those for RHR. Unlike other Westinghouse plants, RHR does not share components with the ECCS, and thus does not play a role in DBA mitigation in MODES 1, 2, 3, and 4. Other plants use CC for DBA mitigation functions other than ECCS in MODES 1, 2, 3, and 4, but the CC system at NAPS does not. This makes the CC System at NAPS different from the CC System described in the NUREG STS, and retaining the CC requirement for MODES 5 and 6 for supporting RHR or any other components not assumed in DBA analysis is inappropriate. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Component Cooling Water Subsystem - Shutdown LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

29. 3.7.4.2 SERVICE WATER SYSTEM - Shutdown

CTS 3.7.4.2 states that one service water loop shall be OPERABLE when both units are in MODES 5 or 6. The Service Water (SW) System in MODES 5 or 6 is used to provide cooling water to various safety and nonsafety related systems. Its principal safety function is to cool the Recirculation Spray (RS) heat exchangers which are not required to be OPERABLE in MODES 5 or 6. It also provides cooling water to the Component Cooling Water system (which supports no accident loads), the main control room coolers, instrument air compressors, and charging pump gearbox coolers. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Service Water System - Shutdown LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

30. 3.7.5.1.b ULTIMATE HEAT SINK - North Anna Reservoir

CTS 3.7.5.1.b states that one of the ultimate heat sinks that shall be OPERABLE is the North Anna Reservoir with a minimum water level at or above elevation 244 Mean Sea Level, USCG Datum, and average water temperature of  $\leq 95^{\circ}$  as measured at the condenser inlet. The North Anna Reservoir provides makeup to the Service Water Reservoir for 30 days after a DBA as necessary to maintain cooling water inventory, ensuring a continued cooling capability. The Service Water Reservoir is credited as the ultimate heat sink for the DBA. The Service Water Reservoir contains adequate water to provide at least 30 days of cooling to support simultaneous safe shutdown and cooldown of both units and their maintenance in a safe-shutdown condition. The Service Water Reservoir also provides sufficient cooling for at least 30 days in the event of an accident in one unit, to permit control of that accident and permit simultaneous safe shutdown and cooldown of the remaining unit and maintain them in a safe-shutdown condition. The North Anna Reservoir serves as a backup to the Service Water Reservoir. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Ultimate Heat Sink - North Anna Reservoir LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

31. 3.7.6.1 FLOOD PROTECTION

CTS 3.7.6.1 states the maximum elevation of the North Anna Reservoir. If this limit is exceeded, flood control measures are required to protect safety related equipment. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Flood Protection LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

32. 3.7.9.1 RESIDUAL HEAT REMOVAL SYSTEMS - (RHR) Operating

CTS 3.7.9.1 states that two RHR subsystems shall be OPERABLE in MODES 1, 2, and 3. The RHR System is used to remove decay heat from the reactor in MODES

4, 5, and 6. The RHR does not operate in MODES 1, 2 and 3 and must be isolated from the reactor coolant system in those MODES to prevent over pressurization of the RHR components. The RHR System serves no accident mitigation function in any MODE. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the RHR - Shutdown LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

33. 3.7.10 SNUBBERS

CTS 3.7.10 states that snubbers shall be OPERABLE. The OPERABILITY of snubbers ensures that the Reactor Coolant System and other safety related fluid systems are adequately restrained and supported during an earthquake and are free to expand and contract during normal operation as the system temperature changes. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Snubbers LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

34. 3.7.11.1 SEALED SOURCE CONTAMINATION

CTS 3.7.11.1 states each sealed source containing radioactive material either in excess of 100 micro curies of beta and/or gamma emitting materials or 5 micro curies of alpha emitting material, shall be free of greater than or equal to 0.005 micro curies of removable contamination. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Sealed Source Contamination LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

35. 3.7.12.1 SETTLEMENT OF CLASS 1 STRUCTURES

CTS 3.7.12.1 and Table 3.7-5 provide limits on the total and differential settlement of Class 1 structures. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Settlement of Class 1 Structures LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

36. 3.7.13 GROUNDWATER LEVEL - Service Water Reservoir

CTS 3.7.13 requires periodic measurement of the groundwater level at locations around the Service Water Reservoir. The groundwater level of the Service Water Reservoir is used to monitor long-term performance of the Service Water Reservoir dike. Failure to meet the requirements of the LCO does not result in the inoperability of the Service Water System. The ACTIONS direct that evaluations be performed to determine cause and consequences of the high groundwater level. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Groundwater Level - Service Water Reservoir LCO and



Surveillances may be relocated to other plant controlled documents outside the ITS.

37. (Unit 2) 3.8.2.5 CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

Unit 2 CTS 3.8.2.5 states the primary and backup containment penetration conductor overcurrent protective devices associated with each containment electrical penetration circuit shall be OPERABLE. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Containment Penetration Conductor Overcurrent Protective Devices LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

38. (Unit 2) 3.8.2.6 MOTOR-OPERATED VALVES THERMAL OVERLOAD PROTECTION DEVICES

Unit 2 CTS 3.8.2.6 states the thermal overload protection devices, integral with the motor starter, of each valve in the safety system shall be OPERABLE. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Motor-Operated Valves Thermal Overload Protection Devices LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

39. (Unit 2) 3.8.2.7 NORMALLY DE-ENERGIZED POWER CIRCUITS

Unit 2 CTS 3.8.2.7 states that all circuits that have containment penetrations and are not required during reactor operations shall be de-energized. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Normally De-Energized Power Circuits LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

40. 3.9.3 DECAY TIME

CTS 3.9.3 states that the reactor must be subcritical for at least 150 hours prior to movement of movement of irradiated fuel in the reactor pressure vessel. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Decay Time LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

41. 3.9.5 COMMUNICATIONS

CTS 3.9.5 states that direct communications shall be maintained between the control room and personnel at the refueling station during CORE ALTERATIONS. This ensures that refueling station personnel can be promptly informed of significant changes in the facility status or core reactivity conditions during CORE ALTERATIONS. The prompt notification of the control room of a fuel handling

accident is an assumption in the Fuel Handling Analysis. This prompt notification is used to ensure that the control room is isolated promptly and is necessary to meet the control room operator dose limits in General Design Criteria 19. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Communications LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

42. 3.9.6 MANIPULATOR CRANE OPERABILITY

CTS 3.9.6 states that the manipulator crane and auxiliary hoist shall be used for movement of control rods or fuel assemblies and shall be OPERABLE during movement of control rods or fuel assemblies within the reactor pressure vessel. This specification ensures that the lifting device on the Manipulator Crane has adequate capacity to lift the weight of a fuel assembly and a Rod Control Cluster Assembly, and that an automatic load limiting device is available to prevent damage to the fuel assembly during fuel movement. This specification also ensures that the auxiliary hoist on the Manipulator Crane has adequate capacity for latching and unlatching control rod drive shafts. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Manipulator Crane Operability LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

43. 3.9.7 CRANE TRAVEL - SPENT FUEL PIT

CTS 3.9.7 places restriction on movement of loads over irradiated assemblies in the spent fuel pit in excess of 2500 pounds. This represents the working load of the fuel assembly plus gripper. The LCO ensures that in the event this load is dropped the activity release will be limited to that contained in a single fuel assembly and any possible distortion of fuel in the storage racks will not result in a critical array. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Crane Travel - Spent Fuel Pit LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

44. 3.9.9 CONTAINMENT PURGE AND EXHAUST ISOLATION SYSTEM

CTS 3.9.9 states requirements for the containment purge and exhaust isolation system, which automatically closes the containment purge and exhaust isolation valves in MODE 6. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Containment Purge and Exhaust System LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

45. 3.9.10.2 WATER LEVEL - Reactor Vessel Control Rods

CTS 3.9.10.2 states that the refueling cavity water level must be at least 23 feet above the fuel during MODE 6 during movement of control rods within the reactor pressure vessel. Movement of control rods is not an initiator of any UFSAR

accident analysis. The staff has determined that the screening criteria of 10 CFR 50.36 have not been satisfied, and thus the Water Level - Reactor Vessel - Control Rods LCO and Surveillances may be relocated to other plant controlled documents outside the ITS.

The relocated specifications from the CTS discussed above are not required to be in the TS because they do not fall within the criteria for mandatory inclusion in the TS as stated in 10 CFR 50.36(c)(2)(ii). These specifications are not needed to obviate the possibility that an abnormal situation or event will give rise to an immediate threat to the public health and safety. In addition, the staff has concluded that appropriate controls have been established for all of the current specifications and information that are being moved to the UFSAR, TRM, ODCM, PCP, or ISI Program. These relocations are the subject of a new license condition discussed in Section 5.0 of this SE. Until incorporated in licensee-controlled documents, changes to these specifications and information will be controlled in accordance with the current applicable procedures and regulations that control these documents. Following implementation, the NRC may audit the removed provisions to ensure that an appropriate level of control has been achieved. The staff has concluded that, in accordance with the Final Policy Statement, sufficient regulatory controls exist under the regulations, particularly 10 CFR 50.59 and 10 CFR 50.55a. Accordingly, the specifications and information, as described in detail in this SE, may be relocated from the CTS and placed in the licensee-controlled documents identified in the licensee's submittals.

#### **F. Control of Specifications, Requirements, and Information Relocated from the CTS**

In the ITS conversion, the licensee will be relocating specifications, requirements, and detailed information from the CTS to licensee-controlled documents outside the CTS. This is discussed in Sections 3.0.D and 3.0.E above. The facility and procedures described in the UFSAR and TRM can only be revised in accordance with the provisions of 10 CFR 50.59, which ensures records are maintained and establishes appropriate control over requirements removed from the CTS and over future changes to the requirements. Other licensee-controlled documents contain provisions for making changes consistent with applicable regulatory requirements. For example, the ODCM can be changed in accordance with ITS 5.5.1, and the administrative instructions that implement the QA Plan can be changed in accordance with 10 CFR 50.54(a) and 10 CFR Part 50, Appendix B. The documentation of these changes will be maintained by the licensee in accordance with the record retention requirements specified in the QA Plan and such applicable regulations as 10 CFR 50.59.

The license condition for the relocation of requirements from the CTS, which is discussed in Section 5.0 of this SE, will address the implementation of the ITS conversion and the schedule for the relocation of the CTS requirements into licensee-controlled documents. The relocations to the UFSAR, which include the TRM, shall be included in the next required update of the UFSAR in accordance with 10 CFR 50.71(e).

#### **G. Evaluation of Other TS Changes (Beyond-Scope Changes) Included in the Application for Conversion to ITS**

This section evaluates other TS changes included in the licensee's conversion application. These include items which deviate from both the CTS and the STS, do not fall clearly into a

category, or are in addition to those changes that are needed to meet the overall purpose of the conversion. These changes are termed beyond scope issues (BSI), which have been identified by the licensee in their submittal, and by the staff during the course of the staff review. These BSIs are included in the notice of consideration of amendment published in the Federal Register on xx, xx, 2002.

#### **G.1 BSI Changes identified by the Licensee:**

The changes discussed below are licensee-identified BSI and are listed in the order of the applicable ITS specification or section, as appropriate. Also provided are references to the associated DOC to the CTS and JFD from the STS given in the licensee's application.

1. ITS SR 3.3.1.6, DOC L.16, JFD 15

ITS states "Compare results of the excore channels to incore detector measurements." Note is added to require NIS channel adjustment if absolute difference is  $> 3\%$ .

The licensee responded to the staff's RAI with a letter, dated November 8, 2001. In this letter, the licensee proposed to use a TSTF presently under NEI review. Subsequently, during a conference call on December 2, 2001, the licensee proposed to replace this BSI with a submittal to extend the SR from 92 days to 6 months. As of January 18, 2002 the staff has not received this submittal.

2. ITS Function 6 OTDT Allowable Value Note 1, DOC L.21, JFD 7, CTS Table 2.2-1 Function 7 OTDT Allowable Value Note 3

ITS states the % allowed for the trip setpoints may differ from the Allowable Value by 2.3%

The licensee in a letter, dated January 2, 2002, withdrew this BSI.

3. ITS 3.3.2 ESFAS INTERLOCK P-12, DOC M.7, JFD 1, CTS Table 3.3-3 ESF Interlock P-12

ITS states the Allowable Value for the P-12 interlock as 542 degrees.

The staff received the licensee's submittal, dated October 17, 2001. This BSI is under staff review.

4. ITS 3.3.2 ESFAS Functions 1.c, 1.d, 1.f, 2.c, 4.c, and 4.d, DOC M.7, JFD 1, CTS Table 3.3-4 ESF Functions 1.c, 1.d, 1.f, 2.c, 4.c, and 4.d

NUREG brackets the Allowable Values for the following functions.

In a letter, dated December 13, 2001, the licensee requested staff approval of plant specific methodology for NAPS and Surry Power Station. This BSI is under staff review

5. ITS 3.4.12, Low Temperature Overpressure Protection (LTOP) System, Condition C (DOC M.4 and JFD 6);

ITS states for Condition C that when an accumulator is not isolated or power is available to one or more accumulator isolation valve operators, the accumulator must be isolated immediately and power removed from affected accumulator isolation valve operator in one hour. Note modifies the Condition to state that it is only applicable when accumulator pressure is greater than PORV lift setpoints.

This beyond scope issue is related to NUREG-1431, STS 3.4.12, "Low Temperature Overpressure Protection (LTOP) System" regarding the accumulator isolation requirement. The licensee proposed ITS 3.4.12, will ; 1) add a note to ACTION C which indicates that the accumulator isolation is only applicable when accumulator pressure is greater than power operated relief valve (PORV) setting, 2) add REQUIRED ACTION C.2 to state that "Remove power from affected accumulator isolation valve operators," and 3) add a note in LCO section which state that "Accumulator isolation with power removed from the isolation valve operators is only required when accumulator pressure is greater than the PORV lift setting." STS 3.4.12 of NUREG-1431 has; 1) a note in the APPLICABILITY section which states that "accumulator isolation is only required when accumulator pressure is greater than or equal to the maximum RCS pressure for the existing RCS cold leg temperature allowed by the P/T limit curves provided in the PTLR," and 2) ACTION C contains the similar words as the note in the APPLICABILITY section.

The primary purpose of the accumulator isolation during LTOP conditions is to prevent inadvertent injection of water from the accumulators into RCS which may a challenge to reactor vessel P/T limits during low temperature operating conditions. The PORVs at NAPS Units are served as LTOP system with their setpoints designed to protect reactor vessel P/T limits under the limiting mass addition and heat addition transients. The settings of these PORVs are lower than the P/T limits in various temperature regions.

The proposed ITS 3.4.12, in the areas of accumulator isolation will require that when the plant is operating in the LTOP conditions, and the accumulator pressures are above the PORV settings, the accumulator are required to be isolated with power removed from the isolation valve operators. The staff evaluated the licensee's submittals and concludes that the licensee proposed ITS 3.4.12 regarding accumulator isolation is acceptable. The bases for the staff acceptance are ; 1) The proposed ITS will only allow the accumulators connected to RCS when the accumulator pressures are lower than the PORV settings. Since the PORVs are designed to mitigate the limiting mass addition from a charging pump, It is unlikely that the P/T limits will be challenged by water injecting to RCS from the accumulators, 2)The proposed ITS is more conservative than STS 3.4.12 in NUREG 1431 since the STS would allow the accumulators connected to RCS when the accumulator pressures are below the P/T limits but above the PORV settings, 3) The proposed ITS will require power removal from the isolation valve operators for added assurance for accumulator isolation, and 4) The proposed ITS add plant operational restrictions to NAPS current licensing bases regarding the requirement of accumulation isolation. There is no such requirement in their CTS.

Based on the above review, the staff finds that the licensee proposed ITS 3.4.12 in the areas of requiring accumulator isolation during LTOP conditions are more conservative than that in CTS and STS 3.4.12 of NUREG-1431. Therefore, the proposed ITS 3.4.12 regarding accumulator isolation is acceptable.

6. ITS 3.7.3 - Main Feedwater Isolation Valves (MFIVs), Main Feedwater Pump Discharge Valves (MFPDVs), Main Feedwater Regulating Valves (MFRVs), and Main Feedwater Regulating Bypass Valves (MFRBVs) (DOC M.1 and JFD 3);

The licensee proposed the adoption of Section 3.7.3 of the STS. Adoption of Section 3.7.3 presents several deviations to the standard format provided in NUREG-1431 and has therefore been identified as a "beyond scope" issue. The title of this section as adopted into the NAPS Units 1 and 2 ITS is; Section 3.7.3, "Main Feedwater Isolation Valves (MFIVs), Main Feedwater Pump Discharge Valves (MFPDVs), Main Feedwater Regulating Valves (MFRVs), and Main Feedwater Regulating Bypass Valves (MFRBVs)."

The NAPS feedwater system consists of three main feedwater pumps with associated Main Feedwater Pump Discharge Valves that feed a common header. From this header are three lines feeding the three steam generators. On each line is a Main Feedwater Isolation Valve in series with a Main Feedwater Regulating Valve. On a line which bypasses each MFIV and MFRV is a Main Feedwater Regulating Bypass Valve. Each of these valves, the MFPDVs, MFIVs, MFRVs, and MFRBVs, close on receipt of a Safety Injection or Steam Generator Water Level High-High Signal. The MFIVs and the MFRVs provide single failure protection for each other. The MFPDVs and the MFRBVs provide single failure protection for each other. Therefore, all four valve types are required to meet the safety analysis assumptions.

The most significant deviation in content that ITS 3.7.3 presents is that ITS 3.7.3 Required Actions A.2, B.2, C.2, and added Required Action D.2, are revised to state, "Verify by administrative means [MFIV or MFPDV or MFRV or MFRBV] is closed or isolated." The phrase "by administrative means" does not appear in the STS and is added in the NAPS ITS. When the specified valves are closed and isolated, there is no indication available in the Control Room of the valve position. Therefore, this verification must be performed by plant personnel accessing the area where the valve is and verifying it's position visually. The licensee indicated that this administrative action will be performed according to NAPS in-house procedure. The staff accepts this deviation from the STS.

The most significant deviation in format to the STS is that the NAPS ITS 3.7.3 will include Main Feedwater Pump Discharge Valves. The STS 3.7.3 (as written in NUREG-1431) addresses Main Feedwater Isolation Valves and Main Feedwater Regulating Valves and associated bypass valves but not MFPDVs. Because NAPS's Main Feedwater System includes Main Feedwater Pump Discharge Valves, and because they provide single failure protection for the MFRBVs (and therefore are required to meet safety analysis assumptions), it is appropriate that the MFPDVs be included in ITS 3.7.3.

Other changes being made are the inclusion of NAPS plant specific values and information, where appropriate, in place of those presented in Section 3.7.3 of the STS. An example of this is the isolation time for the MFIVs, MFRVs, and MFPDVs. The time presented in ITS surveillance requirement (SR) 3.7.3.1 was changed to represent the NAPS requirement and differs slightly from the isolation time presented in the STS SR 3.7.3.1. The ITS SR 3.7.3.1 also adds the requirement to test the closure time of each MFPDV.

Based on our review, the staff finds the proposed change to adopt STS 3.7.3 for NAPS to be acceptable with the deviations from the STS cited above.

7. ITS 3.7.7, DOC R.1, JFD 1, CTS 3.7.3.1 and 3.7.3.1

ITS does not include an LCO for the Component Cooling System.

In response to the staff's RAI, the licensee provided a submittal dated November 19, 2001. During a conference call conducted on January 3, 2002, the staff requested additional information, which the licensee has agreed to submit by the end of January 2002.

8. ITS 3.7.9, DOC R.1, CTS 3.7.6.1

NUREG includes requirements for the Ultimate Heat Sink. ITS does not include requirements for the NAPS Reservoir.

In response to the staff's RAI, the licensee provided a submittal dated November 19, 2001. During a conference call conducted on January 3, 2002, the staff requested additional information, which the licensee has agreed to submit by the end of January 2002.

9. ITS SR 3.7.11.1 - Main Control Room/Emergency Switchgear Room Air Conditioning System

The licensee proposed changing the surveillance requirement frequency of SR 3.7.11.1, from "18 months" to "18 months on a Staggered Test Basis."

An air conditioning system with two independent 100% capacity trains for each unit which supplies the relay rooms and common control room are designed for 75 °F dry bulb at approximately 50% relative humidity during normal operation. For emergency conditions, there is sufficient cooling capacity to maintain the control room, computer room, and relay room space temperature well below the design maximum of 120 °F. A third chiller is provided for each reactor unit as an alternative for either train. One 100% capacity cooling system which supplies the relay rooms and common control room in order to meet the signal failure criterion is installed for each reactor unit. The cooling systems cannot be cross connected between the two reactor units. Only one train for each unit is used at a time.

The emergency ACS for the MCR/ESGR envelope consists of two independent 100% redundant subsystems, one chiller in one subsystem and two chillers in the other. Each subsystem consists of two air handling units, one for the MCR and one for the ESGR to provide the heat removal function during post accident conditions as well as during normal operation. The licensee added Staggered Test Basis with the 18 months surveillance test frequency of chillers. The staff finds the proposed change acceptable, because there are three chillers with 100% cooling operation capability, either of which can be used by the subsystem and in staff's judgement, changing the surveillance frequency to every 18 month on a Staggered Test Basis provides an acceptable level of confidence that the system will function as assumed in the accident analysis.

10. ITS 3.7.12 LCO Note, DOC M.2, JFD 4, CTS 3.7.8.1

The licensee proposed to add the phrase "not open by design" to ITS 3.7.12 LCO to convey that the ECCS pump room boundary openings not open by design may be opened. This additional is deviated from the NUREG NOTE which states that the ECCS pump room boundary openings may be opened intermittently under administrative control.

This item is under review by the staff.

11. ITS Surveillance Requirements (SR) 3.7.12.2 and 3.7.12.4, CTS 4.7.8.1.a.1 - Emergency Core Cooling System (ECCS) Pump Room Exhaust Air Cleanup System (PREACS)

The licensee proposed adding the following surveillance requirement as ITS SR 3.7.12.2, with a surveillance frequency of 31 days: "Actuate each ECCS PREACS train by aligning Safeguards Area exhaust flow and Auxiliary Building Central exhaust flow through the Auxiliary Building HEPA filter and charcoal adsorber assembly".

The Emergency Core Cooling System (ECCS) Pump Room Exhaust Cleanup System (PREACS) filters air from the area of the active ECCS components during the recirculation phase of a loss of coolant accident (LOCA). The ECCS PREACS, in conjunction with other normally operating systems, also provides environmental control of temperature in the ECCS pump room areas.

The licensee stated that this surveillance requirement, ITS SR 3.7.12.2, is added to divert Safeguards Area exhaust flow and Auxiliary Building Central exhaust system flow through the Auxiliary Building HEPA filter and charcoal adsorber assembly for the operating Safeguards Area fan, from the control room, every 31 days. This ITS SR 3.7.12.2 requires certain dampers associated with the Auxiliary Building Central exhaust system to be manually actuated, and tested. This provides additional assurance that the exhaust flow can be diverted through the filters in case of a Design Basis Accident (DBA) that requiring their actuation. The licensee also stated that the 31 days test frequency is based on the known reliability of the equipment and the availability of redundant trains.

This new SR is added to ensure that in the event of a postulated DBA, the ECCS PREACS train is operable to reduce the potential dose risk from a radiological event. The staff concludes that the proposed SR is a conservative addition and therefore finds it acceptable. With this proposed change, the STS surveillance requirement 3.7.12.2 is then renumbered to become ITS SR 3.7.12.3. This is an administrative change and the staff finds it acceptable. Similarly, STS SR 3.7.12.3 is renumbered to become ITS SR 3.7.12.4. This is also an administrative change which the staff finds acceptable. In addition, the licensee proposed changing this SR from "Verify each ECCS PREACS train actuates on an actual or simulated actuation signal" to "Verify Safeguards Area exhaust flow is diverted and each Auxiliary Building filter bank is actuated on an actual or simulated actuation signal".

In addition, STS SR 3.7.12.3 requires verifying each ECCS PREACS train to actuate on an actual or simulated actuation signal. The licensee proposed a change to this SR by replacing "Verify each ECCS PREACS train actuates on an actual or simulated actuation signal" with "Verify Safeguards Area exhaust flow is diverted and each Auxiliary Building filter bank is actuated on an actual or simulated actuation signal" on a surveillance frequency of every 18 months. The staff finds this change acceptable because this SR verify proper operation of actuation signal and assure that the each Auxiliary Building filter bank signal will actuate in case of an accident.

12. ITS 3.7.13, DOC M.2, JFD 7, CTS 3.7.7.1 Action b.

CTS allows the bottled air system to be inoperable for seven days. ITS allows two or more required trains of the MCR/ESGR bottled air system to be inoperable for 24 hours.



This item is under review by the staff.

13. ITS 3.7.15, DOC L.2, JFD 5, CTS 3.9.12

Fuel Building Ventilation System (FBVS) - CTS SR 4.9.12.

The Fuel Building Ventilation System (FBVS) consists of dual exhaust fans and two-speed supply fans. One supply fan serve the spent fuel pit area and one for the remote equipment space at Evaluation 249 ft. 4 in. Both take suction from a common plenum fitted with a combination roll and high efficiency filter (95% atmospheric dust spot efficiency) and steam coils for air tempering and space heating. The exhaust fans discharge through vent stack B and are arranged for selective alignment through the auxiliary building HEPA/charcoal filter bank. The area of the remote equipment room subject to radioactive contamination is exhausted by a branch from the decontamination building exhaust system.

The licensee proposed to eliminate the testing requirement for the fuel building filtration system from the ITS by deleting CTS SR 4.9.12 (a) and CTS SR 4.9.12 (c). The purpose of these SRs is to verify that the fuel building filters can perform as required. In the submittal, the licensee states that the deleted SRs are not necessary to verify that the equipment used to meet the LCO are consistent with the safety analysis and can perform its required functions. Thus, appropriate equipment continues to be tested in a manner and at a frequency necessary to give confidence that the equipment can perform its assumed safety function. Furthermore, the licensee stated that the deletion of the requirement for the FBVS filters is acceptable because the NAPS radiological analysis of the fuel handling accident (FHA) in the fuel building assumes that all of the radionuclides released from the fuel pool are released without credit for filtration of the released material.

In order to determine the acceptability of the deletion of requirements for the FBVS filters, the staff examined the licensee's design basis radiological analysis of the FHA as documented in the licensee's UFSAR, Chapter 15.4.5. The previous licensee analysis along with the resulting dose consequences were found to be acceptable by the staff. The staff verified that the current fuel building FHA radiological analysis does not take credit for filtration of the released material and that the analysis assumptions as listed in the UFSAR are consistent with Regulatory Guide 1.25, "Assumptions Used for Evaluating the Potential Radiological Consequences of a Fuel Handling Accident in the Fuel Handling and Storage Facility for Boiling and Pressurized Water Reactors." The dose consequences of the FHA were previously found by the staff to be well within the dose guidelines given in 10 CFR Part 100 for offsite doses and also meet dose criteria in 10 CFR 50, Appendix A, General Design Criterion (GDC) 19 for the control room. The staff finds the proposed changes to the NAPS TS that remove requirements for testing the FBVS filtration capability are consistent with assumptions used in the current design basis analysis found in the NAPS UFSAR.

The licensee proposes, in accordance with TSTF-51, to add the term recently irradiated fuel as fuel that has been part of a critical reactor core within a licensee-specified number of days. The proposed TS bases state that until analyses are performed to determine a specific value, recently irradiated fuel is defined as any irradiated fuel. CTS 3.9.3 "Decay Time " is being relocated to the TRM. The required decay time is 150 hours before allowing movement of irradiated fuel, which is longer than the assumed decay time of 100 hours in the UFSAR FHA radiological analysis. The

staff finds that the licensee's proposed definition of recently irradiated fuel is consistent with the NAPS design basis analysis. Based on the above evaluation, the staff concludes that the proposed changes to SR 4.9.12 incorporated into the ITS are acceptable.

14. ITS 3.9.4, LA.1, A.5, JFD 2, CTS 3.9.4

The licensee in their submittal dated November 8, 2001, withdrew their request to use this BSI.

15. ITS 5.5.8-2 - Steam Generator Tube Inspection (DOC L.22 and JFD 1), CTS Table 4.4-2. Unit 1 CTS steam generator tube inspection requirements

The licensee proposed to delete the requirements in the current technical specifications Section 4.4.5, Table 4.4-2, "Report to NRC and Obtain Approval Prior to Operation," in the event an additional steam generator is found to be in category C-3. The licensee stated that the requirement is not specified in the STS. The proposed deletion makes this table consistent with the corresponding table in the STS.

The proposed administrative TS retains the requirement to notify the NRC if inspection results fall into category C-3. This notification is to be made pursuant to 10 CFR 50.72, and the "approval" requirement was imposed on the licensee prior to replacement of steam generators when tube leaks at times during operation were frequent. However, the licensee has since replaced with new steam generators and the steam generator performance is significantly improved, and thus the staff concurs that an "approval" requirement is no longer necessary. This deletion will make the NAPS technical specifications consistent with the STS in NUREG 1431. The proposed change is not expected to have any affect on safety, and therefore, the staff finds that the proposed change acceptable.

**G.2 Additional BSI Changes identified by the Staff:**

1. ITS 3.3.1, JFD 14, DOC A.24

In April of 2001, Westinghouse published NUREG-1431, Rev 2, "NUREG-1431, Rev 2, "Standard Technical Specifications, Westinghouse Plants." Many of the Westinghouse designed plants including North Anna Units 1 and 2 are converting to the ITS to provide consistency in their technical specifications and reduce regulatory burden. The staff is responsible for reviewing the conversion of each plant to the ITS format from their CTS. The staff must ensure all safety and regulatory requirements are met.

North Anna Units 1 and 2 used the Westinghouse ITS and WCAP-14483-A "Generic Methodology for Expanded Core Operating Limits Report" to develop their ITS and new Core Operating Limits Report (COLR). The COLR allows licensees to change cycle-specific technical values without NRC approval, provided that NRC approved methodologies are used to determine the values. The staff reviews the implementation of a COLR to ensure that the proper approved methodologies are being used.

Due to the differences between the format and content of the CTS and the proposed ITS for North Anna Units 1 and 2, the staff must review any changes involved in the conversion. This safety evaluation discusses the review of the following two BSIs for North Anna Units 1 and 2:

- 1) The overtemperature  $\Delta T$  and overpower  $\Delta T$  formulas contained in Notes 1 and 2 of ITS Table 3.3.1-1 have been modified in the proposed ITS to reflect those used as the licensing basis in the North Anna CTS. The licensee stated that these changes reflect the plant specific CTS formulas in the proposed ITS requirements.
- 2) The licensee proposed to exclude the statement "with gains to be selected based on measured instrument response during plant startup tests such that:" in Table 2.2-1, Note 1 of the CTS, from the proposed ITS. This statement describes the methodology used to determine the gains used in the calculation of the overtemperature  $\Delta T$  trip setpoints. The licensee's justification for deletion contends that this statement is for information only and since the gains have not been adjusted without engineering evaluation and NRC approval since their initial calculation, the removal is administrative.

With regard to the first BSI, the staff reviewed the formulas for the overtemperature and overpower  $\Delta T$  functions in Notes 1 and 2 of the ITS Table 3.3.1-1, and found that they are identical to those in Notes 1 and 2, respectively, of the CTS Table 2.2-1. Since these formulas were previously approved by the NRC as the licensing basis in the North Anna CTS and have not been changed in the conversion to the ITS, the staff finds their use in the ITS acceptable.

In evaluating the second BSI, the staff reviewed the methodologies used by the licensee to calculate the allowable overtemperature  $\Delta T$  gains and trip setpoints. The staff conducted this review to determine if it was acceptable for the licensee to exclude the statement "with gains to be selected based upon measured instrument response during plant startup tests such that:" from Note 1 of ITS Table 3.3.1-1. This statement appears in CTS Note 1 of Table 2.2-1 and describes how gains for the axial flux difference are determined and used in the calculation of the overtemperature  $\Delta T$  trip setpoints. In two separate RAIs dated September 7 and November 7, 2001, the staff requested the licensee provide detailed information on the procedures and methodologies used to determine the allowable values for the gains and setpoints. The licensee provided responses dated October 10 and December 12, 2001, which indicate the procedures and NRC approved methodologies used in determining the appropriate gains and trip setpoints. The licensee stated that they used the NRC approved methodology contained in WCAP-8748-P-A, "Design Bases for the Thermal Overpower Delta-T and Thermal Overtemperature Delta-T Trip Functions." The staff has approved this topical report for calculation of the constants used in the overtemperature and overpower  $\Delta T$  formulas. Since the licensee is using NRC approved methodologies used for the calculation of the allowable overtemperature  $\Delta T$  gains and trip setpoints, the staff finds it acceptable to exclude the identified statement from ITS Table 3.3.1-1, Note 1.

In reviewing the December 12, 2001, RAI response, the staff noted licensee statements to conditionally adopt WCAP-14483-A, "Generic Methodology for Expanded Core Operating Limits Report" (COLR), to allow relocation of overtemperature and overpower  $\Delta T$  allowable values to the COLR. The staff reviewed the response to determine if an NRC approved methodology was used in calculating the allowable values and gains for the purpose of acceptability to remove the

statement on how gains are determined from the ITS. This safety evaluation has not reviewed the response to determine acceptability of relocating values to the COLR for North Anna, Units 1 and 2 because no clear position on licensee use of WCAP 14483-A was established.

The staff reviewed two BSI related to the licensee's conversion from the CTS to the Westinghouse ITS. First, the staff approves the use of the plant specific ITS equations for the overtemperature and overpower  $\Delta T$  equations shown in Table 3.3.1-1, Notes 1 and 2. The staff has concluded that these equations are identical to those previously approved in CTS Table 2.2-1, Notes 1 and 2. Secondly, the staff approves the exclusion of the statement "with gains to be selected based upon measure instrument response during plant startup tests such that:" from ITS Table 3.3.1-1, Note 1. The staff concluded that the licensee used NRC approved methodologies to calculate the allowable overtemperature  $\Delta T$  gains and trip setpoints.

## 2. ITS 3.3.1, DOC L.7, Unit 2

Category 6 - Relaxation of Surveillance Requirement Acceptance Criteria.

The licensee will adopt TSTF-371, which is under staff review.

## 3. ITS 3.3.1 - Reactor Trip System (RTS) Instrumentation (DOC L.8); Relaxation of LCO Requirements, Allowable Values for the P-7 function come from the requirements of P-10 and P-13

The licensee proposed a change to the allowable values of the setpoints for the P-7 interlock (Low Power Reactor Trips Block) to a value not currently allowed by their current TS. The original allowable value for P-7 was  $<11$  percent. The staff reviewed the proposed change and finds a change to the CTS which lists the allowable value as NA (Not Applicable). However, the P-7 interlock uses the P-10 and P-13 interlocks for inputs. The licensee proposed new allowable value for P-10 and P-13 of  $\leq 11$  percent. This change effectively modifies the P-7 actuation from  $<11$  percent to  $\leq 11$  percent, thus including 11 percent as an allowable value. The staff considers this change to be less restrictive, however considered to have a negligible effect. Based on this review, the staff finds the proposed change acceptable.

## 4. ITS 3.3.1 - Reactor Trip System (RTS) Instrumentation (DOC L.14); Relaxation of LCO Requirements, Allowable Value Changes for P-6, P-8, and P-13 interlocks

The licensee proposed changes to the allowable values for the P-6, P-8, and P-13 interlocks. The P-6 interlock function for increasing power (intermediate range above setpoints) is to allow the operators to manually block the Source Range channels trip capability. Securing the Source Range channels trip is not a safety function, but is an equipment protection function. The licensee proposed removing this P-6 setting from the improved TS. The staff reviewed the change and finds this removal acceptable. However, the P-6 interlock function while decreasing power (intermediate range below setpoints) is safety related. This interlock activates the Source Range channels trip capability. The allowable value for the decreasing power P-6 interlock is listed as  $>3 \times 10^{-10}$  in the current Technical Specifications. The proposed allowable value is listed as  $\geq 3 \times 10^{-10}$ . This change is less restrictive, but is considered to have a negligible effect. Based on this review, the staff finds the proposed change acceptable.

When below the defined setpoints, the P-8 interlock prevents a reactor trip for the following conditions: low flow in a single loop, a single reactor coolant pump breaker open, or a turbine trip. This function (power range below setpoints) is not a safety function and the associated setpoints have been removed from the proposed TS. The staff finds this removal acceptable. However, when above ITS setpoints, the P-8 interlock allows a reactor trip for the above conditions. The current TS list the allowable value for the setpoints as <31 percent on the power range channels. The licensee proposed changing the allowable value to  $\leq 31$  percent. This change is less restrictive, but is considered to have a negligible effect. Based on this review, the staff finds the proposed change acceptable.

The P-13 interlock (Turbine Impulse Pressure) is an input to the P-7 interlock. When above the setpoints, P-13 (in conjunction with P-10) allows a reactor trip under the following conditions in more than one loop: low flow, reactor coolant pump breaker open, under voltage on the reactor coolant pump busses, and under frequency on the reactor coolant pump busses. P-13 also allows a reactor trip on pressurizer low pressure or pressurizer high level when above the setpoints. The current TS list the allowable value as < 11 percent. The licensee proposed changing the allowable value to  $\leq 11$  percent. The inclusion of 11 percent is less restrictive, but it is considered negligible. Based on this review, the staff finds the proposed change acceptable.

When below the setpoints, P-13 (in conjunction with P-10) prevents a reactor trip when any of the following conditions occur: reactor coolant system low flow, reactor coolant pump breakers open, reactor coolant pump busses under voltage, reactor coolant pump busses under frequency, pressurizer low pressure, and pressurizer high level. This function of P-13 is not assumed in the safety analyses. Therefore, the licensee proposed removing the setpoints and allowable values for this function of P-13 from their TS. Based on this review, the staff finds this removal acceptable.

#### 8. ITS Table 3.3.2-1, ESFAS Instrumentation 7. Automatic Switch over to Containment Sump

Automatic Switch over to Containment Sump.

This item is under review by the staff.

#### 9. ITS 3.7.11 Actions D and E, DOC M.1 and M.3, JFD 3, CTS 3/4.7.7.1 Action d

The ITS proposes to only require entry into Action D, for one AC subsystem inoperable, as long as 100% air conditioning system cooling equivalent to a single operable AC subsystem is available.

The emergency ACS for the MCR/ESGR envelope consists of two independent 100% redundant subsystems, one chiller in one subsystem and two chillers in the other. Each subsystem consists of two air handling units, one for the MCR and one for the ESGR to provide the heat removal function during post accident conditions as well as during normal operation. An air conditioning system with two independent 100% capacity subsystems for each unit which supplies the relay rooms and common control room are designed for 75° F dry bulb at approximately 50% relative humidity during normal operation. For emergency conditions, there is sufficient cooling capacity to maintain the control room, computer room, and relay room space temperature well below the design maximum of 120° F. A third chiller is provided for each reactor unit as an alternative for

either train. The cooling systems cannot be cross connected between the two reactor units. Only one train for each unit is used at a time.

The licensee stated that because the MCR/ESGR ACS includes a total of three chillers and flexibility in the use of system components, the description of system requirements, "Less than 100% of the MCR/ESGR ACS cooling equivalent to a single OPERABLE MCR/ESGR ACS subsystem available...." is proposed in the above ITS instead of a reference to two inoperable trains. The proposed ITS Conditions allow a variety of system configurations to be established that would provide sufficient cooling capacity to meet the design function and allows appropriate flexibility in operation of the system similar to ITS 3.5.2, ECCS. The licensee further stated that the Conditions D and E still require that when the design function can not be met, that the appropriate Applicability (MODES 1,2, 3, and 4 and During movement of recently irradiated fuel assemblies) be exited.

The staff has reviewed the proposed change and agrees with the licensee that the proposed ITS change is consistent with the intent of STS 3.7.11. Since there are three chillers with 100% cooling capability, either of which can be used by either subsystem. The staff finds the proposed ITS change acceptable because it provides the system flexibility in operation of the system, enables the various configurations to maintain the required cooling function, and provides an acceptable level of confidence that the system will function as assumed in the accident analysis.

Based on the above evaluation, the staff concludes that the proposed changes to TS 3.7.11, Actions D and E, incorporated in the ITS are acceptable.

#### 4.0 COMMITMENTS RELIED UPON

In reviewing the proposed ITS conversion for NAPS, the staff has relied upon the licensee's commitment to relocate certain requirements from the CTS to licensee-controlled documents as described in Table R, "Relocated Specifications and Removal of Details" (Attachment 5 to this SE). This table reflects the relocations described in the licensee's submittals on the conversion. The staff requested and the licensee submitted a license condition to make this commitment enforceable (see Section 5.0 of this SE). Such a commitment from the licensee is important to the ITS conversion because the acceptability of removing certain requirements from the TS is based on those requirements being relocated to licensee-controlled documents where further changes to the requirements will be controlled by regulations or other requirements (e.g., in accordance with 10 CFR 50.59).

#### 5.0 LICENSE CONDITIONS

License conditions to define the schedule to begin performing the new and revised SRs after implementation of the ITS are included in Appendix C of the Operating License. These conditions are:

- (1) For SRs that are new in this amendment, the first performance is due at the end of the first surveillance interval that begins on the date of implementation of this amendment.

(2) For SRs that existed prior to this amendment, whose intervals of performance are being reduced, the first reduced surveillance interval begins upon completion of the first surveillance performed after implementation of this amendment.

(3) For SRs that existed prior to this amendment that have modified acceptance criteria, the first performance is due at the end of the first surveillance interval that began on the date the surveillance was last performed prior to the implementation of this amendment.

(4) For SRs that existed prior to this amendment, whose intervals of performance are being extended, the first extended surveillance interval begins upon completion of the last surveillance performed prior to the implementation of this amendment.

The staff has reviewed the above schedule for the licensee to begin performing the new and revised SRs and concludes that it is an acceptable schedule. The licensee stated that their implementation date for the new ITS is April 2, 2002. This implementation schedule is acceptable.

Also, a license condition is to be included that will enforce the relocation of requirements from the CTS to licensee-controlled documents. The relocations are described in Table R (Attachment 5 to this SE), and Section 3.0.D, "Removed Details," and Section 3.0.E, "Relocated Specifications," above. The license condition states that the relocations would be completed no later than December 31, 2001. This schedule is acceptable.

As a part of the ITS conversion, the licensee also proposed to delete two existing license conditions related to compliance with CTS reporting and record retention requirements. These two conditions, 3.C and 3.D, are no longer necessary because they duplicate regulations regarding reporting and record keeping. They also duplicate License Condition 3.B, "Technical Specifications," which requires that NAPS operate the facility in accordance with the TS. Many of the CTS requirements that these two conditions refer to are being relocated out of the ITS to licensee-controlled documents, as specified in the conversion submittal and supplements thereto. Therefore, deletion of these two license conditions will have no impact on the reporting and record keeping requirements for NAPS, and is acceptable.

## 6.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Virginia State official was notified on of the proposed issuance of the ITS conversion amendment for NAPS. The State official had no comments.

## 7.0 ENVIRONMENTAL CONSIDERATION

Pursuant to 10 CFR 51.21, 51.32, and 51.35, an environmental assessment and finding of no significant impact was published in the *Federal Register* on xxxxx (xx FR xxxxx), for the proposed conversion of the CTS to ITS for NAPS. Accordingly, based upon the environmental assessment, the Commission has determined that issuance of these amendments will not have a significant effect on the quality of the human environment.

With respect to other changes included in the application for conversion to ITS, the items change requirements with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendments required by these other changes involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission issued proposed findings that the amendments required by these other changes involve no significant hazards consideration, and there has been no public comment on these findings published in the *Federal Register* on XXXXX (XX FR XXXXX); XXXXX (XX FR XXXXX), and XXXXXX (XX FR XXXXX). Accordingly, these changes meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the implementation of these changes.

## 8.0 CONCLUSION

The NAPS ITS provides clearer, more readily understandable requirements to ensure safe operation of the plant. The staff concludes that the ITS for NAPS satisfy the guidance in the Final Policy Statement on TS improvements for nuclear power reactors with regard to the content of TS, and conform to the STS provided in NUREG-1431, Revision 1, with appropriate modifications for plant-specific considerations. The staff further concludes that the ITS satisfy Section 182a of the Atomic Energy Act, 10 CFR 50.36, and other applicable standards. On this basis, the staff concludes that the proposed ITS for NAPS are acceptable.

The staff has also reviewed the plant-specific changes to the CTS as described in this SE. On the basis of the evaluations described herein for each of the changes, the staff also concludes that these changes are acceptable.

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner; (2) such activities will be conducted in compliance with the Commission's regulations; and (3) the issuance of the amendment will not be inimical to the common defense and security, or to the health and safety of the public.

### Attachments:

1. List of Acronyms
2. Table A - Administrative Changes
3. Table M - More Restrictive Changes
4. Table L - Less Restrictive Changes
5. Table R - Relocated Specifications and Removed Details

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## LIST OF ACRONYMS

AC	Air Conditioning or Alternating Current
ADD	Atmospheric Dump Valve
JFD	Axial Flux Difference
A.W.	Auxiliary Feedwater System
AT	Allowed Outage Time
ARM	Average Power Range Monitor
ART	Adjusted Reference Temperature
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
ATS	Anticipated Transient Without Scram
CC	Component Cooling Water
CW	Circulating Water
CFR	Code of Federal Regulations
CFR	Channel Functional Test
C.V.	Containment Isolation Valve
COLR	Core Operating Limits Report
CPI	Containment Pressure Condensate Isolation
C.D.	Control Rod Drive
CHEFS	Control Room Emergency Filtration System
CRIS	Control Room Ventilation System
CRAW	Control Rod Withdrawal Accident
CST	Condensate Storage Tank
CTS	Current Technical Specification
CVCS	Chemical and Volume Control System
DBA	Design-Basis Accident
DG	Diesel Generator
DNB	Departure from Nucleate Boiling
DOC	Discussion of Change (from the CTS)
ECCS	Emergency Core Cooling System
EDGE	Emergency Diesel Generator
ESPY	Effective Full Power Year
EM	Environmental Manual
EPA	Electrical Protection Assembly
ESFAS	Engineered Safety Features Actuation System
FR	Federal Register
ISI	Inservice Inspection
IST	Inservice Testing
ITS	Improved Technical Specification
JFD	Justification for Deviation
kV	Kilovolt
kW	Kilowatt
LCO	Limiting Condition for Operation
LOCA	Loss-of-Coolant Accident
LOOP	Loss of Offsite Power
LOP	Loss of Power

LPM	Local Power Range Monitor
LEFT	Logic System Functional Test
LTOP	Low Temperature Overpressure Protection
MFRV	Manual Feedwater Regulating Valve
MAW	Main Feedwater
MG	Motor Generator
MFIV	Main Steam Isolation Valve
M.C.	Moderator Temperature Coefficient
M.D./T	Megawatt Days/short Ton
NAPS	North Anna Power Station
NMC	Nuclear Management Company, LLC
ODCM	Offsite Dose Calculation Manual
PAM	Post-Accident Monitoring
PIV	Pressure Isolation Valve
P/T	Pressure/Temperature
PORV	Power Operated Relief Valve
PTLR	Pressure Temperature Limits Report
PWR	Pressurized Water Reactor
QA	Quality Assurance
QPTR	Quadrant Power Tilt Ratio
RAI	Request for Additional Information
RBM	Rod Block Monitor
RCPB	Reactor Coolant Pressure Boundary
RCS	Reactor Coolant System
RG	Regulatory Guide
RHR	Residual Heat Removal
RPS	Reactor Protection System
RPV	Reactor Pressure Vessel
RSCS	Rod Sequence Control System
RTB	Reactor Trip Breaker
RTP	Rated Thermal Power
RWST	Reactor Water Storage Tank
SAT	Station Auxiliary Transformer
SCIV	Secondary Containment Isolation Valve
SDC	Shutdown Cooling
SDM	Shutdown Margin
SDV	Scram Discharge Volume
SE	Safety Evaluation
SER	Safety Evaluation Report
SI	Safety Injection
SG	Steam Generator
SGTR	Steam Generator Tube Rupture
SR	Surveillance Requirement
SRM	Source Range Monitor
SRV	Safety/Relief Valve
SSER	Supplemental Safety Evaluation Report
STS	Improved Standard Technical Specification, NUREG-1431, Rev. 1
SW	Service Water
TADOT	Trip Actuating Device Operational Test

TRM	Technical Requirements Manual
TS	Technical Specification
TSTF	Technical Specifications Task Force (re: generic changes to the STS)
UHS	Ultimate Heat Sink
UFSAR	Updated Final Safety Analysis Report
V	Volt
VEPCO	Virginia Electric Power Company

Table A – Administrative Changes  
ITS Section 1.0 – Use and Application

DOC No.	Description of Change	ITS Requirement	CTS Requirement
1.0 A.1	In the conversion of the Surry Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS)..	None	Various
1.0 A.2	ITS Section 1.1 provides definitions of ACTUATION LOGIC TEST, MASTER RELAY TEST, and TRIP ACTUATING DEVICE OPERATIONAL TEST (TADOT). These terms are used as defined terms in the ITS but do not appear in the CTS, and thus are administrative in nature.	1.1 definitions of ACTUATION LOGIC TEST, MASTER RELAY TEST, AND TADOT	None
1.0 A.3	CTS Section 1.0 provides a definition of SHUTDOWN MARGIN (SDM). The ITS Section 1.1 definition of SDM contains three differences from the CTS definition. First, the CTS definition is changed to state the highest reactivity worth RCCA does not have to be assumed if the RCCAs can be verified fully inserted by two independent means. This change is described in DOC L.5. Second, the CTS definition is changed to indicate that the worth of any Rod Control Cluster Assemblies (RCCAs) which are not capable of being fully inserted must be accounted for in the determination of the SDM. Third, the CTS definition is clarified to include a description of the reactor conditions, i.e. nominal zero power level, at which the SDM is calculated. The net requirements are the same.	1.1 definition of SDM	1.0 definition of SDM
1.0 A.4	The CTS Section 1.0 definition of CHANNEL FUNCTIONAL TEST includes the requirements for performing a CHANNEL FUNCTIONAL TEST on bistable channels. ITS Section 1.1 moves these requirements to a new defined term, TRIP ACTUATING DEVICE OPERATIONAL TEST (TADOT). The net requirements are the same.	1.1 definition of TADOT	1.0 definition of CHANNEL FUNCTIONAL TEST
1.0 A.5	CTS Section 1.0 provides a definition of CORE ALTERATION. The ITS Section 1.1 definition of CORE ALTERATION revises the CTS definition to eliminate two redundant phrases. First, the CTS definition includes, "movement or manipulation" of any component within the reactor vessel. The ITS definition of CORE ALTERATION will only include "movement" of components, not "manipulation." Second, the CTS definition does not preclude completion of movement of a component to a "safe conservative" position. The ITS definition specifies only a "safe" position. The net requirements are the same.	1.1 definition of CORE ALTERATION	1.0 definition of CORE ALTERATION
1.0 A.6	CTS Section 1.0 provides a definition of FREQUENCY NOTATION and includes CTS Table 1.2, which lists these notations. The ITS will not contain this information in Section 1.1, but will state the requirements in each Surveillance. The net requirements are the same.	None	1.0 definition of FREQUENCY NOTATION and Table 1.2

Table A – Administrative Changes  
ITS Section 1.0 – Use and Application

DOC No.	Description of Change	ITS Requirement	CTS Requirement
1.0 A.7	CTS Section 1.0 provides a definition of FULLY WITHDRAWN, which defines the fully withdrawn position of the RCCAs as between 225 and 229 steps. The ITS will not include FULLY WITHDRAWN as a defined term. The net requirements are the same.	None	1.0 definition of FULLY WITHDRAWN
1.0 A.8	CTS Section 1.0 includes the following definitions: CONTAINMENT INTEGRITY, GASEOUS RADWASTE TREATMENT SYSTEM, MEMBER(S) OF THE PUBLIC, PURGE - PURGING, REPORTABLE EVENT, SITE BOUNDARY, SOURCE CHECK, UNRESTRICTED AREA, VENTILATION EXHAUST TREATMENT SYSTEM, VENTING. The ITS does not use this terminology and ITS Section 1.1 does not contain these definitions. The net requirements are the same.	None	Listed 1.0 definitions
1.0 A.9	CTS Section 1.0 provides definitions for CONTROLLED LEAKAGE, IDENTIFIED LEAKAGE, PRESSURE BOUNDARY LEAKAGE, and UNIDENTIFIED LEAKAGE. ITS Section 1.1 includes these requirements in one definition called LEAKAGE (which includes three categories: identified LEAKAGE, unidentified LEAKAGE, and pressure boundary LEAKAGE). This changes the CTS by incorporating the definitions into the ITS LEAKAGE definition with no technical changes. The CTS term CONTROLLED LEAKAGE, which is the seal water flow supplied to the reactor coolant pump seals, is no longer considered leakage and has its own specification titled "Seal Injection Flow" as ITS 3.5.5. Since Seal Injection flow is no longer considered leakage, it appears as an exception in the CTS definitions of IDENTIFIED LEAKAGE and UNIDENTIFIED LEAKAGE. As a result, the ITS will not contain a defined term, "Controlled Leakage." The net requirements are the same.	1.1 definition of LEAKAGE	1.0 definitions of CONTROLLED LEAKAGE, IDENTIFIED LEAKAGE, PRESSURE BOUNDARY LEAKAGE, and UNIDENTIFIED LEAKAGE
1.0 A.10	CTS Section 1.0 provides definitions of ENGINEERED SAFETY FEATURE RESPONSE TIME and REACTOR PROTECTIVE SYSTEM RESPONSE TIME. ITS Section 1.1 modifies the definitions to more fully describe how the tests are performed. This changes the CTS by stating that the response time test may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured. The net requirements are the same.	1.1 definitions of ENGINEERED SAFETY FEATURE RESPONSE TIME and REACTOR PROTECTIVE SYSTEM RESPONSE TIME	1.0 definitions of ENGINEERED SAFETY FEATURE RESPONSE TIME and REACTOR PROTECTIVE SYSTEM RESPONSE TIME

Table A – Administrative Changes  
ITS Section 1.0 – Use and Application

DOC No.	Description of Change	ITS Requirement	CTS Requirement
1.0 A.11	CTS Section 1.0 defines CHANNEL FUNCTIONAL TEST as “the injection of a simulated signal into the channel as close to the sensor as practicable to verify OPERABILITY including alarm and/or trip functions.” ITS Section 1.1 renames the CTS definition to CHANNEL OPERATIONAL TEST (COT) and defines it as, “the injection of a simulated or actual signal into the channel as close to the sensor as practicable to verify OPERABILITY of all devices in the channel required for channel OPERABILITY. The COT shall include adjustments, as necessary, of the required alarm, interlock, and trip setpoints so that the setpoints are within the required range and accuracy. The COT may be performed by means of any series of sequential, overlapping or total channel steps.” The addition of use of an actual signal is discussed in DOC L.1. This changes the CTS by stating that the COT shall include adjustments, as necessary, of the devices in the channel so that the setpoints are within the required range and accuracy, changes the example list of devices contained in the definition, and states that the test may be performed by means of any series of sequential, overlapping, or total channel steps. The net requirements are the same.	1.1 definition of CHANNEL OPERATIONAL TEST	1.0 definition of CHANNEL FUNCTIONAL TEST
1.0 A.12	The CTS defines CHANNEL CALIBRATION as, “A CHANNEL CALIBRATION shall be the adjustment, as necessary, of the channel output such that it responds with the necessary range and accuracy to known values of the parameter which the channel monitors. The CHANNEL CALIBRATION shall encompass the entire channel including the sensor and alarm and/or trip functions, and shall include the CHANNEL FUNCTIONAL TEST. The CHANNEL CALIBRATION may be performed by any series of sequential, overlapping or total channel steps such that the entire channel is calibrated.” ITS defines CHANNEL CALIBRATION as, “the adjustment, as necessary, of the channel so that it responds within the required range and accuracy to known input. The CHANNEL CALIBRATION shall encompass all devices in the channel required for channel OPERABILITY. Calibration of instrument channels with resistance temperature detector (RTD) or thermocouple sensors may consist of an 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 calibrations or total channel steps.” This results in a number of changes to the CTS. The CTS definition states, “The CHANNEL CALIBRATION shall encompass the entire channel including the sensor and alarm and/or trip functions” The ITS states, “The CHANNEL CALIBRATION shall encompass all devices in the channel required for channel OPERABILITY.” The CTS states that the CHANNEL CALIBRATION “shall include the CHANNEL FUNCTIONAL TEST.” The ITS does not include this statement. The ITS adds the statement, “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 net requirements are the same.	1.1 definition of CHANNEL CALIBRATION	1.0 definition of CHANNEL CALIBRATION

Table A – Administrative Changes  
ITS Section 1.0 – Use and Application

DOC No.	Description of Change	ITS Requirement	CTS Requirement
1.0 A.13	The CTS Section 1.0 definition of OPERABLE requires a system, subsystem, train, component or device to be capable of performing its “specified function(s)” and all necessary support systems to also be capable of performing their “function(s).” The ITS Section 1.1 definition of OPERABLE requires the system, subsystem, train, component or device, and all necessary support systems, to be capable of performing the “specified safety function(s)”. This changes the CTS by altering the requirement to be able to perform “functions” to a requirement to be able to perform “safety functions.” The net requirements are the same.	1.1 definition of OPERABLE - OPERABILITY	1.0 definition of OPERABLE - OPERABILITY
1.0 A.14	CTS Section 1.0 and Table 1.1, “OPERATIONAL MODES,” provide a description of the MODES. ITS Section 1.1 and Table, 1.1-1, “MODES,” changes the CTS MODE definitions in several ways. The phrase “the vessel head closure bolts” is replaced with “one or more vessel head closure bolts” in Note **. The Note ** condition, “fuel in the reactor vessel” is moved from Table 1.1 to the MODE definition. The phrase “or with the head removed” is eliminated from Note **. ITS Table 1.1-1 contains a new Note, labeled “(b)”, which applies to MODES 4 and 5. Note (b) states, “All reactor vessel head closure bolts fully tensioned.” This Note is the opposite of CTS Note ** and ITS Note (c). For consistency with the Notes in ITS Table 1.1-1, the ITS definition of MODE incorporates “reactor vessel head closure bolt tensioning” to the list of characteristics that define a MODE. The net requirements are the same.	1.1 definition of MODE and Table 1.1-1	1.0 definition of OPERATIONAL MODES and Table 1.1
1.0 A.15	The CTS Section 1.0 definition of STAGGERED TEST BASIS states, “A STAGGERED TEST BASIS shall consist of: 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.” The ITS Section 1.1 definition states, “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.” This changes the CTS to specify the frequency of a Surveillance on one system, subsystem, train, or other designated component in the Frequency column of the ITS instead of specifying the frequency in which all systems, subsystems, trains, or other designated components must be tested. The net requirements are the same.	1.1 definition of STAGGERED TEST BASIS	1.0 definition of STAGGERED TEST BASIS
1.0 A.16	ITS Sections 1.2, 1.3, and 1.4 contain information that is not in the CTS. This change to the CTS adds explanatory information on the ITS usage that is not applicable to the CTS. The net requirements are the same.	1.2, 1.3, and 1.4	None

Table A – Administrative Changes  
ITS Section 1.0 – Use and Application

DOC No.	Description of Change	ITS Requirement	CTS Requirement
1.0 A.17	CTS Table 1.1, OPERATIONAL MODES, is revised. The corresponding table in ITS Section 1.1 is Table 1.1-1, MODES. The changes to the CTS are: 1) The minimum average reactor coolant temperature for MODES 1 and 2 provided in CTS Table 1.1 is changed to NA (not applicable) in ITS Table 1.1-1. 2) The CTS Table 1.1 MODE 6 upper limit on average reactor coolant temperature is removed. In ITS Table 1.1-1, the MODE 6 average reactor coolant temperature limit is given as “NA” (not applicable). The CTS Table 1.1 RATED THERMAL POWER limits of 0% for MODES 3, 4, 5, and 6 are changed in ITS Table 1.1-1 to “NA” (not applicable). The net requirements are the same.	Table 1.1-1	Table 1.1
1.0 A.18	CTS Section 1.0 defines a SLAVE RELAY TEST as “the energization of each slave relay and verification of OPERABILITY of each relay. The SLAVE RELAY TEST shall include a continuity check, as a minimum, of associated testable actuation devices.” ITS Section 1.1 defines the SLAVE RELAY TEST as, “the energization of all slave relays in the channel required for channel OPERABILITY and verification of OPERABILITY of each required slave relay. The SLAVE RELAY TEST shall include a continuity check of associated testable actuation devices. The SLAVE RELAY TEST may be performed by means of any series of sequential, overlapping, or total channel steps.” This changes the CTS by stating that the SLAVE RELAY TEST shall include the slave relays required for channel OPERABILITY and by stating that the test may be performed by means of any series of sequential, overlapping, or total channel steps. The net requirements are the same.	1.1 definition of SLAVE RELAY TEST	1.0 definition of SLAVE RELAY TEST



Table L – Less Restrictive Changes  
ITS Section 1.0 – Use and Application

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Category
1.0 L.1	The CTS Section 1.0 definition of CHANNEL FUNCTIONAL TEST requires the use of a simulated signal when performing the test. ITS Section 1.0 splits the definition of CHANNEL FUNCTIONAL TEST into two definitions, the CHANNEL OPERATIONAL TEST (COT), and the TRIP ACTUATING DEVICE OPERATIONAL TEST (TADOT). The ITS COT and TADOT definitions allow the use of an actual or simulated signal when performing the tests. This changes the CTS by allowing the use of unplanned actuations to perform the Surveillance if sufficient information is collected to satisfy the surveillance test requirements.	1.1 definitions of COT and TADOT	1.0 definition of CHANNEL FUNCTIONAL TEST	Note 1
1.0 L.2	The CTS Section 1.0 definition of CORE ALTERATION applies to the movement or manipulation of any components in the reactor vessel with the vessel head removed and fuel in the vessel. The ITS Section 1.1 definition of CORE ALTERATION will only apply to the movement of fuel, sources, or reactivity control components in the reactor vessel. This changes the CTS by eliminating from the definition of a CORE ALTERATION the movement of any components in the reactor vessel that are not fuel, sources, or reactivity control components. The elimination of “or manipulation” from the definition is discussed in DOC A.5.	1.1 definition of CORE ALTERATION	1.0 definition of CORE ALTERATION	Note 1
1.0 L.3	The CTS Section 1.0 definition of “OPERABLE - OPERABILITY” requires that all necessary normal and emergency electrical power sources be available for the system, subsystem, train, component, or device to be OPERABLE. The ITS Section 1.1 definition of “OPERABLE - OPERABILITY” will replace the phrase “normal <u>and</u> emergency electrical power sources ” with “normal <u>or</u> emergency electrical power sources ”. This changes the CTS by allowing a device to be considered OPERABLE with either normal or emergency power available.	1.1 definition of OPERABLE - OPERABILITY	1.0 definition of OPERABLE - OPERABILITY	Note 1

- Change Categories:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Note 1 - The Less Restrictive changes for Chapter 1.0 did not fall into the categories used for the other Chapters. A specific Determination of No Significant Hazards Consideration was written for each Less Restrictive Change in Chapter 1.0.

Table L – Less Restrictive Changes  
ITS Section 1.0 – Use and Application

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Category
1.0 L.4	The CTS Section 1.0 definitions of ENGINEERED SAFETY FEATURE RESPONSE TIME and REACTOR TRIP SYSTEM RESPONSE TIME require measurement of the response time from the sensor through the actuated equipment. The ITS definitions of ENGINEERED SAFETY FEATURE (ESF) RESPONSE TIME and REACTOR TRIP SYSTEM (RTS) RESPONSE TIME are modified to state, " In lieu of measurement, response time may be verified for selected components provided that the components and methodology for verification have been previously reviewed and approved by the NRC." This changes the CTS by eliminating the requirement to include all components in a response time test.	1.1 definition of ENGINEERED SAFETY FEATURE (ESF) RESPONSE TIME and REACTOR TRIP SYSTEM (RTS) RESPONSE TIME	1.0 definition of ENGINEERED SAFETY FEATURE RESPONSE TIME and REACTOR TRIP SYSTEM RESPONSE TIME	Note 1
1.0 L.5	The CTS Section 1.0 definition of SHUTDOWN MARGIN (SDM) states, "SHUTDOWN MARGIN shall be the instantaneous amount of reactivity by which the reactor is subcritical or would be subcritical from its present condition assuming all full length rod cluster assemblies (shutdown and control) are fully inserted except for the single rod cluster assembly of highest reactivity worth which is assumed to be fully withdrawn." The ITS Section 1.1 definition of SHUTDOWN MARGIN (SDM) states, in part, "SDM shall be the instantaneous amount of reactivity by which the reactor is subcritical or would be subcritical from its present condition assuming: a. all rod cluster control assemblies (RCCAs) are fully inserted except for the single RCCA of highest reactivity worth, which is assumed to be fully withdrawn. However, with all RCCAs verified fully inserted by two independent means, it is not necessary to account for a stuck RCCA in the SDM calculation." This changes the CTS by providing an allowance to not assume the RCCA of highest worth is stuck if all RCCAs can be verified fully inserted by two independent means.	1.1 definition of SDM	1.0 definition of SDM	Note 1

- Change Categories:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Note 1 - The Less Restrictive changes for Chapter 1.0 did not fall into the categories used for the other Chapters. A specific Determination of No Significant Hazards Consideration was written for each Less Restrictive Change in Chapter 1.0.

Table M – More Restrictive Changes  
ITS Section 1.0 – Use and Application

DOC No.	Description of Changes	ITS Requirement	CTS Requirement
None	N/A	N/A	N/A

Table R – Relocated Specifications and Removed Details  
ITS Section 1.0 – Use and Application

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
1.0 LA.1	Table 1.1	CTS Section 1.0, Table 1.1, "OPERATIONAL MODES," states that MODE 6 is restricted to reactivity conditions with $K_{eff} \leq 0.95$ . ITS Section 1.1, Table 1.1-1, "MODES," does not contain that restriction.	ITS 3.9.1 Bases	ITS 5.5.13, Technical Specification Bases Control Program	1

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table A – Administrative Changes  
ITS Section 2.0 – Safety Limits

DOC No.	Description of Change	ITS Requirement	CTS Requirement
2.0 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (STS).	None	Various
2.0 A.2	CTS 2.1.1 references three curves providing limits on THERMAL POWER, pressurizer pressure, and the highest operating loop coolant temperature (Tavg). One curve applies to three loop operation (Figure 2.1-1) and two apply to two-loop operation (Figures 2.1-2 and 2.1-3). In the CTS, Figures 2.1-2 and 2.1-3 are replaced with a note stating, "This page left blank pending NRC approval of ECCS evaluation of two loops in operation with the third loop isolated" and "This page left blank pending NRC approval of ECCS evaluation of two loops in operation with the third loop not isolated," respectively. ITS 2.1.1 does not contain an allowance to operate with less than three reactor coolant loops in operation. This change eliminates references and place holders for curves applying to two-loop operation, that are not used in the CTS.	None	2.1.1, Figures 2.1-2 and 2.1-3
2.0 A.3	Unit 1 CTS 2.1.1 contains a Note and an additional Figure, Figure 2.1-1a, which is to be used for the period of operation until steam generator replacement. ITS 2.1.1 does not contain a similar Note or additional Figure, since the SGs have been replaced.	None	Unit 1 2.1.1, Unit 1 Figure 2.1-1a

Table L – Less Restrictive Changes  
ITS Section 2.0 – Safety Limits

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Category
2.0 L.1	CTS 6.7.1 states that when a Safety Limit is violated, the NRC Operations Center must be notified within one hour, the Vice President - Nuclear Operations and the MSRC shall be notified within 24 hours, and a Safety Limit Violation Report must be prepared and submitted to the NRC, the Vice President - Nuclear Operations; and the MSRC within 14 days. The ITS does not contain these reporting requirements. This changes the CTS by eliminating the explicit reporting requirements and relying on the reporting required by regulations. Internal company reporting requirements are addressed by company procedures and not appropriate for the ITS.	None	6.7.1	8

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table M – More Restrictive Changes  
ITS Section 2.0 – Safety Limits

DOC No.	Description of Changes	ITS Requirement	CTS Requirement
None	N/A	N/A	N/A

Table R – Relocated Specifications and Removed Details  
ITS Section 2.0 – Safety Limits

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
2.0 LA.1	2.1.1 and Figure 2.1-1	CTS 2.1.1 requires that the combination of THERMAL POWER, pressurizer pressure, and the highest operating loop coolant temperature not exceed the limits in CTS Figure 2.1-1. ITS 2.1.1 states that the combination of THERMAL POWER, RCS highest loop average temperature, and pressurizer pressure shall not exceed the limits specified in the COLR and provides specific limits on DNBR and peak fuel centerline temperature. This changes the CTS by relocating cycle-specific parameter limits to the COLR. The limiting Safety Limit parameters are retained in the SL.	COLR	ITS 5.6,5, Core Operating Limits Report	5

- Change Category:
- 1 - Removing Details of System Design and System Description, Including Design Limits
  - 2 - Removing Descriptions of System Operation
  - 3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting
  - 4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms
  - 5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report



Table A – Administrative Changes  
ITS Section 3.0 – LCO and SR Applicability

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.0 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	None	Various
3.0 A.2	Unit 1 CTS 3.0.1 states, "Limiting Conditions for Operation and ACTION requirements shall be applicable during the OPERATIONAL MODES or other conditions specified for each Specification." Unit 2 CTS 3.0.1 states, "Compliance with the Limiting Conditions for Operation contained in the succeeding specifications is required during the OPERATIONAL MODES or other conditions specified therein; except that upon failure to meet the Limiting Conditions for Operation, the associated ACTION requirements shall be met." ITS LCO 3.0.1 states, "LCOs shall be met during the MODES or other specified conditions in the Applicability, except as noted in LCO 3.0.2 and 3.0.7." This results in several changes to the CTS. First, certain phrases are revised to be consistent with the equivalent phrase used in the ITS. Specifically, "Limiting Conditions for Operation" is changed to "LCOs", and "OPERATIONAL MODES or other conditions specified" is changed to "MODES and other specified conditions" to be consistent with the ITS definition of MODE and the terminology used in the ITS. Second, the Unit 1 phrase "... ACTION requirements shall be applicable during the OPERATIONAL MODES ..." and the Unit 2 phrase "... except that upon failure to meet the Limiting Conditions for Operation, the associated ACTION requirements shall be met" are moved from CTS 3.0.1 to ITS LCO 3.0.2 which states that when an LCO is not met, the Required Actions must be met. The Unit 1 CTS 3.0.1 phrase "Limiting Conditions for Applicability ... shall be applicable" and the Unit 2 CTS 3.0.1 phrase "Compliance with the Limiting Conditions for Operation contained in the succeeding specifications is required" are replaced in ITS LCO 3.0.1 with the phrase "LCOs shall be met." This change is made to be consistent with the ITS terminology and to clarify the concept of an LCO being met (e.g., being in compliance with the requirements of the LCO), versus the LCO being applicable or required (e.g., the requirements in the LCO apply.) The phrase "except as provided in LCO 3.0.2 and LCO 3.0.7" is added to CTS 3.0.1. ITS LCO 3.0.2 describes the appropriate actions to be taken when ITS LCO 3.0.1 is not met. LCO 3.0.7 describes Test Exception LCOs, which are exceptions to other LCOs.	LCO 3.0.1	3.0.1

Table A – Administrative Changes  
ITS Section 3.0 – LCO and SR Applicability

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.0 A.3	<p>Unit 1 CTS 3.0.2 states, “Adherence to the requirements of the Limiting Condition for Operation and/or associated ACTION within the specified time interval shall constitute compliance with the Specification. In the event the Limiting Condition for Operation is restored prior to expiration of the specified time interval, completion of the ACTION statement is not required.” Unit 2 CTS 3.0.2 states the same requirements, but in the negative, as, “Noncompliance with a specification shall exist when the requirements of the Limiting Conditions for Operation and associated ACTION requirements are not met within the specified time intervals. If the Limiting Conditions for Operation is restored prior to expirations of the specified time intervals, completion of ACTION requirements is not required.” ITS LCO 3.0.2 states, “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.” This results in several change to the CTS. First, the first sentence in Unit 1 CTS 3.0.2, states, in part, “Adherence to the requirements of the Limiting Condition for Operation and/or associated ACTION . . . shall constitute compliance with the Specification.” This requirement is divided into portions of ITS LCO 3.0.1, “LCOs shall be met” and ITS LCO 3.0.2, “Upon discovery of failure to meet an LCO, the Required Actions of the associated Conditions shall be met”. Second, Unit 2 CTS 3.0.2, states, “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.” This sentence is deleted. This information currently is stated in Unit 2 CTS 3.0.1 and is moved to ITS LCO 3.0.2 as described in Discussion of Change A.2. ITS LCO 3.0.2 states that the Required Actions are to be taken when the LCO is not met. This rearrangement separates the description of LCOs (in ITS LCO 3.0.1) and the description of Required Actions (in ITS LCO 3.0.2). Third, the Unit 1 and Unit 2 CTS 3.0.2 are revised to include an exception for LCO 3.0.5 and 3.0.6. LCO 3.0.5 and LCO 3.0.6 are new allowances which take exception to the ITS LCO 3.0.2 requirement to take the Required Actions when the associated LCO is not met. This exception is included in LCO 3.0.2 to avoid conflicts between the applicability requirements. Fourth, the second sentence of Unit 1 CTS LCO 3.0.2 states, “In the event the Limiting Condition for Operation is restored prior to expiration of the specified time interval, completion of the ACTION statement is not required.” The second sentence of Unit 2 CTS LCO 3.0.2 states, “If the Limiting Conditions for Operation is restored prior to expiration of the specified time intervals, completion of the ACTION requirements is not required.” These sentences state the same requirement. They are replaced in ITS LCO 3.0.2 with, “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.”</p>	LCO 3.0.2	3.0.2

Table A – Administrative Changes  
ITS Section 3.0 – LCO and SR Applicability

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.0 A.4	CTS LCO 3.0.3 is applicable, “when a Limiting Condition for Operation is not met, except as provided in the associated ACTION requirements.” ITS LCO 3.0.3 expands those applicability requirements so that the requirement is applicable, “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.” This changes the CTS to add two new applicability conditions. First, ITS LCO 3.0.3 is applicable when the LCO is not met and there is no applicable ACTION to be taken. Second, ITS LCO 3.0.3 is applicable when directed by the associated ACTIONS. The current Technical Specifications do not contain requirements that direct entry into LCO 3.0.3. The ITS does contain such requirements. Any technical changes related to directing LCO 3.0.3 entry in an ACTION will be discussed in the affected specifications. The net requirements are the same.	LCO 3.0.3	3.0.3
3.0 A.5	CTS 3.0.3 states the shutdown time limits in sequential order; i.e., each time limit is measured from the completion of the previous step. ITS 3.0.3 states the time limits (Completion Times) from the time the condition was entered. In addition, the MODE titles used in CTS 3.0.3 are replaced with the corresponding MODE numbers in ITS LCO 3.0.3. The net requirements are the same.	LCO 3.0.3	3.0.3
3.0 A.6	CTS 3.0.3 states, “Where corrective measures are completed that permit operation under the ACTION requirement, the ACTION may be taken in accordance with the specified time limits as measured from the time of failure to meet the Limiting Condition for Operation.” ITS LCO 3.0.3 states this as, “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.” The net requirements are the same.	LCO 3.0.3	3.0.3

Table A – Administrative Changes  
ITS Section 3.0 – LCO and SR Applicability

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.0 A.7	Unit 1 CTS 3.0.4 states, “Entry into an OPERATIONAL MODE or other specified applicability condition shall not be made unless the conditions of the Limiting Condition for Operation are met without reliance on provisions contained in the ACTION statements unless otherwise excepted. This provision shall not prevent passage through OPERATIONAL MODES as required to comply with ACTION statements.” The Unit 2 CTS 3.0.4 is identical, except that the phrase, “unless otherwise excepted” is eliminated from the first sentence and a sentence is added stating, “Exceptions to these requirements are stated in individual specifications.” ITS LCO 3.0.4 states, “When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall only be made: a) When the associated ACTIONS to be entered permit continued operation in the MODE or other specific condition in the Applicability for an unlimited period of time, or, b) After performance of a risk evaluation, consideration of the results, determination of the acceptability of the MODE change, and establishment of risk management actions, if appropriate. 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 addition of the a) and b) conditions is described in Discussion of Change (DOC) L.1. The following changes are made to CTS 3.0.4: First, Unit 1 CTS 3.0.4 states, “Entry into an OPERATIONAL MODE or other specified applicability condition shall not be made unless the conditions of the Limiting Condition for Operation are met without reliance on provisions contained in the ACTION statements unless otherwise excepted.” Unit 2 CTS 3.0.4 is the same, except as described above. ITS LCO 3.0.4 does not contain a discussion of exceptions. Second, Unit 1 and Unit 2 CTS 3.0.4 states, “This provision shall not prevent passage through OPERATIONAL MODES as required to comply with ACTION statements.” ITS LCO 3.0.4 states in part, “This Specification shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS.” The net requirements are the same.	LCO 3.0.4	3.0.4
3.0 A.8	ITS LCO 3.0.7 is added to the CTS. LCO 3.0.7 states, “Test Exception LCOs 3.1.8 and 3.4.19 allow specified Technical Specification requirements to be changed to permit performance of special tests and operations. Unless otherwise specified, all other TS requirements remain unchanged. Compliance with Test Exception LCOs is optional. When a Test Exception LCO is desired to be met but is not met, the ACTIONS of the Test Exception LCO shall be met. When a Test Exception LCO is not desired to be met, entry into a MODE or other specified condition in the Applicability shall be made in accordance with the other applicable Specifications.” The net requirements are the same.	LCO 3.0.7	None
3.0 A.9	CTS 4.0.1 states that Surveillance Requirements shall be applicable during the OPERATIONAL MODES or other conditions specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement. The first sentence of CTS 4.0.3 states that 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. The	SR 3.0.1	4.0.1

Table A – Administrative Changes  
ITS Section 3.0 – LCO and SR Applicability

DOC No.	Description of Change	ITS Requirement	CTS Requirement
	<p>last sentence of CTS 4.0.3 states that Surveillance Requirements do not have to be performed on inoperable equipment. ITS SR 3.0.1 states that 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. Surveillances may be performed by means of any series of sequential, overlapping, or total steps. The changes to the CTS are: First, the first sentence of CTS 4.0.1 states that Surveillance Requirements shall be applicable during the OPERATIONAL MODES or other conditions specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement. ITS SR 3.0.1 states that SRs shall be met during the MODES or other specified conditions in the Applicability for individual LCOs, unless otherwise stated in the SR. Second, the first sentence of CTS 4.0.3 states, "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." This information is moved to ITS SR 3.0.1 which states, "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." This changes the CTS by adding the clarification, "whether such failure is experienced during the performance of the Surveillance or between performances of the Surveillance." Third, CTS 4.0.3 which states in part, "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." This information is moved from CTS 4.0.3 to ITS SR 3.0.1. ITS SR 3.0.1 states, "Failure to perform a Surveillance within the specified Frequency shall be failure to meet the LCO except as provided in SR 3.0.3." Fourth, CTS 4.0.3 states, in part, "Surveillance requirements do not have to be performed on inoperable equipment." ITS SR 3.0.1 states, "Surveillances do not have to be performed on inoperable equipment or variables outside specified limits." This changes the CTS by including "variables within limits" in recognition that not all Surveillances test equipment, but may test variables such as boron concentration, power distribution factors, temperatures, and pressures. This does not change the current use and application of the statement in CTS 4.0.3. Fifth, ITS 3.0.1 states, in part, "Surveillances may be performed by means of any series of sequential, overlapping, and total steps. This changes the CTS by explicitly stating an accepted industry practice. This does not change the current use and application of the statement in CTS 4.0.1 and the net requirements are the same.</p>		

Table A – Administrative Changes  
ITS Section 3.0 – LCO and SR Applicability

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.0 A.10	CTS 4.0.2 states, “Each Surveillance Requirement shall be performed within the specified surveillance interval with a maximum allowable extension not to exceed 25 percent of the surveillance interval.” ITS SR 3.0.2 states, “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.” This results in several changes to the CTS. First, ITS SR 3.0.2 adds to the CTS, “For Frequencies specified as ‘once,’ the above interval extension does not apply. This is described in DOC M.2. Second, ITS SR 3.0.2 adds to the CTS, “If a Completion Time requires periodic performance on a ‘once per . . .’ basis, the above Frequency extension applies to each performance after the initial performance.” This is described in DOC L.5. Third, ITS SR 3.0.2 is more specific regarding the start of the Frequency by stating, “as measured from the previous performance or as measured from the time a specified condition of the Frequency is met.” This direction is consistent with the current use and application of the Technical Specifications. Fourth, ITS SR 3.0.2 adds to the CTS, “Exceptions to this Specification are stated in the individual Specifications.” The net requirements are the same.	SR 3.0.2	4.0.2
3.0 A.11	CTS 4.0.3 states, in part, that the time limits of the action statement requirements are applicable at the time it is identified that a surveillance requirement has not been performed. The action statement 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 statement requirements are less than 24 hours. ITS SR 3.0.3 states that 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 greater. 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. This adds to the CTS that this delay period is permitted to allow performance of the Surveillance and that 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. Changes to the time allowed to perform the missed Surveillance are described in DOC L.6. The net requirements are the same.	SR 3.0.3	4.0.3

Table A – Administrative Changes  
ITS Section 3.0 – LCO and SR Applicability

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.0 A.12	CTS 4.0.4 restricts entry into MODES or other conditions specified in the Applicability unless the applicable SRs have been successfully performed. ITS SR 3.0.4 contains the same restriction, but adds an allowance that, “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.” This changes the CTS in two ways. First, ITS SR 3.0.4 adds an allowance that failure to perform a Surveillance will not prevent entry into MODES or other specified conditions in the Applicability that are required to comply with ACTIONS. Second, ITS SR 3.0.4 adds an allowance that failure to perform a surveillance will not prevent entry into MODES or other specified conditions in the Applicability “that are part of a shutdown of the unit.” ITS SR 3.0.4 is also only applicable in MODES 1, 2, 3 and 4. These changes are addressed in DOC L.4. The net requirements are the same.	SR 3.0.4	4.0.4

Table L – Less Restrictive Changes  
ITS Section 3.0 – LCO and SR Applicability

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Category
3.0 L.1	CTS 3.0.4 does not allow entry into a MODE or other specified condition in the Applicability when an LCO is not met and while relying on ACTIONS without a specific exception. ITS LCO 3.0.4 contains the same restriction, but eliminates specific exceptions and includes an allowance to enter a MODE or condition specified in the Applicability "a) When the associated ACTIONS to be entered permit continued operation in the MODE or other specific condition in the Applicability for an unlimited period of time, or, b) After performance of a risk evaluation, consideration of the results, determination of the acceptability of the MODE change, and establishment of risk management actions, if appropriate." CTS 4.0.4 states that entry into a MODE or other specified condition shall not be made unless the Surveillance Requirement(s) associated with the Limiting Condition for Operation have been performed within the stated surveillance interval or as otherwise stated. ITS SR 3.0.4 states that entry into a MODE or other specified condition in the Applicability of an LCO shall only be made when the LCO's Surveillances have been met within their specified Frequency. When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall only be made: "a) When the associated ACTIONS to be entered permit continued operation in the MODE or other specific condition in the Applicability for an unlimited period of time, or, b) After performance of a risk evaluation, consideration of the results, determination of the acceptability of the MODE change, and establishment of risk management actions, if appropriate." This changes the CTS by allowing additional circumstances under which a MODE or other specified condition in the Applicability may be entered when the LCO is not met.	LCO 3.0.4	3.0.4	Note 1
3.0 L.2	ITS LCO 3.0.5 is added to the CTS. ITS LCO 3.0.5 states, "Equipment removed from	LCO 3.0.5	None	Note 1

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Note 1 - The Less Restrictive changes for Section 3.0 did not fall into the categories used for the other Chapters. A specific Determination of No Significant Hazards Consideration was written for each Less Restrictive Change in Section 3.0.



Table L – Less Restrictive Changes  
ITS Section 3.0 – LCO and SR Applicability

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Category
	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.”			
3.0 L.3	CTS 3.0.5 provides an exception to the definition of OPERABILITY for normal and emergency power and to CTS 3.0.2. ITS LCO 3.0.6 replaces CTS 3.0.5 and expands the concept to apply to all Technical Specifications which support other Technical Specifications equipment, not only normal and emergency power. This changes the CTS in several ways. First, CTS 3.0.5 provides an exception to the definition of OPERABILITY and to the requirement to follow the Required Actions when an LCO is not met when a system, subsystem, train, or component is inoperable due to either the normal or emergency power source being inoperable. ITS LCO 3.0.6 expands that concept to all Technical Specifications systems supported by other Technical Specifications systems. Second, CTS 3.0.5 allows a system, subsystem, train, or component to be considered OPERABLE if it is inoperable solely because either the normal or emergency power source is inoperable. ITS LCO 3.0.6 does not allow the Technical Specifications system supported by the inoperable system (i.e., the “supported system”) to be considered OPERABLE, but the Conditions and Required Actions of the supported system do not have to be followed - only the inoperable system’s (i.e., the “support system”) Conditions and Required Actions must be followed. Third, CTS 3.0.5 contains conditions which ensure that, absent a subsequent failure, the system, subsystem, train, or component can perform its safety function. ITS LCO 3.0.6 also	LCO 3.0.6	3.0.5	Note 1

Change Category:

- 1 - Relaxation of LCO Requirements
- 2 - Relaxation of Applicability
- 3 - Relaxation of Completion Time
- 4 - Relaxation of Required Action
- 5 - Deletion of Surveillance Requirement
- 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
- 7 - Relaxation Of Surveillance Frequency
- 8 - Deletion of Reporting Requirements

Note 1 - The Less Restrictive changes for Section 3.0 did not fall into the categories used for the other Chapters. A specific Determination of No Significant Hazards Consideration was written for each Less Restrictive Change in Section 3.0.

Table L – Less Restrictive Changes  
ITS Section 3.0 – LCO and SR Applicability

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Category
	requires an evaluation in accordance with ITS 5.5.14, Safety Function Determination Program, to determine if a loss of safety function exists. This determination is consistent with the evaluations performed under CTS 3.0.5. If a loss of safety function exists, CTS 3.0.5 directs a unit shutdown. ITS LCO 3.0.6 directs that the supported system be declared inoperable and the Conditions and Required Actions followed. Fourth, CTS 3.0.5 is only applicable in MODES 1 - 4, as the normal and emergency power requirements are different than in MODES 5 and 6. ITS LCO 3.0.6 is expanded to include all MODES. Fifth, ITS LCO 3.0.6 states that if a Required Action directs that a system be declared inoperable or directs entry into other Conditions or Required Actions, the LCO exception may not be used. In those cases, the Required Actions directing entry are necessary to ensure that the appropriate actions are taken to address the inoperability.			
3.0 L.4	CTS 3.0.4 and CTS 4.0.4 are applicable in all MODES and prevent entry into a MODE or other specified condition in the Applicability unless the LCO or SR, respectively, is satisfied. ITS LCO 3.0.4 and ITS SR 3.0.4 are only applicable for entry into a MODE or other specified condition in the Applicability in MODES 1, 2, 3 and 4. In addition, ITS LCO 3.0.4 and ITS SR 3.0.4 do not prohibit entry into a MODE or other specified condition if such entry is part of a shutdown of the unit.	LCO 3.0.4 and SR 3.0.4	3.0.4 and 4.0.4	Note 1
3.0 L.5	CTS 4.0.2 states, "Each Surveillance Requirement shall be performed within the specified surveillance interval with a maximum allowable extension not to exceed 25 percent of the surveillance interval." ITS SR 3.0.2 states, "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	SR 3.0.2	4.0.2	Note 1

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Note 1 - The Less Restrictive changes for Section 3.0 did not fall into the categories used for the other Chapters. A specific Determination of No Significant Hazards Consideration was written for each Less Restrictive Change in Section 3.0.

Table L – Less Restrictive Changes  
ITS Section 3.0 – LCO and SR Applicability

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Category
	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." This changes the CTS by adding, "If a Completion Time requires periodic performance on a 'once per . . .' basis, the above Frequency extension applies to each performance after the initial performance." The remaining changes to CTS 4.0.2 are discussed in DOC A.10 and DOC M.2.			
3.0 L.6	CTS 4.0.3 states, in part, "The time limits of the action statement requirements are applicable at the time it is identified that a surveillance requirement has not been performed. The action statement 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 statement requirements are less than 24 hours." ITS SR 3.0.3 states in part, "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 greater. This delay period is permitted to allow performance of the Surveillance. A risk evaluation shall be performed for any Surveillance delayed greater than 24 hours." This changes the CTS by, 1) allowing a minimum of 24 hours and up to the specified Frequency to perform the missed Surveillance, provided a risk evaluation is performed for any Surveillance delayed greater than 24 hours, and 2) basing the time allowed to perform a missed Surveillance before taking the Required Actions on the Surveillance Frequency instead of the allowed outage time.	SR 3.0.3	4.0.3	Note 1

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Note 1 - The Less Restrictive changes for Section 3.0 did not fall into the categories used for the other Chapters. A specific Determination of No Significant Hazards Consideration was written for each Less Restrictive Change in Section 3.0.

**Table L – Less Restrictive Changes**  
**ITS Section 3.0 – LCO and SR Applicability**

Change Category:

- 1 - Relaxation of LCO Requirements
- 2 - Relaxation of Applicability
- 3 - Relaxation of Completion Time
- 4 - Relaxation of Required Action
- 5 - Deletion of Surveillance Requirement
- 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
- 7 - Relaxation Of Surveillance Frequency
- 8 - Deletion of Reporting Requirements

Note 1 - The Less Restrictive changes for Section 3.0 did not fall into the categories used for the other Chapters. A specific Determination of No Significant Hazards Consideration was written for each Less Restrictive Change in Section 3.0.

Table M – More Restrictive Changes  
ITS Section 3.0 – LCO and SR Applicability

DOC No.	Description of Changes	ITS Requirement	CTS Requirement
3.0 M.1	Not used.	N/A	N/A
3.0 M.2	CTS 4.0.2 states, “Each Surveillance Requirement shall be performed within the specified surveillance interval with a maximum allowable extension not to exceed 25 percent of the surveillance interval.” ITS SR 3.0.2 states, “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.” This changes the CTS by adding, “For Frequencies specified as ‘once,’ the above interval extension does not apply.” The remaining changes to CTS 4.0.2 are discussed in DOC A.10 and DOC L.5.	SR 3.0.2	4.0.2

Table R – Relocated Specifications and Removed Details  
ITS Section 3.0 – LCO and SR Applicability

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
None	N/A	N/A	N/A	N/A	N/A

- Change Category:
- 1 - Removing Details of System Design and System Description, Including Design Limits
  - 2 - Removing Descriptions of System Operation
  - 3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting
  - 4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms
  - 5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table A – Administrative Changes  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.1.1 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	None	Various
3.1.1 A.2	CTS 3.1.1.1 provides SHUTDOWN MARGIN (SDM) requirements in MODES 1, 2, 3 and 4. CTS 3.1.1.2 provides SDM requirements in MODE 5. ITS 3.1.1 provides SDM requirements in MODE 2 with $K_{eff} < 1.0$ and MODES 3, 4, and 5. This changes the CTS by combining the SDM requirements for MODE 2 with $K_{eff} < 1.0$ and MODES 3, 4, and 5. The SDM requirements for MODE 1 and MODE 2 with $K_{eff} \geq 1.0$ are addressed by the Control Rod Insertion Limit Specification (ITS 3.1.5) and are described in DOC A.3. The net requirements are the same.	3.1.1	3.1.1.1 and 3.1.1.2
3.1.1 A.3	CTS 3.1.1.1 provides SHUTDOWN MARGIN (SDM) requirements in MODES 1, 2, 3 and 4. Surveillance 4.1.1.1.b states that when in MODES 1 and 2 with $K_{eff} \geq 1.0$ , SDM is verified by verifying that the control banks are within the insertion requirements of CTS 3.1.3.6, Control Rod Insertion Limits. ITS 3.1.1 is Applicable in MODE 2 with $K_{eff} < 1.0$ and MODES 3, 4, and 5. ITS 3.1.5 contains the control bank insertion requirements. This changes the CTS by dividing the SDM requirements and placing those applicable in MODE 2 with $K_{eff} < 1.0$ $\Delta k/k$ and MODES 3, 4, and 5 in ITS 3.1.1 and placing those applicable in MODE 1 and MODE 2 with $K_{eff} \geq 1.0$ in the control bank specifications. The net requirements are the same.	3.1.1	3.1.1.1, 4.1.1.1.b, 3.1.3.6
3.1.1 A.4	The Applicability of CTS 3.1.1.1 is MODES 1, 2, 3, and 4 with a footnote stating, "See Special Test Exception 3.10.1." ITS 3.1.1 Applicability does not contain the footnote or a reference to the Special Test Exception; cross-referencing specifications is unnecessary and not done in the STS. The net requirements are the same.	None	3.1.1.1
3.1.2 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	None	Various
3.1.2 A.2	CTS Surveillance 4.1.1.1.2 requires the overall core reactivity balance be compared to predicted values to demonstrate agreement within $\pm 1\% \Delta k/k$ . ITS LCO 3.1.2 requires the measured core reactivity to be within $\pm 1\% \Delta k/k$ of predicted values. This changes the CTS by replacing the Surveillance requirement with an LCO requirement. The net requirements are the same.	3.1.2	4.1.1.1.2

Table A – Administrative Changes  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.1.3 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS). The net requirements are the same.	None	Various
3.1.3 A.2	CTS 3.1.1.4 states that the maximum MTC upper limit shall be $\leq 0.6 \times 10^{-4} \Delta k/k/^{\circ}F$ below 70% RTP and $\leq 0.0 \times 10^{-4} \Delta k/k/^{\circ}F$ at or above 70% RTP. ITS 3.1.3 states that the maximum MTC upper limit shall be $\leq 0.6 \times 10^{-4} \Delta k/k/^{\circ}F$ when $< 70\%$ RTP, and $\leq 0.0 \Delta k/k/^{\circ}F$ when $\geq 70\%$ RTP. This changes the CTS by designating the maximum MTC upper limit at $\geq 70\%$ RTP as $0.0 \Delta k/k/^{\circ}F$ instead of $0.0 \times 10^{-4} \Delta k/k/^{\circ}F$ . The net requirements are the same.	3.1.3	3.1.1.4
3.1.3 A.3	The Applicability of CTS 3.1.1.4 is modified by a footnote, designated "#", stating, "See Special Test Exception 3.10.3." ITS 3.1.3 Applicability does not contain the footnote or a reference to the Special Test Exception; cross-referencing specifications is unnecessary and not done in the STS.	None	3.1.1.4
3.1.3 A.4	CTS 3.1.1.4 refers to the Beginning of Cycle (BOC) MTC limit and the End of Cycle (EOC) MTC limit. ITS 3.1.3 refers to these values as the upper MTC limit and lower MTC limit, respectively. The net requirements are the same.	3.1.3	3.1.1.4
3.1.3 A.5	CTS 3.1.1.4, Action a.1, states that if the MTC is more positive than the BOC (e.g., upper) limit, control rod withdrawal limits must be imposed within 24 hours or be in HOT STANDBY within 6 hours. ITS 3.1.3, ACTION A, states that with the MTC not within the upper limit, establish control rod withdrawal limits with 24 hours or be in MODE 2 with $K_{eff} < 1.0$ within 6 hours. This changes the CTS by requiring the plant to be in MODE 2 with $K_{eff} < 1.0$ instead of HOT SHUTDOWN (i.e.; MODE 3); effectively the same condition. The net requirements are the same.	3.1.3, Action A	3.1.1.4, Action a.1
3.1.3 A.6	CTS 3.1.1.4, Action a.1, states that when the MTC is more positive than the BOC limit, control rod withdrawal limits must be established. It also states, "these withdrawal limits shall be in addition to the insertion limits of Specification 3.1.3.6." The ITS does not include this sentence with a redundant requirement. The net requirements are the same.	None	3.1.1.4, Action a.1
3.1.4 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	None	Various
3.1.4 A.2	The Applicability of CTS 3.1.3.1 is modified by a footnote, designated "***", stating, "See Special Test Exceptions 3.10.2 and 3.10.3." ITS 3.1.4 Applicability does not contain the footnote or a reference to the Special Test Exception; cross-referencing specifications is unnecessary and not done in the STS.	None	3.1.3.1



Table A – Administrative Changes  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.1.4 A.3	CTS 3.1.3.1, Action c.1, states that with a maximum of one rod misaligned from the group step counter demand position by more than the alignment requirements, POWER OPERATION may continue provided that within one hour, the rod is restored to OPERABLE status within the above alignment limits, or other compensatory measures described in the specification are taken. ITS 3.1.4 does not contain a Required Action stating that the rod must be restored to OPERABLE status within the alignment limits; restoration to OPERABLE status is always an option that need not be stated.	None	3.1.3.1, Action c.1
3.1.4 A.4	CTS 3.1.3.1, Action c.2.e), states that with a maximum of one rod misaligned from the group step counter demand position by more than the alignment requirements, POWER OPERATION may continue provided that the remainder of the rods in the group are aligned to within +/- 12 steps of the misaligned rod within 1 hour while maintaining the thermal power, rod sequence, and insertion limits of Specification 3.1.3.6 during subsequent operation. While ITS 3.1.4 does not contain a Required Action stating that the remainder of the rods in the group must be aligned with the misaligned rod, it is not necessary to state a Required Action to restore compliance with the LCO. The LCO requirements remain the same.	None	3.1.3.1, Action c.2.e)
3.1.4 A.5	CTS 3.1.3.4, Action a, states that with the rod drop time of any full length rod determined to exceed the rod drop time limit, restore the rod drop time to within limit prior to proceeding to MODE 1 or 2. CTS 3.1.3.4 is applicable in MODES 1 and 2. The ITS does not have a similar explicit requirement since SR 3.0.4 requires meeting SRs before entering into applicable modes.	None	3.1.3.4, Action a
3.1.4 A.6	CTS 3.1.3.4, Action b, contains actions to follow if the rod drop times are measured with less than three reactor coolant loops in service and provide restrictions on power operation with less than all three reactor coolant loops in service. The ITS does not contain similar restrictions, since operation in modes 1 and 2 is prohibited with 3 loops in operation..	None	3.1.3.4, Action b
3.1.4 A.7	CTS 4.1.1.1.1.a and 4.1.1.2.a require verification of SHUTDOWN MARGIN within one hour after detection of an inoperable control rod(s) and at least once per 12 hours thereafter while the rod(s) is inoperable. This duplicates the requirements in CTS 3.1.3.1, Action c.2 and Action c.2.b and is eliminated. CTS 4.1.1.1.1.a and 4.1.1.2.a also state that if the inoperable control rod is immovable or untrippable, the SHUTDOWN MARGIN shall be increased by the amount at least equal to the withdrawn worth of the immovable or untrippable control rod(s). The ITS definition of “SHUTDOWN MARGIN” states, “With any RCCA not capable of being fully inserted, the reactivity worth of the RCCA must be accounted for in the determination of SDM.” This changes the CTS by eliminating duplicated requirements and moving information from the Specifications to the definitions section of the ITS.	1.1 definition of SDM	4.1.1.1.1.a and 4.1.1.2.a

Table A – Administrative Changes  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.1.5 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	None	Various
3.1.5 A.2	The Applicability of CTS 3.1.3.5 is modified by a footnote, designated "*", stating, "See Special Test Exceptions 3.10.2 and 3.10.3." ITS 3.1.5 Applicability does not contain the footnote or a reference to the Special Test Exceptions; cross-referencing specifications is unnecessary and not done in the STS.	None	3.1.3.5
3.1.5 A.3	CTS 3.1.3.5, Action b, states that power operation may continue with a maximum of one shutdown bank inserted beyond the insertion limit during surveillance testing pursuant to Specification 4.1.3.1.2 and immovable due to malfunctions in the rod control system. ITS 3.1.5, Condition B, states, in part, "One shutdown bank inserted ≤ 18 steps below the insertion limit and immovable." This changes the CTS by eliminating the qualification, "during surveillance testing pursuant to Specification 4.1.3.1.2" and immovable "due to malfunctions in the rod control system," the qualifications are not necessary to be stated and the requirements remain the same.	3.1.5, Condition B	3.1.3.5, Action b
3.1.5 A.4	CTS 3.1.3.5, Action b, states, in part, that "With a maximum of one shutdown bank inserted beyond the insertion limit specified in the CORE OPERATING LIMITS REPORT during surveillance testing pursuant to Specification 4.1.3.1.2 and immovable due to malfunctions in the rod control system, POWER OPERATION may continue provided that: . . . 2. the affected bank is trippable, 3. each shutdown and control rod is aligned to within +/- 12 steps of its respective group step counter demand position . . ." ITS 3.1.5, Condition B, states, in part, "One shutdown bank inserted ≤ 18 steps below the insertion limit and immovable AND each control and shutdown bank within the limits of LCO 3.1.4." ITS LCO 3.1.4 requires that all shutdown and control banks be OPERABLE (which is defined as "trippable,") and individual indicated rod positions be within 12 steps of their group step counter demand position. This changes the CTS by substituting a reference to LCO 3.1.4 for the explicit requirements in the CTS action; the requirements have not changed.	3.1.5, Condition B	3.1.3.5, Action b
3.1.6 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	None	Various
3.1.6 A.2	The Applicability of CTS 3.1.3.6 is modified by a footnote, designated "*", stating, "See Special Test Exceptions 3.10.2 and 3.10.3." ITS 3.1.6 Applicability does not contain the footnote or a reference to the Special Test Exceptions; cross-referencing specifications is unnecessary and not done in the STS.	None	3.1.3.6

Table A – Administrative Changes  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.1.6 A.3	CTS 3.1.3.6, Action a, states, in part, “With the control banks inserted beyond the insertion limits, except for surveillance testing pursuant to Specification 4.1.3.1.2” and CTS 3.1.3.6, Action b, states, in part, “With a maximum of one control bank inserted beyond the insertion limits specified in the CORE OPERATING LIMITS REPORT during surveillance testing pursuant to Specification 4.1.3.1.2.” ITS 3.1.6, Applicability Note, states, “The LCO is not applicable while performing SR 3.1.4.2.” This changes the CTS by moving the qualifications, “during surveillance testing pursuant to Specification 4.1.3.1.2” to an Applicability Note; the requirement has not changed.	3.1.6, Applicability Note	3.1.3.6, Actions a and b
3.1.6 A.4	CTS 3.1.3.6, Action b, states, in part, “With a maximum of one control bank inserted beyond the insertion limit specified in the CORE OPERATING LIMITS REPORT during surveillance testing pursuant to Specification 4.1.3.1.2 and immovable due to malfunctions in the rod control system, POWER OPERATION may continue . . .” ITS 3.1.6, Condition C, states, in part, “Control bank A, B, or C inserted ≤ 18 steps below the insertion limit and immovable.” This changes the CTS by eliminating a qualification, immovable “due to malfunctions in the rod control system.” The requirements have not changed. Other changes to CTS 3.1.3.6, Action b, are described in DOC A.3.	3.1.6, Condition C	3.1.3.6, Action b
3.1.6 A.5	CTS 3.1.3.6, Action b, states, in part, that “With a maximum of one control bank inserted beyond the insertion limit specified in the CORE OPERATING LIMITS REPORT during surveillance testing pursuant to Specification 4.1.3.1.2 and immovable due to malfunctions in the rod control system, POWER OPERATION may continue provided that: . . . 2. the affected bank is trippable, 3. each shutdown and control rod is aligned to within +/- 12 steps of its respective group step counter demand position . . .” ITS 3.1.6, Condition C, states, in part, “One control bank inserted ≤ 18 steps below the insertion limit and immovable AND each control and shutdown bank within the limits of LCO 3.1.4.” ITS LCO 3.1.4 requires that all shutdown and control banks be OPERABLE (which is defined as “trippable,”) and individual indicated rod positions be within 12 steps of their group step counter demand position. This changes the CTS by substituting a reference to LCO 3.1.4 for the explicit requirements in the CTS action; the requirements have not changed.	3.1.6, Condition C	3.1.3.6, Action b
3.1.6 A.6	CTS 3.1.3.6, Action a.1 and a.2 state that with the control banks inserted beyond the insertion limits, restore the control banks to within the insertion limits within two hours or reduce the THERMAL POWER within 2 hours to less than or equal to that fraction of RATED THERMAL POWER which is allowed by the rod group step counter demand position using the insertion limits specified in the CORE OPERATING LIMITS REPORT. ITS 3.1.6, Action B.2, requires the control bank to be restored to within limits within 2 hours. This changes the CTS by eliminating the explicit statement that compliance with the LCO can be restored in order to exit the Action.	3.1.6, Action B.2	3.1.3.6, Action a.1 and a.2

Table A – Administrative Changes  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.1.7 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	None	Various
3.1.7 A.2	CTS Action a.1, a.2, and b.2 require verification that the requirements of CTS 3.1.3.1 are satisfied. CTS 3.1.3.1 is equivalent to ITS LCO 3.1.5. The ITS does not contain a requirement in ITS 3.1.7 to verify that ITS LCO 3.1.5 is satisfied; it is unnecessary/redundant to explicitly state.	None	3.1.3.1, Action a.1, a.2, and b.2
3.1.7 A.3	ITS 3.1.7 Actions are modified by a Note which states, "Separate Condition entry is allowed for each inoperable rod position indicator and each demand position indicator." While the CTS does not have a similar explicit statement, the CTS is worded such that separate condition entry is allowed, and it is current practice.	3.1.7 Actions Note	None
3.1.7 A.4	CTS 3.1.3.2 contains a Note, designated "*", which allows individual rod position indication to be up to +/- 24 steps, vice +/- 12 steps, for up to one hour per 24 hours when reactor power is ≤ 50% RTP. It contains the statement, "If either the one hour period or the +/- 24 step limit is exceeded, immediately declare the individual rod position indicator channel inoperable." The ITS does not contain a similar statement, however the ITS structure and format provide the same result.	None	3.1.3.2 Note *
3.1.7 A.5	CTS 3.1.3.2.a states "Each individual rod position indicator channel, 1 per rod, accurate to within +/- 12 steps* of actual rod position." Footnote "*" states, "Below 50% power each individual rod position indicator may be more than +/- 12 steps from its group step counter demand position for a maximum of one hour in every 24. During this hour, each individual rod position indicator may be no more than +/- 24 steps from its demand position." ITS 3.1.7 states, "The Rod Position Indication (RPI) system and the Demand Position Indication System shall be OPERABLE." ITS LCO 3.1.4 states, "All shutdown and control rods shall be OPERABLE AND individual indicated rod positions shall be within 12 steps of their group step counter demand position." ITS LCO 3.1.4 is modified by a Note which states, "When THERMAL POWER is ≤ 50% RTP, the indicated position of each rod as determined by its individual rod position indicator may be within 24 steps from its group step counter demand position for up to 1 hour per 24 hours. This NOTE is not applicable for control rods known to be greater than 12 steps from the rod group step counter demand position." This changes the CTS by moving the requirement that the RPI indicate within 12 or 24 steps of the actual position to LCO 3.1.4; the requirement is the same.	LCO 3.1.4, LCO 3.1.7	3.1.3.2.a, footnote *
3.1.8 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	None	Various

Table A – Administrative Changes  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.1.8 A.2	CTS 3.1.1.3.2 states, “The following valves shall be locked, sealed or otherwise secured in the closed position except during planned boron dilution or makeup activities.” ITS LCO 3.1.8 states, “Each valve used to isolate primary grade water flow paths shall be secured in the closed position.” A Note to the LCO states, “Primary grade water flow path isolation valves may be opened under administrative control for planned boron dilution or makeup activities.” ITS SR 3.1.8.1 states, “Verify each valve that isolates primary grade water flow paths is locked, sealed, or otherwise secured in the closed position;” the set requirements are the same.	LCO 3.1.8 Note, SR 3.1.8.1	3.1.1.3.2
3.1.8 A.3	CTS 3.1.1.3.2 is applicable in MODES 3, 4, 5 and 6. The CTS Action states that with the valves not locked, sealed, or otherwise secured in the closed position, suspend CORE ALTERATIONS. ITS 3.1.8 is applicable in MODES 3, 4, and 5 and does not contain this Action. Action applies in MODE 6	None	3.1.1.3.2
3.1.9 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	None	Various
3.1.9 A.2	CTS 3.10.3 states that the limitations of Specification 3.1.1.4, 3.1.3.1, 3.1.3.5, and 3.1.3.6 may be suspended during the performance of PHYSICS TESTS provided the Reactor Trip Setpoints on the OPERABLE Intermediate and Power Range Channels are set ≤ 35% and ≤ 25% of RATED THERMAL POWER, respectively. Other requirements are also imposed. ITS 3.1.9 states that the requirement of LCO 3.1.3, LCO 3.1.4, LCO 3.1.5, LCO 3.1.6, and LCO 3.4.2 may be suspended, but contains no requirements on the Intermediate and Power Range Channels. The ITS requirements on the Intermediate and Power Range Channel Reactor Trip Setpoint are contained in ITS LCO 3.3.1 and do not need to be duplicated in ITS 3.1.9. The overall requirements are the same.	LCO 3.1.9	3.10.3
3.1.9 A.3	CTS 3.10.3 is applicable in MODE 2. ITS 3.1.9 is applicable, “During PHYSICS TESTS initiated in MODE 2.” The requirements are effectively the same.	3.1.9 Applicability	3.10.3 Applicability

Table L – Less Restrictive Changes  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Category
3.1.1 L.1	CTS 3.1.1.1 and CTS 3.1.1.2 Actions state that when the SDM is less than the limit, boration must be initiated immediately. ITS 3.1.1 Action A states that when SDM is less than the limit, boration must be initiated within 15 minutes. This changes the CTS by relaxing the Completion Time from “immediately” to 15 minutes.	3.1.1, ACTION A	3.1.1.1 and 3.1.1.2	3
3.1.1 L.2	CTS 3.1.1.1 and CTS 3.1.1.2 Actions state that when the SDM is not within its limit, boration must be initiated and continued at ≥ 10 gpm of 12,950 ppm boric acid solution or equivalent until the required SDM is restored. ITS 3.1.1 Action A states that with the SDM not within limit, initiate boration to restore SDM to within limit. This changes the CTS by eliminating the specific values of flow rate and boron concentration that must be used to restore compliance from the Required Action.	3.1.1, ACTION A	3.1.1.1 and 3.1.1.2	4
3.1.1 L.3	CTS Surveillance 4.1.1.1.d requires verification that SDM is within its limit, “Prior to initial operation above 5% RATED THERMAL POWER after each fuel loading, by consideration of the factors of e below, with the control banks at the maximum insertion limit of Specification 3.1.3.6.” The ITS does not contain a similar requirement.	None	4.1.1.1.d	5
3.1.2 L.1	CTS 3.1.1.1 is applicable in MODES 1, 2, 3, and 4. ITS 3.1.2 is applicable in MODES 1 and 2. This changes the CTS by reducing the applicable MODES in which the core reactivity requirement must be met.	3.1.2 Applicability	3.1.1.1 Applicability	2

Change Category:  
1 - Relaxation of LCO Requirements  
2 - Relaxation of Applicability  
3 - Relaxation of Completion Time  
4 - Relaxation of Required Action  
5 - Deletion of Surveillance Requirement  
6 - Relaxation Of Surveillance Requirement Acceptance Criteria  
7 - Relaxation Of Surveillance Frequency  
8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Category
3.1.2 L.2	CTS 3.1.1.1 does not contain Actions to follow if the core reactivity balance Surveillance is not met. If the core reactivity balance Surveillance was not met, LCO 3.0.3 would be entered. LCO 3.0.3 requires the plant to be in MODE 3 within 7 hours, MODE 4 within 13 hours, and MODE 5 within 37 hours. ITS 3.1.2 contains Actions to follow if the core reactivity balance LCO is not met. If the LCO is not met, 7 days is provided to re-evaluate the core design and safety analysis, and determine that the reactor core is acceptable for continued operation and to establish appropriate operating restrictions and SRs. If these actions are not completed within the AOT, the plant must be in MODE 3 within 6 hours. This changes the CTS by providing 7 days to evaluate and provide compensatory measures for not meeting the core reactivity balance requirement and then requiring entry into MODE 3 instead of requiring an immediate shutdown and entry into MODE 5.	3.1.2 ACTIONS	None	4
3.1.2 L.3	CTS Surveillance 4.1.1.1.2 requires the overall core reactivity balance to be compared with the predicted value once per 31 EFPD. The CTS also requires the predicted reactivity values to be adjusted (normalized) to the actual core conditions prior to exceeding a fuel burnup of 60 EFPD after each fuel loading. ITS SR 3.1.2.1 also requires the measured core reactivity to be compared to the predicted values every 31 EFPD, but the ITS SR is only required after 60 EFPD of core burnup. The ITS also allows the adjustment of the predicted values to the actual values prior to exceeding a fuel burnup of 60 EFPD after each fuel loading. This changes the CTS by not requiring the at-power core reactivity comparison until core burnup reaches 60 EFPD.	SR 3.1.2.1	4.1.1.1.2	7
3.1.3 L.1	CTS 3.1.1.4 Action a.3 requires that a Special Report be prepared and submitted to the NRC within 10 days if the measured MTC is more positive than the BOC limit. ITS 3.1.3 does not include this requirement.	None	3.1.1.4, Action a.3	8

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Category
3.1.3 L.2	CTS 3.1.1.4, Action a.2, states that when the measured MTC is more positive than the limit, the control rod withdrawal limits established in Action a.1 must be maintained until subsequent measurement verifies that the MTC has been restored to within its limits for the all rods withdrawn condition. ITS 3.1.3 does not contain a requirement that the control rod withdrawal limits be maintained until MTC is confirmed to be within its limit by measurement. However, LCO 3.0.2 states that the Required Actions shall be followed until the LCO is met or no longer applicable. The ITS Bases state that physics calculations may be used to determine the time in cycle life at which the calculated MTC will meet the LCO requirement and at this point in core life, the condition may be exited and the control rod withdrawal limits removed. This changes the CTS by eliminating the Surveillance Requirement verifying the MTC to be within its limit before removing the control rod withdrawal limits.	None	3.1.1.3, Action a.2	5
3.1.4 L.1	CTS LCO 3.1.3.1 states, “All shutdown and control rods shall be OPERABLE and positioned within +/- 12 steps of their group step counter demand position.” CTS 3.1.3.1, Action c.2), states that a misaligned rod must be declared inoperable. ITS LCO 3.1.4 states, “All shutdown and control rods shall be OPERABLE <u>AND</u> Individual indicated rod position shall be within 12 steps of their group step counter demand position.” This changes the CTS by considering shutdown and control rods that are trippable but misaligned to be OPERABLE. The term “untrippable” in CTS 3.1.3.1, Action a, is replaced with “inoperable” and the requirement to declare a misaligned rod inoperable in CTS 3.1.3.1, Action c.2, is deleted.	LCO 3.1.4	3.1.3.1 and 3.1.3.1, Action c.2)	1

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements



Table L – Less Restrictive Changes  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Category
3.1.4 L.2	CTS 3.1.3.1, Actions a, b, c.2, and c.2.b) require satisfying the SHUTDOWN MARGIN requirement in accordance with Specification 3.1.1.1. In the same conditions, ITS 3.1.4 requires verification that the SHUTDOWN MARGIN is within the limit provided in the COLR or initiating boration to restore SDM to within the limit. This changes the CTS by providing the option to initiate action to establish compliance with the SDM requirement within 1 hour instead of declaring the Required Action not met and following LCO 3.0.3. The change from referencing Specification 3.1.1.1 to referencing a value in the COLR is discussed in DOC LA.1.	3.1.4, Action A.1.1	3.1.3.1, Actions a, b, c.2, and c.2.b)	4
3.1.4 L.3	CTS 3.1.3.1, Action c.2.a), states that when a rod is misaligned, POWER OPERATION may continue if a reevaluation of each accident analysis of Table 3.1-1 is performed within 5 days. This re-evaluation shall confirm that the previous analyzed results of these accidents remain valid for the duration of operation under these conditions. ITS 3.1.4, Condition B, states that when one rod misaligned, re-evaluate the safety analyses and confirm results remain valid for the duration of operation under these conditions. This changes the CTS by eliminating Table 3.1-1, which lists the specific events to be re-evaluated, and the Action to evaluate those specific events.	3.1.4, Condition B	3.1.3.1, Action c.2.a) and Table 3.1-1	4
3.1.4 L.4	CTS 3.1.3.1, Action c.2.d) states that with one rod misaligned, reduce the THERMAL POWER level to $\leq 75\%$ of RATED THERMAL POWER within one hour. ITS 3.1.4, Required Action B.2.1, requires THERMAL POWER to be reduced to $\leq 75\%$ RTP within 2 hours. This changes the CTS by changing the Completion Time from one hour to two hours.	3.1.4, Required Action B.2.1	3.1.3.1, Action c.2.d)	3

Change Category:  
1 - Relaxation of LCO Requirements  
2 - Relaxation of Applicability  
3 - Relaxation of Completion Time  
4 - Relaxation of Required Action  
5 - Deletion of Surveillance Requirement  
6 - Relaxation Of Surveillance Requirement Acceptance Criteria  
7 - Relaxation Of Surveillance Frequency  
8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Category
3.1.4 L.5	CTS 3.1.3.1, Action c.2.d) states that with one rod misaligned, reduce the THERMAL POWER level to ≤ 75% of RATED THERMAL POWER and reduce the high neutron flux trip setpoint to ≤ 85% of RTP within the next 4 hours. ITS 3.1.4, Required Action B.2.1, requires THERMAL POWER to be reduced to ≤ 75% RTP, but does not require the high neutron flux trip setpoint to be reduced. This changes the CTS by eliminating the Required Action to reduce the high neutron flux trip setpoint.	3.1.4, Required Action B.2.1	3.1.3.1, Action c.2.d)	4
3.1.4 L.6	CTS 4.1.3.4 requires the rod drop time of full length rods to be demonstrated through measurement prior to reactor criticality for specifically affected individual rods following any maintenance or modification to the control rod drive system which could affect the drop time of those specific rods. The ITS does not include post maintenance/modification testing requirements.	None	4.1.3.4	5
3.1.4 L.7	CTS 4.1.3.4 requires the rod drop time of full length rods to be demonstrated through measurement prior to reactor criticality at least once per 18 months. The ITS does not include this testing requirement; ITS frequency is “after removal of reactor vessel head,” which is comparable.	None	4.1.3.4	7
3.1.4 L.8	CTS 4.1.3.1.1 requires the position of each rod to be determined to be within the group demand limit by verifying the individual rod positions at least once per 12 hours except during time intervals when the Rod Position Deviation Monitor is inoperable, then verify the group positions at least once per 4 hours. ITS SR 3.1.4.1 requires verification that the individual rod positions are within the alignment limit every 12 hours. This changes the CTS by eliminating the requirement to verify the individual rod positions to be within the alignment limit every 4 hours when the Rod Position Deviation Monitor is inoperable.	SR 3.1.4.1	4.1.3.1.1	7

- Change Category:  
1 - Relaxation of LCO Requirements  
2 - Relaxation of Applicability  
3 - Relaxation of Completion Time  
4 - Relaxation of Required Action  
5 - Deletion of Surveillance Requirement  
6 - Relaxation Of Surveillance Requirement Acceptance Criteria  
7 - Relaxation Of Surveillance Frequency  
8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Category
3.1.4 L.9	CTS 3.1.3.4 states that the rod drop time must be measured from the 229 step withdrawn position. ITS 3.1.4.3 states the rod drop time must be verified from the fully withdrawn position. This changes the CTS by eliminating the rod step position equivalent to the fully withdrawn position.	3.1.4.3	3.1.3.4	6
3.1.5 L.1	CTS LCO 3.1.3.5 states, “All shutdown rods shall be limited in physical insertion as specified in the CORE OPERATING LIMITS REPORT.” CTS 3.1.3.5, Action a, applies when one shutdown rod is inserted beyond the insertion limits and requires, within one hour, restoration of the rod to within the insertion limits or declaration of the rod to be misaligned and application of Specification 3.1.3.1. ITS LCO 3.1.5 states, “Each shutdown bank shall be within insertion limits specified in the COLR.” ITS 3.1.5 does not contain actions for a single rod inserted below the insertion limit and single rod misalignment greater than 12 steps would fall under the requirement of ITS LCO 3.1.4. LCO 3.1.4 requires the rods to be aligned within 12 steps. This changes the CTS by eliminating the CTS 3.1.3.5 requirement to declare a single shutdown rod below the insertion limits misaligned, even if the rod is within 12 steps of the group alignment limits.	LCO 3.1.5	LCO 3.1.3.5, 3.1.3.5 Action a	1
3.1.5 L.2	CTS Surveillance 4.1.3.5 requires verification that each shutdown rod is within the insertion limit specified in the CORE OPERATING LIMITS REPORT within 15 minutes prior to initial control rod bank withdrawal during an approach to reactor criticality. ITS 3.1.5 does not require verification that the shutdown rods are above the insertion limits within 15 minutes prior to initial control bank withdrawal. This changes the CTS by eliminating the requirement that the shutdown banks be verified to be above the insertion limit within 15 minutes prior to withdrawing the first control bank.	None	4.1.3.5	5

- Change Category:  
1 - Relaxation of LCO Requirements  
2 - Relaxation of Applicability  
3 - Relaxation of Completion Time  
4 - Relaxation of Required Action  
5 - Deletion of Surveillance Requirement  
6 - Relaxation Of Surveillance Requirement Acceptance Criteria  
7 - Relaxation Of Surveillance Frequency  
8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Category
3.1.5 L.3	CTS 3.1.3.5 does not contain an Action for a shutdown bank not within the insertion limit except Action b, which contains a number of qualifying conditions. Under the CTS, a shutdown bank not within the insertion limits and not meeting the qualifying conditions in CTS Action b, would result in an CTS 3.0.3 entry. CTS 3.0.3 allows one hour to prepare for a shutdown and requires the plant to be in MODE 3 within 7 hours. ITS 3.1.5, Condition A, applies with one or more shutdown banks not within limits for reasons other than Condition B (which is the same as CTS Action b). It allows 2 hours to restore the bank to within the insertion limits and then requires the plant to be in MODE 3 in 6 hours. This changes the CTS by allowing an additional hour (from 7 hours to 8 hours) to be in MODE 3 under this condition.	3.1.5, Condition A	3.1.3.5	3
3.1.6 L.1	CTS 4.1.3.6 requires the position of each control bank to be determined to be within the insertion limits at lease once per 12 hours except during time intervals when the Rod Insertion Limit Monitor is inoperable, then verify the individual rod positions (indicated positions) or the group step counter demand position of each rod group to be within the insertion limits at least once per 4 hours. ITS SR 3.1.6.2 requires verification that each control bank insertion is within the limits in the COLR every 12 hours. This changes the CTS by eliminating the requirement to verify the control bank insertion to be within limits every 4 hours when the Rod Insertion Limit Monitor is inoperable.	SR 3.1.6.2	4.1.3.6	7
3.1.7 L.1	CTS 3.1.3.2 states, “The shutdown and control rod position indicating system shall be OPERABLE with . . each demand position indicator, 1 per group, accurate to within +/- 2 steps of demand position” CTS SR 4.1.3.2.2 requires each demand position indicator to be demonstrated OPERABLE by performing CHANNEL CHECKS every 7 days and every 92 days. ITS LCO 3.1.7 states, “The Rod Position Indication (RPI) System and the Demand Position Indication System shall be OPERABLE.” This changes the CTS by eliminating the specific tolerance requirement and CHANNEL CHECK Surveillances on the demand position indicators.	LCO 3.1.7	3.1.3.2 and 4.1.3.2.2	1

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Category
3.1.7 L.2	CTS 3.1.3.2 states, “The shutdown and control rod position indicating system shall be OPERABLE with . . .the Automatic Rod Position Deviation Monitor with the alarm setpoint < 12 steps.” ITS LCO 3.1.7 states, “The Rod Position Indication (RPI) System and the Demand Position Indication System shall be OPERABLE.” This changes the CTS by eliminating the requirements on the Automatic Rod Position Deviation Monitor.	LCO 3.1.7	3.1.3.2	1
3.1.7 L.3	CTS 3.1.3.2 Action a.1 states that with a maximum of one individual rod position indicator channel per group inoperable, determine the position of the non-indicating rod indirectly by the moveable incore detectors at least once per 8 hours and immediately after any motion of the non-indicating rod which exceeds 24 steps in one direction since the last determination of the rod’s position. ITS 3.1.7, Action C.1 states, “One or more rods with inoperable position indicators have been moved in excess of 24 steps in one direction since the last determination of the rod’s position, verify the position of the rods with inoperable position indicators by using the moveable incore detectors within 4 hours. This changes the CTS by allowing 4 hours to verify the rod position instead of requiring the verification immediately.	3.1.7, Action C.1	3.1.3.2 Action a.1	3
3.1.7 L.4	CTS 4.1.3.2 requires each rod position indicator to be determined OPERABLE by performing a CHANNEL CHECK every 12 hours and a CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION at least once per 18 months. ITS SR 3.1.7.1 requires a CHANNEL CALIBRATION every 18 months. This changes the CTS by eliminating the CHANNEL CHECK and CHANNEL FUNCTIONAL TEST requirements.	SR 3.1.7.1	4.1.3.2	5

Change Category:  
1 - Relaxation of LCO Requirements  
2 - Relaxation of Applicability  
3 - Relaxation of Completion Time  
4 - Relaxation of Required Action  
5 - Deletion of Surveillance Requirement  
6 - Relaxation Of Surveillance Requirement Acceptance Criteria  
7 - Relaxation Of Surveillance Frequency  
8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Category
3.1.7 L.5	CTS 3.1.3.2 does not have an action for more than one Rod Position Indicator Channel is inoperable per group. CTS 3.0.3 would be entered in this condition. CTS 3.0.3 requires a shutdown to MODE 3 within 7 hours. ITS 3.1.7, Condition B, applies when more than one RPI per group is inoperable and requires the rods to be placed under manual control immediately, monitoring and recording of RCS T <sub>avg</sub> once per hour, verification of rod position using the movable incore detectors once per 8 hours, and restoration of all but one RPI to OPERABLE status within 24 hours. This changes the CTS by allowing operation for an additional 24 hours with more than one RPI per group inoperable.	3.1.7, Condition B	3.1.3.2	4
3.1.8 L.1	Unit 1 CTS 3.1.1.3.2 states that when the primary grade water flow path isolation valves are not locked, sealed, or otherwise secured in the closed position in MODES 3 and 4, the plant must be in COLD SHUTDOWN within 30 hours. If in MODE 5 or 6, all operations involving positive reactivity changes or CORE ALTERATIONS must be suspended, and the valves must be locked, sealed, or secured in the closed position within 15 minutes. ITS 3.1.8 Actions state that when the primary grade water flow path are not isolated, positive reactivity additions must be suspended immediately, the primary grade water flow path must be isolated within 15 minutes and SR 3.1.1.1 must be performed within 1 hours. This changes the CTS by eliminating the Unit 1 Action that a unit in MODES 3 or 4 be shutdown to MODE 5 within 30 hours. The other changes to CTS 3.1.1.3.2 are discussed in DOCs A.3, M.1, and LA.1.	3.1.8 Actions	Unit 1 3.1.1.3.2	4

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Category
3.1.8 L.2	Unit 2 CTS 3.1.1.3.2 states that when the primary grade water flow path isolation valves are not locked, sealed, or otherwise secured in the closed position, all operations involving positive reactivity changes or CORE ALTERATIONS must be suspended, the isolation valves must be locked, sealed, or otherwise secured in the closed position within 15 minutes, and SHUTDOWN MARGIN must be verified greater than or equal to 1.77% $\Delta k/k$ within 60 minutes. ITS 3.1.8 Actions state than when one or more valves are not secured in the closed position, positive reactivity changes must be suspended immediately, the primary grade water flow paths must be isolated within 15 minutes and the boron concentration must be verified per SR 3.1.1.1 within 4 hours. This changes the Unit 2 CTS by allowing 4 hours to determine the SHUTDOWN MARGIN per SR 3.1.1.1.	3.1.8 Actions	Unit 2 3.1.1.3.2	3
3.1.9 L.1	CTS 4.10.3.2 requires that tests be performed on each Intermediate and Power Range channel within 12 hours prior to initiating PHYSICS TESTS. ITS SR 3.1.9.1 requires that the testing be performed prior to initiation of PHYSICS TESTS. This changes the CTS by eliminating the time period prior to initiation of PHYSICS TESTS within which the testing must be performed.	SR 3.1.9.1	4.10.3.2	7
3.1.9 L.2	ITS 3.9.1 states that the number of required channels for LCO 3.3.1, "RTS Instrumentation," Functions 2, 3, 6, and 18.d, may be reduced to "3" required channels, during the performance of PHYSICS TESTS. CTS 3.10.3 does not contain this allowance. This changes the CTS by reducing LCO requirements for the number of Power Range Neutron Flux channels from "4" to "3" during PHYSICS TESTS initiated in MODE 2.	LCO 3.9.1	None	1

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table M – More Restrictive Changes  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	Description of Changes	ITS Requirement	CTS Requirement
3.1.1 M.1	CTS 4.1.1.1.1.e and CTS 4.1.1.2.b requires SDM to be determined to be within its limit every 24 hours when in MODES 3, 4, and 5. ITS SR 3.1.1.1 requires SDM to be determined to be within its limit in MODE 2 with $K_{eff} < 1.0$ , and MODES 3, 4, and 5. This changes the CTS by expanding the applicability of the Surveillance to include MODE 2 with $K_{eff} < 1.0$ .	SR 3.1.1.1	4.1.1.1.1.e, 4.1.1.2.b
3.1.2 M.1	ITS SR 3.1.2.1 requires the core reactivity balance to be determined to be within 1% $\Delta k/k$ of the predicted value once prior to entering MODE 1 after each refueling. The CTS does not contain a similar requirement. This changes the CTS by adding an additional performance requirement for the core reactivity balance SR.	SR 3.1.2.1	None
3.1.3 None	N/A	N/A	N/A
3.1.4 M.1	CTS 3.1.3.1, Action c, states that with one rod misaligned, POWER OPERATION may continue provided that certain actions are completed within one hour. If those actions are not complete, CTS 3.0.3 would be entered which requires entry into MODE 3 within 7 hours, for a total time from condition discovery to entry into MODE 3 of 8 hours. ITS 3.1.4, Action C, states that if the Required Actions and associated Completion Times of Condition B, one rod not within alignment limits, are not met, the unit must be in MODE 3 in 6 hours. The shortest Completion Time in ITS Condition B is one hour. Therefore, under the ITS, the time from discovery of the condition to entry into MODE 3 is 7 hours. This changes the CTS by providing one less hour for entry into MODE 3 following discovery of a misaligned rod.	3.1.4, Action C	3.1.3.1, Action c
3.1.5 M.1	CTS 3.1.3.5 is applicable in MODE 1 and MODE 2 with $k_{eff} \geq 1.0$ . ITS 3.1.5 is applicable in MODES 1 and 2. This changes the CTS by expanding the applicability from MODE 2 with the reactor critical to all of MODE 2. This has the effect of expanding the applicability of the requirements.	3.1.5 Applicability	3.1.3.5 Applicability
3.1.6 M.1	CTS LCO 3.1.3.6 requires the control banks to be limited in physical insertion as specified in the CORE OPERATING LIMITS REPORT. ITS LCO 3.1.6 requires the control banks to be within the insertion, sequence, and overlap limits specified in the COLR. ITS Condition A provides Actions for not meeting the overlap and sequence requirements, and ITS SR 3.1.6.3 requires verification of the overlap and sequence every 12 hours. This changes the CTS by adding requirements on the overlap and sequence to the Technical Specifications.	LCO 3.1.6, Condition A, SR 3.1.6.3	3.1.3.6
3.1.6 M.2	CTS 3.1.3.6, Action a, requires control banks inserted beyond the insertion limits to be restored within 2 hours or the plant to be in HOT SHUTDOWN within 6 hours. ITS 3.1.6, Condition B, contains the same requirements and adds the requirement to verify the SDM is within the limits specified in the COLR or initiate boration to restore SDM to within the limit within 1 hour. This changes the CTS by adding the requirement to verify SDM or boration to restore the required SDM within one hour when control banks are below the insertion limits.	3.1.6, Condition B	3.1.3.6, Action a



Table M – More Restrictive Changes  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	Description of Changes	ITS Requirement	CTS Requirement
3.1.7 M.1	CTS 3.1.3.2 does not contain an Action to follow if the provided Actions cannot be met. Therefore, CTS 3.0.3 would be entered which would allow 1 hour to plan a shutdown and be in MODE 3 within 7 hours. ITS 3.1.7 contains Action E which states that the plant must be in MODE 3 if the Required Actions and associated Completion Times are not met. This changes the CTS by eliminating the one hour to plan a shutdown and, consequently, allowing one hour less for the unit to be in MODE 3.	3.1.7, Action E	3.1.3.2
3.1.8 M.1	Unit 1 CTS 3.1.1.3.2 states that when the primary grade water flow path isolation valves are not locked, sealed, or otherwise secured in the closed position in MODES 3 and 4, the plant must be in COLD SHUTDOWN within 30 hours. If in MODE 5 or 6, all operations involving positive reactivity changes or CORE ALTERATIONS must be suspended, and the valves must be locked, sealed, or secured in the closed position within 15 minutes. Unit 2 CTS 3.1.1.3.2 states that when the primary grade water flow path isolation valves are not locked, sealed, or otherwise secured in the closed position, all operations involving positive reactivity changes or CORE ALTERATIONS must be suspended, the isolation valves must be locked, sealed, or otherwise secured in the closed position within 15 minutes, and SHUTDOWN MARGIN must be verified greater than or equal to 1.77% $\Delta k/k$ within 60 minutes. ITS 3.1.8 Actions state that when the primary grade water flow paths are not isolated, positive reactivity additions must be suspended immediately, the primary grade water flow paths must be isolated within 15 minutes and SR 3.1.1.1 must be performed within 4 hours. The Condition is modified by a Note requiring that the SR 3.1.1.1 performance be done whenever Condition A is entered. This changes the Unit 1 CTS by adding a requirement to verify the SHUTDOWN MARGIN within 4 hours and by requiring the SHUTDOWN MARGIN be performed whenever the Condition is entered. The other changes to CTS 3.1.1.3.2 are discussed in DOCs A.3, L.1, and LA.1.	3.1.8 ACTIONS	3.1.1.3.2
3.1.9 M.1	CTS 3.10.1 provides an exception to the SHUTDOWN MARGIN requirements in CTS 3.1.1.1 for the purpose of performing rod worth measurement in the N-1 configuration (all rods inserted into the core except 1). The ITS does not contain the test exception. This changes the CTS by eliminating a test exception.	None	3.10.1
3.1.9 M.2	CTS 3.10.2 provides an exception to the rod group height, rod insertion, and power distribution limits for the purpose of performing the control rod pseudo ejection test, control rod pseudo drop and misalignment test, and xenon stability measurements. The ITS does not contain the test exception. This changes the CTS by eliminating a test exception.	None	3.10.2
3.1.9 M.3	CTS 3.10.3 provides an exception to CTS 3.1.1.4, 3.1.3.1, 3.1.3.5, and 3.1.3.6 during the performance of PHYSICS TESTS and provides restrictions that must be followed when utilizing the exception. ITS 3.1.9 provides an exception to the equivalent ITS LCOs and to the restrictions that must be followed adds a requirement that SHUTDOWN MARGIN must be within the limits provided in the COLR. A Surveillance to verify the SHUTDOWN MARGIN every 24 hours and ACTIONS to follow if the	LCO 3.1.9, 3.1.9 ACTIONS, SR 3.1.9.4	3.10.3

Table M – More Restrictive Changes  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	Description of Changes	ITS Requirement	CTS Requirement
	SHUTDOWN MARGIN limit is not met are also added to the CTS. This changes the CTS by imposing an additional requirement on the application of the test exception LCO.		
3.1.9 M.4	Unit 1 CTS 3.10.3 provides an exception to CTS 3.1.1.4, 3.1.3.1, 3.1.3.5, and 3.1.3.6 during the performance of PHYSICS TESTS and provides restrictions that must be followed when utilizing the exception. ITS 3.1.9 provides an exception to the equivalent ITS LCOs and to the restrictions that must be followed adds a requirement that RCS lowest loop average temperature be $\geq 531$ °F. A Surveillance to verify the RCS lowest loop average temperature is $\geq 531$ °F and ACTIONS to follow if the RCS lowest loop average temperature is not within limit are also added to the CTS. This changes the CTS by imposing an additional requirement on the application of the test exception LCO. The LCO requirement, Action, and Surveillance being added to the Unit 1 CTS exists in the Unit 2 CTS.	LCO 3.1.9, 3.1.9 ACTIONS, SR 3.1.9.2	3.10.3
3.1.9 M.5	CTS 4.10.3.1 requires THERMAL POWER to be verified to be $\leq 5\%$ once per hour. ITS SR 3.1.9.3 requires the verification be performed every 30 minutes. This changes the CTS by increasing the Frequency of the THERMAL POWER verification.	SR 3.1.9.3	4.10.3.1

Table R – Relocated Specifications and Removed Details  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.1.1 LA.1	3.1.1.1, 3.1.1.2, 4.1.1.1.1, and 3.1.1.2	CTS 3.1.1.1 states that the SHUTDOWN MARGIN shall be $\geq 1.77\% \Delta k/k$ . CTS 3.1.1.2 states that the SHUTDOWN MARGIN shall be $\geq 1.77\% \Delta k/k$ . The specific value of $1.77\% \Delta k/k$ also appears in the CTS 3.1.1.1 and CTS 3.1.1.2 Action, and in Surveillance 4.1.1.1.1 and 4.1.1.2. ITS 3.1.1 states that SHUTDOWN MARGIN shall be within the limits provided in the COLR. The Actions and Surveillance Requirements of ITS 3.1.1 also reference SDM values located in the COLR. This changes the CTS by relocating the SHUTDOWN MARGIN parameter limits to the Core Operating Limits Report (COLR).	COLR	ITS 5.6.5, Core Operating Limits Reporty	5
3.1.1 LA.2	4.1.1.1.1.e and 4.1.1.2.b	CTS Surveillances 4.1.1.1.1.e, and 4.1.1.2.b require determination that the SDM is within limit and specifically require the consideration of the following factors: reactor coolant system boron concentration, control rod position, reactor coolant system average temperature, fuel burnup based on gross thermal energy generation, xenon concentration, and samarium concentration. ITS SR 3.1.1.1 requires determination that SDM is within limit but does not describe the factors that must be considered in the calculation. This information is relocated to the Surveillance Bases. This changes the CTS by removing details on how the SDM calculation is performed from the specifications and placing the information in the Bases.	Bases	ITS 5.5.13, Technical Specification Bases Control Program	3
3.1.2 LA.1	4.1.1.1.1.2, 4.1.1.1.1.e	CTS Surveillances 4.1.1.1.1.2 requires comparison of the actual and predicted core reactivity balance and specifically requires consideration of at least those factors stated in Specification 4.1.1.1.1.e. CTS 4.1.1.1.1.e requires determination of SDM and require the consideration of the	Bases	ITS 5.5.13, Technical Specification Bases Control Program	3

**Change Category:**  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
		following factors: reactor coolant system boron concentration, control rod position, reactor coolant system average temperature, fuel burnup based on gross thermal energy generation, xenon concentration, and samarium concentration. ITS SR 3.1.2.1 requires comparison of the actual and predicted core reactivity balance but does not describe the factors that must be considered in the calculation. This information is relocated to the Surveillance Bases. This changes the CTS by removing details on how the core reactivity balance comparison calculation is performed from the specifications and placing the information in the Bases.			
3.1.3 None	N/A	N/A	N/A	N/A	N/A
3.1.4 LA.1	3.1.3.1, Actions a, b, c.2, and c.2.b)	CTS 3.1.3.1, Actions a, b, c.2, and c.2.b) require satisfying the SHUTDOWN MARGIN requirement in accordance with Specification 3.1.1.1. In the same conditions, ITS 3.1.4 requires verification that the SHUTDOWN MARGIN is within the limit provided in the COLR. This changes the CTS by relocating the SHUTDOWN MARGIN value to be met from the specifications to the Core Operating Limits Report (COLR).	COLR	ITS 5.6.5, Core Operating Limits Report	5
3.1.5 None	N/A	N/A	N/A	N/A	N/A
3.1.6 None	N/A	N/A	N/A	N/A	N/A
3.1.7 None	N/A	N/A	N/A	N/A	N/A
3.1.8 LA.1	Unit 2 3.1.1.3.2 Action	Unit 2 CTS 3.1.1.3.2 Action states that with the primary grade water flow path isolation valves not locked, sealed, or otherwise secured in the closed position, verify the SHUTDOWN MARGIN is greater than or equal to 1.77%	COLR	ITS 5.6.5, Core Operating Limits Report	5

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
		$\Delta k/k$ within 60 minutes. ITS 3.1.8, Action A.3, states this requirement as, "Perform SR 3.1.1.1" within 1 hour. ITS 3.1.1.1 requires verification that the SHUTDOWN MARGIN is within the limit provided in the COLR. This changes the CTS by moving the SHUTDOWN MARGIN value to the COLR.			
3.1.8 LA.2	3.1.1.3.2	Unit 1 CTS 3.1.1.3.2 states "The following valves shall be locked, sealed, or otherwise secured in the closed position except during planned boron dilution or makeup activities: a. 1-CH-217 or b. 1-CH-220, 1 CH-241, FCV 1114B and FCV-1113B." Unit 2 CTS 3.1.1.3.2 states "The following valves shall be locked, sealed, or otherwise secured in the closed position except during planned boron dilution or makeup activities: a. 2-CH-140 or b. 2-CH-160, 2 CH-156, FCV 2114B and FCV-2113B." ITS 3.1.8 states, "Each valve used to isolate primary grade water flow path shall be secured in the closed position." ITS 3.1.8 LCO Note states, "Primary grade water flow path isolation valves may be opened under administrative control for planned boron dilution or makeup activities." This changes the CTS by relocating the list of primary grade water flow path isolation valves to the ITS Bases. The other changes in CTS 3.1.1.3.2 are discussed in DOC A.2.	Bases	ITS 5.5.13, Technical Specification Bases Control Program	3
3.1.9 None	N/A	N/A	N/A	N/A	N/A
CTS 3.1.1.3.1R.1	3.1.1.3.1	CTS 3.1.1.3.1 requires a minimum reactor coolant system flow of 3000 gpm in all MODES. Various accident analyses assume adequate reactor coolant flow for heat removal and boron mixing. However, a specific flow rate is not assumed as an initial condition of any design basis accident or transient	Technical Requirements Manual	10 CFR 50.59	N/A

**Change Category:**  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.1 – Reactivity Control Systems

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
		and is not credited for mitigation of any design basis accident or transient. Other specifications in the ITS contains adequate controls to ensure that RCS flow meets the general accident analysis assumption. In MODES 1, 2, and 3, at least one Reactor Coolant Pump (RCP) is required to be in operation, which provides flow in excess of 3000 gpm. In MODE 4, either an RCP or Residual Heat Removal (RHR) train is required to be in operation, and in MODES 5 and 6, at least one RHR train is required to be in operation. The ITS Bases state that when an RHR train is required to provide RCS flow, the flow rate must be sufficient for decay heat removal and boron mixing. The LCO does not meet the criteria for retention in the ITS; therefore, it will be retained in the Technical Requirements Manual.			

- Change Category:
- 1 - Removing Details of System Design and System Description, Including Design Limits
  - 2 - Removing Descriptions of System Operation
  - 3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting
  - 4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms
  - 5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table A – Administrative Changes  
ITS Section 3.2 – Power Distribution Limits

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.2.1 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	None	Various
3.2.1 A.2	CTS 3.2.2 provides the limit for $F_Q(Z)$ . The LCO provides two equations, which give the $F_Q(Z)$ limit for power > 50% RTP and power ≤ 50% RTP. ITS 3.2.1 refers to the same limits that are contained in SR 3.2.1.1; the requirements are the same.	None	3.2.2
3.2.1 A.3	CTS 3.2.2 provides a limit for $F_Q(Z)$ . The Actions for CTS 3.2.2 apply when $F_Q(Z)$ exceeds its limit. ITS 3.2.1 states, " $F_Q(Z)$ , as approximated by $F_Q^M(Z)$ , shall be within the limit specified in the COLR." The ITS Condition is, " $F_Q^M(Z)$ not within limit," is equivalent to the CTS limits ITS SR 3.2.1.1 requires verification that $F_Q^M(Z)$ is within its limit. The requirements have not changed; the ITS limits are consistent with the CTS limits.	3.2.1	3.2.2
3.2.1 A.4	CTS 4.2.2.1 states, "The provisions of Specification 4.0.4 are not applicable." The ITS does not include this statement; the SR 3.2.1.1 provides the equivalent allowance.	None	4.2.2.1
3.2.1 A.5	ITS 3.2.1, Action A.2.1, A.2.2, and A.2.3 state that the Required Actions must be taken "after each $F_Q^M(Z)$ determination." CTS 3.2.2, Action a, does not explicitly state this requirement, but current interpretation and practice are equivalent.	3.2.1, Required Actions A.2.1, A.2.2, A.2.3.	3.2.2, Action a
3.2.2 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	None	Various
3.2.2 A.2	CTS 3.2.3, Action c states that with $F_{\Delta H}^N$ exceeding its limit, identify and correct the cause of the out of limit condition prior to increasing THERMAL POWER above the reduced limit; subsequent POWER OPERATION may proceed provided that $F_{\Delta H}^N$ is demonstrated through in-core mapping to be within its limit. ITS 3.2.2, Action A, states that SR 3.2.2.1 shall be performed. SR 3.2.2.1 requires measurement of $F_{\Delta H}^N$ . The ITS SR 3.2.2.1 requires core mapping; the requirements are the same.	3.2.2, Action A, SR 3.2.2.1	3.2.3, Action c
3.2.2 A.3	CTS 3.2.3, Action c, states that with $F_{\Delta H}^N$ exceeding its limit, $F_{\Delta H}^N$ must be measured prior to exceeding 50% RTP, 75% RTP, and within 24 hours of exceeding 95% RTP. ITS 3.2.2, Action A.4, contains the same requirements.	3.2.2, Action A.4	3.2.2, Action c

Table A – Administrative Changes  
ITS Section 3.2 – Power Distribution Limits

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.2.2 A.4	CTS 4.2.3.1 states that $F_{\Delta H}^N$ shall be determined to be within its limit by using the moveable incore detectors to obtain a power distribution map. ITS SR 3.2.2.1 states that $F_{\Delta H}^N$ shall be verified to be within the limits specified in the COLR. ITS SR 3.2.2.1 requires a power distribution map by incore detectors and is equivalent to the CTS.	SR 3.2.2.1	4.2.3.1
3.2.2 A.5	CTS 4.2.3.1.c states, “The provisions of Specification 4.0.4 are not applicable.” The ITS does not include this statement; the SR 3.2.2.1 provides this allowance.	None	4.2.3.1
3.2.3 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	None	Various
3.2.3 A.2	CTS 3.2.1, Action a, states that with AFD outside its limit, restore the indicated AFD to within its limit within 15 minutes or reduce THERMAL POWER to less than 50% RTP within 30 minutes. ITS 3.2.3, Condition A, states that with AFD not within limits, reduce THERMAL POWER to less than 50% within 30 minutes. It is unnecessary to explicitly require restoration within limits, it is always an option. The requirements are equivalent.	3.2.3, Condition A	3.2.1, Action a
3.2.3 A.3	CTS 3.2.1, Action b, states, “THERMAL POWER shall not be increased above 50% of RATED THERMAL POWER unless the indicated AFD is within the limits specified in the CORE OPERATING LIMITS REPORT.” ITS 3.2.3 does not explicitly contain a similar requirement; the requirement is addressed by ITS LCO 3.0.4, and are equivalent	None	3.2.1, Action b
3.2.4 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	None	Various
3.2.4 A.2	The Applicability of CTS 3.2.4 is modified by a footnote, designated “*”, stating, “See Special Test Exception 3.10.2.” ITS 3.2.4 Applicability does not contain the footnote or a reference to the Special Test Exception; cross-referencing the TS is unnecessary and does not alter the requirements.	None	3.2.4, footnote *
3.2.4 A.3	CTS 3.2.4, Action a.1.a (Unit 1) states that with QPTR > 1.02, within 2 hours reduce the QPTR to within its limit. CTS 3.2.4, Action a.1(a) and 2.a state that with QPTR > 1.02, calculate QPTR at least once per hour until QPTR is within its limit and within 2 hours reduce QPTR to within its limit. ITS 3.2.4 does not contain a Required Actions requiring a return to within limits, it is always an option. The requirements are equivalent.	None	3.2.4, Action a.1.(a) and 2.a (Unit 1)



Table L – Less Restrictive Changes  
ITS Section 3.2 – Power Distribution Limits

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Category
3.2.1 L.1	CTS 3.2.2, Action a, states the Power Range Neutron Flux - High Trip setpoints must be reduced 1% for each 1% $F_Q^M(Z)$ exceeds its limit within 4 hours. ITS 3.2.1, Action A.2.2, requires the Power Range Neutron Flux - High trip setpoints be reduced $\geq 1\%$ for each 1% $F_Q^M(Z)$ exceeds its limit within 72 hours. This changes the CTS by extending the Completion Time from 4 hours to 72 hours.	3.2.1, Action A.2.2	3.2.2, Action a	3
3.2.1 L.2	CTS 3.2.2, Action b, states that when $F_Q^M(Z)$ exceeds its limit, identify and correct the cause of the out of limit condition prior to increasing THERMAL POWER above the reduced power limit. ITS 3.2.1, Action A.2.4, requires verification that $F_Q^M(Z)$ is within its limit prior to increasing THERMAL POWER above the reduced power limit. This changes the CTS by eliminating the requirement to identify the cause of the out of limit condition prior to increasing power above the reduced power limit.	3.2.1, Action A.2.4	3.2.2, Action b	4
3.2.2 L.1	CTS 3.2.3, Action a states that when $F_{\Delta H}^N$ exceeds its limit, reduce THERMAL POWER to less than 50% RTP within 2 hours and reduce the Power Range Neutron Flux - High trip setpoints to less than 55% of RTP within the next 4 hours. ITS 3.2.2, Actions A.1 and A.2 state that with $F_{\Delta H}^N$ not within this limit, reduce THERMAL POWER to $\leq 50\%$ RTP within 4 hours and reduce the Power Range Neutron Flux - High trip setpoints to $\leq 55\%$ RTP within 72 hours. This changes the CTS by allowing a 4 hour Completion Time to reduce power to $\leq 50\%$ RTP and 72 hours to reduce the trip setpoint.	3.2.2, Actions A.1 and A.2	3.2.3, Action a	3
3.2.2 L.2	CTS 3.2.3, Action b states that when $F_{\Delta H}^N$ exceeds its limit, demonstrate through incore mapping that $F_{\Delta H}^N$ is within its limit or reduce THERMAL POWER to less than 5% within the next 2 hours. ITS 3.2.2, Action B states that with the Required Action and associated Completion Time not met, be in MODE 2 within 6 hours. This changes the CTS by allowing a 6 hour Completion Time to reduce power to $< 5\%$ RTP.	3.2.2, Action B	3.2.3, Action b	3

- Change Category:  
1 - Relaxation of LCO Requirements  
2 - Relaxation of Applicability  
3 - Relaxation of Completion Time  
4 - Relaxation of Required Action  
5 - Deletion of Surveillance Requirement  
6 - Relaxation Of Surveillance Requirement Acceptance Criteria  
7 - Relaxation Of Surveillance Frequency  
8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.2 – Power Distribution Limits

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Category
3.2.3 L.1	CTS 3.2.1, Action a, states that when AFD is not within its limit, reduce THERMAL POWER to less than 50% within 30 minutes and reduce the Power Range Neutron Flux - High Trip setpoints to $\leq 55\%$ of RTP within the next 4 hours. ITS 3.2.3, Action A.1, requires THERMAL POWER to be reduced to less than 50% within 30 minutes when AFD is outside of its limit. This changes the CTS by eliminating the requirement to reduce the High Flux Trip Setpoint to $\leq 55\%$ within 4 hours.	3.2.3, Action A.1	3.2.1, Action a	4
3.2.3 L.2	CTS 4.2.1.1 requires the indicated AFD for each excore channel to be determined to be within its limits once per 7 days when the AFD Monitor is OPERABLE, and at least once per hour for the first 24 hours after restoring the AFD Monitor Alarm to OPERABLE status, and once per hour for the first 24 hours and once per 30 minutes thereafter when the AFD Monitor Alarm is inoperable. ITS SR 3.2.3.1 requires AFD to be verified within its limits for each OPERABLE excore channel every 7 days. This changes the CTS by eliminating all AFD Surveillance Frequencies based on the OPERABILITY of the AFD Monitor.	SR 3.2.3.1	4.2.1.1	7
3.2.4 L.1	CTS 3.2.4 states that the QPTR shall not exceed 1.02. CTS Action a provides actions for QPTR > 1.02 and $\leq 1.09$ and CTS 3.2.4 actions b and c provide actions for QPTR > 1.09. CTS action b applies when QPTR > 1.09 due to misalignment of a RCCA and requires a power reduction of 3% RTP for every 1% QPTR exceeds 1.0 within 30 minutes and reduce power to < 50% RTP within 2 hours if QPTR is not restored to within limits. CTS action c applies when QPTR > 1.09 for any other reason and requires reducing power to < 50% RTP within 2 hours. ITS LCO 3.2.4 states that QPTR shall be $\leq 1.02$ . ITS 3.2.4 contains actions for QPTR > 1.02, but does not contain additional actions for QPTR > 1.09. This changes the CTS by eliminating additional actions for QPTR > 1.09.	3.2.4	3.2.4	4

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.2 – Power Distribution Limits

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Category
3.2.4 L.2	CTS 4.2.4.1 requires the QPTR to be verified to be within limit every 7 days with the QPTR alarm is OPERABLE and every 12 hours with the QPTR alarm is inoperable. ITS SR 3.2.4.1 requires verification that the QPTR is within limit every 7 days. This changes the CTS by eliminating the requirement to verify QPTR more frequently when the QPTR alarm is inoperable.	SR 3.2.4.1	4.2.4.1	7
3.2.4 L.3	CTS 3.2.4, Action a.1.b) (Unit 1) and Action a.2.(b) (Unit 2), states that when QPTR is not within its limit, reduce THERMAL POWER by at least 3% RTP for every 1% of indicated QPTR in excess of 1.0 and reduce the Power Range Neutron Flux - High Trip setpoints within the next 4 hours. ITS 3.2.4, Action A.1, requires THERMAL POWER to be reduced > 3% RTP for each 1% QPTR > 1.00. This changes the CTS by eliminating the requirement to reduce the High Flux Trip Setpoint.	3.2.4, Action A.1	3.2.4, Action a.1.b) (Unit 1) and Action a.2.(b) (Unit 2)	4

Change Category:  
1 - Relaxation of LCO Requirements  
2 - Relaxation of Applicability  
3 - Relaxation of Completion Time  
4 - Relaxation of Required Action  
5 - Deletion of Surveillance Requirement  
6 - Relaxation Of Surveillance Requirement Acceptance Criteria  
7 - Relaxation Of Surveillance Frequency  
8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.2 – Power Distribution Limits

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Category
3.2.4 L.4	CTS 3.2.4, Action a.2 (Unit 1) states that with QPTR $\geq 1.02$ and $\leq 1.09$ , verify that QPTR is within its limit within 24 hours or reduce THERMAL POWER to less than 50% RTP within the next 2 hours and reduce the Power Range Neutron Flux - High Trip setpoints to $\leq 55\%$ RTP within the next 4 hours. CTS 3.2.4, Action a.1(a) and a.3 (Unit 2) states that with QPTR $\geq 1.02$ and $\leq 1.09$ , calculate QPTR at least once per hour until THERMAL POWER is reduced to less than 50% of RTP and verify that QPTR is within its limit within 24 hours or reduce THERMAL POWER to less than 50% RTP within the next 2 hours and reduce the Power Range Neutron Flux - High Trip setpoints to $\leq 55\%$ RTP within the next 4 hours. CTS 3.2.4, Action a.3 (Unit 1) and a.4 (Unit 2) state that the cause of the out of limit QPTR must be identified and corrected prior to increasing THERMAL POWER and subsequent operation above 50% RTP can proceed provided that the QPTR is verified to be within its limit at least once per hours for 12 hours or until verified acceptable at 95% or greater RTP. ITS 3.2.4, Action B, states that with the Required Actions and Associated Completion Times of Condition A not met, reduce THERMAL POWER to $\leq 50\%$ RTP within 4 hours. This changes the CTS by eliminating requirements to be $\leq 50\%$ RTP within a specified time of exceeding the LCO and substituting compensatory measures in Condition A, which if not met, result in a reduction in power.	3.2.4, Action B	3.2.4, Action a.2, a.3 (Unit 1), and Action a.1(a), a.3, and a.4 (Unit 2)	4
3.2.4 L.5	CTS Surveillance 4.2.4.1 states that QPTR shall be determined to be within the limit by calculating the ratio at least once per 7 days. ITS SR 3.2.4.1, Note 2, states that SR 3.2.4.2, which requires verification of QPTR using the movable incore detectors, may be performed in lieu of SR 3.2.4.1. This changes the CTS by allowing the movable incore detectors to be used to determine QPTR instead of the excore detectors.	SR 3.2.4.1, Note 2	4.2.4.1	6

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table M – More Restrictive Changes  
ITS Section 3.2 – Power Distribution Limits

DOC No.	Description of Changes	ITS Requirement	CTS Requirement
3.2.1 M.1	CTS 3.2.2 does not contain an Action to follow if the provided Actions or Completion Times are not followed. Therefore, CTS 3.0.3 would be entered which would require the plant to be in MODE 2 within 7 hours. ITS 3.2.1, Action B, states that when the Required Action and associated Completion Time is not met, the plant must be in MODE 2 within 6 hours. This changes the CTS by providing 6 hours vice 7 hours to be in MODE 2.	3.2.1, Action B	3.2.2
3.2.1 M.2	CTS 3.2.2, Action f.2.a, states that power operation may continue with $F_Q^M(Z)$ outside its limit provided the AFD limits are reduced 1% for each percent $F_Q(Z)$ exceeded its limit. ITS 3.2.1, Action A.1 requires the AFD limits to be reduced $\geq 1\%$ for each 1% $F_Q^M(Z)$ exceeds its limit within 15 minutes. This changes the CTS by providing a Completion Time for an action which does not have a Completion Time in the CTS.	3.2.1, Action A.1	3.2.2, Action f.2.a
3.2.1 M.3	CTS 4.2.2.2.d requires $F_Q^M(Z)$ to be measured upon achieving equilibrium conditions after exceeding the THERMAL POWER at which $F_Q(Z)$ was last determined by 10% or more of RATED THERMAL POWER or at least once per 31 EFPD. ITS SR 3.2.1.1 contains the same requirements, but also requires $F_Q^M(Z)$ to be verified to be within its limit once after each refueling prior to THERMAL POWER exceeding 75% RTP. This changes the CTS by adding a new Surveillance Frequency.	SR 3.2.1.1	4.2.2.2.d
3.2.2 M.1	CTS 3.2.3, Action c, states that with $F_{\Delta H}^N$ exceeding its limit, subsequent POWER OPERATION may proceed provided that $F_{\Delta H}^N$ is demonstrated through incore mapping to be within its limit at a nominal 50% of RATED THERMAL POWER prior to exceeding this THERMAL POWER, at a nominal 75% of RATED THERMAL POWER prior to exceeding this THERMAL POWER, and within 24 hours after attaining 95% or greater RATED THERMAL POWER. However, under CTS 3.0.2, these measurements do not have to be completed if compliance with the LCO is reestablished. ITS 3.2.2 Condition A contains a Note which states, "Required Actions A.3 and A.4 must be completed whenever Condition A is entered." ITS Required Actions A.3 and A.4 require performance of a $F_{\Delta H}^N$ measurement every 24 hours and prior to exceeding 50% RTP, 75% RTP, and within 24 hours after THERMAL POWER $\geq 95\%$ RTP. This changes the CTS by requiring the $F_{\Delta H}^N$ measurements to be made even if $F_{\Delta H}^N$ is restored to within its limit.	3.2.2, Condition A Note	3.2.3, Action c
3.2.3	None	N/A	N/A
3.2.4 M.1	CTS 3.2.4, Action a.1.b) (Unit 1) and Action a.2(b) (Unit 2) requires THERMAL POWER to be reduced at least 3% for every 1% QPTR exceeds 1.0 and allows a maximum of 24 hours of operation above 50% RTP with QPTR greater than the limit. ITS 3.2.4, Condition A, also requires THERMAL POWER to be reduced at least 3% for every 1% QPTR exceeds 1.0, but the ITS allows indefinite power operation above 50% RTP provided that QPTR is determined within 12 hours, $F_Q(Z)$ and $F_{\Delta H}^N$ are verified to be within limit within 24 hours of achieving equilibrium conditions after the power reduction	3.2.4, Condition A	3.2.4, Action a.1.b) (Unit 1) and Action a.2(b) (Unit 2)

Table M – More Restrictive Changes  
ITS Section 3.2 – Power Distribution Limits

DOC No.	Description of Changes	ITS Requirement	CTS Requirement
	and every 7 days thereafter, and the safety analyses are reevaluated to confirm the results are still valid for the duration of operation under this condition prior to increasing power. If the reevaluation of the safety analyses confirms that the results remain valid, the ITS allows the excore detectors to be normalized to restore QPTR within limit provided that $F_Q(Z)$ and $F_{\Delta H}^N$ are verified to be within limits within 24 to 48 hours after achieving equilibrium condition at RTP. This changes the CTS by requiring $F_Q(Z)$ and $F_{\Delta H}^N$ be verified, the safety analyses be reevaluated, and the excore detectors be normalized to restore QPTR to within the limits. The change eliminating the requirement to reduce power to less than 50% RTP is discussed in DOC L.4.		

Table R – Relocated Specifications and Removed Details  
ITS Section 3.2 – Power Distribution Limits

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.2.1 LA.1	3.2.2, Action a	CTS 3.2.2, Action a, states that when $F_Q(Z)$ is exceeding its limit, POWER OPERATION may proceed provided the Overpower $\Delta T$ Trip Setpoint (value of $K_4$ ) has been reduced at least 1% (in $\Delta T$ span) for each 1% $F_Q(Z)$ exceeds the limit. ITS 3.2.1, Required Action A.2.3 states, "Reduce Overpower $\Delta T$ trip setpoints $\geq 1\%$ for each 1% $F_Q^M(Z)$ exceeds limit." This changes the CTS by eliminating the parenthetical phrases, "(value of $K_4$ )" and "(in $\Delta T$ span)" and placing the information in the Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.2.1 LA.2	4.2.2.2.a	CTS 4.2.2.2.a states that $F_Q(Z)$ shall be evaluated to determine if $F_Q$ is within its limit by using the moveable incore detectors to obtain a power distribution map at any THERMAL POWER greater than 5% of RATED THERMAL POWER. The ITS does not contain a similar statement and this information appears in the ITS Bases. This changes the CTS by moving information to the Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.2.1 LA.3	4.2.2.2.b, 4.2.2.3	CTS 4.2.2.2.b states that the measured $F_Q(Z)$ must be increased by 3% to account for manufacturing tolerances and further increased by 5% for measurement uncertainties. CTS 4.2.2.3 states that when $F_Q(Z)$ is measured for reasons other than meeting the requirements of Surveillance 4.2.2.2, the measured $F_Q(Z)$ must be increased by 3% to account for manufacturing tolerances and further increased by 5% for measurement uncertainties. The ITS does not contain this requirement. This information is contained in the ITS Bases. This changes the CTS by moving information to the Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.2.1 LA.4	4.2.2.c	CTS 4.2.2.2.c states that the measured $F_Q(Z)$ must meet a relationship provided in the Surveillance. The values for the	Bases	ITS 5.5.13, Technical	3

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.2 – Power Distribution Limits

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
		principle components of the relationship, $CFQ$ , $K(Z)$ , and $N(Z)$ , are specified in the COLR. ITS LCO 3.2.1 requires that $F_Q(Z)$ meet this same relationship by stating, “ $F_Q(Z)$ , as approximated by $F_Q^M(Z)$ , shall be within the limits specified in the COLR.” The equation for the relationship is located in the ITS Bases. This changes the CTS by moving information to the Bases.		Specifications Bases Control Program	
3.2.1 LA.5	4.2.2.2	CTS 4.2.2.2.f states that with $F_Q^M(Z)$ not within limit, power operation may continue provided the AFD are reduced 1% AFD for each percent $F_Q(Z)$ exceeded its limits or by complying with the requirements of the specification for $F_Q(Z)$ exceeding its limit by the same percentage. CTS 4.2.2.2 also provides an equation for determining the percent by which $F_Q(Z)$ exceeds its limit. ITS 3.2.1 contains the same requirements described for the CTS, but does not contain an equation for determining the percentage by which $F_Q(Z)$ exceeds the limit. This equation is relocated to the ITS Bases. This changes the CTS by moving information to the Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.2.1 LA.6	4.2.2.2.g	CTS 4.2.2.2.g states that the $F_Q(Z)$ limits are not applicable in the lower core region 0 to 15 percent inclusive, and the upper core region 85 to 100 percent inclusive. ITS 3.2.1 does not contain this information. This information is located in the ITS Bases. This changes the CTS by moving information to the Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.2.1 LA.7	3.2.1, Action e.1	CTS 3.2.1, Action e.1, states that $F_Q^M(Z)$ shall be increased by 2% over the measured amount when $F_Q^M(Z) / K(Z)$ (maximum over Z) is increasing. ITS SR 3.2.1.1 Note states that $F_Q^M(Z)$ shall be increased by an appropriate factor when $F_Q^M(Z) / K(Z)$ (maximum over Z) is increasing. This changes the CTS	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report



Table R – Relocated Specifications and Removed Details  
ITS Section 3.2 – Power Distribution Limits

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
		by relocating the amount by which $F_Q^M(Z)$ must be increased to the COLR.			
3.2.2 LA.1	3.2.3	CTS 3.2.3 states that $F_{\Delta H}^N$ shall be limited by an equation, which is contained in the LCO. All of the parameters in the CTS equation are specified in the CORE OPERATING LIMITS REPORT (COLR). ITS LCO 3.2.2 states, " $F_{\Delta H}^N$ shall be within the limits specified in the COLR." This changes the CTS by relocating the equation to the COLR.	COLR	ITS 5.6.5, Core Operating Limits Report	5
3.2.3 None	N/A	N/A	N/A	N/A	N/A
3.2.4 LA.1	4.2.4.2	CTS Surveillance 4.2.4.2 states that the QPTR shall be determined to be within limit when above 75 % RTP with one Power Range Channel inoperable by using the movable incore detector to confirm that the normalized symmetric power distribution, obtained from 2 sets of 4 symmetric thimble locations or a full-core flux map, is consistent with the indicated QPTR at least once per 12 hours. ITS SR 3.2.4.2 states, "Verify QPTR is within limit using the movable incore detectors." ITS SR 3.2.4.2 is modified by a Note which states, "Not required to be performed until 12 hours after input from one or more Power Range neutron Flux channels are inoperable with THERMAL POWER > 75% RTP." This changes the CTS by relocating the details of how the movable incore detector system is used to determine QPTR by moving the phrase "the normalized symmetric power distribution, obtained from 2 sets of 4 symmetric thimble locations or a full-core flux map" to the Bases of the Surveillance.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table A – Administrative Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.3.1 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various
3.3.1 A.2	The Functional Units required to be OPERABLE for the Reactor Trip System (RTS) instrumentation are shown in CTS Table 3.3-1. The Table defines each function with specific requirements for Channels, Applicable MODES, and Actions. A Note is added to ITS 3.3.1 Actions, which states, "Separate Condition entry is allowed for each Function." This modifies the CTS by providing a specific allowance to enter each Function separately.	3.3.1 ACTIONS Note	Table 3.3-1
3.3.1 A.3	The Action for CTS LCO 3.3.1.1 states, "As shown in Table 3.3-1." ITS LCO 3.3.1 Action A states, "One or more Functions with one or more channels inoperable, enter the Condition referenced in Table 3.3.1-1 for the channel(s), immediately."	3.3.1 ACTION A	3.3.1.1 Action
3.3.1 A.4	CTS Surveillance Requirement (SR) 4.3.1.1.1 states that each Reactor Trip System instrumentation channel shall be demonstrated OPERABLE by the performance of specific test requirements. These include a CHANNEL CHECK, CHANNEL CALIBRATION, and CHANNEL FUNCTIONAL TEST performed for required MODES of operation and the specified frequencies shown in Table 4.3-1. ITS Table 3.3.1-1 includes the surveillance requirement column in addition to the applicable MODES or other specified condition column for each Function. ITS SRs for the CHANNEL CHECK, CHANNEL CALIBRATION, TRIP ACTUATING DEVICE OPERATIONAL TEST (TADOT), and CHANNEL OPERATIONAL TEST (COT) are listed by numbers and Frequency in the surveillance requirements section for the specification.	Table 3.3.1-1	4.3.1.1.1
3.3.1 A.5	CTS Table 3.3-1 provides the requirements for each RTS instrumentation function. The table lists "FUNCTIONAL UNIT", "TOTAL NUMBER OF CHANNELS," "CHANNELS TO TRIP," "MINIMUM CHANNELS OPERABLE," "APPLICABLE MODES," and "ACTIONS" columns. CTS Table 4.3-1 lists the surveillance requirements for each RTS function including a column labeled "MODES IN WHICH SURVEILLANCE REQUIRED," that specifies the applicability for each function. ITS Table 3.3.1-1 is constructed from the requirements of the CTS Tables with modifications. ITS Table 3.3.1-1 lists the columns as, "FUNCTION," "APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS," "REQUIRED CHANNELS," "CONDITIONS," "SURVEILLANCE REQUIREMENTS," and "ALLOWABLE VALUE." The elimination of "CHANNELS TO TRIP" and "MINIMUM CHANNELS OPERABLE" columns is addressed in DOC LA.15. This change modifies the CTS Tables by changing the names of columns and deleting the Table 4.3-1 column labeled "MODES IN WHICH SURVEILLANCE REQUIRED."	Table 3.3.1-1	Table 3.3-1, Table 4.3-1

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DOC No.		Description of Change	ITS Requirement	CTS Requirement
3.3.1	A.6	CTS 2.2.1 in Table 2.2-1 lists various notes for the Allowable Values associated with the operation of the unit until steam generator replacement or 2-loop operation. The steam generators have been replaced and 2-loop operation has never been licensed. Therefore, these notes do not provide any technical requirements and are eliminated.	None	Table 2.2-1
3.3.1	A.7	CTS Surveillance Requirement 4.3.1.1.2 states, in part, that the RTS Response Time of each trip function shall be demonstrated to be within its limit at least on per 18 months. The requirement specifies that each test shall include at least one logic train such that both logic trains are tested at least once per 36 months. A column added to CTS Table 4.3-1 addresses each function, and which the RESPONSE TIME testing requirement is applicable. The RESPONSE TIMES requirements reflect the channel requirements contained in the Technical Requirements Manual (TRM) Section 6.2. This does not modify the CTS requirements, but provides clarification. ITS SR 3.3.1.16 requires the verification of RTS RESPONSE TIMES be with limits every 18 months on a STAGGERED TEST BASIS.	3.3.1.16	4.3.1.1.2, Table 4.3-1
3.3.1	A.8	CTS Table 3.3-1 for the RTS Functions does not list Action 11 to be entered for an inoperable channel. ITS 3.3.1 does not convert the Action to an ITS Condition for any of the required RTS Functions. This changes the CTS by eliminating Action 11.	None	Table 3.3-1, Action 11
3.3.1	A.9	Not used.	N/A	N/A

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DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.3.1 A.10	CTS Surveillance Requirements (SRs) for the Intermediate Range channels in Table 4.3-1 list a CHANNEL CHECK at a frequency of Q <sup>(12)</sup> for the MODES 3*, 4*, and 5* applicability. The SRs listed for the Intermediate Range channels with the applicability in MODES 1 and 2 require the performance of a CHANNEL CHECK at a frequency of each shift (S), a CHANNEL CALIBRATION at a refueling frequency (R <sup>(6,13)</sup> ), and a CHANNEL FUNCTIONAL TEST at the frequency of each startup (S/U <sup>(1)</sup> ) and quarterly (Q <sup>(12)</sup> ). CTS Table 3.3-1 requires the Intermediate Range channels to be OPERABLE in MODES 1 <sup>###</sup> and 2. The <sup>###</sup> represent “Below the P-10 (Low Setpoint Power Range Neutron Flux Interlock) setpoint” for the applicability. CTS Action 3 must be entered for an inoperable channel. The applicability for Intermediate Range channels is set above the P-6 setpoint in Action 3 Part a. This states, “Below the P-6 setpoint, restore the inoperable channel to OPERABLE status prior to increasing THERMAL POWER above the P-6 setpoint.” ITS 3.3.1 Function 4 Intermediate Range Neutron Flux channels lists the applicability as MODES 1 <sup>(b)</sup> and 2 <sup>(c)</sup> and Conditions F and G must be entered for inoperable channel(s). Note <sup>(b)</sup> states, “Below the P-10 (Power Range Neutron Flux) interlocks,” and Note <sup>(c)</sup> requires, “Above the P-6 (Intermediate Range Neutron Flux) interlocks.” The surveillance requirements for these channels are SRs 3.3.1.1, 3.3.1.8, and 3.3.1.11. The change of the CTS applicability from MODE 2 to MODE 2 <sup>(c)</sup> in DOC L.27. The change in applicability from <sup>###</sup> to Note <sup>(b)</sup> maintains the technical requirement from the CTS to the ITS. This changes the CTS by deleting the Q <sup>(12)</sup> CHANNEL FUNCTIONAL TEST for MODES 3*, 4*, and 5*.	Table 3.3.1-1	Table 4.3-1, Table 3.3-1
3.3.1 A.11	The CHANNEL FUNCTIONAL TEST (CFT) requirements in CTS Table 4.3-1 have been changed in ITS Table 3.3.1-1 to the CHANNEL OPERATIONAL TEST (COT), TRIP ACTUATION DEVICE OPERATIONAL TEST (TADOT), or ACTUATION LOGIC TEST (ALT). The individual RTS functions will require a COT or TADOT to be performed with the exception of the trip actuation logic, which requires the ALT. Trip actuation devices (bistable or digital) such as manual switches or RCP breakers require a TADOT to be performed. The analog channels such as Pressurizer Pressure require a COT to be performed. Each SR Frequency is replaced with an ITS SR number that corresponds to the required testing at the current frequency. The technical requirements and frequency of testing for each function will remain unchanged in the ITS requirements, unless noted and addressed by a separate discussion of change.	Table 3.3.1-1	Table 4.3-1
3.3.1 A.12	CTS 3.3.1.1 Actions denoted with a <sup>#</sup> in Table 3.3-1 state that the provisions of Specification 3.0.4 are not applicable. ITS LCO or Surveillance requirements do not require an allowance stated in each Specification, but provides the allowance by the definition specified in ITS Section 3.0. This change modifies the CTS by eliminating the reference to the provisions of Specification 3.0.4 within specifications or surveillance requirements.	None	Table 3.3-1, Action <sup>#</sup>
3.3.1 A.13	Not used.	N/A	N/A

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DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.3.1 A.14	CTS surveillance requirement in Table 4.3-1 for the SI input from ESF is stated as M <sup>(4)</sup> . Note <sup>(4)</sup> states the following “Manual ESF functional input check every 18 months.” The monthly requirement is therefore only required to check the input from ESF on an 18 monthly frequency. ITS 3.3.1 for function 17, SI input from ESF, requires SR 3.3.1.14 to be performed. This requirement performs a TADOT every 18 months. A Note modifies the requirement that specifies that verification of setpoint is not required. This change maintains the technical requirements of the CTS in ITS format.	Table 3.3.1-1	Table 4.3-1
3.3.1 A.15	CTS 3.3.1.1 requirements for Functional Unit 6.C, Source Range Neutron Flux Shutdown, are stated in CTS Table 3.3-1. This requires Action 5 to be entered for an inoperable required Source Range channel. This requirement is applicable in MODES 3, 4, and 5 with the RTBs open. Action 5 states that with the number of OPERABLE channels one less than the required by the minimum channels OPERABLE, the SHUTDOWN MARGIN is verified for compliance, in accordance with CTS Specifications 3.1.1.1 or 3.1.1.2, and performed within 1 hour and every 12 hours thereafter. The total number of Source Range channels is listed as two, and the minimum channels OPERABLE is listed as one. ITS 3.3.1 requirement for the Source Range Neutron Flux, Function 5, is stated in ITS Table 3.3.1-1, and lists the number of required channels as one. The Table lists the applicability or other specified conditions as MODES 3(e), 4(e), and 5(e) with the RTBs open, and Condition K must be entered for a required inoperable Source Range channel. Note (e) states, “With the Rod Control System incapable of rod withdrawal. In this condition, source range Function does not provide reactor trip but does provide indication.” This change maintains the CTS technical requirements for the Source Range requirement for a shutdown condition with the RTBs open.	Table 3.3.1-1	Table 3.3-1
3.3.1 A.16	CTS functions for the RTS Interlocks in Table 3.3.-1 require Action 17 to be entered for an inoperable channel. Action 17 states with less than the Minimum Channels OPERABLE, within one hour verify that the interlocks are in the required state for plant conditions, or apply Specification 3.0.3. ITS function 18, the RTS interlocks list Conditions Q and R to be entered for an inoperable channel. Required Action Q.2 requires the unit to be placed in MODE 3 within 7 hours. Required Action R.2 requires the unit to be placed in MODE 2 within 7 hours. This changes the CTS from the LCO 3.0.3 statement to specific required actions to be performed.	Table 3.3.1-1	Table 3.3.-1

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DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.3.1 A.17	CTS Action 7 is required to be performed when the Overtemperature, Overpower, Pressurizer Pressure – High, Steam Generator (SG) Water Level – Low Low, and Steam/Feed Flow Mismatch and Low SG Water Level functions have a required channel become inoperable. Each of the functions is required to be OPERABLE in MODES 1 and 2. Action 7 states that the inoperable channel must be placed in trip within 72 hours, and if this is not satisfied, the unit must be placed in HOT STANDBY in 6 hours, HOT SHUTDOWN within the next 6 hours and COLD SHUTDOWN in the following 30 hours. ITS 3.3.1 for the Overtemperature, Overpower, Pressurizer Pressure – High, Steam Generator (SG) Water Level – Low Low, and SG Water Level Low coincident with Steam Flow /Feed Flow Mismatch requires each function to be OPERABLE in MODES 1 and 2 and requires Condition E to be entered for an inoperable channel. Condition E states with one inoperable channel, place the channel in trip within 72 hours or be in MODE 3 within 78 hours. This changes the CTS by elimination the requirement to place the unit in HOT SHUTDOWN or COLD SHUTDOWN.	Table 3.3.1-1	Table 3.3-1 Action 7
3.3.1 A.18	CTS 3.3.1.1 Functional Unit 21B, Reactor Trip Bypass Breakers, states two channels are required to be OPERABLE in the applicable MODES, as indicated by a Note *** and Action 13 is required to be entered, if a channel is inoperable. Note *** states, “With the Reactor Trip Breaker open for surveillance testing in accordance with Specification Table 4.3-1 (item 21A).” CTS Action 13 states that with an inoperable bypass breaker, the breaker must be restored to OPERABLE status within one hour, or the testing of the RTB must be terminated and the bypass breaker opened. CTS Action 1 for the RTB requirements (item 21 A) for an inoperable channel states, “With the number of channels OPERABLE one less than required by the Minimum Channels OPERABLE requirements be in HOT STANDBY within 6 hours.” ITS Function 19 states two trains for the Reactor Trip Breakers <sup>(h)</sup> are required to be OPERABLE in MODES 1 and 2. Note <sup>(h)</sup> states, “Includes any reactor trip bypass breakers that are racked in and closed for bypassing an RTB.” Condition P is required to be entered for an inoperable RTB train. ITS Required Action P.1 states, “Restore train to OPERABLE status,” within one hour. The change to CTS Action 1, with the addition of ITS Required Action P.1, is addressed by DOC L.13. Required Action P.2 states, “ <u>OR</u> Be in MODE 3,” within 7 hours. This changes the CTS by including the requirement for the bypass breakers into the function for the RTB train and maintains the allowed outage time for an inoperable breaker.	3.3.1, ACTION P	Table 3.3-1 Action 1
3.3.1 A.19	Not used.	N/A	N/A

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DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.3.1 A.20	The requirements in CTS Table 3.3-1 for the Reactor Trip System interlocks list the designated functions as P-7, P-10, and P-13. These interlocks are required to be OPERABLE from the surveillance requirement 4.3.1.1.2, associated with CTS ITS 3.3.1.1. The P-10 and P-13 interlocks are required to provide a signal at a specific indicated power level, from either the neutron detectors (P-10-Power Range Neutron Flux channels), or power indication of the main turbine (P-13-turbine impulse chamber pressure). The P-10 and P-13 function are required to actuate at a specific setpoint with a tolerance up to the allowable value. The P-7 interlock is derived from P-10 and P-13 functions and is a logic function only. ITS 3.3.1, Table 3.3.1-1, list the Reactor Trip System Interlocks as Function 18, and the P-7 function is Function 18d. Function 18d and 18e represent the P-10 and P-13 interlocks. P-10 and P-13 functions are required to actuate and provide its specific interlocks at a specific setpoint with an allowance up to an allowed value. The P-7 Function is not a channel related interlock, but functions on a train related basis. The channel requirements for P-7 are stated as, "1 per train." Because the P-7 interlock is a logic function, there is no setpoint or allowable value limit associated with the function.	Table 3.3.1-1	Table 3.3-1
3.3.1 A.21	CTS requirements for the Power Range Instrumentation channels are listed in Table 3.3-1. This states four total channels are required in MODES 1 and 2 and Action 2" must be entered for an inoperable channel. The Limiting Safety System Settings listed in CTS Table 2.2-1 specifies for the Power Range Neutron Flux two trip setpoints and allowable values. These are divided into Low and High values. The P-10 interlock in CTS Table 3.3-1 describes the requirements for enabling the Power Range Neutron Flux Low setpoint trip below the specified values. The ITS in Table 3.3.1-1 states the Power Range Neutron Flux channels, functions 2a and 2b, are to be OPERABLE in two states, High and Low Neutron Flux, with four channels required to be OPERABLE. The functions are applicable in MODES 1 and 2 for the High and MODES 1 <sup>(b)</sup> and 2 for the Low. For the Power Range Low function Action E is required to be entered. Action E requires the channel to be placed in trip within 72 hours or be in MODE 3 within the next 6 hours. Note <sup>(b)</sup> states, "Below the P-10 (Power Range Neutron Flux) setpoint. This change maintains the technical requirements of the CTS as they are translated to the ITS format.	Table 3.3.1-1, 3.3.1 ACTION E	Table 3.3-1, Table 2.2-1

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DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.3.1 A.22	CTS Table 3.3-1 Functions 18.a (Low Auto Stop Oil Pressure) and 18.b (Turbine Stop Valve Closure) requires the functions to be OPERABLE in MODE 1 and Action 9 to be entered for an inoperable channel. Action 9 requires an inoperable channel be placed in trip within 72 hours or reduce power to less than P-8 setpoint within the next 4 hours. ITS Table 3.3.1-1 Function 16 Turbine Trip with Low Auto Stop Oil Pressure (16a) and Turbine Stop Valve Closure (16b) lists the applicable MODES as MODE 1(g). Note (g) states, "Above the P-8 (Power Range Neutron Flux) interlock." The Table lists Condition N to be entered for an inoperable channel. Condition N states, "One Turbine Trip channel inoperable place the channel in trip," within 72 hours, or "Reduces power < P-8," within 76 hours. A Note modifies Condition N that states, " The inoperable channel may be bypassed for up to 4 hours for surveillance testing of other channels." The addition of this Note is addressed by DOC L.26. This changes the format of the CTS while maintaining the technical requirements.	Table 3.3.1-1 Note g, ACTION N Note	Table 3.3-1 Action 9
3.3.1 A.23	CTS 3.3.1.1 for Functional Units 19, 21, and 22 lists the test requirements for the Safety Injection (SI) input to Engineered Safety Features (ESF), Reactor Trip Breakers (RTBs), and Automatic Trip Logic. Each of these functions must be tested monthly. This Frequency is modified by Note (5), which states, "Each train or logic channel shall be tested at least every 62 days on a STAGGERED TEST BASIS (STB)." ITS notation for STB utilizes a definition that states the frequency as 31 days on a STB for the RTBs, Function 19, and the Automatic Trip Logic, Function 21. This change maintains the required testing frequency for each required safety function.	SR 3.3.1.4 SR 3.3.1.5	Table 3.3-1 Note (5)
3.3.1 A.24	Not used.	N/A	N/A
3.3.1 A.25	CTS Table 4.3-1 Function 18, Turbine Trip, specifies a CHANNEL FUNCTIONAL TEST with a frequency of S/U <sup>(1)</sup> . The S/U stands for prior to a reactor startup and Note <sup>(1)</sup> specifies "If not performed within the previous 31 days." Action 9 must be entered for an inoperable channel. Action 9 states, "With the number of channels OPERABLE less than the Total Number of Channels OPERABLE requirement, STARTUP and POWER OPERATION may proceed provided the inoperable channel is placed in the tripped condition within 72 hours and the Minimum Channels OPERABLE Requirement is met or reduce power to less than the P-8 setpoint in the next 4 hours." ITS Table 3.3.1-1 Function 16 Turbine Trip requires SR 3.3.1.15, a TADOT, to be performed. The Frequency for the SR states, "prior to exceeding the P-8 interlock whenever the unit has been in MODE 3, if not performed within the previous 31 days." A Note to the SR states, "Verification of setpoint is not required." This changes the CTS surveillance requirement frequency from startup, if not performed in the previous 31 days to prior, to exceed P-8 setpoint whenever the unit has been in MODE 3, if not performed in the previous 31 days and specifically states that verification of the setpoint is not required.	SR 3.3.1.15	Table 4.3-1 Note (1)



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DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.3.1 A.26	CTS Table 3.3-1 Action 1 states with the number of channels OPERABLE one less than required by the Minimum Channels OPERABLE requirement the unit must be shutdown within a given time. Additionally, Action 1 states that one channel may be bypassed for up to 4 hours for concurrent surveillance testing of the RTB and automatic trip logic provided the other channel is OPERABLE. Action 1 applies to Function 21 Reactor Trip Breakers. ITS Table 3.3.1 –1 for function 19 requires Condition P to be entered for an inoperable train. Condition P requires with one RTB train inoperable, it must be restored to OPERABLE status or the unit must be shutdown. Three Notes modify Condition P. Note 3 states that one RTB train may be bypassed for up to 4 hours for concurrent surveillance testing of the RTB and automatic trip logic, provided the other channel is OPERABLE. This changes the CTS by placing the allowance of concurrent surveillance testing into a Note in the ITS format.	3.3.1 ACTION P Note 3	Table 3.3-1 Action 1
3.3.1 A.27	CTS Table 3.3-1 Function 20 RCP Breaker Position provides for a reactor trip. The total number of channels is one per (RCP) breaker and for an inoperable channel Action 8 must to be entered and requires the inoperable channel to be placed into trip within 72 hours or the unit is required to be placed below P-7 interlock within 78 hours. ITS 3.3.1 for RCP Breaker Position specifies the required channels is one per RCP (breaker) and requires Condition M for an inoperable channel. The Condition provides for an inoperable channel that the channel must be placed in trip within 72 hours or power must be reduced below P-7 setpoint within 78 hours. This changes the CTS by stating the channel requirement for RCP breaker position as one per RCP.	3.3.1 ACTION M	Table 3.3-1
3.3.1 A.28	CTS Table 4.3-1 lists the surveillance requirements for the Power Range Neutron Flux CHANNEL CALIBRATION as M (3)(6). Note (3) states, “Compare incore to excore axial offset above 15 % RATED THERMAL POWER (RTP). Adjust channel if absolute difference $\geq$ 3 percent.” The CTS does not specify a CHANNEL CALIBRATION for the Overtemperature (OT) $\Delta$ T function. ITS Table 3.3.1–1 specifies SR 3.3.1.3 for PRNF and OT $\Delta$ T functions. SR 3.3.1.3 states, “ Compare results of the incore detector measurements to NIS AFD,” every 31 effective full power days (EFPD). Two Notes modify the SR. Note 1 states, “Adjust NIS channel if absolute difference is $\geq$ 3 %.” Note 2 states, “Not required to be performed until 24 hours after THERMAL POWER is $\geq$ 15 % RTP.” The addition of Note 2 is addressed by DOC L.9. The change from monthly to every 31 EFPD is addressed by DOC L.16. This changes the CTS by applying the requirement of a monthly comparison of axial offset of the NIS channel to both the PRNF and OT $\Delta$ T functions.	SR 3.3.1.3 NOTE 1	Table 4.3-1 Note (3)

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DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.3.1 A.29	CTS Table 4.3-1 lists for the Power Range Low Setpoint and Intermediate Range channels a quarterly test to be performed (Q <sup>(12)</sup> ). Note <sup>(12)</sup> states, "Quarterly Surveillance in MODE 3*, 4*, and 5* shall also include verification that Permissives P-6 and P-10 are in their required state for existing plant conditions by observation of the permissive annunciator window." ITS SR 3.3.1.8 for the Source, Intermediate, and Power Range Neutron Flux Low Setpoint channels require a CHANNEL OPERATIONAL TEST (COT) to be performed every 92 days. A Note modifies the SR that states, "This Surveillance shall include verification that interlocks P-6 and P-10 are in their required state for existing unit conditions." The movement of the phrase, "by observation of the permissive annunciator window," is addressed by DOC LA.6. The deletion of quarterly surveillance in MODES 3*, 4*, and 5* is addressed by DOC L.10. This changes the CTS by reformatting the requirement to the ITS SR 3.3.1.8 Note.	SR 3.3.1.8 Note	Table 4.3-1 Note (12)
3.3.2 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various
3.3.2 A.2	CTS Actions a and b for LCO 3.3.2.1 require the applicable Action requirements of Table 3.3-3 be entered for an inoperable channel until the required channel is restored to OPERABLE status. ITS LCO 3.3.2 Action A states for an ESFAS function with one or more required channels or trains inoperable, the referenced Condition in Table 3.3.2-1 for the channel(s) or train(s) be entered immediately. The Actions of the ITS are modified by a Note which states, "Separate Condition entry is allowed for each Function."	3.3.2 ACTIONS NOTE	3.3.2.1 Actions a and b
3.3.2 A.3	CTS Surveillance Requirement 4.3.2.1.1 states that each ESFAS instrumentation channel shall be demonstrated OPERABLE by the performance of specific test requirements. This includes a CHANNEL FUNCTIONAL TEST (CFT) shown in Table 4.3-2. ITS Table 3.3.2-1 includes the SRs in a column for each Function. The ITS SRs for the TRIP ACTUATING DEVICE OPERATIONAL TEST (TADOT), ACTUATION LOGIC TEST (ALT), MASTER RELAY TEST (MRT), and CHANNEL OPERATIONAL TEST (COT) are listed by numbers in the Surveillance Requirements section for the specification.	Table 3.3.2-1	4.3.2.1.1

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DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.3.2 A.4	CTS Functional Units 1.f and 4.d of Table 3.3-3 specifies, “Steam Flow in Two Steam Lines – High Coincident with either T <sub>ave</sub> – Low Low or Steam Line Pressure – Low,” for Safety Injection (SI) and Steam Line Isolation (SLI) are required to be OPERABLE in MODES 1, 2, 3 <sup>##</sup> . The notation <sup>##</sup> states, “Trip function may be blocked in this MODE below the P-12 setpoint.” ITS Table 3.3.2-1 requires the High Steam Flow in Two Steam Lines Coincident with T <sub>ave</sub> – Low Low function for SI and SLI to be OPERABLE in MODES 1, 2 and 3. MODES 2 and 3 are modified by Note <sup>(b)</sup> that states, “Above the P-12 (T <sub>ave</sub> -Low Low) interlock.” This changes the CTS by providing a clarification for the functional requirements.	3.3.2-1 Note (b)	Table 3.3-3, Note ##
3.3.2 A.5	CTS Table 3.3-3 provides the requirements for the ESFAS instrumentation functions. The table’s columns list the name of the function, total number of channels, channels to trip, minimum number of OPERABLE channels, applicable MODES, and associated Actions. ITS Table 3.3.2-1 is constructed from the requirements of CTS Table, but with modifications. The ITS Table requirements list the name of the function, applicable MODES or other specified Conditions, required channels, Conditions, Surveillance Requirements, and Allowable Values. The “Channels to Trip” and “Minimum Channels OPERABLE” columns are addressed by DOC LA.12. A separate DOC addresses any technical change to the CTS Table 3.3-3. This changes the CTS Table by requiring different information in the ITS.	Table 3.3.2-1	Table 3.3-3
3.3.2 A.6	CTS Table 3.3-3 for Functional Unit 3, Containment Isolation Phase ‘A’, states the function is initiated from safety injection automatic actuation logic, in addition to manual initiation. ITS requirement in Table 3.3.2-1 states manual, automatic actuation logic and actuation relays, and the safety injection signals provide the Containment Isolation Phase A initiation signal. This rewords the requirement and provides a clarification for the CTS.	Table 3.3.2-1	Table 3.3-3
3.3.2 A.7	CTS requirements for LCO 3.3.2.1 in Table 3.3-3 associated with Functions require various Actions marked with * to be entered when a channel becomes inoperable for the functions. The notation * for the Action states, “The provisions of Specification 3.0.4 are not applicable.” This allowance is not needed to be specifically stated for these functions in the ITS format and is eliminated.	None	Table 3.3-3
3.3.2 A.8	CTS Table 4.3-2 lists in the last column the MODES in which the associated Surveillance Requirements must be performed. CTS Tables 3.3-3 and 4.3-2 are combined to form ITS Table 3.3.2-1. With the combining of these Tables, the ‘MODES in which surveillance required’ column of 4.3-2 is redundant to the requirements listed for the functions in Table 3.3-3 ‘Applicable MODES’ column and is eliminated. ITS Table 3.3.2-1 labels this column as, ‘Applicable MODES or other specified conditions.’	Table 3.3.2-1	Table 4.3-2

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DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.3.2 A.9	CTS Surveillance Requirement 4.3.2.1.2 requires the ENGINEERED SAFETY FEATURES RESPONSE TIME test on each ESFAS function be performed at least once per 18 months. The requirement states, “Each test shall include at least one logic train such that both logic trains are tested at least once per 36 months.” ITS SR 3.3.2.9 requires the verification of ESFAS RESPONSE TIMES are within limits every 18 months on a STAGGERED TEST BASIS (STB).	SR 3.3.2.9	4.3.2.1.2
3.3.2 A.10	CTS ESFAS system interlocks P-11 and P-12 are required to be OPERABLE in MODES 1, 2, and 3. If a channel becomes inoperable, Action 22 must be entered. The Action requires with less that the Minimum Channels within 1 hour determine, “that the interlock is in its required state for the existing plant condition or apply Specification 3.0.3.” ITS requirements for the ESFAS interlocks P-11 and P-12 require the functions to be OPERABLE in MODES 1, 2, and 3. If a channel becomes inoperable Action J must be entered. The Action requires a verification of the interlocks are in their required state for plant conditions within 1 hour or be in MODE 3 within 7 hours and MODE 4 within 13 hours. This changes the CTS by specifically stating shutdown requirements in specified time requirements in the Action.	3.3.2 ACTION J	Table 3.3-3 Action 22
3.3.2 A.11	CTS Functional Unit I.d of Table 3.3-3 specifies Pressurizer Pressure – Low-Low shall be OPERABLE in MODES 1, 2, 3 <sup>#</sup> . The notation <sup>#</sup> states the function may be blocked in MODE 3 below P-11 setpoint. ITS Table 3.3.2-1 requires Pressurizer Pressure – Low Low function to be OPERABLE in MODES 1, 2, and 3 <sup>(a)</sup> . Note <sup>(a)</sup> states, “Above the P-11 setpoint.” This changes the CTS by providing a clarification for the functional requirements.	Table 3.3.2-1 Note (a)	Table 3.3-3 Note #
3.3.2 A.12	CTS Table 4.3-2 notation (1) is associated with the manual initiation switches for Safety Injection, Containment Spray, Containment Isolation (Phase A and B), Steam Line Isolation, and the start of the AFW pumps. The notation requires that each manual actuation switch be tested to actuate the required function at least once per 18 months during shutdown. In ITS Table 3.3.2-1, for each of the listed functions, SR 3.3.2.7 states that a TADOT must be performed at a frequency of eighteen months. A Note to SR 3.3.2.7 specifies, “Verification of setpoint not required for manual initiation functions.” The deletion of the performance of the surveillance requirement during shutdown is addressed by DOC L.4. This changes the CTS by replacing the wording of testing each required switch with the ITS requirement of performing a TADOT for the required functions and adds the Note to not require verification of setpoint.	SR 3.3.2.7 NOTE	Table 4.3-2 notation (1)
3.3.2 A.13	CTS Table 4.3-2 lists the requirements for the ESFAS Interlocks P-11 and P-12. A CHANNEL FUNCTIONAL TEST (CFT) and a CHANNEL CALIBRATION must be performed for each interlock on a refueling frequency (R). ITS SRs for the P-11 and P-12 interlocks require SR 3.3.2.8 (CHANNEL CALIBRATION) to be performed every 18 months. This changes the CTS by eliminating the CHANNEL FUNCTIONAL TEST requirements.	SR 3.3.2.8	Table 4.3-2

Table A – Administrative Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.3.2 A.14	CTS requirements in Table 3.3–3 for ESFAS Function 3.b.1), Containment Isolation Phase B manual, state that 2 sets, 2 switches/set are the total number of channels required. This function is required to be OPERABLE in MODES 1, 2, 3, and 4 with Action 18 to be entered for an inoperable channel. ITS in Table 3.3.2-1 Function 3.b.1, Containment Isolation Phase B on Manual Initiation, states, “Refer to Function 2.a (Containment Spray – Manual Initiation) for all functions and requirements.” This changes the CTS by deleting the specific requirements for the Containment Isolation Phase B manual requirements and referring the function to the Containment Spray Manual Initiation for the specific requirements.	Table 3.3.2-1	Table 3.3–3
3.3.2 A.15	CTS requirements in Table 3.3-3 for ESFAS Function 3.b.3, Containment Isolation Phase B Containment Pressure High-High state that 4 channels are required. The function is required to be OPERABLE in MODES 1,2,3, and 4 with Action 16* to be entered for an inoperable channel. CTS requirements in Table 3.3-3 for ESFAS Function 2.c, Containment Spray on Containment Pressure High-High state that 4 channels are required. The function is required to be OPERABLE in MODES 1,2,3, and 4 with Action 16* to be entered for an inoperable channel. ITS in Table 3.3.2-1 Function 3.b.3, Containment Isolation Phase B on Containment Pressure High High, states, “Refer to Function 2.c (Containment Spray – Containment Pressure High High) for all functions and requirements.” This change the CTS by deleting the specific requirements for the Containment Isolation Phase B on Containment Pressure High High requirements and referring the function to the Containment Spray Containment Pressure High High for the specific requirements.	Table 3.3.2-1	Table 3.3-3
3.3.2 A.16	CTS Surveillance Requirement 4.3.2.1.2 requires the Engineered Safety Feature Response Time to be conducted for each ESFAS function. The testing must demonstrate that each function is within its specified limit at a frequency of every 18 months. ITS ESFAS SI, Containment Spray, Containment Isolation, Steam Line Isolation, AFW, and ESFAS Interlock Functions for manual initiation and Automatic Actuation Logic and Actuation Relays do not require that Response Time Testing (RTT) be performed. The Automatic Actuation Logic and Actuation Relays require Actuation Logic Test (SR 3.3.2.2), Master Relay Test (SR 3.3.2.3), and Slave Relay Test (SR 3.3.2.5). Each manual initiation function requires a TADOT (SR 3.3.2.7). The ESFAS P-11 and P-12 interlocks require a CHANNEL CHECK and a CHANNEL CALIBRION requirement. The P-4 interlock requires the TADOT. This changes the CTS requirements by not requiring RTT to be performed on the above ESFAS Functions.	None	4.3.2.1.2

Table A – Administrative Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.3.2 A.17	CTS Table 3.3-3 for Functional Units 5.a and 5.b, Turbine Trip and Feedwater Isolation on Steam Generator (SG) Water Level – High-High and Automatic Actuation Logic and Actuation Relays, requires for each an applicability of MODES 1, 2, and 3 <sup>###</sup> . Notation <sup>###</sup> states, “Except when all MFIVs, MFRVs, and associated bypass valves are closed and de-activated or isolated by a closed manual valve.” ITS Table 3.3.2 – 1 for Function 5, Turbine Trip and Feedwater Isolation, requires that Functions 5.a and 5.b, Automatic Actuation Logic and Actuation Relays and SG Water Level – High High, be OPERABLE in MODES 1, 2 <sup>(e)</sup> , and 3 <sup>(e)</sup> . Note <sup>(e)</sup> states, “Except when all Main Feedwater pump discharge valves or all MFIVs, MFRVs, and associated bypass valves are closed and de-activated or isolated by a closed manual valve.” The Main Feedwater pump discharge valves addition is addressed by DOC L.6. This changes the CTS by specifically stating the Functions 5.a and 5.b are not applicable in MODE 2 when appropriate valves are closed and provide the required safety function.	Table 3.3.2-1 NOTE (e)	Table 3.3-3 NOTE ###
3.3.2 A.18	CTS Table 3.3-3 allows one channel of certain functional units to be bypassed for up to 4 hours to perform surveillance testing. A Note for ITS 3.3.2 Required Action C states, “One train may be bypassed for up to 4 hours for surveillance testing provided the other train is OPERABLE.” This changes the CTS by specifically stating that surveillance testing can only be performed when the remaining train is OPERABLE.	3.3.2 Required Action C Note	Table 3.3-3
3.3.2 A.19	CTS Table 4.3 – 2 Functional Units 1.b, 2.b, 3.b.1, 3.b.2, 4.b, 5.b, and 6.b1, the Automatic Actuation Logic for SI, Containment Spray, Containment Isolation (Phases A and B), Steam Line Isolation, Turbine Trip and Feedwater Isolation, AFW pump, and the Automatic Actuation Logic and Actuation Relays for Steam Line Isolation require a monthly CHANNEL FUNCTIONAL TEST to be performed. The surveillance frequency is modified by Note (2) that states, “Each train or logic channel shall be functionally tested at least every other 31 days . . .” ITS Surveillance Requirements (SR) for the Automatic Actuation Logic and Actuation Relays for SI, Containment Spray, Containment Isolation (Phase A Isolation and Phase B Isolation), Steam Line Isolation, Turbine Trip and Feedwater Isolation, and AFW, require SRs 3.3.2.2 and 3.3.2.3 to be performed. ITS SR 3.3.2.2 requires the performance of an ACTUATION LOGIC TEST (ALT) and ITS SR 3.3.2.3 states that a MASTER RELAY TEST (MRT) must be performed. The Frequency of both ITS SRs is “31 days on a STAGGERED TEST BASIS.” This changes the CTS SR Frequency from “every other 31 days” to the ITS requirement of “31 days on a STAGGERED TEST BASIS.” The CTS testing requirements are expressed in ITS terms of ALT and MRT.	SR 3.3.2.2, SR 3.3.2.3	Table 4.3 – 2 Note (2)
3.3.3 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various

Table A – Administrative Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.3.3 A.2	CTS LCO 3.3.3.6 states the PAM instrumentation channels listed in Table 3.3-10 shall be OPERABLE. ITS 3.3.3 states the PAM instrumentation for each function shall be OPERABLE. Each Function is listed in Table 3.3.3 – 1. A Note to the Actions states, “Separate Condition entry is allowed for each Function.” This changes the CTS by adding a Note to the CTS requirements.	3.3.3 ACTIONS Note	3.3.3.6
3.3.3 A.3	CTS SR 4.3.3.6 in Table 4.3-7 requires each PAM instrumentation channel to be demonstrated OPERABLE by the performance of a CHANNEL CALIBRATION on a refueling frequency. ITS SR 3.3.3.2 requires a CHANNEL CALIBRATION be performed on each PAM instrumentation function shown in Table 3.3.3-1, at a Frequency of eighteen months. A Note modifies the SR that excludes neutron detectors from CHANNEL CALIBRATIONS. This changes the CTS by adding a clarifying Note.	SR 3.3.3.2 Note	4.3.3.6
3.3.3 A.4	CTS 3.3.3.6 Table 3.3-10 lists in two columns the requirements for accident monitoring instrumentation. These columns are labeled as, “Total No. of Channels” and “Minimum Channels OPERABLE.” The CTS provides Actions stated as part of the LCO. ITS 3.3.3 Table 3.3.3-1 states the requirements for PAM Instrumentation in one column labeled “Required Channels.” This changes the CTS by deleting the minimum channels OPERABLE column.	Table 3.3.3-1	Table 3.3-10
3.3.3 A.5	CTS 3.3.3.6 Table 3.3-10 lists the functions of Reactor Vessel Coolant Level Monitor, In Core Thermocouples, and Reactor Coolant System Subcooling Margin Monitor as required accident monitoring instruments. ITS 3.3.3 Table 3.3.3-1 groups these instruments under the Inadequate Core Cooling Monitor as subsystems. This changes the CTS by the regrouping PAM functions.	Table 3.3.3-1	Table 3.3-10
3.3.4 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various
3.3.4 A.2	CTS 3.3.3.5 requirements for the auxiliary shutdown panel monitoring instrumentation channels state that the functions in Table 3.3-9 shall be OPERABLE. ITS LCO 3.3.4 provides a Note to the Actions that states, “Separate Condition entry is allowed for each Function.” This changes the CTS by stating that separate Condition entry for each function is allowed.	3.3.4 ACTIONS NOTE	3.3.3.5
3.3.5 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various

Table A – Administrative Changes  
ITS Section 3.3 – Instrumentation

DOC No.		Description of Change	ITS Requirement	CTS Requirement
3.3.5	A.2	CTS LCO 3.3.2.1, Engineered Safety Feature Actuation System (ESFAS) Instrumentation, states the trip setpoints for the features are required to be set consistent with the values listed in the Trip Setpoint column of Table 3.3-4. CTS Action b states, "With an ESFAS instrumentation channel inoperable, take the ACTION shown in Table 3.3-3." ITS LCO 3.3.5, "Loss of Power (LOP) Emergency Diesel Generator (EDG) Start Instrumentation," requires specific channels per bus for the undervoltage and degraded voltage functions to be OPERABLE. This change maintains the CTS requirements for the loss of power function in the ITS format.	LCO 3.3.5	3.3.2.1 Action b
3.3.5	A.3	CTS LCO 3.3.2.1 requires the ESFAS instrumentation channels to be OPERABLE in accordance with the requirements in Table 3.3-3. If a required channel becomes inoperable, the table provides the appropriate required Actions to be performed for each required function. ITS LCO 3.3.5 requires three channels per bus for the loss of voltage and degraded voltage functions to be OPERABLE. The ITS Actions provide the appropriate Conditions, Required Actions, and Completion Times for the LOP EDG function. A Note modifies the Actions that states, "Separate Condition entry is allowed for each function." This changes the CTS by specifically stating that each Condition may be entered for each function separately and follow a separate Completion Time.	3.3.5 ACTIONS NOTE	Table 3.3-3
3.3.5	A.4	CTS Surveillance Requirement 4.3.2.1.2 requires the ENGINEERED SAFETY FEATURES RESPONSE TIME test on each ESFAS function at least once per 18 months. The requirement states, "Each test shall include at least one logic train such that both logic trains are tested at least once per 36 months." ITS SR 3.3.5.3 requires the verification of ESFAS RESPONSE TIMES are within limits every 18 months on a STAGGERED TEST BASIS (STB). This changes the CTS by deleting the logic train requirement for the LOP EDG start instrumentation.	SR 3.3.5.3	4.3.2.1.2
3.3.5	A.5	CTS Table 4.3-2 lists for Functional Unit 7, Loss of Power 4.16KV Emergency Bus requirements for a quarterly CHANNEL FUNCTIONAL TEST for the Loss of Voltage and Degraded Voltage functions. The CHANNEL FUNCTIONAL TEST does not require a verification of relay setpoints for the Loss of Voltage and Degraded Voltage functions. ITS SR 3.3.5.1 states that a TADOT must be performed every 92 days. The SR is modified by a Note that states, "Verification of setpoint is not required." This changes the CTS by specifically stating that setpoint verification is not required for the required quarterly testing.	SR 3.3.5.1 NOTE	Table 4.3-2



Table L – Less Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.1 L.1	CTS Table 3.3-1 requires for various functions that Action 15 be entered for an inoperable channel in MODES 3*, 4*, and 5*. Note * states, "With the reactor trip system breakers in the closed position and the control rod drive system capable of rod withdrawal." Action 15 states that an inoperable channel shall be returned to OPERABLE status within 48 hours or open the Reactor Trip Breakers (RTBs) within the next hour. ITS Table 3.3.1-1 for these functions requires ITS Action C to be entered. Action C states with one channel or train inoperable, restore the function to OPERABLE status in 48 hours or initiate action to fully insert all rods. The Rod Control System must be placed in a condition incapable of rod withdrawal within the next hour. The applicable MODES or other specified conditions for MODES 3, 4, and 5 are modified by Note <sup>(a)</sup> . Note <sup>(a)</sup> states, "With Rod Control System capable of rod withdrawal or one or more rods not fully inserted." This changes the CTS by not requiring the RTBs to be opened but allowing an alternative action to disable the Rod Control System.	Table 3.3.1-1 Note (a)	Table 3.3-1 Action 15 Note *	4

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.1 L.2	CTS 3.3.1.1 requires for an inoperable Power Range channel that Action 2 be entered. This Action requires the inoperable channel to be placed in trip within 72 hours, and both the THERMAL POWER $\leq 75\%$ and the Power Range Neutron Flux trip setpoint $\leq 85\%$ within the next 4 hours. The Action also provides an alternate option to reducing power and decreasing the trip setpoints. The option requires the channel to be placed in trip within 72 hours and the performance of a QPTR measurement every 12 hours. ITS 3.3.1 Condition D.1 requires for one Power Range Neutron Flux - High channel inoperable, the channel will be placed in trip within 72 hours and the THERMAL POWER will be reduced to $\leq 75\%$ within the next 6 hours. An alternative to this requirement is to place the channel in trip and perform a QPTR every 12 hours. This changes the CTS requirements by eliminating the requirement to reduce the Power Range Neutron Flux trip setpoint to $\leq 85\%$ within 78 hours.	3.3.1 Required Action D.1	3.3.1.1 Action 2	4
3.3.1 L.3	CTS 3.3.1.1 Action 2 provides an option to reduce power and decrease the trip setpoints when a Power Range channel is inoperable. The option requires the channel to be placed in trip within 72 hours or a QPTR measurement is performed every twelve hours. ITS 3.3.1 Required Action D.2 maintains the requirement for placing the channel in trip and performing the QPTR measurement. A Note is added to Required Action D.2.2 that allows the Power Range channel to be considered OPERABLE, for the purpose of calculating the QPTR, if the portion of the channel continues to provide the necessary input for the QPTR calculation. This modifies the CTS by allowing the Power Range to be considered OPERABLE, for the purposes of QPTR calculation, if the channel continues to provide a valid signal to determine the power distribution. This changes the CTS by allowing an action that is not contained in the CTS.	3.3.1 Required Action D.2.2 Note	None	4

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.1 L.4	CTS 3.3.1.1 Functional Unit 5, Neutron Flux Intermediate Range channels, in Table 3.3-1 states the Applicability for the instruments as Modes 1 <sup>###</sup> and 2. The <sup>###</sup> requires the channels to be OPERABLE, “Below the P-10 (Power Range Neutron Flux) setpoint.” If a channel becomes inoperable, Action 3 must be entered. CTS Action 3.b states with an inoperable Intermediate Range channel above P-6 but below P-10 restore the inoperable channel to OPERABLE status prior to increasing THERMAL POWER above the P-10 setpoint. CTS Action 3.c allows continued operation with an inoperable Intermediate Range channel if THERMAL POWER is greater than P-10. ITS 3.3.1 Function 4 Intermediate Range Neutron Flux in Table 3.3.1-1 lists the Applicable Modes or other specified conditions as MODE 1 <sup>(b)</sup> and 2 <sup>(c)</sup> . The superscript letters for the MODES denote the specified conditions. The Intermediate Range channels are required to be OPERABLE whenever reactor power is between MODE 2 <sup>(c)</sup> (Intermediate Range Neutron Flux interlock, P-6) and MODE 1 <sup>(b)</sup> (the Power Range Neutron Flux interlock, P-10). If an Intermediate Range channel becomes inoperable when reactor power is between P-6 and P-10, either ITS Required Actions F.1 or F.2 must be met. Required Action F.1 states that THERMAL POWER must be reduced to < P-6 within 24 hours. Required Action F.2 requires that THERMAL POWER be increased to > P-10 within 24 hours. This changes the CTS by allowing the reactor power to be increased to > P-10 (approximately 10% RTP) with an inoperable Intermediate Range channel with reactor power above the P-6 setpoint. This also changes the MODES of Applicability from MODE 1 <sup>###</sup> and 2 to specific values of the Power Range and Intermediate Range interlocks (P-10 and P-6).	Table 3.3.1-1	Table 3.3-1	4

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.1 L.5	CTS Table 3.3-1 Functional Unit 5 Neutron Flux Intermediate Range channels states if a channel becomes inoperable Action 3 must be entered. CTS Action 3.a states that when below P-6 restore the inoperable channel to OPERABLE status prior to increasing THERMAL POWER above the P-6 setpoint. CTS Action 3.b states with an inoperable Intermediate Range channel above P-6 but below P-10 restore the inoperable channel to OPERABLE status prior to increasing THERMAL POWER above P-10. No allowance is provided for two inoperable channels, therefore LCO 3.0.3 must be entered in this condition. ITS Table 3.3.1-1 Function 4 Intermediate Range Neutron Flux states that Action G must be entered for two inoperable channels. ITS Action G states, "Two Intermediate Range channels inoperable," Required Actions G.1 and G.2 must be completed. Required Action G.1 states, "Suspend operations involving positive reactivity additions." Required Action G.2 states, "Reduce THERMAL POWER < P-6," within 2 hours. A Note modifies the Required Actions that states "Limited plant cooldown or boron dilution is allowed provided the change is accounted for in the calculated SDM." This changes the CTS by allowing Required Actions with two Intermediate Range channels inoperable that are not currently allowed.	3.3.1 ACTION G	None	4

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.1 L.6	CTS Table 4.3-1 lists for the Power Range Low Setpoint and Intermediate Range channels, the surveillance requirements for a CHANNEL FUNCTIONAL TEST (CFT). The Frequency of the CFT for these functions is S/U <sup>(1)</sup> . S/U requires the surveillance must be performed prior to a reactor startup. Note <sup>(1)</sup> states, "If not performed in previous 31 days." The Source and Intermediate Ranges additionally require a quarterly test to be performed (Q <sup>(12)</sup> ). Note <sup>(12)</sup> states, "Quarterly Surveillance in MODE 3*, 4*, and 5* shall also include verification that Permissives P-6 and P-10 are in their required state for existing plant conditions by observation of the permissive annunciator window." The movement of the phrase, "by observation of the permissive annunciator window," is addressed by DOC LA.6. The deletion of quarterly surveillance in MODES 3*, 4*, and 5* is addressed by DOC L.10. The movement of the verification of Permissives P-6 and P-10 is addressed by DOC A.29. ITS SR 3.3.1.8 for the Source, Intermediate, and Power Range Neutron Flux Low Setpoint channels require a CHANNEL OPERATIONAL TEST (COT) to be performed every 92 days. Additionally, a COT must be performed for these instrument channels prior to reactor startup if not performed within the previous 31 days. The COT must be performed for the Source Range within 4 hours after reducing power below the P-6 setpoint and the Power Range Low Setpoint and Intermediate Range channels must perform the COT within 12 hours after power is reduced below the P-10 setpoint. This changes the CTS by allowing 4 hours for the Source Range and 12 hours for the Power and Intermediate Ranges to perform the required test after entry into the applicable MODES or other specified conditions.	SR 3.3.1.8	Table 4.3-1	7

Change Category:

- 1 - Relaxation of LCO Requirements
- 2 - Relaxation of Applicability
- 3 - Relaxation of Completion Time
- 4 - Relaxation of Required Action
- 5 - Deletion of Surveillance Requirement
- 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
- 7 - Relaxation Of Surveillance Frequency
- 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.1 L.7	Unit 2 CTS surveillance requirements for the Power Range Neutron Flux High Setpoint are listed in Table 4.3-1. This requires the D <sup>(2)</sup> CHANNEL CALIBRATION test to be performed on the instrumentation channels. Note (2) states, “Heat balance only, above 15 % of RATED THERMAL POWER. Adjust channel if absolute difference > 2 percent.” ITS SR 3.3.1.2 is required for the Power Range Neutron Flux High Setpoint every 24 hours. The SR is modified by Note 2 that states, “Adjust NIS channel if difference is greater than (-) 2%.” This changes the CTS only requiring an adjustment of the Power Range channel if indicated power of the NIS channel is more than 2 % lower than the calculated power of the calorimetric.	SR 3.3.1.2 NOTE 2	None	7
3.3.1 L.8	CTS requirements for RTS interlocks (P-6, P-8, P-10, and P-13) provide specific numbers for the Allowable Values. The Allowable Values for the P-7 function come from the requirements of P-10 and P-13. ITS requirements for these functions are provided with appropriate ≥ or ≤ symbols to specifically state the limits for each RTS interlock value. This changes the CTS by allowing the values of the RTS interlocks to be set to a limit not currently allowed.	Table 3.3.1-1	Table 3.3-1	1

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.1 L.9	CTS Table 4.3-1 lists the surveillance requirements for the Power Range Neutron Flux CHANNEL CALIBRATION as M <sup>(3)(6)</sup> . Note <sup>(3)</sup> states, “Compare incore to excore axial offset above 15 % RATED THERMAL POWER (RTP). Adjust channel if absolute difference ≥ 3 percent.” ITS Table 3.3.1–1 specifies SR 3.3.1.3 for the Overtemperature ΔT function. SR 3.3.1.3 states, “ Compare results of the incore detector measurements to NIS AFD,” every 31 effective full power days (EFPD). Two Notes modify the SR. Note 1 states, “Adjust NIS channel if absolute difference is ≥ 3 %.” Note 2 states, “Not required to be performed until 24 hours after THERMAL POWER is ≥ 15 % RTP.” The change from monthly to every 31 EFPD is addressed by DOC L.16. This changes the CTS by allowing 24 hours to perform a CHANNEL CALIBRATION after THERMAL POWER exceeds 15 % RTP for the surveillance testing.	SR 3.3.1.3 NOTE 2	None	7

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.1 L.10	CTS Table 4.3-1 list for the Power Range (Low Setpoint), Intermediate Range, and the Source Range channels S/U <sup>(1)</sup> requirements for a CHANNEL FUNCTIONAL TEST (CFT). This also requires the CFT be performed prior to a reactor start up if not completed within the previous 31 days (Note <sup>(1)</sup> ). The Source and Intermediate Ranges additionally require Q <sup>(12)</sup> requirement. Note <sup>(12)</sup> states, “Quarterly Surveillance in Modes 3*, 4*, and 5* shall also include verification that Permissive P-6 and P-10 are in their required state for existing plant conditions by observation of the permissive annunciator window.” ITS SR 3.3.1.8 for the Source, Intermediate and Power Range Neutron Flux channels requires a COT be performed every 92 days. In addition, ITS SR 3.3.1.8 allows the COT to be performed within 12 hours after reducing power below P-10 for the Power and Intermediate ranges of instrumentation. The COT must be performed for the Source Range channels within 4 hours after reducing power below P-6. This changes the CTS by allowing Source Range channels to perform a COT within 4 hours after power is reduced below the P-6 and Intermediate and Power Ranges within 12 hours after power is reduced below P-10 setpoint.	SR 3.3.1.8	Table 4.3-1 NOTE 12	7
3.3.1 L.11	Not used.	N/A	N/A	N/A
3.3.1 L.12	Not used.	N/A	N/A	N/A

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements



Table L – Less Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.1 L.13	CTS 3.3.1.1 in Table 3.3-1 lists the required number of channels for Reactor Trip Breakers (RTBs) to be OPERABLE. Action 1 must be entered if one train of either function becomes inoperable. Action 1 states, "with the number of channels OPERABLE one less than required by the minimum Channels OPERABLE requirement, be in HOT STANDBY within 6 hours;" ITS 3.3.1 in Table 3.3.1-1 states for the function a specific number of trains that are required to be OPERABLE. If a train of RTB becomes inoperable, Condition P must be entered. The Required Actions for Conditions P allows one hour to return an inoperable train to OPERABLE status, or six additional hours to reach MODE 3. This changes the CTS requirements by allowing one additional hour to return the inoperable train to OPERABLE status.	3.3.1 ACTION P	Table 3.3-1 Action 1	3
3.3.1 L.14	CTS 3.3.1.1 requirements listed in Table 3.3-1 for P-6, P-8, and P-13 specifies two limits for the Allowable Values. The P-6 function lists the setpoint as $1 \times 10^{-10}$ and allowable value as $< 3 \times 10^{-10}$ for increasing power. The P-8 interlock for decreasing power lists the setpoint and allowable value as 28% and >27%, respectfully. Decreasing power for the P-13 interlock, the setpoint and allowable value are stated as 8% and 7%. ITS 3.3.1 requirements in Table 3.3.1-1 for the Reactor Trip System interlocks P-6, P-8, and P-13 do not list the reset setpoints and allowable values in the specifications. This changes the CTS by not requiring these specific interlocks to state the reset values for Allowable Values.	None	Table 3.3-1	1

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.1 L.15	CTS surveillance requirements for the Power Range Neutron Flux CHANNEL CALIBRATION are listed in Table 4.3-1 as D <sup>(2)</sup> . This requires the four Power Range channels to be compared to the heat balance of the RCS (calorimetric) on a daily basis. Note <sup>(2)</sup> state that the heat balance is required to be performed above 15 % RTP. ITS SR 3.3.1.2 for the Power Range Neutron Flux must be performed every 24 hours. The requirement is modified by Note 2, which states, “Not required to be performed until 12 hours after THERMAL POWER is ≥ 15 % RTP.” This changes the CTS by allowing 12 hours to perform a CHANNEL CALIBRATION after THERMAL POWER of the Power Range channels exceeds 15 % RTP for the initial surveillance testing.	SR 3.3.1.2 Note 2	None	7
3.3.1 L.16	CTS Table 4.3-1 lists a CHANNEL CALIBRATION requirement for the Power Range channels as M <sup>(3)</sup> . This requires CHANNEL CALIBRATION to be performed every 31 days. ITS SR 3.3.1.3 requires a comparison of the incore measurements to the excore indication every 31 effective full power days (EFPD). Other changes associated with this requirement are addressed in DOC L.9 and A.28. This changes the CTS by allowing CHANNEL CALIBRATION to be performed on an EFPD basis instead of calendar days.	SR 3.3.1.3	Table 4.3-1	7

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
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DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.1 L.17	The CTS requires a CHANNEL FUNCTIONAL TEST for the Source Range Neutron Flux channels on a quarterly basis. Normally, if the reactor has been operating in MODE 1 for greater than 92 days, the surveillance should be performed prior to entering the MODE of Applicability on a reactor shutdown. The MODES of Applicability for these channels are listed as 2, 3, 4, and 5. To not perform the required surveillance prior to entry into the MODE of Applicability requires an exception to Surveillance Requirement 4.0.4. The CTS requirements do not contain the required exception. ITS SR 3.3.1.7 for the Source Range Neutron Flux channel requires a COT be performed every 92 days. This surveillance requirement is modified by a Note, which states, "Not required to be performed for source range instrumentation prior to entering MODE 3 from MODE 2 until 4 hours after entry into MODE 3." The applicable MODES for this requirement are listed as 2 <sup>(d)</sup> , 3 <sup>(a)</sup> , 4 <sup>(a)</sup> , and 5 <sup>(a)</sup> . Note <sup>(d)</sup> states, "Below the P-6 (Intermediate Range Neutron Flux) interlocks. Note <sup>(a)</sup> states, "With Rod Control System capable of rod withdrawal or one or more rods not fully inserted." This changes the CTS by allowing 4 hours, after entering MODE 3 from MODE 2, to perform the COT on the Source Range channels.	SR 3.3.1.7 Note	Table 3.3-1	6

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.1 L.18	CTS Table 3.3-1 requires for various functions that Action 15 be entered for an inoperable channel in MODES 3*, 4*, and 5*. Note * states, “With the reactor trip system breakers in the closed position and the control rod drive system capable of rod withdrawal.” Action 15 states that an inoperable channel be returned to OPERABLE status within 48 hours or open the Reactor Trip Breakers (RTBs) within the next hour. ITS Table 3.3.1-1 for Source Range function requires ITS Action J to be entered. Action J states with one channel inoperable, restore the function to OPERABLE status in 48 hours or initiate action to fully insert all rods in 48 hours and place the Rod Control System in a condition incapable of rod withdrawal within 49 hours. The applicable MODES or other specified conditions for MODES 3, 4, and 5 are modified by Note <sup>(a)</sup> . Note <sup>(a)</sup> states, “With Rod Control System capable of rod withdrawal or one or more rods not fully inserted.” This changes the CTS by not requiring the RTBs to be opened but allowing an alternative action to disable the Rod Control System.	3.3.1 ACTION J	Table 3.3-1 Action 15	4
3.3.1 L.19	CTS Table 2.2-1, Notes 1 and 2, provide the RTS instrumentation trip setpoints formulas for the calculation of Overtemperature (OT) and Overpower (OP) ΔT functions. The values used for various constants specify exact number for each constant to be adjusted. ITS Table 3.3.1-1 Notes 1 and 2 provide the formulas for the calculation of Overtemperature and Overpower ΔT functions. The values for constants P', K <sub>1</sub> , K <sub>2</sub> , K <sub>3</sub> , K <sub>4</sub> , K <sub>5</sub> , K <sub>6</sub> , τ <sub>1</sub> , τ <sub>2</sub> , and τ <sub>3</sub> are modified with less than or equal to (≤), or greater than or less to (≥) symbols to allow a tolerance. This changes the CTS by allowing the values of the constants to be set to a limit not currently allowed.	Table 3.3.1-1 Notes 1 and 2	Table 2.2-1, Notes 1 and 2	1

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
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DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.1 L.20	CTS 4.3.1.1.2 states, “The REACTOR TRIP SYSTEM RESPONSE TIME of each reactor trip function shall be demonstrated to be within its limit at least once per 18 months.” ITS Table 3.3.1-1 under the Surveillance Requirements column lists SR 3.3.1.16. This SR states, “Verify RTS RESPONSE TIME is within limits.” This SR is required for all RTS Functions except the following: (1) Manual Reactor Trip, (3.a) Power Range Neutron Flux High Positive Rate, (4) Intermediate Range Neutron Flux, (7) Overpower ΔT, (15) Steam/Feed Flow Mismatch and Low Steam Generator Water Level, (16) Turbine Trip, (17) SI input from ESF, (11) Reactor Coolant Pump Breaker Position Trip, (19) Reactor Trip Breakers, (20) RTB Undervoltage and Shunt Trip Mechanisms, and (21) Automatic Trip Logic. This changes the CTS by deleting the Response Time Testing requirements for the listed functions.	SR 3.3.1.16	4.3.1.1.2	5
3.3.1 L.21	CTS 2.2 Limiting Safety System Setting states in Table 2.2-1 Note 3, “the channel’s maximum trip point shall not exceed its computed trip point by more than 2 percent of span.” This applies to the Overtemperature and Overpower ΔT trip setpoints for the Allowable Values as stated in Notes 1 and 2. ITS 3.3.1 in Table 3.3.1-1 states for the Overtemperature and Overpower ΔT that the functions Allowable Values are listed in Notes 1 and 2. The Overtemperature ΔT Allowable Value formula is modified by a Note that states, “The Overtemperature ΔT Function Allowable Value shall not exceed the following nominal trip setpoint by more than 2.3 % of ΔT span.” This changes the CTS requirement for Overtemperature ΔT by increasing the % of ΔT span from a value of 2.0 to 2.3.	Table 3.3.1-1 Note 1	Table 2.2-1 Note 3	1

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
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DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.1 L.22	Unit 1 CTS Table 4.3-1 Function 18, Turbine Trip on Low Auto Stop Oil Pressure or Turbine Stop Valve Closure states the related Surveillance is required as MODES 1 and 2. The Surveillance required is a CHANNEL FUNCTIONAL TEST with a listed frequency of S/U (1). S/U requires the surveillance to be performed prior to each reactor start up. Note (1) states, "If not performed within the previous 31 days." The applicable MODES or other specified conditions for ITS Table 3.3.1-1 Function 16, Turbine Trip on Low Auto Stop Oil Pressure or Turbine Stop Valve Closure is 1(g) with SR 3.3.1.15 as one of the required Surveillances. Note (g) states, "Above the P-8 (Power Range Neutron Flux) interlock." This changes the CTS by changing the applicability of the Surveillance from MODES 1 and 2 to MODE 1 above the P-8 interlock.	Table 3.3.1-1 NOTE g	Table 4.3-1 Note (1)	2

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
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DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.1 L.23	CTS Table 3.3-1 Function 2 Power Range Neutron Flux (PRNF) and Function 3 PRNF High Positive and Negative Rate trips state that Action 2 is to be entered for an inoperable channel. Action 2, Part a states that an inoperable channel must be placed in the tripped condition within 72 hours. Action 2, Part b allows the testing of additional channel with one channel inoperable. Action 2, Part c states that THERMAL POWER is to be limited to ≤ 75 % Rated Thermal Power (RTP) and the PRNF trip setpoints are to be reduced to ≤ 85% RTP within 78 hours. Action 2, Part d provides instructions for determining the QUADRANT POWER TILT RATIO (QPTR) with an inoperable PRNF channel. ITS Function 3 PRNF rate trips, high positive or high negative states that Condition E be entered for an inoperable channel. Condition E.1 states “Place channel in trip,” within 72 hours, or Condition E.2 requires that the unit be placed “in MODE 3,” within 78 hours. Condition E.2 is addressed by DOC M.2. A Note modifies the Required Actions of Condition E. This Note allows the testing of an additional channel with one channel inoperable. This changes the CTS by not requiring the performance of a QPTR and not requiring power and flux trip setpoints to be reduced for an inoperable PRNF rate trip channel.	3.3.1 ACTION E	Table 3.3-1 Action 2, Part d	4

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
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DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.1 L.24	CTS Table 4.3–1 requires a CHANNEL FUNCTIONAL TEST for Function 6 Source Range Neutron Flux channels at a frequency of S/U <sup>(1)</sup> . S/U requires the surveillance to be performed prior to each reactor start up. Note <sup>(1)</sup> states, “If not performed within the previous 31 days.” This requirement is applicable in MODES 3*, 4*, and 5*. The * states, “With the reactor trip system breakers closed and the control rod drive system capable of rod withdrawal.” ITS Function 5 Source Range Neutron Flux channels are required in MODES 3 <sup>(a)</sup> , 4 <sup>(a)</sup> , and 5 <sup>(a)</sup> to perform SR 3.3.1.7. Note <sup>(a)</sup> states, “With Rod Control System capable of rod withdrawal or one or more rods not fully inserted.” The change from Note * to Note <sup>(a)</sup> is addressed by DOC L.1. The ITS SR requires a COT to be performed every 92 days. It is modified by a Note that states, “Not required to be performed for source range instrumentation prior to entering MODE 3 from MODE 2 until 4 hours after entering MODE 3.” The change from 31 to 92 days is addressed by DOC L.11. This changes the CTS surveillance requirement by providing an allowance to perform the SR 4 hours after entering the applicable MODE.	SR 3.3.1.7 NOTE	Table 4.3-1 Note(1)	7
3.3.1 L.25	CTS Surveillance Requirements in Table 4.3-1 for Function 21.B, reactor trip bypass breaker, require a CHANNEL FUNCTIONAL TEST to be performed at a refueling (R) Frequency. The Frequency is modified by a Note <sup>(10)</sup> that states, “Automatic undervoltage trip.” Note <sup>(10)</sup> is addressed by DOC LA.4. ITS Table 3.3.1–1 Function 19, Reactor Trip Breakers <sup>(h)</sup> requires the performance of SR 3.3.1.4. Note <sup>(h)</sup> states, “Including any reactor trip bypass breakers that are racked in and closed for bypassing an RTB.” SR 3.3.1.4 requires the monthly testing (TADOT) on a Staggered Test Basis for the trip and bypass breakers. A Note that states, “This Surveillance must be performed on the trip bypass breaker immediately after placing the bypass breaker in service” modifies SR3.3.1.4. This changes the CTS by deleting the surveillance requirement performed on a refueling basis for the RTB bypass breaker.	SR 3.3.1.4 NOTE	Table 4.3-1 Note (10)	5

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements



Table L – Less Restrictive Changes  
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DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.1 L.26	CTS Table 3.3-1 Functions 18.a (Low Auto Stop Oil Pressure) and 18.b (Turbine Stop Valve Closure) requires the functions to be OPERABLE in MODE 1 and Action 9 to be entered for an inoperable channel. Action 9 requires an inoperable channel be placed in trip within 72 hours or reduce power to less than P-8 setpoint within the next 4 hours. ITS Table 3.3.1-1 Function 16 Turbine Trip with Low Auto Stop Oil Pressure (16a) and Turbine Stop Valve Closure (16b) lists the applicable MODES as MODE 1 <sup>(g)</sup> . Note <sup>(g)</sup> states, "Above the P-8 (Power Range Neutron Flux) interlock." The Table lists Condition N to be entered for an inoperable channel. Condition N states, "One Turbine Trip channel inoperable, Place channel in trip," within 72 hours, or "Reduce THERMAL POWER < P-8," within 76 hours. A Note modifies Condition N that states, " The inoperable channel may be bypassed for up to 4 hours for surveillance testing of other channels." This changes the CTS by adding an allowance that an inoperable channel may be bypassed for up to 4 hours for surveillance testing of other channels.	3.3.1 Condition N Note	Table 3.3-1 Action 9	4
3.3.1 L.27	CTS Tables 3.3-1 and 4.3-1 list the MODES of applicability for the Intermediate Range function 5 as MODE 1 below the P-10 setpoint and MODE 2. Action 3 must be entered for an inoperable channel. Action 3-part b states "Above the P-6 setpoint, but below the P-10 setpoint, restore the inoperable channel to OPERABLE status prior to increasing THERMAL POWER above the P-10 setpoint." ITS Table 3.3.1–1 Function 4 Intermediate Range lists the Applicable MODES or other specified conditions as MODES 1 <sup>(b)</sup> and 2 <sup>(c)</sup> . Note <sup>(b)</sup> states, "Below the P-10 (Power Range Neutron Flux) interlocks," and Note <sup>(c)</sup> requires, "Above the P-6 (Intermediate Range Neutron Flux) interlocks." Conditions F and G must be entered for an inoperable channel(s). Required Actions F.2 and G.2 limit THERMAL POWER for the unit to < P-6 setpoint. This changes the CTS by decreasing the applicability from MODE 2 to MODE 2 above the P-6 setpoint.	Table 3.3-1 NOTE (c)	Tables 3.3-1 and 4.3-1	2

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
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DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.1 L.28	<p>CTS Table 3.3-1 Functions 9.) Pressurizer Pressure – Low, 11.) Pressurizer Water Level – High, 12.) Loss of Flow, 16.) Undervoltage – RCP Buses, 17.) Underfrequency – RCP Buses, 18.) Turbine Trip, and 20.) RCP Breaker Position are required to be OPERABLE. Functions 9 and 11 have applicable MODES of 1 and 2, and Functions 12, 16, 17, 18, and 20 have an applicability of MODE 1. Action 8 must be entered for an inoperable channel on Functions 9, 11, 12, 16, 17, and 20. Action 8 requires the inoperable channel to be placed into trip within 72 hours or the unit is required to be placed below P-7 interlock within 78 hours. Action 9 requires an inoperable channel for function 18, Turbine Trip, to be placed into trip within 72 hours or the unit is required to be placed below P-8 interlock within 76 hours. ITS Table 3.3.1–1 Functions 8.a) Pressurizer Pressure–Low, 9.) Pressurizer Water Level – High, 10.) Reactor Coolant Flow – Low, 11.) RCP Breaker Position, 12.) Undervoltage RCPs, and 13.) Underfrequency RCPs require the functions to be OPERABLE in MODE 1 above the P – 7 setpoint. ITS Note <sup>(6)</sup> states, “Above the P–7 (Low Power Reactor Trips Block) setpoint.” The Turbine Trip, Function 16 is required to be OPERABLE in MODE 1 above P–8 setpoint. ITS Note <sup>(8)</sup> states, “Above the P–8 (Power Range Neutron Flux) interlock.” Condition L is required to be entered for an inoperable channel for functions 8.a, 9, 10, 12, and 13. Condition L states for one channel inoperable, “Place channel in trip,” within 72 hours, or “Reduce THERMAL POWER to &lt; P-7,” in 78 hours. Function 11 RCP Breaker Position requires Condition M to be entered for an inoperable channel. Condition M states, “Place channel in trip,” within 72 hours, or “Reduce THERMAL POWER to &lt; P-7,” in 78 hours. Condition N is required to be entered if one Turbine Trip channel becomes inoperable. Condition N states, “Place channel in trip,” within 72 hours, or “Reduce THERMAL POWER &lt; P–8,” within 76 hours. This changes the CTS by stating the applicability for these functions so that they are compatible with their Required Actions.</p>	Table 3.3.1-1	Table 3.3-1	2

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.2 L.1	CTS 3.3.2.1 requires the ESFAS instrumentation channels shown in Table 3.3-3 to be OPERABLE. Table 3.3-3 states for function 6(a), Auxiliary Feedwater Pump starts on manual initiation that the total number of channels is 2. The function is required to be OPERABLE in MODES 1, 2, and 3. For an inoperable channel, Action 21 must be entered. ITS 3.3.2 in Table 3.3.2-1 does not require the manual initiation function for AFW pump starts. This changes the CTS by deleting the requirements for manual initiation of AFW pump starts.	None	Table 3.3-3 function 6(a)	1
3.3.2 L.2	CTS requirement 3.3.2.1 for Steam Line Isolation, Functional Unit 4 in Table 3.3-3, requires the function to be OPERABLE with the capabilities to perform a Main Steam isolation. The isolation may be initiated from Manual, Automatic Actuation Containment Pressure – Intermediate High-High, and Steam Flow in Two Steam Lines – High coincident with either T <sub>ave</sub> Low-Low or Steam Line Pressure Low. The steam line isolation functions are required to be OPERABLE in MODES 1, 2, and 3 <sup>##</sup> . ITS LCO 3.3.2 in Table 3.3.2-1 lists the requirement for Steam Line Isolation as Function 4. This requires the function to be OPERABLE with initiation by Manual, Automatic Actuation Logic and Actuation Relays, Containment Pressure Intermediate High-High, High Steam Flow in Two Steam Lines with either T <sub>ave</sub> Low-Low or Steam Line Pressure Low. These initiators are required to be OPERABLE in MODES 1, 2 <sup>(d)</sup> , and 3 <sup>(d)</sup> . Notation <sup>(d)</sup> states, “Except when all MSTVs are closed and de-activated.” This changes the CTS by not requiring the instrumentation channels to be OPERABLE in MODES 2 <sup>(d)</sup> and 3 <sup>(d)</sup> .	Table 3.3.2-1 NOTE (d)	Table 3.3-3	2

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
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DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.2 L.3	CTS SR 4.3.2.1.3 provides for the Response Time Testing (RTT) of the ESF functions. This is applicable to the steam turbine driven pump start requirement of the CTS function 6 for the automatic start requirements. The AFW pumps are required to start on Steam Generator Water Level Low – Low, Loss of Offsite Power, the Trip of all Main Feedwater Pumps, and any SI signals. ITS SR 3.3.2.9 requires the verification of RTT to be within specific limits. A Note is added to the requirement that provides an exception for the turbine driven AFW pump. The allowance delays the required verification by 24 hours after Main Steam pressure reaches 1005 psig. This changes the CTS by allowing the RTT verification to be delayed for 24 hours after the unit reaches a stable condition for testing.	SR 3.3.2.9 NOTE	4.3.2.1.3	6
3.3.2 L.4	CTS Table 4.3-2 notation (1) is associated with the manual initiation switches for Safety Injection, Containment Spray, Containment Isolation (Phase A and B), Steam Line Isolation, and the start of the AFW pumps. The notation requires that each manual actuation switch be tested to actuate the required function at least once per 18 months during shutdown. In ITS Table 3.3.2-1, for each of the listed functions, SR 3.3.2.7 states that a TADOT must be performed at a frequency of eighteen months. This changes the CTS by deleting the “during shutdown” requirement and requires the test be performed every 18 months.	SR 3.3.2.7	Table 4.3-2 NOTE (1)	7

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.2 L.5	CTS 3.3.2.1 requirements listed in Table 3.3-3 for P-11 and P-12 specifies two limits for the Allowable Values for each function. The P-11 function lists allowable values for: ≤ 2010 psig prevents manual block of Safety Injection (SI) on Low Low Pressurizer Pressure; and ≤ 1990 psig allows the manual block of SI on Low Low Pressurizer Pressure. The P-12 function lists allowable values for: ≤ 545 °F prevents manual block of SI actuation of high steam line flow; and ≥ 541 °F allows the manual block of SI on high steam line flow. ITS 3.3.1 requirements in Table 3.3.1-1 for the Reactor Trip System interlocks P-11 and P-12 list the allowable values that prevents manual block of the functions. P-11 allowable value ≤ 2010 psig and P-12 allowable value ≤ 545 °F. This changes the CTS by not requiring these interlocks to state Allowable Values for allowing manual functions blocks.	Table 3.3.2-1	Table 3.3.1-1	1
3.3.2 L.6	CTS Table 3.3-3 for Functional Units 5.a and 5.b, Turbine Trip and Feedwater Isolation on Steam Generator (SG) Water Level – High-High and Automatic Actuation Logic and Actuation Relays, requires for each an applicability of MODES 1, 2, and 3 <sup>###</sup> . Notation <sup>###</sup> states, “Except when all MFIVs, MFRVs, and associated bypass valves are closed and de-activated or isolated by a closed manual valve.” ITS Table 3.3.2 – 1 for Function 5, Turbine Trip and Feedwater Isolation, requires that Functions 5.a and 5.b, Automatic Actuation Logic and Actuation Relays and SG Water Level – High High, be OPERABLE in MODES 1, 2 <sup>(e)</sup> , and 3 <sup>(e)</sup> . Note <sup>(e)</sup> states, “Except when all Main Feedwater pump discharge valves or all MFIVs, MFRVs, and associated bypass valves are closed and de-activated or isolated by a closed manual valve.” This changes the CTS by modifying the MODES 2 and 3 applicability with the addition of the Main Feedwater (MFW) pump discharge valves to the list.	Table 3.3.2-1 NOTE (3)	Table 3.3-3 Note ###	2

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.3 L.1	CTS 3.3.3.6 Action a requires the restoration of PAM instrumentation channels within seven days whenever one required channel is inoperable or the unit to be shutdown within the next 12 hours. CTS 3.6.4.1 Action a requires the restoration of an inoperable hydrogen analyzer within thirty days with one analyzer inoperable. ITS 3.3.3 Conditions A and B require the restoration of post accident instrumentation channels within thirty days or the initiation of a special report. This changes the CTS by deleting the requirements for the unit to be in HOT SHUTDOWN within the next 12 hours with one inoperable channel for a Function that has two required channels, allowing an additional restoration time, and requiring a report to be made in accordance with Specification 5.6.6.	None	3.3.3.6 Action a 3.6.4.1 Action a	3
3.3.3 L.2	CTS 3.3.3.6 Action b requires the restoration of inoperable PAM instrumentation channels within forty-eight hours whenever both required channels for a Function are inoperable. CTS 3.6.4.1 Action b. allows 7 days to restore one hydrogen analyzer to OPERABLE status when both are inoperable. ITS 3.3.3 Condition C requires the restoration of inoperable PAM instrumentation channels within seven days. This changes the CTS by allowing an additional five days for restoration of an inoperable instrumentation channel for a Function that has two inoperable channels.	3.3.3 Condition C	3.6.4.1 Action b	3
3.3.3 L.3	CTS SR 4.6.4.1 states, in part, “Each hydrogen analyzer shall be demonstrated OPERABLE at least once per 92 days on a STAGGERED TEST BASIS by performing a CHANNEL CALIBRATION.” ITS SR 3.3.3.2 states a CHANNEL CALIBRATION must be performed at a frequency of every 92 days. This changes the CTS for the hydrogen analyzer by eliminating the STAGGERED TEST BASIS (STB) requirement.	SR 3.3.3.2	SR 4.6.4.1	7
3.3.3 L.4	Not used.	N/A	N/A	N/A

- Change Category:  
1 - Relaxation of LCO Requirements  
2 - Relaxation of Applicability  
3 - Relaxation of Completion Time  
4 - Relaxation of Required Action  
5 - Deletion of Surveillance Requirement  
6 - Relaxation Of Surveillance Requirement Acceptance Criteria  
7 - Relaxation Of Surveillance Frequency  
8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.3 L.5	CTS 3.3.3.6 in Table 3.3-10 requires the following functions to be OPERABLE: 8) Refueling Water Storage Tank, 9) Boric Acid Tank Solution Level, 10) Auxiliary Feedwater Flow Rate, 12) PORV Position Indicator, 13) PORV Block Valve Position Indication, 14) Safety Valve Position Indication, and 16) Containment Water Level. ITS 3.3.3 does not require these functions to be OPERABLE. This changes the CTS by deleting these functions from the post accident monitoring functions.	None	Table 3.3-10 functions 8, 9, 10, 12, 13, 14 and 16	1
3.3.3 L.6	CTS Table 3.3-6 requires 2 channels of the Containment High Range Area Monitors to be OPERABLE in MODES 1, 2, 3, and 4. ITS LCO 3.3.3 Function 11, Containment Area Radiation (High Range), requires 2 channels to be OPERABLE in MODES 1, 2, and 3. changes the CTS by deleting the function in MODE 4.	Table 3.3.3-1	Table 3.3-6	6
3.3.3 L.7	CTS Table 3.3-6 requires 2 channels of the Containment High Range Area Monitors to be OPERABLE. Table 3.3-6 specifies Action 35 is to be entered when a channel becomes inoperable. This action requires inoperable channels to be returned to OPERABLE within 7 days. ITS LCO 3.3.3 Function 11, Containment Area Radiation (High Range), requires 2 channels to be OPERABLE. ITS Condition A is required to be entered for an inoperable channel for a period of 30 days. This changes the CTS by allowing 23 additional days for one channel of Containment High Range Area Monitors to be inoperable.	3.3.3 ACTION A	Table 3.3-6 Action 35	7

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.3 L.8	CTS Table 3.3-6 requires 2 channels of the Containment High Range Area Monitors to be OPERABLE. Table 3.3-6 specifies Action 35 is to be entered when a channel becomes inoperable. This action requires inoperable channels to be returned to OPERABLE within 7 days or a special report be made within 14 days. ITS LCO 3.3.3 Function 11, Containment Area Radiation (High Range), requires 2 channels to be OPERABLE in MODES 1, 2, and 3. ITS Condition A allows one channel to be inoperable for a period of 30 days before a report is required. ITS Condition B required with 2 channels inoperable that one channel must be restored to OPERABLE status within 7 days or the plant must be shutdown. This changes the CTS by allowing 2 channels of Containment High Range Area Monitors to be inoperable and providing a period of 7 days to restore one inoperable channel.	3.3.3 ACTION A	Table 3.3-6 Action 35	4
3.3.3 L.9	CTS Table 3.3-6 requires 2 channels of the Containment High Range Area Monitors to be OPERABLE. Surveillance Requirements of a CHANNEL CHECK, CHANNEL FUNCTIONAL TEST, CHANNEL CALIBRATION are required to be performed per CTS Table 4.3-3. The ITS includes Surveillance Requirements for a CHANNEL CHECK and a CHANNEL CALIBRATION to be performed on PAM function 11. This changes the CTS by eliminating the CHANNEL FUNCTIONAL TEST for the PAM instrument.	None	Table 4.3-3	5

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements



Table L – Less Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.4 L.1	CTS 3.3.3.5 states that the auxiliary shutdown panel monitoring instrumentation listed in Table 3.3-9 shall be OPERABLE. Function 9 of the table lists the Relay Room Positive Ventilation requirement. This requires one channel to be OPERABLE and indicate from 0 to 0.5 inches of water pressure. A CHANNEL CHECK is required once a month and a CHANNEL CALIBRATION is required each refueling. ITS 3.3.4 in Table 3.3.4-1 does not require the Relay Room Positive Ventilation instrumentation channel to be OPERABLE. This changes the CTS requirements by eliminating the Relay Room Ventilation pressure from the required channel requirements.	None	Table 3.3-9 Function 9	1
3.3.4 L.2	Unit 2 CTS 3.3.3.5 requires in Action a, that an inoperable channel(s) will either be returned to OPERABLE status within 7 days, or the unit must be shutdown. Unit 1 CTS 3.3.3.5 requires in Action a, that an inoperable channel(s) will either be returned to OPERABLE status within 30 days, or the unit must be shutdown. ITS LCO 3.3.4 Action A states that with one or more required functions inoperable, the required function will be restored to OPERABLE status within 30 days. This changes the Unit 2 CTS requirements for restoring a required function from 7 to 30 days.	3.3.4 Action A	CTS 3.3.3.5 Action a	3
3.3.5 L.1	CTS Table 3.3-3 for ESFAS instrumentation states the total number of channels as three for the loss of power (LOP) functions (loss of voltage and degraded voltage). CTS Action 19 is required to be entered for an inoperable channel, and the inoperable channel is required to be placed in the tripped condition within 72 hours. ITS LCO 3.3.5 states the total number of required channels as three for each function. ITS Condition B states, "One or more Functions with two or more channels per bus inoperable, restore all but one channel to OPERABLE status in 1 hour." This changes the CTS to allow more than one channel for the functions to be inoperable	3.3.5 ACTION B	3.3-3 Action 19	4

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.3.5 L.2	CTS 3.3.2, Action 19, states that with the number of OPERABLE channels one less than the total number of channels, STARTUP and POWER OPERATION may proceed provided the inoperable channel is placed in trip within 72 hours. ITS 3.3.5 Action C states, “When the Required Action and associated Completion Time not met,” immediately enter applicable Condition(s) and Required Action(s) for the associated EDG made inoperable by LOP EDG start instrumentation. This changes the CTS by allowing the associated EDG to be declared inoperable instead of the declaring the LOP function inoperable, entering LCO 3.0.3, and shutting down the unit.	3.3.5 ACTION C	3.3.2 Action 19	4
3.3.5 L.3	CTS Table 3.3-4 for function 7.a, Loss of Power 4160 Volt Emergency Bus Undervoltage (Loss of Voltage) states an Allowable Value of $\geq 2989$ volts. SR 3.3.5.2 states that a CHANNEL CALIBRATION is performed with an Allowable Value for the Loss of Voltage set to 2935 volts. This changes the CTS by decreasing the Allowable Value for the Loss of Voltage from 2989 to 2935 volts.	SR 3.3.5.2	Table 3.3-4	1

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table M – More Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.3.1 M.1	Unit 1 CTS Table 4.3-1 Function 16 RCP Undervoltage does not contain a Surveillance Requirement for a CHANNEL FUNCTIONAL TEST to be performed. Unit 2 CTS Table 4.3-1 Function 16 requires a CHANNEL FUNCTIONAL TEST to be performed at a Q (Quarterly) Frequency. ITS Table 3.3.1–1 Function 12 RCP undervoltage requires ITS SR 3.3.1.9 to be performed for both units undervoltage functions. A Note that states, “Verification of setpoint is not required,” modifies the SR. This changes the Unit 1 CTS Surveillance Requirements for RCP undervoltage by specifying a TADOT be performed every 92 days and adds a Note to the SR.	SR 3.3.1.9 Note	Unit 2 CTS Table 4.3-1
3.3.1 M.2	CTS 3.3.1.1 Action 2 requires an inoperable Power Range channel to be placed in trip within 72 hours, for either the neutron flux levels or positive and negative rate trips functions being inoperable. If this cannot be accomplished, the unit is required to enter LCO 3.0.3 and one hour is allowed to initiate action and 6 additional hours for the unit to be placed in HOT STANDBY. CTS LCO 3.0.3 provides the requirements when a LCO is not met and within one hour Action shall be initiated to place the unit in a MODE in which the Specification does not apply. ITS LCO 3.0.3 is required to be entered if more than one Power Range channel becomes inoperable for either of the required functions of flux level or rate trips. ITS 3.3.1 Required Actions D for an inoperable Power Range Neutron Flux channel requires the inoperable channel to be placed into trip within 72 hours with additional compensatory measures, or place the unit in MODE 3 within the next 6 hours. ITS 3.3.1 Required Action E for an inoperable Power Range channel for positive or negative rate trips, requires the inoperable channel to be placed into trip within 72 hour or the unit is required to be in MODE 3 within the next 6 hours. This changes the CTS requirements by decreasing the time allowed to be in MODE 3 from 7 hours in the CTS to 6 hours for the ITS.	3.3.1 ACTIONS D and E	3.3.1.1 Action 2
3.3.1 M.3	CTS 3.3.1.1 Action 3.b requires for an inoperable Intermediate Range channel, when power is below P-10 and above the Intermediate Range interlock P-6, that the channel be restored to OPERABLE status prior to increasing power above the P-10 limit. ITS Required Actions F.1 and F.2 only allow operation between P-6 and P-10 power levels for a maximum time of 24 hours. After that, power level is required to either be increased above P-10 or decreased below P-6. The allowance for increasing power above P-10 is addressed by DOC L.4.. Limiting the time with an inoperable Intermediate Range channel to 24 hours changes the CTS requirements, which currently allows operation for an indefinite period of time.	ITS Required Actions F.1 and F.2	3.3.1.1 Action 3.b

Table M – More Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.3.1 M.4	CTS 3.3.1.1 Functional Unit 6 for the Source Range Neutron Flux requires Action 4 to be entered if the number of channels OPERABLE is one less than the minimum number when THERMAL POWER is below P-6 in MODE 2 operation. This Action limits the THERMAL POWER to the P-6 setpoint value until the inoperable channel is restored to OPERABLE status. ITS Function 5 Source Range Neutron Flux requires Condition H to be entered for an inoperable channel. Required Action H states with one inoperable channel all operation involving reactivity changes must be immediately suspended. The requirement is modified by a Note that states, "Limited plant cooldown or boron dilution is allowed provided the change is accounted for in the calculated SDM." This changes the CTS requirements for an inoperable Source Range channel by limiting operation involving positive reactivity changes.	3.3.1 ACTION H Note	Table 3.3-1 Action 4
3.3.1 M.5	CTS requirements for the Source Range instrumentation channels, Functional Unit 6, in Table 3.3-1 state for MODE 2## and MODES 3*, 4*, and 5* that Actions 15 and 4, respectively, are required to be entered for one channel inoperable. The CTS requirements do not address the possibility of two channels inoperable. If two Source Range channels did become inoperable in either applicable condition, LCO 3.0.3 must be entered. This would allow at least one hour before commencing a MODE change. ITS 3.3.1 Function 5, Source Range Neutron Flux, provides an additional Action I. This requires that if two Source Range channels become inoperable, the RTBs will be opened immediately. This changes the CTS by requiring the RTBs to be opened immediately if both Source Range channels become inoperable during start up or with the Rod Control System capable of withdrawing the shutdown and control rod banks.	3.3.1 Action I	Table 3.3-1
3.3.1 M.6	CTS Table 3.3-1 Function 6 Source Range Neutron Flux requires two channels to be OPERABLE in MODES 3, 4, and 5 and, with the RTBs closed and the Rod Control System capable of rod withdrawal. If the required Source Range channel is inoperable, CTS Action 5 must be entered. Action 5 states, with the number of channels OPERABLE one less than the number required, SDM shall be verified within 1 hour and at least once per 12 hours thereafter. ITS 3.3.1 Function 5 Source Range states that 1 channel is required for MODES 3 <sup>(e)</sup> , 4 <sup>(e)</sup> , and 5 <sup>(e)</sup> and Condition K applies when the channel is inoperable. The notation <sup>(e)</sup> states, "With the Rod Control System incapable of rod withdrawal. In this condition, source range Function does not provide reactor trip but does provide indication." Condition K requires that, with the required Source Range Neutron Flux channel inoperable, all operations involving positive reactivity must be immediately suspended and SR 3.1.1.1 (SDM calculation) must be performed within an hour and every 12 hours thereafter. A Note modifies Condition K and it states, "Limited plant cooldown or boron dilution is allowed provided the change is accounted for in the calculated SDM." This changes the CTS by placing an additional restriction on operations when the Source Range channel is inoperable.	Table 3.3.1-1 NOTE (e), ACTION K Note	Table 3.3-1 Action 5

Table M – More Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.3.1 M.7	CTS Table 4.3-1 lists the surveillance requirements of CHANNEL CALIBRATION for the Turbine Trip Function 18.A Auto Stop Oil Pressure and Function 18.B Turbine Stop Valves Closure as Not Applicable (N/A). ITS Table 3.3.1-1 Function 16 Turbine lists the CHANNEL CALIBRATION surveillance requirement for the Auto Stop Oil Pressure and Turbine Stop Valve Closure as SR 3.3.1.10. This must be performed at a Frequency of 18 months. This SR is modified by a Note that requires the verification that time constants are adjusted to prescribed values. This changes the CTS by adding a CHANNEL CALIBRATION requirement for the Turbine Trip functions.	Table 3.3.1-1, SR 3.3.1.10	Table 4.3-1
3.3.1 M.8	CTS Table 4.3-1 contains a Surveillance Requirement for the Intermediate Range channels. A CHANNEL CALIBRATION is required and modified by a footnote. Note 13 states, "The provisions of Specification 4.0.4 are not applicable for entry in MODE 2 or 1." ITS SR 3.3.1.11 for the Intermediate Ranges requires a CHANNEL CALIBRATION every 18 months. This changes the CTS by deleting a portion of the Note allowing the Specification 4.0.4 allowance.	SR 3.3.1.11	Table 4.3-1 Note 13
3.3.1 M.9	Unit 1 CTS Table 4.3-1 Function 20, RCP Breaker Position Trip, lists N/A under the column labeled "MODES IN WHICH SURVEILLANCE REQUIRED." Function 20 requires a CHANNEL FUNCTIONAL TEST to be performed on an R (Refueling) frequency. Unit 2 CTS Table 4.3-1 Function 18, Turbine Trip on Low Auto Stop Oil Pressure and Turbine Stop Valve Closure, lists N/A under the "MODES IN WHICH SURVEILLANCE REQUIRED," column. Function 18 requires a CHANNEL FUNCTIONAL TEST to be performed for each portion of the function at a frequency of S/U <sup>(1)</sup> . S/U requires the surveillance to be performed prior to each reactor start up. Note <sup>(1)</sup> states, "If not performed within the previous 31 days." The applicable MODES or other specified conditions for ITS Table 3.3.1-1 Function 11, RCP Breaker Position Trip is MODE 1 <sup>(f)</sup> , with SR 3.3.1.14 as a required Surveillance. Note <sup>(f)</sup> states, "Above the P-7 (Low Power Reactor Trips Block) interlock." The applicable MODES or other specified conditions for ITS Table 3.3.1-1 Function 16, Turbine Trip on Low Auto Stop Oil Pressure or Turbine Stop Valve Closure, is MODE 1 <sup>(g)</sup> with SR 3.3.1.15 as one of the required Surveillances. Note <sup>(g)</sup> states, "Above the P-8 (Power Range Neutron Flux) interlock." This changes the CTS by requiring the surveillance for the RCP Breaker Position Trip and the Turbine Trip Functions to be performed in the ITS when they are not required in the CTS.	Table 3.3.1-1 NOTE (f) and (g)	Table 4.3-1
3.3.1 M.10	CTS Table 4.3-1 Function 23.b Low Power Reactor Trip Block, P-7, states that a CHANNEL CALIBRATION and a CHANNEL FUNCTIONAL TEST are to be performed at a frequency of R (refueling). ITS Table 3.3.1-1 Function 18.b Low Reactor Power Trips Block, P-7, states that SR 3.3.1.5 ACTUATION LOGIC TEST (ALT) is to be performed at a Frequency of every 31 days on a STAGGERED TEST BASIS (STB). This changes the CTS by requiring an ALT to be performed every 31days on a STB instead of a CHANNEL CALIBRATION and a CHANNEL FUNCTIONAL TEST being conducted every refueling.	Table 3.3.1-1, SR 3.3.1.5	Table 4.3-1

Table M – More Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.3.1 M.11	CTS Table 3.3-1 Function 21A, RTBs, lists Actions 1 and 14 to be followed for an inoperable channel in MODES 1 and 2. Action 14 states, “With one of the diverse trip features (undervoltage or shunt trip device) inoperable, restore it to OPERABLE status within 48 hours or declare the RTB inoperable and apply Action 1.” Additionally, the Action states, “The breaker shall not be bypassed while one of the diverse trip features is inoperable except for the time required for performing maintenance to restore the breaker to OPERABLE status.” ITS 3.3.1 Function 20, RTB Undervoltage and Shunt Trip Mechanism, requires these mechanisms to be OPERABLE for each RTB in MODES 1 and 2, and MODES 3(a), 4(a), and 5(a). Note (a) states, “With the Rod Control System capable of rod withdrawal or one or more rods not fully inserted.” If either function becomes inoperable Conditions S (MODES 1 and 2) or Condition C (MODES 3(a), 4(a), and 5(a)) must be entered. Required Actions for Condition C direct that the inoperable trip mechanism be restored to OPERABLE status within 48 hours or insert all rods and place the Rod Control System in a condition where rods cannot be withdrawn. This is required within one hour. This changes the CTS by requiring the diverse trip functions to be OPERABLE in MODES 3(a), 4(a), and 5(a), and adding of ITS Condition C requirements.	Table 3.3.3-1 NOTE (a)	Table 3.3-1 Actions 1 and 14
3.3.1 M.12	CTS Table 3.3-1 Function 21A Reactor Trip Breakers lists Action 1 to be entered for an inoperable channel in MODES 1 and 2. CTS Action 14 is applicable for the RTBs for the diverse trip function and it states, “With one of the diverse trip features (undervoltage or shunt trip device) inoperable, restore it to OPERABLE status within 48 hours or declare the breaker inoperable and apply Action 1. The breaker shall not be bypassed while one of the diverse trip features is inoperable except for the time required for performing maintenance to restore the breaker to OPERABLE status.” ITS Table 3.3.1–1 Function 19 RTB requires 2 trains to be OPERABLE in MODES 1 and 2 and Condition P to be entered if one RTB train is inoperable. Condition P states that with one train inoperable, it must be restored to OPERABLE status in one hour or be in MODE 3 within 7 hours. Three Notes modify the Condition. Note 2 states, “One RTB may be bypassed for up to 2 hours for maintenance on undervoltage or shunt trip mechanisms, provided the other train is OPERABLE.” This changes the CTS requirements for the RTBs by limiting to 2 hours any maintenance on the undervoltage or shunt trip mechanism before declaring the RTB train inoperable.	3.3.1 ACTION P NOTE 2	Table 3.3-1 Action 14

Table M – More Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.3.1 M.13	CTS Table 4.3–1 Surveillance Requirements do not require a quarterly test on the OTAT Functions to ensure an accurate input for the f (ΔI) from the required Power Range channels. ITS Table 3.3.1–1 Function 6 states SR 3.3.1.6 must be performed. ITS SR 3.3.1.6 states, “Compare results of the excore channels to the incore detector measurements.” This SR must be performed every 92 effective full power days (EFPD). Two Notes modify the requirement. Note 1 states, “ Adjust NIS channel if absolute difference is ≥ 3%.” Note 2 states, “Not required to be performed until 24 hours after THERMAL POWER is ≥ 50%.” This changes the CTS by requiring an additional Surveillance Requirement for the OTAT Function.	Table 3.3.1-1, SR 3.3.1.6 NOTE 1	None
3.3.2 M.1	CTS Surveillance requirement 4.3.2.1.2 requires the testing of the ESFAS interlocks to determine OPERABILITY. The two interlocks P-11 and P-12 are required to be OPERABLE. No specific requirement is stated or implied to perform a CHANNEL CHECK for the interlocks. ITS SR 3.3.2.1 is added to the surveillance requirements for the P-11 and P-12 interlocks. This change modifies the CTS requirements for these interlocks and requires a CHANNEL CHECK to be performed every twelve hours.	SR 3.3.2.1	4.3.2.1.2
3.3.2 M.2	CTS Surveillance listed in Table 4.3-2 provide CHANNEL CALIBRATION requirements for a variety of functions to be performed at a R (refueling) frequency. ITS Surveillance Requirement 3.3.2.8 specifies a CHANNEL CALIBRATION be performed every 18 months. A Note modifies the SR that states “This Surveillance shall include verification that the time constants are adjusted to the prescribed values.” This changes the CTS by adding the requirement to perform a verification of time constants adjusted to prescribed values with a CHANNEL CALIBRATION of the various safety functions.	SR 3.3.2.8 NOTE	Table 4.3-2

Table M – More Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.3.2 M.3	CTS for ESF instrumentation do not require the ESFAS function for the automatic swap over of Low Head Safety Injection (LHSI) pumps suction to the containment sump from the Refueling Water Storage Tank (RWST) on a Low-Low level. ITS ESFAS Instrumentation Function 7 is labeled as the “Automatic Switchover to Containment Sump.” This requires that two trains of automatic actuation logic and actuation relays to be OPERABLE in MODES 1, 2, 3, and 4. This requires Action C to be entered if a train becomes inoperable, and SRs 3.3.2.2, 3.3.2.3, and 3.3.2.5 to be performed at specific frequencies. The function requires four channels of RWST level to be OPERABLE in MODES 1, 2, 3, and 4. When two of the four channels reach the RWST Low-Low level setpoint, coincident with a SI signal, the LHSI pump suctions swap from the RWST to the containment sump. ITS Action I is required to be entered for an inoperable channel, and SRs 3.3.2.1, 3.3.2.4, 3.3.2.8, and 3.3.2.9 are required to be performed to verify OPERABILITY. ITS Action I requires an inoperable channel to be placed in bypass within 72 hours or the unit must be placed in MODE 3 within the next 6 hours and MODE 5 within the next 30 hours. A Note that allows an additional channel to be bypassed for up to 12 hours for surveillance testing modifies the Required Action. The Allowable Value for the RWST Level Low-Low is $\geq 18.4\%$ and $\leq 20.4\%$ for LHSI pump swapover to the containment sump from the RWST. This changes the CTS by adding additional requirements to the CTS.	Table 3.3.2-1 Function 7, Action C, Action I SR 3.3.2.1, SR 3.3.2.2, SR 3.3.2.3, SR 3.3.2.4, SR 3.3.2.5, SR 3.3.2.8 SR 3.3.2.9	None
3.3.2 M.4	CTS requirements for LCO 3.3.2.1 in Table 3.3-3 for various Functions require that Action 14 be entered for an inoperable channel. This requires the inoperable channel to be placed in a blocked condition within 72 hours. If this can not be accomplished, CTS LCO 3.0.3 would require the plant to be shutdown to HOT STANDBY within the next 7 hours and HOT SHUTDOWN within the following 6 hours. ITS LCO 3.3.2 Table 3.3.2-1 for these Functions require with one channel inoperable, the channel is required to be placed in bypass within 72 hours by Required Action D.1. If this can not be accomplished, the plant is required by Required Action D.2 to be placed in MODE 3 within six hours and MODE 4 within the following six hours. This change decreases the time allowed to reach MODE 3 by one hour.	3.3.2 ACTION D	Table 3.3-3, Action 14
3.3.2 M.5	CTS requirement for LCO 3.3.2.1 in Table 3.3-3 Containment Spray and Isolation Functions require that Action 16 is to be entered for an inoperable channel. This requires the inoperable channel to be placed in a blocked condition within 72 hours. If this can not be accomplished, CTS LCO 3.0.3 would require the plant to be shutdown to HOT STANDBY within the next 7 hours and HOT SHUTDOWN within the following 6 hours. ITS LCO 3.3.2 Table 3.3.2-1 for these Containment Functions require with one channel inoperable, the channel is required to be placed in bypass within 72 hours by Required Action E.1. If this can not be accomplished, the plant is required by Required Action E.2 to be placed in MODE 3 within six hours and MODE 4 within the following six hours. This change the CTS by decreases the time allowed to reach MODE 3 by one hour.	3.3.2 ACTION E	Table 3.3-3 Action 16



Table M – More Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.		Description of Change	ITS Requirement	CTS Requirement
3.3.2	M.6	CTS Surveillance Requirements listed in Table 4.3-2 for the Station Blackout start for the Auxiliary Feedwater (AFW) pump (function 6.e) requires a CHANNEL CALIBRATION and ESFAS RESPONSE TIMES test to be conducted on a refueling basis. The CTS does not require a CHANNEL FUNCTIONAL TEST to be performed at any frequency. The ITS 3.3.2 Function for the start of the AFW pump on Loss of Offsite Power (6.d) requires the performance of SRs 3.3.2.8 (CHANNEL CALIBRATION) and 3.3.2.9 (ESFAS RESPONSE TIMES) every 18 months, and 3.3.2.6 (TADOT) every 92 days. The TADOT is modified by a Note that states, “Verification of relay setpoints not required.” This changes the CTS by requiring the TADOT to be performed every 92 days.	SR 3.3.2.6	None
3.3.2	M.7	CTS requirements in Table 3.3-3 list the Allowable Values for ESFAS Functions and Interlocks. The Allowable Values for the following function are stated as: Safety Injection (SI) on Containment Pressure High $\leq 18.5$ psia, SI on Pressurizer Pressure Low-Low $\geq 1755$ psig, SI on Steam Flow in Two Steam Lines Coincident with $T_{ave}$ Low-Low or Steam Line Pressure Low $\leq \Delta P$ corresponding to 44% of full steam flow increasing to 111.5% at full load, Containment Spray on Containment Pressure High-High $\leq 29.25$ psia, Steam Line Isolation on Containment Pressure Intermediate High-High $\leq 19.3$ psia, and Steam Line Isolation on Steam Flow in Two Steam Lines Coincident with $T_{ave}$ Low-Low or Steam Line Pressure Low $\leq \Delta P$ corresponding to 44% of full steam flow increasing to 111.5% at full load. ITS requirements in Table 3.3.2-1 lists the Allowable Values for the ESFAS Functions and Interlock as the following: SI on Containment Pressure High $\leq 17.7$ psia, SI on Pressurizer Pressure Low-Low $\geq 1770$ psig, SI on Steam Flow in Two Steam Lines Coincident with $T_{ave}$ Low-Low or Steam Line Pressure Low $\leq \Delta P$ corresponding to 44% of full steam flow increasing to 111% at full load, Containment Spray on Containment Pressure High-High $\leq 28.45$ psia, Steam Line Isolation on Containment Pressure Intermediate High-High $\leq 18.5$ psia, and Steam Line Isolation on Steam Flow in Two Steam Lines Coincident with $T_{ave}$ Low-Low or Steam Line Pressure Low $\leq \Delta P$ corresponding to 42 % of full steam flow increasing to 111% at full load. This changes the CTS Allowable Values for these functions to more restrictive values in the ITS Allowable Values.	Table 3.3.2-1	Table 3.3-3
3.3.2	M.8	CTS Table 4.3 – 2 for Functional Unit 8.c, Engineered Safety Feature Actuation System Interlock Reactor Trip (P – 4), requires the performance of a CHANNEL FUNCTIONAL TEST every refueling (R). ITS Function 8.a, ESFAS Interlock, Reactor Trip (P – 4), requires the performance of SR 3.3.2.10. This SR requires the performance of a TADOT at a frequency of once per reactor trip breaker (RTB) cycle. The SR is modified by a Note that states, “Verification of setpoint not required.” This changes the CTS by requiring the performance of the TADOT each time the reactor trip breaker is cycled instead of one per refueling cycle.	SR 3.3.2.10	Table 4.3 – 2

Table M – More Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.		Description of Change	ITS Requirement	CTS Requirement
3.3.3	M.1	CTS 3.3.3.6 Action b states that with the number of OPERABLE accident monitoring instrumentation channels less than the minimum channels OPERABLE requirements of Table 3.3-10, either restore the inoperable channel(s) to OPERABLE status within 48 hours or be in at least HOT SHUTDOWN within the next 12 hours. ITS 3.3.3 Action C states, "One or more Functions with two required channels inoperable, restore one channel to OPERABLE status within 7 days." If this is not accomplished, ITS Action D states, "Required Action and associated Completion Time of Condition C not met, be in MODE 3 in 6 hours and MODE 4 within 12 hours." This changes the CTS requirement by requiring the unit to be in MODE 3 within 6 hours.	3.3.3 ACTION C, 3.3.3 ACTION D	3.3.3.6 Action b
3.3.3	M.2	CTS LCO 3.6.4.1, hydrogen analyzers, is applicable in MODES 1 and 2. CTS 3.6.4.1 Action b states if both hydrogen analyzers are inoperable for more than forty-eight hours, the unit must be placed in HOT STANDBY within the next six hours. ITS 3.3.3 is applicable in MODES 1, 2, and 3. ITS Action D states if two hydrogen analyzers are inoperable for greater than seven days, the unit to be placed in MODE 3 within six hours and MODE 4 within twelve hours. This changes the CTS requirements for the hydrogen analyzers from MODES 1 and 2 to MODES 1, 2, and 3 and the Required Actions from being in MODE 3 to being in MODE 4.	3.3.3 ACTION D	3.6.4.1 Action b
3.3.3	M.3	CTS 3.3.6, Table 3.3-10, Functions 4 and 5, require one channel for the reactor coolant pressure-wide range and pressurizer water level functions. ITS 3.3.3, Table 3.3.3-1, Functions 5 and 12 require two channels for RCS Pressure (Wide Range) and Pressurizer Level. This changes the CTS requirements for the parameters from one to two required channels.	Table 3.3.3-1, Functions 5 and 12	Table 3.3-10, Functions 4 and 5

Table M – More Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.3.3 M.4	CTS 3.3.6 Table 3.3-10 does not require OPERABLE indication channels for the parameters of nuclear instrumentation, containment pressure (narrow range), containment isolation valve position, containment area radiation levels, wide range steam generator level, the inventory of water to supply AFW pumps, and high pressure Safety Injection flow. These are added to the CTS and shown in ITS 3.3.3, Table 3.3.3-1, Functions 1, 2, 8, 10, 14, 16, and 18. The Gammametric Power and Source range channels (Functions 1 and 2) provide nuclear instrumentation indication, with two channels of each range. Two channels provide narrow range containment pressure (Function 8). Containment isolation valve position indication (Function 10) is required for each of two valves per penetration flow path. This requirement is modified by a note that requires only one position indication channel per penetration flow path with one installed channel located in the Control Room. Steam generator level is additionally monitored by wide range indication (Function 14). The last two requirements are added for two channels of Emergency Condensate Storage Tank level (Function 16) and two indications for the High Head Safety Injection flow (Function 18). In addition, SRs are added for each function. Two Notes modify the requirements for Function 9, Containment Isolation Valve Position. Note (a) states, "Not required for isolation valves whose associated penetration is isolated by at least one closed and deactivated automatic valve, closed manual valve, blind flange, or check valve with flow through the valve secured." Note (b) states, "Only one position indication channel is required for penetration flow paths with only one installed control room indication channel." This changes the CTS by adding new functions, Notes, and SRs.	Table 3.3.3-1, Functions 1, 2, 8, 10, 14, 16, and 18, Notes (a) and (b)	None
3.3.3 M.5	CTS 3.3.6, Table 3.3-10, Function 18 states the total number of channels required for the In Core Thermocouples (T/Cs) as four per core quadrant. ITS 3.3.3, Table 3.3.3-1, Function 6.c for Core Exit Temperature, states the required number of channels as two per quadrant. ITS Note c requires a channel to consist of two T/Cs. This changes the CTS to require two T/Cs be powered from one train and the other two T/Cs be powered from the other train. This changes the CTS by requiring two trains of T/Cs.	Table 3.3.3-1, Function 6.c	Table 3.3-10, Function 18
3.3.3 M.6	CTS 3.3.3.6, Action c states, "The provisions of Specification 3.0.4 are not applicable." ITS LCO 3.3.3 does not contain a similar allowance. This changes the CTS by eliminating an explicit Specification 3.0.4 exception.	None	3.3.3.6, Action c
3.3.4 M.1	CTS 3.3.3.5 Action a requires that if an inoperable channel can not be returned to OPERABLE status, the unit must be placed in HOT SHUTDOWN within the next 12 hours. ITS 3.3.4 Action B requires if a required channel can not be returned to OPERABLE status, the unit must be in MODE 3 within the next 6 hours and MODE 4 within the next 12 hours. This changes the CTS requirements by specifying that MODE 3 must be achieved within 6 hours.	3.3.4 ACTION B	3.3.3.5 Action a

Table M – More Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.		Description of Change	ITS Requirement	CTS Requirement
3.3.4	M.2	CTS LCO 3.3.3.5 states, "The auxiliary shutdown panel monitoring instrumentation channels shown in Table 3.3-9 shall be OPERABLE . . ." ITS LCO 3.3.4 states, "The Remote Shutdown System Functions shall be OPERABLE." The following functions for various control systems are added to the ITS requirements: Boric Acid Pump controls, Pressurizer Heaters controls, AFW Pump and Valve controls, SG PORV controls, and Charging Pump controls. These control systems are included in the Bases Table B3.3.4-1. ITS SR 3.3.4.2 is also added and requires verification that each required control circuit or transfer switch is capable of performing its required function once every 18 months. This changes the CTS by adding the control functions and a surveillance to verify their OPERABILITY every 18 months.	LCO 3.3.4, Table B3.3.4-1, SR 3.3.4.2	Table 3.3-9
3.3.4	M.3	CTS 3.3.3.5, Action b, states, "The provisions of Specification 3.0.4 are not applicable." ITS LCO 3.3.4 does not contain a similar allowance. This changes the CTS by eliminating an explicit Specification 3.0.4 exception.	None	3.3.3.5 Action b
3.3.5	M.1	CTS Table 3.3-4, Engineered Safety Feature Actuation System Instrumentation Trip Setpoints, lists the Allowable Values for the Loss of Power on the 4160-Volt Emergency Bus Undervoltage for loss of voltage and degraded voltage. The degraded voltage Allowable Value is stated as, "≥ 3688 volts with a time delay of ≤ 63 seconds." This requirements is translated into the ITS SR 3.3.5.2 for the CHANNEL CALIBRATION for the degraded voltage Allowable Values and states the degraded voltage requirement as, "≥ 3720 volts with a time delay of ≤ 63 seconds without an SI signal." ITS SR 3.3.5.3 adds the Allowable Value requirement for degraded voltage time delay requirement with a safety injection signal and states the requirement as, "≥ 3720 volts with a time delay of ≤ 9 seconds with an SI signal." This changes the CTS by changing the Allowable Value from 3688 V to 3720 V and adding the requirement that the time delay with an SI signal be verified to be less than 9 seconds.	SR 3.3.5.2, SR 3.3.5.3	Table 3.3-4
3.3.5	M.2	CTS Table 3.3-4 ESFAS Trip Setpoints list the Allowable Values for the Loss of Power on a Loss of Voltage and Degraded Voltage condition of the 4160-Volt emergency buses. The Allowable Values are listed for the minimum voltage values of each function. ITS SR 3.3.5.2 specifies a maximum and a minimum Allowable Value for the Loss of Voltage and Degraded Voltage functions. The maximum voltage Allowable Value for the Loss of Voltage is ≤ 3225 Volts, and the Degraded Voltage Allowable Value is ≤ 3772 Volts. This changes the CTS by adding Allowable Values that are not currently specified.	SR 3.3.5.2	Table 3.3-4

Table M – More Restrictive Changes  
ITS Section 3.3 – Instrumentation

DOC No.		Description of Change	ITS Requirement	CTS Requirement
3.3.5	M.3	CTS LCO 3.3.2.1, Engineered Safety Feature Actuation System (ESFAS) Instrumentation, states the trip setpoints for the features are required to be set consistent with the values listed in the Trip Setpoint column of Table 3.3-4. ITS LCO 3.3.5, “Loss of Power (LOP) Emergency Diesel Generator (EDG) Start Instrumentation,” requires three channels per bus for the undervoltage and degraded voltage Functions for this unit H and J Train 4160 VAC buses to be OPERABLE. The LCO additionally requires the H and/or J Train 4160 VAC buses on the other unit that are needed to support shared components to be OPERABLE. This changes the LCO requirements by specifically requiring LOP EDG start instrumentation from the other unit to be OPERABLE when supporting shared components for this unit.	LCO 3.3.5	Table 3.3-4
3.3.5	M.4	CTS Surveillance Requirements 4.3.2.1.1 and 4.3.2.1.2 require the periodic testing of Loss of Voltage and Degraded Voltage Functions for the Loss of Power on the 4160 kV emergency bus. ITS SRs 3.3.5.1, 3.3.5.2, and 3.3.5.3 require the testing of the LOP EDG start instruments for this unit and the other unit that supplies shared electrical power to shared components. These requirements are specified as LCO 3.3.5.a and LCO 3.3.5.b Functions. This changes the CTS by requiring the other unit loss of voltage and degraded voltage Functions to be tested for this unit if they support shared components.	LCO 3.3.5.a, LCO 3.3.5.b SR 3.3.5.1, SR 3.3.5.2, SR 3.3.5.3	4.3.2.1.1, 4.3.2.1.2

Table R – Relocated Specifications and Removed Details  
ITS Section 3.3 – Instrumentation

DOC No.		CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.3.1	LA.1	4.3.1.1.2	CTS Surveillance Requirement 4.3.1.1.2 requires the RTS trip functions to be response time tested. This requirement includes the following, “Response of the neutron flux signal portion of the channel time shall be measured from the detector output or input of the first electronic component in the channel.” ITS SR 3.3.1.16 requires RESPONSE TIME testing of the RTS functions. This changes the CTS by moving the descriptive wording from the Specifications to the ITS Bases	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.3.1	LA.2	3.3.1.1 Note (d)	CTS 3.3.1.1 requires two Source Range channels be OPERABLE in MODE 2 <sup>##</sup> . The note <sup>##</sup> states that the high voltage to detector may be de-energized above P-6. ITS requirement for the Source Range channel state that two channels must be OPERABLE in MODE 2 <sup>(d)</sup> . Note <sup>(d)</sup> specifies, “Below the P-6 (Intermediate Range Neutron Flux) interlock” and maintains the intent of the CTS requirement. This changes the CTS by moving the allowance that the high voltage detector may be de-energized above P-6 from the Specifications to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	1
3.3.1	LA.3	Table 3.3-1	Reactor Trip System Interlocks or “P” functions are required to be OPERABLE in CTS Table 3.3-1. These functions are designated as P-6, P-7, P-8, P-10, and P-13. Descriptive information is contained in the Condition, Function, and Setpoint columns for the interlocks. ITS 3.3.1 does not include this information in the Specifications. This changes the CTS by moving the information from the Specifications to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	2

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.3 – Instrumentation

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.3.1 LA.4	Table 4.3-1	CTS Table 4.3-1 contains surveillance requirements with Notes which provide information on the undervoltage and shunt trip circuits testing of the Reactor Trip Breakers (RTBs) and for the RTB bypass breakers in testing the automatic undervoltage trip during CHANNEL FUNCTIONAL TEST. ITS SR 3.3.1.4 for the RTBs and bypass RTBs does not contain this information. ITS retains the necessary SRs for the RTB and bypass RTB to be OPERABLE. The information is contained in the Bases for SR 3.3.1.14. This changes the CTS by moving the descriptive information from the Specifications to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	1
3.3.1 LA.5	Table 2.2-1	CTS Table 2.2-1 for the Limiting Safety System Settings states the formulas for Overtemperature and Overpower $\Delta T$ functions. ITS 3.3.1 in Table 3.3.1 – 1 lists the formulas for the Overtemperature and Overpower $\Delta T$ functions with a reference in each that the specific variables are contained in the Core Operating Limits Report (COLR). This changes the CTS by relocating specific parameters for the Overtemperature and Overpower $\Delta T$ functions from the Technical Specifications to the COLR.	COLR	ITS 5.6.5, Core Operating Limits Report	5
3.3.1 LA.6	Table 4.3-1 NOTE 12	CTS 3.3.1.1 Surveillance Requirement in Table 4.3-1 for the Intermediate Range channels requires a CHANNEL CHECK on a refueling basis, and shown by the designation of R <sup>(12)</sup> . Note 12 states, in part, “verification that the Permissives P-6 and P-10 are in their required state for existing plant conditions by observation of the permissive annunciator window.” The requirement of verification for P-6 and P-10 is retained in ITS SR 3.3.1.8. This changes the CTS by moving the requirement of “observation of the permissive annunciator window,” from the Specification to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.3 – Instrumentation

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.3.1 LA.7	2.2.1 Action	CTS 2.2.1 Action states, “with the RTS instrumentation setpoint less conservative than the Allowable Value, the instrumentation channel must be declared inoperable.” With the channels inoperable, the applicable Action of ITS 3.3.1.1 shall be entered, and the channel’s trip setpoint shall be adjusted to be consistent with the Trip Setpoint value to return the instrument to OPERABLE status. The information provides no specific requirement for each function, but only describes the mechanics of how to adjust the channel to provide the required reactor protection. This changes the CTS by moving the information relating to the Trip Setpoint from the Specification to the ITS 3.3.1 Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.3.1 LA.8	Table 2.2-1 footnote	CTS 2.2.1 in Table 2.2-1 provides in a footnote for Loss of Flow function, that the design flow per loop is one-third of the minimum allowable RCS total flow rate requirement. The minimum flow rate requirement is stated in CTS Table 3.2-1. The Allowable Value for Loss of Flow is stated in % of design flow per loop. ITS 3.3.1 does not include this information on design flow rate. This changes the CTS by moving the information from the Specifications to the COLR, and using the indicated flow rate for the Allowable Value in ITS 3.3.1.	COLR	ITS 5.6.5, Core Operating Limits Report	5
3.3.1 LA.9	Table 2.2-1 Note 2	CTS Table 2.2-1 Note 2 provides the calculation for the Overpower $\Delta T$ setpoint, Functional Unit 8. This states that the function generated by the rate lag controller for $T_{ave}$ dynamic compensation is given by the formula for $\tau_3$ ( $\tau_3 = S/1 + \tau_3 S$ ). Also specified is the time constant utilized in the rate lag controller for $T_{ave}$ . ITS 3.3.1 Function 7, the Overpower $\Delta T$ formula does not include this information. This changes the CTS by moving the information from the Specifications to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	1

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report



Table R – Relocated Specifications and Removed Details  
ITS Section 3.3 – Instrumentation

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.3.1 LA.10	Table 2.2-1	CTS requirements stated in Table 2.2-1 for functions 13 and 14 describes the span of the instrument used to measure steam generator level to provide the trip setpoint and allowable value. ITS Table 3.3.1 does not include this information. This changes the CTS by moving the information for the function from the Specifications to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.3.1 LA.11	Tables 2.2-1 and 3.3-1	The CTS lists in Tables 2.2-1 and 3.3-1 Allowable Values and Trip Setpoints. ITS 3.3.1 does not specify the Trip Setpoints. This changes the CTS by moving the Trip Setpoint from the Specifications to the Technical Requirements Manual (TRM).	Technical Requirements Manual	10 CFR 50.59	3
3.3.1 LA.12	Table 4.3-1 NOTE 9	CTS surveillance requirement listed in Table 4.3-1 for the reactor bypass breaker states a Frequency of "M (9)." This requires the monthly testing of the bypass breaker in conjunction the RTS testing. Note 9 states, "Local manual shunt trip the reactor trip bypass breaker immediately after placing the bypass breaker into service, but prior to commencing reactor trip system testing or reactor trip breaker maintenance." ITS 3.3.1.4 is required to be performed on the RTB bypass breaker every 31 days on a STAGGERED TEST BASIS. This test would be required when the associated train of RTS is tested or that train RTB requires maintenance. This changes the CTS by moving the note from the Specifications to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.3 – Instrumentation

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.3.1 LA.13	Table 4.3-1 Note 13	CTS Table 4.3-1 states in Note 13 to the Intermediate Range Surveillance Requirements that the detector plateau curves shall be obtained and evaluated on an R (refueling) Frequency. ITS Table 3.3.1-1 states Function 4 Intermediate Range that SR 3.3.1.11 is required. The SR required Frequency is 18 months. This changes the CTS by moving the requirement for performing detector plateau curves from the Specification to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.3.1 LA.14	Table 2.2-1	CTS Table 2.2-1 states the Allowable Value for Function11 Pressurizer Water Level – High is “93 % of instrument span.” ITS Table 3.3.1-1 lists the Allowable Value for Function 9 Pressurizer Water Level – High is “93%.” This changes the CTS by moving a portion of the requirement “of instrument span,” from the specifications to the UFSAR.	UFSAR	10 CFR 50.59	1
3.3.1 LA.15	Table 2.2-1	CTS Table 2.2-1 for Reactor Trip System (RTS) instrumentation has three columns stating various requirements for each function. These columns are labeled, “TOTAL NO. OF CHANNELS,” “CHANNELS TO TRIP,” and “MINIMUM CHANNELS OPERABLE.” ITS Table 3.3.1-1 states the channel requirement for each RTS function as, “REQUIRED CHANNELS.” This changes the CTS by stating all of the channel requirements for each function as the required channels and moving the information of the number of channels to trip and the minimum channels needed to maintain the function OPERABLE to the UFSAR.	UFSAR	10 CFR 50.59	1

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.3 – Instrumentation

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.3.1 LA.16	Table 3.3-1 Action 2.d	CTS 3.3.1.1 Action 2.d in Table 3.3-1 states that the QUADRANT POWER TILT RATIO (QPTR) shall be determined to be within limit when reactor power is above 75 percent of RATED THERMAL POWER (RTP). The moveable incore detectors will be utilized to verify the QPTR when a Power Range Channel is inoperable. In this condition, the normalized symmetric power distribution is determined by either utilizing 2 sets of 4 symmetric thimble locations or a full core flux map. Every 12 hours, the results of the flux map must be compared with the indicated QPTR for consistency. The indicated QPTR is provided by the three Power Range Channels that remain OPERABLE. ITS 3.3.1 Action D.2.2 requires the performance of ITS SR 3.2.4.2, which verifies the QPTR is within its limit. This changes the CTS by moving the details of determining QPTR from the specification to the ITS Bases for SR 3.2.4.2.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.3.1 LA.17	Table 2.2-1 Note 1	CTS Table 2.2-1 Functional Unit 7 states the requirement for the Overtemperature (OT) $\Delta T$ as Note 1. The Allowable Value for the function is calculated with the application of Note 3 to Note 1. A portion of Note 1 states that the gains set for the equation are selected based on measured instrument response obtained during plant startup testing. ITS Table 3.3.1-1 Function 6 requires the OTAT Allowable Value to be calculated via the formula stated in ITS Note 1. Note 1 in the ITS combines the CTS Notes 1 and 3 with modifications. ITS Note 1 does not contain the requirement "with gains to be selected based on measured instrument response during plant startup tests . . ." This changes the CTS by moving the information of the gain selection from the specification to the Technical Requirements Manual (TRM).	Technical Requirements Manual	10 CFR 50.59	3

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.3 – Instrumentation

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.3.2 LA.1	LCO 3.3.2.1 and Action a	CTS LCO 3.3.2.1 and Action a contain information about the ESFAS channels and interlocks setpoint requirements. The LCO states the setpoint will be set consistent with the Trip Setpoints listed in Table 3.3-4. Action a requires the setpoint to be set more conservatively than the value listed in the Allowable Value column of the same table in order for the function to be considered OPERABLE. ITS 3.3.2 does not contain this information. This changes the CTS by moving the information from the Specification to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.3.2 LA.2	Table 4.3-2 NOTE (2)	CTS Table 4.3-2 specifies a requirement to perform a CHANNEL FUNCTIONAL TEST for the automatic actuation logic on various ESF functions on a monthly basis. The frequency (M) is modified by notation (2) which states, "Each train or logic channel shall be functionally tested at least every other 31 days up to and including input coil continuity testing to the ESF slave relays." ITS SRs 3.3.2.2 and 3.3.2.3 require the performance of the ACTUATION LOGIC TEST and the MASTER RELAY TEST every 31 days on a STAGGERED TEST BASIS. This changes the CTS by moving information from the Specification to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	1
3.3.2 LA.3	Table 3.3-4	CTS LCO 3.3.2.1 in Table 3.3-4, item 6.c, for the Allowable Values requirement contains information relating to the Steam Generator (SG) Water Level – Low Low trip. The requirement states that the Allowable Value is associated with the narrow range instrumentation span for each SG. ITS Table 3.3.2-1 (item 6.c) lists the requirements for the SG Water Level – Low Low Allowable Value but does not contain the information about the narrow range instrumentation span. This changes the CTS by moving the information from the Specification to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	1

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.3 – Instrumentation

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.3.2 LA.4	Table 3.3-3	CTS LCO 3.3.2.1 in Table 3.3-3 for the ESFAS interlocks P-11 and P-12 contains information in the Condition and Function sections which describes how the interlocks function. ITS Table 3.3.2-1 lists the functions and the necessary requirements to ensure OPERABILITY. This changes the CTS by moving the information from the Specification to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	1
3.3.2 LA.5	Table 3.3-4	CTS LCO 3.3.2.1 in Table 3.3-4 for the ESFAS instrumentation trip setpoints contains information describing the bus that is monitored to detect a station blackout. ITS Table 3.3.2-1 does not contain this information. This changes the CTS by moving the information from the Specification to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	1
3.3.2 LA.6	Table 4.3-2 Note 3	Note 3 of CTS 3.3.2.1 Table 4.3-2 for the ESFAS containment pressure instrumentation surveillance requirement states that the CHANNEL FUNCTIONAL TEST shall include exercising the transmitter by applying either a vacuum or pressure to the appropriate side of the transmitter. ITS Table 3.3.2-1 for the testing of Containment pressure requires SR 3.3.2.4 to be performed. This changes the CTS by moving the information from the Specification to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.3.2 LA.7	Table 3.3-4	CTS LCO 3.3.2.1 in Table 3.3-4 item 5.a for the Allowable Value requirement contains information relating to the Steam Generator (SG) Water Level – High High trip. This states that the Allowable Values are associated with the narrow range instrumentation span for each SG. ITS Table 3.3.2-1 (item 5.a) lists the requirements for the SG Water Level – High High Allowable Values but does not contain the information about the narrow range instrumentation span. This changes the CTS by moving the information from the Specification to the ITS Bases	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	1

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.3 – Instrumentation

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.3.2 LA.8	Table 3.3 – 3	CTS requirement listed in Table 3.3 – 3, for each ESFAS interlock function, an Allowable Value and a Setpoint column. ITS Table 3.3.2-1 includes only an Allowable Value column. This changes the CTS by moving the Setpoint information from the Specification to the Technical Requirements Manual (TRM).	Technical Requirements Manual	10 CFR 50.59	3
3.3.2 LA.9	4.3.2.1.2	CTS Surveillance Requirement 4.3.2.1.2 requires the ENGINEERED SAFETY FEATURES RESPONSE TIME test on each ESFAS function at least once per 18 months. The requirement additionally states, “one channel per function (will be tested) such that all channels are tested at least once per N times 18 months where N is the total number of redundant channels in a specific ESFAS function as shown in the “Total No. of Channels” Column of Table 3.3-3.” This changes the CTS by moving the information from the Specification to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.3.2 LA.10	Table 3.3-3 Action 22	CTS Action 22 for Table 3.3-3 requires for applicable instrumentation channels that, “With less than the Minimum Channels OPERABLE, within one hour determine by observation of the associated permissive annunciator window(s) that the interlock is in its required state for the existing plant condition.” ITS 3.3.2 in Table 3.3.2-1 for Action J requires, “One or more channels inoperable, verify interlock is in required state for existing unit condition within one hour.” The allowance provided by “determine by observation of the associated permissive annunciator window(s)” is not included in the ITS. This changes the CTS by moving the information from the Specification to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.3 – Instrumentation

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.3.2 LA.11	Table 3.3-3	CTS requirements in Table 3.3-3 for function 2.a, Containment Spray Manual, lists the total number of channels as 2 sets 2 switches/set. ITS 3.3.2 Table 3.3.2-1 for function 2.a, Containment Spray Manual Actuation, states the channel requirements as 2 per train/2 trains. This changes the CTS by moving the information from the Specification to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	1
3.3.2 LA.12	Table 3.3-3	CTS Table 3.3-3 for Engineered Safety Feature Actuation System Instrumentation has three columns stating various requirements for each function. These columns are labeled, "TOTAL NO. OF CHANNELS," "CHANNELS TO TRIP," and "MINIMUM CHANNELS OPERABLE." ITS Table 3.3.2-1 states the channel requirement for each ESFAS function as, "REQUIRED CHANNELS." This changes the CTS by stating all of the channel requirements for each function as the required channels and moving the information of the number of channels to trip and the minimum channels needed to maintain the function OPERABLE to the UFSAR.	UFSAR	10 CFR 50.59	1
3.3.3 LA.1	LCO 3.6.4.1 NOTE, 4.6.4.1 NOTE	CTS LCO 3.6.4.1 states two independent containment hydrogen analyzers (shared with the other unit) shall be OPERABLE. Notes to CTS 3.6.4.1 Actions and Surveillance Requirement 4.6 4.1 requires the OPERABILITY of the hydrogen analyzers to include the OPERABILITY of the associated heat tracing system. ITS 3.3.3 PAM Instrumentation requires two channels of hydrogen analyzers to be OPERABLE. This change moves CTS information regarding the hydrogen analyzer heat tracing system from the Specifications to the Technical Requirements Manual.	Technical Requirements Manual	10 CFR 50.59	1

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.3 – Instrumentation

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.3.3 LA.2	4.6.4.1	CTS SR 4.6.4.1 states each hydrogen analyzer shall be demonstrated OPERABLE by performing a CHANNEL CALIBRATION using a sample gas containing a specified gas concentration for hydrogen mixed with nitrogen. ITS SR 3.3.3.2 requires the hydrogen analyzers have a CHANNEL CALIBRATION. This change moves the CTS sample gas requirements to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.3.3 LA.3	LCO 3.6.4.1	CTS LCO 3.6.4.1 states two independent containment hydrogen analyzers (shared with the other unit) shall be OPERABLE. ITS 3.3.3 PAM Instrumentation requires two channels of hydrogen analyzers to be OPERABLE. This change moves CTS information regarding the hydrogen analyzer being shared between units from the Specifications to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	1
3.3.3 LA.4	Table 3.3-6	CTS Table 3.3-6 Radiation Monitoring Instrumentation lists the alarm/trip setpoint and measurement range for the High Range Area Monitors. ITS 3.3.3 PAM Instrumentation requires two channels of High Range Area monitors but does not state the measuring range or alarm/trip setpoint. This change moves the measurement range and alarm/trip setpoint from the Specifications to the Technical Requirements Manual (TRM).	Technical Requirements Manual	10 CFR 50.59	1

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
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4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report



Table R – Relocated Specifications and Removed Details  
ITS Section 3.3 – Instrumentation

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.3.4 LA.1	Table 3.3-9	CTS 3.3.3.5 LCO states that the auxiliary shutdown monitoring instrumentation channels in Table 3.3-9 shall be OPERABLE with readouts displayed external to the control room. CTS requirement in Table 3.3-9 lists the measuring range for each required channel and the location of the auxiliary shutdown panel where the instrumentation channel is remotely displayed. ITS LCO 3.3.4 states that the Remote Shutdown Instrumentation Functions shall be OPERABLE. This changes the CTS by moving the requirement for readouts displayed external to the control room, the location of the remote readouts (auxiliary shutdown panel) and the instrument channel ranges from the specification to the UFSAR.	UFSAR	10 CFR 50.59	1
3.3.4 LA.2	Table 3.3-9, Table 4.3-6	CTS 3.3.3.5 states that the auxiliary shutdown monitoring instrumentation in Table 3.3-9 shall be OPERABLE. CTS Table 4.3-6 lists the Surveillance Requirements for the functions in Table 3.3-9. ITS LCO 3.3.4 states that the Remote Shutdown Instrumentation Functions shall be OPERABLE. This changes the CTS by moving Tables 3.3-9 and 4.3-6 from the specification to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	1
3.3.5 LA.1	3.3.2.1 Action a	CTS 3.3.2.1 Action a requires that with an ESFAS instrumentation channel trip setpoint found less conservative than the value shown in the Allowable Values column of Table 3.3-4, the channel be declared inoperable and Action a be entered. ITS 3.3.5 LCO requires three channels per function to be OPERABLE and Action A requires an inoperable channel to be placed in trip within 72 hours. This changes the CTS by moving the discussion of the relationship between the Allowable Value and OPERABILITY from the Technical Specification to the Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3

Change Category:  
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2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.3 – Instrumentation

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.3.5 LA.2	Table 3.3-4, 3.3.2.1 LCO, Action a	CTS Table 3.3-4 functional unit 7, Loss of Power, lists the Trip Setpoints for the undervoltage and degraded voltage on the 4160-volt emergency bus. CTS 3.3.2.1 LCO and Action a state that the instrumentation channels' trip setpoints will be set, "consistent with the Trip Setpoint values." ITS 3.3.5 LCO and Actions do not contain these requirements. This changes the CTS by moving the Trip Setpoints and the trip setpoint adjustment, "consistent with the Trip Setpoint value," from the Technical Specifications to the Technical Requirements Manual (TRM).	Technical Requirements Manual	10 CFR 50.59	3
3.3.5 LA.3	Table 4.3-2 NOTE (5)	CTS Table 4.3-2 requires a quarterly (Q) CHANNEL FUNCTIONAL TEST (CFT) of the Loss of Power function. The Surveillance Requirement is modified by Note (5), which states, "Each train or logic channel shall be functionally tested up to and including input coil continuity testing to the ESF relays." ITS SR 3.3.5.1 requires a TADOT to be performed every 92 days. The ITS does not contain the requirements of Note 5. This changes the CTS by moving the requirement of Note 5 to the Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.3.5 LA.4	4.3.2.1.2	CTS Surveillance Requirement 4.3.2.1.2 requires the ENGINEERED SAFETY FEATURES RESPONSE TIME test on each ESFAS function at least once per 18 months. The requirement additionally states, "one channel per function (will be tested) such that all channels are tested at least once per N times 18 months where N is the total number of redundant channels in a specific ESFAS function as shown in the "Total No. of Channels" Column of Table 3.3-3." ITS SR 3.3.5.3 requires the ESFAS RESPONSE TIMES to be within limits. This changes the CTS by moving details of scheduling the test from the Specification to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3

Change Category:  
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2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.3 – Instrumentation

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.3.5 LA.5	Table 3.3-3	CTS Table 3.3-3 for Engineered Safety Feature Actuation System (ESFAS) instrumentation has three columns stating various requirements for each function. These columns are labeled, "TOTAL NO. OF CHANNELS," "CHANNELS TO TRIP," and "MINIMUM CHANNELS OPERABLE." ITS Table 3.3.2-1 states the channel requirement for each ESFAS function as, "REQUIRED CHANNELS." This changes the CTS by stating all of the channel requirements for each function as the required channels and moving the information of the number of channels to trip and the minimum channels needed to maintain the function OPERABLE to the UFSAR.	UFSAR	10 CFR 50.59	1
3.3.3.1 R.1	CTS 3.3.3.1	CTS 3.3.3.1 states the radiation monitoring instrumentation channels shown in Table 3.3-6 shall be OPERABLE with their alarm/trip setpoints within the specified limits. Portions of the Radiation Monitoring Instrumentation specification, as shown in the CTS markup, are addressed in ITS 3.4.15, RCS Leakage Detection Instrumentation, and ITS 3.3.3, Post Accident Monitoring (PAM) Instrumentation. Those portions are not addressed in this change. The Radiation Monitoring Instrumentation monitors radiation levels in selected plant locations and indicates abnormal or unusually high radiation levels. The radiation monitors are not assumed in the accident analyses to provide signals to prevent initiation of a DBA or transient or to mitigate a DBA or transient. This LCO does not meet the criteria for retention in the ITS; therefore, it will be retained in the Technical Requirements Manual.	Technical Requirements Manual	10 CFR 50.59	N/A

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.3 – Instrumentation

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.3.3.2 R.1	CTS 3.3.3.2	CTS 3.3.3.2 provides requirements on the Movable Incore Detector Instrumentation when required to monitor the flux distribution within the core. The Movable Incore Detector System is used for periodic surveillance of the power distribution, and for calibration of the excore detectors. This LCO does not meet the criteria for retention in the ITS; therefore, it will be retained in the Technical Requirements Manual.	Technical Requirements Manual	10 CFR 50.59	N/A
3.3.3.3 R.1	CTS 3.3.3.3	CTS 3.3.3.3 for Unit 1 states the Seismic Monitoring Instrumentation shown in Table 3.3-7 shall be OPERABLE. The Seismic Monitoring Instrumentation is used to record data for use in evaluating the effect of a seismic event. The Seismic Monitoring Instrumentation is not used to mitigate a DBA or transient. The Seismic Monitoring Instrumentation does not meet the criteria for retention in the ITS; therefore, it will be retained in the Technical Requirements Manual.	Technical Requirements Manual	10 CFR 50.59	N/A
3.3.3.4 R.1	CTS 3.3.3.4	CTS 3.3.3.4 for Unit 1 states the Meteorological Monitoring Instrumentation shown in Tables 3.3-8 and 4.3-5 shall be OPERABLE. The Meteorological Monitoring Instrumentation is used to record meteorological data for use in evaluating the effect of an accidental radioactive release from the plant. The Meteorological Monitoring Instrumentation is not used to mitigate a DBA or transient. The Meteorological Monitoring Instrumentation does not meet the criteria for retention in the ITS; therefore, it will be retained in the Technical Requirements Manual.	Technical Requirements Manual	10 CFR 50.59	N/A

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.3 – Instrumentation

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.3.3.9 R.1	CTS 3.3.3.9	Unit 1 CTS 3.3.3.9 requires the OPERABILITY of the loose parts detection instrumentation which can detect loose metallic parts in the Reactor Coolant System in order to avoid damage to the Reactor Coolant System components. The Unit 2 Technical Specifications do not contain this Specification. This LCO does not meet the criteria for retention in the ITS; therefore, it will be retained in the Technical Requirements Manual.	Technical Requirements Manual	10 CFR 50.59	N/A
3.3.3.11 R.1	CTS 3.3.3.11	CTS 3.3.3.11 requires the Explosive Gas Monitoring Instrumentation be OPERABLE. The Explosive Gas Monitoring Instrumentation is used to ensure that the oxygen limits of the Waste Gas Holdup System are not exceeded. The oxygen concentration limit in the Waste Gas Holdup Tank ensures that the concentration of potentially explosive gas mixtures in the Waste Gas Holdup System is maintained below the flammability limits. This instrumentation is not credited in preventing or mitigating any DBA or transient as the safety analysis concerning the Waste Gas Holdup System assumes a storage tank rupture with no mitigation. This LCO does not meet the criteria for retention in the ITS; therefore, it will be retained in the Technical Requirements Manual (TRM).	Technical Requirements Manual	10 CFR 50.59	N/A

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
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5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table A – Administrative Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.		Description of Change	ITS Requirement	CTS Requirement
3.4.1	A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various
3.4.1	A.2	CTS 3.2.5, Table 3.2-1, contains placeholders for DNB limits during 2 loop operation with loop stop valves open and during 2 loop operation with isolated loop stop valves closed. A footnote, designated **, states that values will be dependent on NRC approval of ECCS evaluation for these conditions. The ITS does not contain a similar place holder. This changes the CTS by eliminating references and place holders for DNB limits applying to two-loop operation.	None	Table 3.2-1
3.4.2	A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various
3.4.2	A.2	CTS 3.1.1.5 Action states, "With a Reactor Coolant System operating loop temperature, $T_{avg}$ , less than 541 °F, restore $T_{avg}$ to within its limit within 15 minutes or be in HOT STANDBY within the next 15 minutes." ITS 3.4.2, Action A, states that with $T_{avg}$ in one or more RCS loops not within limit, be in MODE 2 with $K_{eff} < 1.0$ within 30 minutes. This changes the CTS by eliminating the requirement to restore $T_{avg}$ to within its limit within 15 minutes. The change associated with entering MODE 2 with $K_{eff} < 1.0$ instead of HOT STANDBY is discussed in DOC A.3.	3.4.2 Action A	3.1.1.5
3.4.2	A.3	CTS 3.1.1.5 Action states, "With a Reactor Coolant System operating loop temperature, $T_{avg}$ , less than 541 °F, restore $T_{avg}$ to within its limit within 15 minutes or be in HOT STANDBY within the next 15 minutes." ITS 3.4.2, Action A, states that with $T_{avg}$ in one or more RCS loops not within limit, be in MODE 2 with $K_{eff} < 1.0$ within 30 minutes. This changes the CTS requirement to enter HOT STANDBY to enter MODE 2 with $K_{eff} < 1.0$ . Other changes to this Action are discussed in DOC A.2.	3.4.2 Action A	3.1.1.5
3.4.2	A.4	Unit 2 CTS 3.1.1.5 Applicability is modified by a footnote, designated with an asterisk, which states, "See Special Test Exception 3.10.3." ITS 3.4.2 does not contain this reference.	None	Unit 2, 3.1.1.5
3.4.3	A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various

Table A – Administrative Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.		Description of Change	ITS Requirement	CTS Requirement
3.4.3	A.2	CTS 3.4.9.1 states that the RCS temperature and pressure shall be limited “during heatup, cooldown, and inservice leak and hydrostatic testing.” CTS 3.4.9.1 is applicable at all times. ITS 3.4.3 states that the RCS pressure, temperature, and RCS heatup and cooldown rates shall be maintained. ITS 3.4.3 is applicable at all times. This changes the CTS by eliminating the LCO requirement that the limits must be met during heatup, cooldown, and inservice leak and hydrostatic testing.	3.4.3	3.4.9.1
3.4.3	A.3	CTS 3.4.9.1 Action states that with any of the P/T limits exceeded, restore the temperature and/or pressure to within the limit within 30 minutes; perform an engineering evaluation to determine the effects of the out-of limit condition on the structural integrity of the RCS; determine that the RCS remains acceptable for continued operations. ITS 3.4.3, Conditions A and C state that when the requirements of the LCO are not met, the parameters must be restored to within limits and it must be determined that the RCS acceptable for continued operation. ITS 3.4.3, Conditions A and C are modified by a Note which requires the determination that the RCS is acceptable for continued operation to be performed whenever the Condition is entered. This changes the CTS by explicitly stating that a determination that the RCS is acceptable for continued operation must be performed whenever the condition is entered. Other changes to the Actions are described in other DOCs.	3.4.3 Conditions A and C	3.4.9.1
3.4.3	A.4	CTS 3.4.9.1 Action states that with any of the P/T limits exceeded, restore the temperature and/or pressure to within the limit within 30 minutes; perform an engineering evaluation to determine the effects of the out-of limit condition on the structural integrity of the RCS; determine that the RCS remains acceptable for continued operations. ITS 3.4.3, Conditions A and C divide the Conditions. ITS 3.4.3 Condition A is applicable when the requirements of the LCO are not met in MODES 1, 2, 3, and 4. Condition C is applicable when the requirements of the LCO are not met any time in other than MODE 1, 2, 3, or 4. Any technical changes resulting from this division are discussed in other DOCs.	3.4.3 Conditions A and C	3.4.9.1
3.4.3	A.5	CTS 4.4.9.1.2 states that the reactor vessel material irradiation surveillance specimens shall be removed and examined to determine changes in material properties at the intervals required by 10 CFR 50, Appendix H. The results of these examinations shall be used to update the P/T limit curves. ITS 3.4.3 does not contain this Surveillance.	None	4.4.9.1.2
3.4.4	A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various

Table A – Administrative Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.		Description of Change	ITS Requirement	CTS Requirement
3.4.4	A.2	CTS 3.4.1.1 states that all reactor coolant loops shall be in operation. ITS 3.4.4 states that three reactor coolant loops shall be OPERABLE and in operation. This changes the CTS by requiring the RCS loops to be OPERABLE.	3.4.4	3.4.1.1
3.4.4	A.3	The Applicability of CTS 3.4.1.1 is MODES 1 and 2 with a footnote stating, "See Special Test Exception 3.10.4." ITS 3.4.4 Applicability does not contain the footnote or a reference to the Special Test Exception.	None	3.4.1.1
3.4.5	A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various
3.4.5	A.2	CTS 3.4.1.2, Unit 2 only, contains a footnote that states that the requirement to have one coolant loop in operation is exempted during the performance of the boron mixing tests as stipulated in License Condition 2.C(15)(f) and 2.C(20)(b). ITS 3.4.5 does not contain this footnote.	None	Unit 2 CTS 3.4.1.2
3.4.6	A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various
3.4.6	A.2	CTS Surveillance 4.4.1.3.1 states that the required RHR subsystems shall be demonstrated OPERABLE per Specification 4.7.9.2. ITS 3.4.6 does not contain this Surveillance.	None	4.4.1.3.1
3.4.7	A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various
3.4.7	A.2	CTS 3.4.1.3 is applicable in MODES 4 and 5. ITS 3.4.6 is applicable in MODE 4, ITS 3.4.7 is applicable in MODE 5 with the RCS loops filled, and ITS 3.4.8 is applicable in MODE 5 with the RCS loops not filled. Editorial changes are made in the division of the CTS requirements to the ITS.	3.4.7	3.4.1.3
3.4.7	A.3	CTS 3.4.1.3 states that with less than the required loops OPERABLE, immediately initiate corrective action to return the required loops to OPERABLE status as soon as possible and be in cold shutdown (MODE 5) within 20 hours. ITS 3.4.7 states that when an RHR loop is inoperable, immediately initiate action to restore a second RHR loop to OPERABLE status. This changes the CTS by eliminating the requirement to be in MODE 5 within 20 hours.	3.4.7	3.4.1.3



Table A – Administrative Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.		Description of Change	ITS Requirement	CTS Requirement
3.4.7	A.4	CTS 3.4.1.3 states that two coolant loops shall be OPERABLE, consisting of any combination of RCS and RHR loops. A footnote to the LCO states that the OPERABLE RHR loops may have inoperable offsite or emergency power sources in MODE 5. ITS 3.4.7 does not contain an allowance for an OPERABLE RHR loop to have an offsite or emergency power source inoperable.	None	3.4.1.3.
3.4.7	A.5	CTS 3.4.1.3 is applicable in MODES 4 and 5 and allows any combination of two coolant loops to satisfy the LCO. ITS 3.4.7 is applicable in MODE 5 with the RCS loops filled and requires one RHR loop to be OPERABLE and in operation. ITS 3.4.7 contains a Note which allows all RHR loops to be removed from operation during planned heatup to MODE 4 when at least one RCS loop is in operation.	LCO 3.4.7 Note	3.4.1.3
3.4.7	A.6	CTS Surveillance 4.4.1.3.1 states that the required RHR subsystems shall be demonstrated OPERABLE per Specification 4.7.9.2. ITS 3.4.7 does not contain this Surveillance.	None	4.4.1.3.1
3.4.8	A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various
3.4.8	A.2	CTS 3.4.1.3 is applicable in MODES 4 and 5 and requires two coolant loops, consisting of any combination of RCS and RHR loops, to be OPERABLE. ITS 3.4.8 is applicable in MODE 5 with the RCS loops not filled. In this condition, the RCS loops cannot be used for decay heat removal and all references to the RCS loops, steam generators, and Reactor Coolant Pumps are removed.	3.4.8	3.4.1.3
3.4.8	A.3	CTS 3.4.1.3 is applicable in MODES 4 and 5. ITS 3.4.6 is applicable in MODE 4, ITS 3.4.7 is applicable in MODE 5 with the RCS loops filled, and ITS 3.4.8 is applicable in MODE 5 with the RCS loops not filled. This changes the CTS by dividing the CTS 3.4.1.3 requirements into three specifications with different applicabilities. Editorial changes are made in the division of the CTS requirements to the ITS.	3.4.8	3.4.1.3
3.4.8	A.4	CTS 3.4.1.3 states that with less than the required loops OPERABLE, immediately initiate corrective action to return the required loops to OPERABLE status as soon as possible and be in cold shutdown (MODE 5) within 20 hours. ITS 3.4.8 states that when an RHR loop is inoperable, immediately initiate action to restore a second RHR loop to OPERABLE status. This changes the CTS by eliminating the requirement to be in MODE 5 within 20 hours.	3.4.8	3.4.1.3

Table A – Administrative Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.		Description of Change	ITS Requirement	CTS Requirement
3.4.8	A.5	CTS 3.4.1.3 states that two coolant loops shall be OPERABLE, consisting of any combination of RCS and RHR loops. A footnote to the LCO states that the OPERABLE RHR loops may have inoperable offsite or emergency power sources in MODE 5. ITS 3.4.8 does not contain an allowance for an OPERABLE RHR loop to have an offsite or emergency power source inoperable.	None	3.4.1.3
3.4.8	A.6	CTS Surveillance 4.4.1.3.1 states that the required RHR subsystems shall be demonstrated OPERABLE per Specification 4.7.9.2. ITS 3.4.8 does not contain this Surveillance.	None	4.4.1.3.1
3.4.9	A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various
3.4.9	A.2	CTS 3.4.4 requires that pressurizer water volume be less than or equal to 1240 cubic feet and Surveillance 4.4.4.1 requires verification of the volume every 12 hours. ITS 3.4.9 will require that pressurizer level be $\leq 93\%$ and SR 3.4.9.1 will require verification of the pressurizer level every 12 hours.	3.4.9 and SR 3.4.9.1	3.4.4 and 4.4.4.1
3.4.9	A.3	CTS 3.4.4, action b, applies when the pressurizer is inoperable for reasons other than inoperable group of pressurizer heaters. ITS 3.4.9, Condition A, applies when the pressurizer water level is not within limit. Changes to CTS 3.4.4, action a, to make it applicable to all causes of pressurizer heater inoperability are discussed in DOC L.1.	3.4.9 Condition A	3.4.4 Action b
3.4.10	A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various
3.4.10	A.2	CTS Surveillances 4.4.3.1 and 4.4.2 state that there are no Surveillance Requirements on the pressurizer safety valves other than those required by Specification 4.0.5. Specification 4.0.5 describes the Inservice Test requirements. ITS SR 3.4.10.1 states that it must be verified that each pressurizer safety valve is OPERABLE in accordance with the Inservice Testing Program and, following testing, lift settings shall be within $\pm 1\%$ .	SR 3.4.10.1	4.4.2 and 4.4.3.1

Table A – Administrative Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.4.10 A.3	CTS 3.4.2 requires a minimum of one pressurizer code safety valve to be OPERABLE with a lift setting of 2485 psig $\pm 3\%$ as-found. ITS 3.4.10 requires three pressurizer code safety valves to be OPERABLE with a lift setting of 2485 psig, $+2\%$ / $-3\%$ average with no single valve outside of $\pm 3\%$ . The requirement for three safety valves to be OPERABLE in MODE 4 is described in DOC M.3.	3.4.10	3.4.2
3.4.11 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various
3.4.11 A.2	CTS 3.4.3.2 describes the Actions to be taken when a PORV or block valve is inoperable. ITS 3.4.11 also describes Actions to be taken when a PORV or block valve is inoperable and contains a statement that separate condition entry is allowed for each PORV and each block valve.	3.4.11	3.4.3.2
3.4.11 A.3	CTS 3.4.3.2, Action A.1, applies with one or both PORV(s) inoperable solely because of excessive seat leakage. CTS 3.4.3.2, Action A.2, applies with one or both PORV(s) inoperable because of an inoperable backup nitrogen supply. CTS 3.4.3.2, Action A.4, applies with one PORV inoperable due to causes other than those addressed in Actions A.1, A.2, or A.3. CTS 3.4.3.2, Action A.5, applies with both PORVs inoperable such that Actions A.1, A.2, or A.3 above do not apply. ITS 3.4.11 ACTIONS divide the conditions of PORV inoperability into those in which the PORV is capable of being manually cycled and those which do not. ITS 3.4.11, Action A applies with one or more PORVs inoperable due to inoperable backup nitrogen supply and capable of being manually cycles. ITS 3.4.11, Action B, applies with one or more PORV inoperable for reasons other than Condition A and capable of being manually cycled. ITS 3.4.11, Action C, applies with one PORV inoperable and not capable of being manually cycled. ITS Action F applies with two PORVs inoperable and not capable of being manually cycled. This changes the CTS by dividing the existing conditions into those in which the PORV can, and cannot, be manually cycled.	3.4.11 Actions A, Action B, Action C and Action F	3.4.3.2 Action A.1, Action A.2, Action A.4 and Action A.5

Table A – Administrative Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.4.11 A.4	CTS 3.4.3.2, Action B.1, states that with one block valve inoperable, within 1 hour either restore the block valves to OPERABLE status or place the PORVs in manual control; restore the block valve to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours. CTS 3.4.3.2, Action B.2, states that with both block valves inoperable, within 1 hour either restore the block valves to OPERABLE status or place the PORVs in manual control; restore at least one block valve to OPERABLE status within the next hour, and restore the remaining inoperable block valve to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours. ITS 3.4.11, Action D, states that with one block valve inoperable, place the associated PORV in manual control and restore the block valve to OPERABLE status within 72 hours. ITS 3.4.11, Action G, states that with two block valves inoperable, restore one block valve to OPERABLE status within 2 hours. This changes the CTS by eliminating the actions for one block valve inoperable in the Condition for two block valves inoperable.	3.4.11 Action D and Action G	3.4.3.2 Action B.1 and Action B.2
3.4.12 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various
3.4.13 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various
3.4.13 A.2	CTS LCO 3.4.6.2.c states that the RCS leakage shall be limited to 1 GPM total primary-to-secondary leakage through all steam generators not isolated from the Reactor Coolant System and 500 gallons per day through any one steam generator not isolated from the Reactor Coolant System. ITS 3.4.13 contains the same limits on primary-to-secondary leakage, but does not contain the qualification that the steam generators must not be isolated from the RCS.	None	3.4.6.2.c
3.4.13 A.3	CTS LCO 3.4.13.c contains an asterisk reference to a footnote which states that CTS Specification 3.4.6.3 applies when in MODE 1 above 50% power. ITS Specification 3.4.13 does not contain this footnote.	None	3.4.13.c footnote

Table A – Administrative Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.4.13 A.4	CTS 4.4.5.0 states, "Each steam generator shall be demonstrated OPERABLE by performance of the following augmented inservice inspection program and the required Specification 4.0.5." ITS SR 3.4.13.2 states that the RCS operational leakage must be verified to be within limits in accordance with the Steam Generator Tube Surveillance Program. This changes the CTS by changing the reference to the required testing from the testing in CTS 3.4.5 and Specification 4.0.5 to the Steam Generator Tube Inspection Program in the ITS Administrative Controls.	SR 3.4.13.2	4.4.5.0
3.4.14 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various
3.4.14 A.2	ITS 3.4.14 contains ACTION Note 2 which states, "Enter applicable Conditions and Required Actions for systems made inoperable by an inoperable PIV." CTS 3.4.6.2 does not specifically state a similar requirement.	3.4.14 Action Note 2	None
3.4.14 A.3	CTS Surveillances 4.4.6.2.2.b and Unit 1 CTS Surveillance 4.4.6.2.2.a require testing of RCS PIVs prior to entering MODE 2. Unit 2 CTS Surveillance 4.4.6.2.2.a requires testing every 18 months. However, Surveillance 4.4.6.2.2.b can be used to meet this Surveillance, so the exception to enter MODES 3 and 4 prior to performing the testing applies. ITS SR 3.4.14.1 contains a Note which states that RCS PIV testing is not required to be performed in MODES 3 and 4.	SR 3.4.14.1 Note	4.4.6.2.2.a and 4.4.6.2.2.b
3.4.14 A.4	Unit 1 CTS Surveillance 4.4.6.2.2.a requires testing of RCS PIVs prior to entering MODE 2 after each refueling. Unit 2 CTS 4.4.6.2.2 requires testing of RCS PIVs in accordance with 4.0.5 (the Inservice Testing Program) and every 18 months. ITS SR 3.4.14.1 requires testing of RCS PIVs in accordance with the Inservice Testing (IST) Program and every 18 months.	SR 3.4.14.1	Unit 1 4.4.6.2.2.a and Unit 2 4.4.6.2.2
3.4.15 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various
3.4.15 A.2	CTS 3.4.6.1 does not include an explicit requirement to enter LCO 3.0.3 when all required monitors are inoperable. ITS 3.4.15 Required Action D.1 requires entering LCO 3.0.3 when all required monitors are inoperable. This changes CTS by adding a Required Action explicitly requiring entry into LCO 3.0.3, while the CTS would also require entry into LCO 3.0.3 based on not meeting the LCO and not having an explicit Condition to enter.	3.4.15 Action D.1	None

Table A – Administrative Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.4.15 A.3	CTS 3.4.6.1.b states, “The following Reactor Coolant System leakage detection systems shall be OPERABLE: ...b. The containment sump level and discharge flow measurement system.” ITS 3.4.15.a states, “The following RCS leakage detection instrumentation shall be OPERABLE: a. One containment sump (level or discharge flow) monitor;...” This changes CTS by more explicitly stating that any one of the components in the system is capable of monitoring the containment sump for Reactor Coolant System leakage.	LCO 3.4.15.a	3.4.6.1.b
3.4.16 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various
3.4.17 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various
3.4.17 A.2	CTS 3.4.1.1 states that all reactor coolant loops shall be in operation with power removed from the loop stop valve operators. ITS 3.4.4 states that all reactor coolant loops shall be OPERABLE and in operation. ITS 3.4.17 states that all RCS hot and cold leg loop isolation valves shall be open with power removed from each isolation valve operator. This changes the CTS by dividing the existing LCO requirements into two LCOs.	3.4.17	3.4.1.1
3.4.17 A.3	ITS 3.4.17 Actions are modified by a Note that states that separate condition entry is allowed for each RCS loop isolation valve. CTS does not contain this allowance.	3.4.17 Actions Note	None
3.4.18 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various
3.4.18 A.2	CTS 3.4.1.4 provides requirements on the boron concentration of an isolated loop in MODES 3, 4 and 5. CTS 3.4.1.5 provides requirements on opening a cold leg stop valve in all MODES. ITS 3.4.18 provides requirements on the startup of an isolated loop and is applicable in MODES 5 and 6. ITS 3.4.18 also refers to the minimum boron concentration requirements in MODE 6 imposed by LCO 3.9.1.	3.4.18	3.4.1.4 and 3.4.1.5
3.4.18 A.3	CTS 3.4.1.5 states, in part, that a reactor coolant loop cold leg stop valve shall remain closed until the reactor is subcritical by at least 1.77% $\Delta k/k$ . ITS 3.4.18 does not contain this requirement.	None	3.4.1.5

Table A – Administrative Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.4.18 A.4	CTS 3.4.1.5 states that a reactor coolant loop cold leg stop valve shall remain closed until certain requirements are met. The CTS 3.4.1.5 Action states that with the requirements of the specification not satisfied, suspend startup of the isolated loop. ITS 3.4.18, Action C.1, states that with the isolated loop hot or cold leg isolation valve open with LCO requirements not met, close the cold leg isolation valve immediately.	3.4.18 Action C.1	3.4.1.5
3.4.18 A.5	The LCO Note to CTS LCO 3.4.1.5 states that if a cold leg stop valve is closed for maintenance or testing and not reopened with 2 hours, A.C. power is to be removed from the valve and the breaker locked open. This changes the CTS by not requiring that A.C. power be removed from the valve. The change regarding locking the breaker open is discussed in DOC L.3.	None	3.4.1.5 Note
3.4.18 A.6	CTS LCO 3.4.1.6 requires that the pressurizer water volume be at least 450 cubic feet prior to filling a drained, isolated loop from the active volume of the RCS. CTS Action b addresses this limit not being met and Surveillance 4.4.1.6.2 verifies this volume. ITS LCO 3.4.18 requires pressurizer level to be $\geq 32\%$ . Action C addresses the condition of this pressurizer level not being met and SR 3.4.18.6 verifies this level is met. This changes the CTS by substituting an equivalent pressurizer level for the pressurizer volume contained in the CTS.	3.4.18 , Action C and SR 3.4.18.6	3.4.1.6
3.4.18 A.7	CTS 3.4.1.6, Action b, states that if pressurizer water volume is not maintained above the limit, the loop stop valves must be closed. Action b also requires that A.C. power be removed from the loop stop valves and the breakers be locked open. ITS 3.4.18, Action D applies in the same circumstance and requires that the isolation valves be closed. This changes the CTS by not requiring that A.C. power be removed from the valve. The change regarding locking the breaker open is discussed in DOC L.3.	3.4.18 Action D	3.4.1.6 Action b
3.4.18 A.8	CTS 3.4.1.6.a.3 requires a source range neutron flux monitor to be OPERABLE in MODES 5 and 6 during the filling of an isolated and drained portion of the RCS from the active RCS volume. The ITS does not contain this requirement.	None	3.4.1.6.a.3
3.4.18 A.9	CTS 3.4.1.6, Action c and e state if the requirement is not met, the loop shall be isolated and drained or apply Specification 3.4.1.4 and 3.4.1.5. ITS 3.4.18, Action E, applies in the same conditions and states the valves are to be closed immediately. This changes the CTS by eliminating the requirement that the loop be drained or Specifications 3.4.1.4 and 3.4.1.5 be applied.	3.4.18 Action E	3.4.1.6 Actions c and e
3.4.19 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various

Table A – Administrative Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.4.19 A.2	CTS 3.10.4 is applicable during operation below the P-7 Interlock Setpoint. LCO 3.4.19 is applicable in MODES 1 and 2 during startup and PHYSICS TESTS.	3.4.19	3.10.4
3.4.19 A.3	CTS 4.10.4.2 requires that a CHANNEL FUNCTIONAL TEST be performed on each Intermediate and Power Range channel and P-7 Interlock. ITS SR 3.4.19.2 requires that a CHANNEL OPERATIONAL TEST be performed on that equipment.	SR 3.4.19.2	4.10.4.2
3.4.19 A.4	CTS 3.10.4 states that the limitations of Specification 3.4.1.1 may be suspended during the performance of startup and PHYSICS TESTS provided the THERMAL POWER does not exceed the P-7 Interlock Setpoint and the Reactor Trip Setpoints on the OPERABLE Intermediate and Power Range Channels are set $\leq 35\%$ and $\leq 25\%$ of RATED THERMAL POWER, respectively. ITS 3.4.19 states that the requirement of LCO 3.4.4, "RCS Loops - MODES 1 and 2," may be suspended with THERMAL POWER $< P-7$ . This changes the CTS by eliminating the requirement that the Reactor Trip Setpoints on the OPERABLE Intermediate and Power Range Channels are set $\leq 35\%$ and $\leq 25\%$ of RATED THERMAL POWER, respectively.	None	3.10.4
CTS 3.7.9.2 A.1	In the conversion of the North Anna Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS), certain changes (wording preferences, editorial changes, reformatting, revised numbering, etc.) are made to obtain consistency with NUREG-1431, Rev. 1, "Standard Technical Specifications-Westinghouse Plants" (ISTS).	Various	Various
CTS 3.7.9.2 A.2	CTS 3.7.9.2 Action states that when an RHR subsystem is inoperable, it must be immediately restored to OPERABLE status or RCS temperature must be maintained below 350°F by alternate heat removal methods. It also states that the provisions of Specifications 3.0.3, 3.0.4, and 4.0.4 are not applicable. ITS 3.4.6 Actions do not contain exceptions to these specifications. Other changes to the CTS 3.7.9.2 Action are described in L.5.	None	3.7.9.2



Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.4.1 L.1	CTS 4.2.5.2 states that the Reactor Coolant System total flow rate shall be determined to be within its limit by measurement at least once per 18 months. ITS SR 3.4.1.4 requires measurement of the RCS total flow rate every 18 months and is modified by a Note which states, "Not required to be performed until 30 days after ≥ 90% RTP." This changes the CTS by relaxing the Surveillance Frequency in order to allow entry into MODE 1 to perform the test and requires the test to be performed within 30 days after exceeding 90% RTP.	SR 3.4.1.4	4.2.5.2	7
3.4.2 L.1	CTS Surveillance 4.1.1.5 states that the RCS T <sub>avg</sub> shall be determined to be ≥ 541 °F within 15 minutes prior to achieving reactor criticality and every 30 minutes when the RCS T <sub>avg</sub> < 547°F and the T <sub>avg</sub> - T <sub>ref</sub> Deviation Alarm is not reset. ITS Specification 3.4.2 requires RCS T <sub>avg</sub> in each loop to be verified to be ≥ 541 °F every 12 hours. Under ITS SR 3.0.4, a Surveillance must be performed within the specified Frequency prior to entering the MODE or other specified condition in the Applicability. This changes the CTS Surveillance Frequency by requiring that the RCS T <sub>avg</sub> for each loop be verified every 12 hours	SR 3.4.2.1	4.1.1.5	7
3.4.3 None	N/A	N/A	N/A	N/A
3.4.4 L.1	CTS 3.4.1.1 states that when the reactor coolant loop requirements are not met, the unit must be in HOT STANDBY within 1 hour. ITS 3.4.4 states that when the reactor coolant loop requirements are not met, the unit must be in MODE 3 within 6 hours. This changes the CTS by relaxing the Completion Time from 1 hour to 6 hours.	3.4.4	3.4.1.1	3

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.4.5 L.1	CTS 3.4.1.2, Note "*" states that all reactor coolant pumps may be deenergized for up to 1 hour provided no operations are permitted that would cause dilution of the reactor coolant system boron concentration. CTS 3.4.1.2, Action b , states that when no reactor coolant loops are in operation, all operations involving a reduction in boron concentration of the RCS must be suspended and action must be initiated to return the required loop to operation. ITS LCO 3.4.5 Note 1 states that all reactor coolant pumps may be removed from operation provided no operations are permitted that would cause introduction into the RCS, coolant with boron concentration less than required to meet the SDM of LCO 3.1.1. ITS 3.4.5, Action C states that if two required RCS loops are inoperable or the required RCS loop(s) are not in operation, operations that would cause introduction into the RCS, coolant with boron concentration less than required to meet the SDM of LCO 3.1.1 must be suspended, and action must be immediately initiated to restore one RCS loops to operable status and operation. This relaxes the CTS Required Actions by revising the action from suspending reductions in boron concentration to suspending introduction of coolant with a boron concentration less than required to meet LCO 3.1.1.	LCO 3.4.5 Note 1 and Action C	3.4.1.2 Note "*" and Action b	4
3.4.5 L.2	CTS 4.4.1.2.1 states that the required RCPs, if not in operation, shall be determined to be OPERABLE once per 7 days by verifying correct breaker alignment and indicated power availability. ITS SR 3.4.5.3 requires verification of correct breaker alignment and indicated power availability to the that is not in operation required pump every 7 days. It is modified by a Note which states, "Not required to be performed until 24 hours after a required pump is not in operation." This changes the CTS by not requiring the SR to be performed until 24 hours after a pump is taken out of operation.	SR 3.4.5.3 Note	4.4.1.2.1	7

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.4.6 L.1	CTS 3.4.1.3, Action a, states that with less than the two required coolant loops OPERABLE, action must be immediately initiated to return the required loops to OPERABLE status as soon as possible and to be in COLD SHUTDOWN within 20 hours. ITS 3.4.6, Action A, states that when one required loop is inoperable, action must be initiated immediately to restore the required loop to OPERABLE status. Action A also requires the plant to be in MODE 5 within 24 hours, but only if an RHR loop is OPERABLE. This changes the CTS by providing an exception to the requirement to be in MODE 5 and allowing 24 hours instead of 20 hours to reach MODE 5.	3.4.6 Action A	3.4.1.3 Action a	4
3.4.6 L.2	CTS 4.4.1.3.2 states that the required pumps, if not in operation, shall be determined to be OPERABLE once per 7 days by verifying correct breaker alignment and indicated power availability. ITS SR 3.4.6.3 requires verification of correct breaker alignment and indicated power availability to the required pump that is not in operation every 7 days. It is modified by a Note which states, "Not required to be performed until 24 hours after a required pump is not in operation." This changes the CTS by not requiring the SR to be performed until 24 hours after a pump is taken out of operation.	SR 3.4.6.3 Note	4.4.1.3.2	7

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.4.6 L.3	CTS 3.4.1.3, Note "*" states that all reactor coolant pumps and RHR pumps may be deenergized for up to 1 hour provided no operations are permitted that would cause dilution of the reactor coolant system boron concentration. CTS 3.4.1.2, Action b , states that when no coolant loop is in operation, all operations involving a reduction in boron concentration of the RCS must be suspended and action must be initiated to return the required loop to operation. ITS LCO 3.4.6 Note 1 states that all reactor coolant pumps and RHR pumps may be removed from operation provided no operations are permitted that would cause introduction into the RCS, coolant with boron concentration less than required to meet the SDM of LCO 3.1.1. ITS 3.4.6, Action B states that if two required loops are inoperable or the required loop(s) are not in operation, operations that would cause introduction into the RCS, coolant with boron concentration less than required to meet the SDM of LCO 3.1.1 must be suspended, and action must be immediately initiated to restore one loop to operable status and operation. This relaxes the CTS Required Actions by revising the action from suspending reductions in boron concentration to suspending introduction of coolant with a boron concentration less than required to meet LCO 3.1.1.	LCO 3.4.6 Note 1 and Action B	3.4.1.3 Note "*" and 3.4.1.2 Action b	4

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.4.7 L.1	CTS 3.4.1.3 states that a coolant loop used to satisfy the LCO requirements must consist of an RHR subsystem or a reactor coolant loop, its associated steam generator, and reactor coolant pump (RCP). CTS Surveillance 4.4.1.3.4 requires verification that one RHR loop or reactor coolant pump is in operation every 12 hours. ITS 3.4.7 states that a steam generator with a secondary side water level of 17% may be used to satisfy the LCO requirements. CTS SR 4.4.1.3.3 also states this requirement. This changes the CTS by eliminating the requirement that an RCS loop used to meet the LCO must have an OPERABLE RCP. ITS Surveillance 3.4.7.1 does not require verification than a reactor coolant pump is in operation.	None	3.4.1.3, 4.4.1.3.3 and 4.4.1.3.4	1
3.4.7 L.2	ITS 3.4.7 contains a Note which allows one required RHR loop to be inoperable for up to 2 hours for surveillance testing provided that the other RHR loop is OPERABLE and in operation. This allowance does not exist in CTS 3.4.1.3.	LCO 3.4.7 Note	3.4.1.3	1
3.4.7 L.3	CTS 4.4.1.3.2 states that the required pumps, if not in operation, shall be determined to be OPERABLE once per 7 days by verifying correct breaker alignment and indicated power availability. ITS SR 3.4.7.3 requires verification of correct breaker alignment and indicated power availability to the required pump that is not in operation every 7 days. It is modified by a Note which states, "Not required to be performed until 24 hours after a required pump is not in operation." This changes the CTS by not requiring the SR to be performed until 24 hours after a pump is taken out of operation.	SR 3.4.7.3 Note	4.4.1.3.2	7

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.4.7 L.4	CTS 3.4.1.3, Note "*" states that all reactor coolant pumps and RHR pumps may be deenergized for up to 1 hour provided no operations are permitted that would cause dilution of the reactor coolant system boron concentration. CTS 3.4.1.2, Action b , states that when no coolant loop is in operation, all operations involving a reduction in boron concentration of the RCS must be suspended and action must be initiated to return the required loop to operation. ITS LCO 3.4.7 Note 1 states that all reactor coolant pumps and RHR pumps may be removed from operation provided no operations are permitted that would cause introduction into the RCS, coolant with boron concentration less than required to meet the SDM of LCO 3.1.1. ITS 3.4.7, Action C states that if no required loops are OPERABLE or the required RHR loop is not in operation, operations that would cause introduction into the RCS, coolant with boron concentration less than required to meet the SDM of LCO 3.1.1 must be suspended, and action must be immediately initiated to restore one loop to operable status and operation. This relaxes the CTS Required Actions by revising the action from suspending reductions in boron concentration to suspending introduction of coolant with a boron concentration less than required to meet LCO 3.1.1.	LCO 3.4.7 Note 1 and Action C	3.4.1.3 Note "*" and Action b	4
3.4.8 L.1	ITS 3.4.8 contains a Note which allows one required RHR loop to be inoperable for up to 2 hours for surveillance testing provided that the other RHR loop is OPERABLE and in operation. This allowance does not exist in CTS 3.4.1.3.	LCO 3.4.8 Note	3.4.1.3	1

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.4.8 L.2	CTS 4.4.1.3.2 states that the required pumps, if not in operation, shall be determined to be OPERABLE once per 7 days by verifying correct breaker alignment and indicated power availability. ITS SR 3.4.8.2 requires verification of correct breaker alignment and indicated power availability to the required pump that is not in operation every 7 days. It is modified by a Note which states, "Not required to be performed until 24 hours after a required pump is not in operation." This changes the CTS by not requiring the SR to be performed until 24 hours after a pump is taken out of operation.	SR 3.4.8.2 Note	4.4.1.3.2	7
3.4.8 L.3	CTS 3.4.1.3, Note "*" states that all reactor coolant pumps and RHR pumps may be deenergized for up to 1 hour provided no operations are permitted that would cause dilution of the reactor coolant system boron concentration. CTS 3.4.1.2, Action b , states that when no coolant loop is in operation, all operations involving a reduction in boron concentration of the RCS must be suspended and action must be initiated to return the required loop to operation. ITS LCO 3.4.8 Note 1 states that all reactor coolant pumps and RHR pumps may be removed from operation provided no operations are permitted that would cause introduction into the RCS, coolant with boron concentration less than required to meet the SDM of LCO 3.1.1. ITS 3.4.8, Action B states that if no required loops are OPERABLE or the required RHR loop is not in operation, operations that would cause introduction into the RCS, coolant with boron concentration less than required to meet the SDM of LCO 3.1.1 must be suspended, and action must be immediately initiated to restore one loop to operable status and operation. This relaxes the CTS Required Actions by revising the action from suspending reductions in boron concentration to suspending introduction of coolant with a boron concentration less than required to meet LCO 3.1.1.	LCO 3.4.8 Note 1 and Action B	3.4.1.3 Note "*" and 3.4.1.2 Action b	4

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.4.9 L.1	CTS 3.4.4, action b, requires that the plant be in HOT STANDBY with the reactor trip breakers open within 6 hours. ITS 3.4.9, Action A, also requires that the plant be in MODE 3 within 6 hours for this Condition, but requires that the rods be fully inserted and the Rod Control System be in a condition incapable of rod withdrawal. This changes the CTS by not specifically requiring that the RTBs be open.	3.4.9 Action A	3.4.4 Action b	4
3.4.10 L.1	CTS 3.4.2 requires a safety valve to be OPERABLE in MODE 4. ITS 3.4.10 requires three safety valves to be OPERABLE in MODE 4 with all RCS cold leg temperatures > 235°F (Unit 1), 270°F (Unit 2). This changes the operating regime within MODE 4 in which pressurizer safety valves are required to be OPERABLE. The change in the number of required safety valves is discussed in DOC M.3	3.4.10	3.4.2	2
3.4.10 L.2	CTS 3.4.2 Action states that with no pressurizer safety valve OPERABLE in MODE 4, immediately suspend positive reactivity changes and place an OPERABLE RHR loop into operation. ITS 3.4.10 states that with one pressurizer safety valve inoperable in MODE 4 with all RCS cold leg temperature > 235 °F (Unit 1), 270°F (Unit 2), restore the valve to OPERABLE status within 15 minutes. If in MODE 4 the valve is not restored within that time, or if two or more pressurizer safety valves are inoperable, be in MODE 4 with any RCS cold leg temperature ≤ 235°F (Unit 1), 270°F (Unit 2) within 12 hours. This changes the CTS actions to be taken in MODE 4 when one or more pressurizer safety valves are inoperable.	3.4.10	3.4.2 Action	4

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements



Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.4.10 L.3	CTS LCOs 3.4.3.1 and 3.4.2 provide requirements on the pressurizer code safety valves in MODES 1, 2, 3, and 4. The ITS LCO 3.4.10 Applicability is modified by a Note which allows the lift settings to not be within the LCO limits during MODES 3 and 4 for the purpose of setting the pressurizer safety valves under ambient (hot) conditions. The exception is allowed for 54 hours following entry into MODE 3 provided a preliminary cold setting was made prior to heatup. This changes the CTS by allowing entry into MODES 3 and 4 without verifying that the pressurizer code safety valve lift settings are within the LCO limits.	LCO 3.4.10 Applicability Note	3.4.2 and 3.4.3.1	2
3.4.10 L.4	CTS 3.4.3.1 states that with one pressurizer code safety valve inoperable, be in HOT SHUTDOWN within 12 hours. ITS 3.4.10 states that with one pressurizer safety valve inoperable, be in MODE 4 with any RCS cold leg temperature ≤ 235 °F (Unit 1), 270 °F (Unit 2) within 24 hours. The change in the end condition is discussed in DOC M.2. This changes the CTS by allowing 24 hours vice 12 hours to reach the end condition.	3.4.10	3.4.3.1	3
3.4.11 L.1	CTS 4.4.3.2.2 requires testing of each block valve every 92 days. CTS 4.4.3.2.1.b.1 requires operating a PORV through one complete cycle of full travel at least once per 18 months. ITS SR 3.4.11.2 and 3.4.11.3 modify these CTS Surveillances with a Note which states, "Only required to be performed in MODES 1 and 2." This changes the CTS by allowing entry into MODE 3 prior to performing the Surveillance.	SR 3.4.11.2 and 3.4.11.3 Notes	4.4.3.2.2 and 4.4.3.2.1.b.1	7

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.4.11 L.2	CTS 3.4.3.2, Action d, applies when one or both block valves are inoperable. ITS 3.4.11, Action D and G, apply when one or both block valves, respectively, are inoperable. ITS 3.4.11, Actions D and G, are modified by a Note which states that the Required Actions are not applicable when the block valve is inoperable solely as a result of complying with Required Actions C.2 and F.2. ITS Required Actions C.2 and F.2 require power to be removed from the block valve and apply when the associated PORV is inoperable. This changes the CTS by eliminating the requirement to declare the block valve inoperable when power is removed because the associated PORV is inoperable.	None	3.4.3.2 Action d	4
3.4.11 L.3	CTS 3.4.3.2, Action A.3, states, "With one or both PORV(s) inoperable due to a malfunction in the PORV automatic control system, within 1 hour restore the affected automatic control system(s) to OPERABLE status or place and maintain the affected PORV(s) in manual control. states . . . . ITS 3.4.11 does not require the PORV automatic control system for OPERABILITY. This changes the CTS by eliminating the LCO requirement for the PORV automatic control system.	None	3.4.3.2 Action A.3	1
3.4.12 L.1	CTS 3.4.9.3, Action c, allows 8 hours to depressurize the RCS and establish an RCS vent when both PORVs are inoperable. ITS 3.4.12, Action G, allows to depressurize the RCS and establish an RCS vent when both PORVs are inoperable. This changes the CTS by allowing 12 hours vice 8 hours to depressurize and vent the RCS when both PORVs are inoperable.	3.4.12 Action G	3.4.9.3 Action c	3

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.4.12 L.2	CTS 3.4.9.3.e states that in the event either the PORVs or the RCS vent(s) are used to mitigate an RCS pressure transient, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 5.9.2 within 30 days. The report shall describe the circumstances initiating the transient, the effect of the PORVs or RCS vent(s) on the transient, and any corrective action necessary to prevent recurrence. The ITS does not have a similar requirement. This changes the CTS by eliminating a Special Report.	None	3.4.9.3.e	8
3.4.13 L.1	CTS Surveillance 4.4.6.2.1.d requires the performance of a Reactor Coolant System water inventory balance at least once per 72 hours during steady state operation. ITS SR 3.4.13.1 also requires that RCS operational leakage be verified to be within its limits by performance of an RCS water inventory balance every 72 hours during steady state operation. In addition, ITS SR 3.4.13.1 contains a Note which states that the Surveillance is not required to be performed until 12 hours after establishment of steady state operation. This changes the CTS by providing an exception to the Surveillance Frequency.	SR 3.4.13.1 Note	4.4.6.2.1.d	7
3.4.13 L.2	CTS Surveillances 4.4.6.2.1.a, 4.4.6.2.1.b, and 4.4.6.2.1.e require monitoring of the containment atmosphere particulate radioactivity monitor and the containment sump inventory and discharge every 12 hours, and the reactor head flange leakoff temperature every 24 hours. The ITS does not contain these Surveillance Requirements. This changes the CTS by eliminating these Surveillance Requirements.	None	4.4.6.2.1.a, 4.4.6.2.1.b, and 4.4.6.2.1.e	5

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.4.14 L.1	CTS 3.4.6.2 is applicable in MODES 1, 2, 3, and 4. ITS 3.4.14 is applicable in MODES 1, 2, and 3, and MODE 4, except valves in the residual heat removal (RHR) flow path when in, or during the transition to or from, the RHR mode of operation. SR 3.4.14.1, Note 2, exempts RHR PIVs from the leakage surveillance when in the shutdown cooling mode of operation. This changes CTS by exempting the RHR isolation PIVs from the leakage requirements when those valves are open.	SR 3.4.14.4 Note 2	3.4.6.2	1
3.4.14 L.2	CTS 3.4.6.2 does not contain an ACTION for more than one flow path with RCS PIVs inoperable. In this condition, entry into LCO 3.0.3 is required. ITS 3.4.14 contains ACTION Note 1 which allows separate condition entry for each flow path. This changes the CTS by allowing the Completion Times to apply to each flow path and prevents an LCO 3.0.3 entry should more than one RCS PIV flow path be inoperable.	3.4.14 Action Note 1	3.4.6.2	4
3.4.14 L.3	CTS 3.4.6.2, Action c, requires a shutdown to MODE 3 in 6 hours and MODE 5 in the following 30 hours when leakage from required RCS PIVs is greater than the limit. ITS 3.4.14, ACTION A allows 4 hours to restore RCS PIV leakage to within limit. If the RCS PIV leakage can not be restored within limit within 4 hours, the ITS requires a shutdown to MODE 3 in 6 hours and MODE 5 in the following 30 hours. This changes the CTS by allowing up to 4 hours to restore RCS PIV leakage to within limit instead of requiring an immediate shutdown.	3.4.14 Action A	3.4.6.2 Action c	4

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.4.14 L.4	CTS Surveillance 4.4.6.2.2.b requires testing of RCS PIVs prior to entering MODE 2 whenever the plant has been in Cold Shutdown for 72 hours or more and if leakage testing has not been performed in the previous 9 months. ITS SR 3.4.14.1 requires testing of RCS PIVs prior to entering MODE 2 whenever the unit has been in MODE 5 for 7 days or more, if leakage testing has not been performed in the previous 9 months. This changes the CTS by allowing shutdowns to MODE 5 from 3 to 7 days in length without requiring RCS PIV testing.	SR 3.4.14.1	4.4.6.2.2.b	7
3.4.14 L.5	CTS Surveillance 4.4.6.2.2.c requires testing of RCS PIVs following maintenance, repair, or replacement work on the valve. ITS 3.4.14 does not include this requirement. This changes the CTS by eliminating a post-maintenance Surveillance Requirement.	None	4.4.6.2.2.c	5
3.4.14 L.6	Unit 2 CTS Surveillance 4.4.6.2.2.d requires testing of RCS PIVs within 24 hours following a valve actuation. ITS SR 3.4.14.1 contains a Frequency which requires RCS PIVs to be tested within 24 hours following valve actuation due to automatic or manual action or flow through the valve. SR 3.4.14.1, Note 3, states that such testing does not have to be performed more than once on valves if a repetitive testing loop cannot be avoided. This changes the CTS by allowing valve testing to not be performed if it would result in a repetitive testing loop.	SR 3.4.14.1 Note 3	4.4.6.2.2.d	7

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.4.14 L.7	Unit 1 CTS Surveillance 4.4.6.2.2 requires each RCS PIV specified in CTS Table 3.4-1 be demonstrated OPERABLE by verifying leakage to be within its limit. The Unit 1 leakage limit is 1 gpm to 5 gpm, depending of the results of past tests. In addition, the minimum differential test pressure must be 150 psid or greater. The Unit 2 CTS Surveillance 4.4.6.2.2 requires each RCS PIV specified in CTS Table 3.4-1 be tested in accordance with Specification 4.0.5 (the Inservice Test Program). This requirement is modified by a footnote to LCO 3.4.6.2.f which states that the leakage limit for any RHR system isolation valve shall be 5 gpm. ITS SR 3.4.14.1 requires verification of leakage from each RCS PIV required to be tested equivalent to 0.5 gpm per nominal inch of valve size up to a maximum of 5 gpm at an RCS pressure $\geq 2215$ psig and $\leq 2255$ psig. This changes the Unit 1 and Unit 2 Surveillance acceptance criteria.	3.4.14.1	4.4.6.2.2	6
3.4.15 L.1	Not Used	N/A	N/A	N/A
3.4.15 L.2	CTS 3.4.6.1 ACTION does not include an exclusion allowing a delay in performing an RCS water inventory balance. ITS 3.4.15 REQUIRED ACTIONS A.1 and B.1.2 include NOTES that state, "Not required until 12 hours after establishment of steady state operation." This changes the CTS by allowing 12 hours after establishment of steady state operation AND after entering the respective Conditions before an RCS water inventory balance must be performed.	3.4.15 Required Actions A.1 and B.1.2 Notes	3.4.6.1	4

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.4.15 L.3	CTS 3.4.6.1.a states, “The following Reactor Coolant System leakage detection systems shall be OPERABLE: a. The containment atmosphere particulate and gaseous radioactivity monitoring system, and...” ITS 3.4.15.b states, “The following RCS leakage detection instrumentation shall be OPERABLE: ...One containment atmosphere radioactivity monitor (gaseous or particulate).” This changes the CTS by requiring only one containment atmosphere radioactivity monitor, gaseous or particulate, instead of two.	3.4.15.b	3.4.6.1.a	1
3.4.15 L.4	CTS 3.3.3.1 Table 4.3-3 requires a monthly Channel Functional Test for the containment RCS leakage detection radiation monitors. ITS SR 3.4.15.2 requires a Channel Operational Test be performed every 92 days. This changes the CTS by increasing the Frequency for the test from monthly to 92 days.	SR 3.4.15.2	Table 4.3-3	7
3.4.16 L.1	CTS 3.4.8 is applicable in MODES 1, 2, 3, 4, and 5. ITS 3.4.16 is applicable in MODES 1 and 2, and MODE 3 with RCS $T_{avg} \geq 500$ °F. This changes the CTS by reducing the MODES in which the LCO is applicable.	3.4.16	3.4.8	2
3.4.16 L.2	Not Used	N/A	N/A	N/A
3.4.16 L.3	CTS Table 4.4-4, Item 1, requires gross activity determination at least once per 72 hours. ITS SR 3.4.16.1 requires verification that the reactor coolant gross specific activity $\leq 100 / \bar{E}$ $\mu\text{Ci/gm}$ every 7 days. This changes the CTS by reducing the Frequency from 72 hours to 7 days.	SR 3.4.16.1	Table 4.4-4 Item 1	7

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.4.16 L.4	CTS Table 4.4-4, Item 4, requires isotopic analysis for iodine once per 4 hours when the specific activity exceeds $100 / \bar{E}$ $\mu\text{Ci/gm}$ . The ITS does not contain this Action. This changes the ITS by eliminating a conditionally performed Surveillance when gross activity exceeds $100 / \bar{E}$ $\mu\text{Ci/gm}$ .	None	Table 4.4-4 Item 4	4
3.4.16 L.5	CTS Table 4.4-4, Item 3, requires radiochemical determination of $\bar{E}$ once per 6 months. Footnote * states that the sample is to be taken after a minimum of 2 EFPD and 20 days of POWER OPERATION have elapsed since the reactor was last subcritical for 48 hours or longer. ITS SR 3.4.16.3 requires $\bar{E}$ to be determined from a sample taken in MODE 1 after a minimum of 2 effective full power days and 20 days of MODE 1 operation have elapsed since the reactor was last subcritical for $\geq 48$ hours. ITS SR 3.4.16.3 is modified by a Note which states, "Not required to be performed until 31 days after a minimum of 2 effective full power days and 20 days of MODE 1 operation have elapsed since the reactor was last subcritical for $\geq 48$ hours. This changes the CTS by putting a limit, 31 days, on when the Surveillance must be performed after the requisite conditions are met.	SR 3.4.16.3 Note	Table 4.4-4 Item 3 and Footnote "*"	7

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements



Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.4.17 L.1	CTS 3.4.1.1 requires that all reactor coolant loops be in operation with power removed from the loop stop valve operators. CTS 3.4.1.1 does not contain an Action for power available to one or more of the loop stop valve operators and, in this condition, LCO 3.0.3 would be entered. ITS 3.4.17 requires that when power is available to one or more loop isolation valve operators that the power must be removed within 30 minutes. The Actions are modified by a Note that states that separate condition entry is allowed for each RCS loop isolation valve. If power is not removed within 30 minutes, LCO 3.0.3 would be entered. This changes the CTS by allowing 30 minutes per isolation valve to remove power from the isolation valve operator before entering LCO 3.0.3.	3.4.17 Actions Note	3.4.1.1	4

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.4.18 L.1	CTS 3.4.1.4 states that the boron concentration of an isolated loop is to be maintained greater than equal to the boron concentration corresponding to the SHUTDOWN MARGIN requirements of Specification 3.1.1.1 or 3.1.1.2 as applicable for the active volume of the Reactor Coolant System unless the loop has been drained for maintenance. CTS 3.4.1.4 Action contains the actions to be taken when the loop isolation valves are closed but the boron concentration of the isolated loop is less than required. CTS Surveillance 4.4.1.4 requires that the boron concentration of the isolated loop must be verified to be within limits at least once per 24 hours. ITS 3.4.18 states that the hot and cold leg isolation valves of a filled, isolated loop must remain closed if the boron concentration of the isolated loop is less than the boron concentration required to meet the SDM of LCO 3.1.1 or the boron concentration of LCO 3.9.1. If the loop isolation valves are opened without the isolated loop boron concentration requirement being met, the loop isolation valves must be closed. This changes the CTS LCO requirement (and the corresponding Action and Surveillance) by eliminating the ongoing requirement that the boron concentration of an isolated loop be equal to or greater than the concentration of the operating loops unless the loop has been drained for maintenance and applying requirements on boron concentration only when a loop isolation valve is to be opened. The addition to reference to LCO 3.9.1 is addressed in DOC A.2.	None	3.4.1.4 and 4.4.1.4	1

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.4.18 L.2	CTS Surveillance 4.4.1.6.3 requires that the source range neutron flux monitor be demonstrated OPERABLE by a CHANNEL FUNCTIONAL TEST within 8 hours prior to commencing isolated loop backfill and a CHANNEL CHECK at least once per 15 minutes during backfilling of an isolated loop. ITS 3.4.18 does not contain these requirements. This changes the CTS by eliminating a CHANNEL FUNCTIONAL TEST and periodic CHANNEL CHECKS from the process of backfilling a drained loop from the active RCS volume.	None	4.4.1.6.3	5
3.4.18 L.3	CTS LCO 3.4.1.5 and CTS LCO 3.4.1.6 require that the stop valves remain closed with A.C. power removed and its breaker locked open unless certain conditions are satisfied. The CTS LCO 3.4.1.5 Note *, CTS 3.4.1.5 Action, and CTS 3.4.1.6 Actions b and d also specify that A.C. power be removed from the valve(s) and the breaker locked open. ITS 3.4.18 and ITS 3.4.18 Action F state that an RCS loop shall remain isolated with power removed from the valve unless certain conditions are satisfied. This changes the CTS by removing the LCO requirement (and corresponding Action and Notes requirements) that the isolation valve breaker be locked open.	None	3.4.1.5 and 3.4.1.6	1

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
3.4.18 L.4	CTS 3.4.1.6.c.2 states that the source range neutron flux count rate shall be no more than a factor of 2 above the initial count rate during the filling of a drained RCS loop from the active volume of the RCS. CTS 3.4.1.6 Action d, states that if the source range count rate increase by a factor of two over the initial count rate, then the loop stop valves must be closed, power removed, and the breakers locked open. Furthermore, it states that no attempt shall be made to reopen the loop stop valves until the reason for the count rate increase has been determined. The ITS does not contain these requirements. This changes the CTS by eliminating the requirement to maintain count rate less than twice the initial count rate and the corresponding Action.	None	3.4.1.6.c.2 and 3.4.1.6 Action d	1
3.4.19 L.1	CTS 4.10.4.2 requires that tests be performed on each Intermediate and Power Range channel and P-7 Interlock within 12 hours prior to initiating startup or PHYSICS TESTS. ITS SR 3.4.19.2 requires that the testing be performed prior to initiation of startup and PHYSICS TESTS. This changes the CTS by eliminating the time period prior to initiation of startup and PHYSICS TESTS within which the testing must be performed.	None	4.10.4.2	7
CTS 3.7.9.2 L.1	CTS Surveillance 4.7.9.2.c.2 requires each RHR pump in the subsystem flowpath to be verified OPERABLE per Specification 4.0.5. The ITS does not contain this Surveillance.	None	4.7.9.2.c.2	5

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
CTS 3.7.9.2 L.2	CTS Surveillance 4.7.9.2.b.1 requires, every 31 days, the cycling of each testable, remote or automatically operated valve in the RHR subsystem flowpath through at least one complete cycle. CTS Surveillance 4.7.9.2.b.2 states that the correct position of each manual valve in the RHR subsystem flowpath that is not locked, sealed, or otherwise secured in position must be verified at least once per 31 days. CTS Surveillance 4.7.9.2.b.3 requires that the correct position of each remote or automatically operated valve in the RHR subsystems flowpath must be verified to be in the correct position at least once per 31 days. The ITS does not contain these requirements.	None	4.7.9.2.b.1, 4.7.9.2.b.2 and 4.7.9.2.b.3	5
CTS 3.7.9.2 L.3	CTS Surveillance 4.7.9.2.a requires that the RHR subsystem be demonstrated OPERABLE by verifying isolation of the RHR system prior to the Reactor Coolant System pressure exceeding 500 psig by closing and de-energizing both remote operated RHR suction isolation valves and locking the associated breakers. The ITS does not contain this requirement.	None	4.7.9.2.a	5
CTS 3.7.9.2 L.4	CTS 3.7.9.2 states that one RHR subsystem shall be OPERABLE in MODES 4 and 5. CTS 3.4.1.3 states that at least two coolant loops shall be OPERABLE and at least one must be in operation in MODES 4 and 5. The two coolant loops may consist of any combination of RCS and RHR loops. ITS 3.4.6 states that two loops consisting of any combination of RCS loops and RHR loops shall be OPERABLE and one loop shall be in operation. ITS 3.4.7 and 3.4.8 require on RHR subsystem to be OPERABLE in MODE 5. This changes the CTS by eliminating the requirement that one RHR subsystem be OPERABLE in MODE 4.	None	3.7.9.2	1

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table L – Less Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement	Change Type
CTS 3.7.9.2 L.5	CTS 3.7.9.2 Action states that when no RHR subsystem is OPERABLE, immediate action must be taken to restore an RHR subsystem to OPERABLE status or maintain RCS temperature less than 350°F by use of alternate heat removal methods. ITS 3.4.6 states that when one required cooling loop is inoperable, immediate action must be taken to restore a second loop to OPERABLE status. That second loop may be an RHR loop or an RCS loop. ITS 3.4.7 and 3.4.8 states that if no RHR loop is OPERABLE in MODE 5, immediate action must be taken to restore the inoperable loop. This changes the CTS by eliminating the requirement to immediately restore an RHR loop to OPERABLE status in MODE 4. The requirement to maintain RCS temperature less than 350°F by alternate heat removal methods is unchanged as, in this context, the OPERABLE RCS loop is an alternate heat removal method and heatup above 350°F (i.e., to MODE 3) is prohibited by ITS LCO 3.0.4.	None	3.7.9.2	4

- Change Category:
- 1 - Relaxation of LCO Requirements
  - 2 - Relaxation of Applicability
  - 3 - Relaxation of Completion Time
  - 4 - Relaxation of Required Action
  - 5 - Deletion of Surveillance Requirement
  - 6 - Relaxation Of Surveillance Requirement Acceptance Criteria
  - 7 - Relaxation Of Surveillance Frequency
  - 8 - Deletion of Reporting Requirements

Table M – More Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.4.1 None	N/A	N/A	N/A
3.4.2 None	N/A	N/A	N/A
3.4.3 M.1	CTS 3.4.9.1 Action states that with any of the P/T limits exceeded, restore the temperature and/or pressure to within the limit within 30 minutes; perform an engineering evaluation to determine the effects of the out-of limit condition on the structural integrity of the RCS; determine that the RCS remains acceptable for continued operations or be in at least hot standby within the next 6 hours and reduce the RCS T <sub>avg</sub> and pressure to less than 200°F and 500 psig, respectively, within the following 30 hours. ITS 3.4.3, Condition C, states that with the requirements of the LCO not met any time in other than in MODE 1, 2, 3, or 4, initiate immediate action to restore the parameter(s) to within limits and determine the RCS is acceptable for continued operation prior to entering MODE 4. This changes the CTS by requiring immediate action to restore the parameters to within limits when the LCO is not met any time in other than MODE 1, 2, 3, or 4 when the CTS allows 30 minutes to restore parameters.	3.4.3 Condition C	3.4.9.1
3.4.3 M.2	CTS 3.4.9.1 Action states that if the P/T limits are exceeded, an evaluation must be performed to determine if the RCS remains acceptable for continued operation. No time limit is given for the performance of this evaluation. ITS 3.4.3, Actions A.2 and C.2 states that when the LCO is not met, an evaluation to be performed to determine if the RCS is acceptable for continued operation within 72 hours.	3.4.3 Actions A.2 and C.2	3.4.9.1
3.4.4 None	N/A	N/A	N/A
3.4.5 M.1	CTS 3.4.1.2, Action a, states that when less than the two required reactor coolant loops are OPERABLE, the required loop must be restored to OPERABLE status within 72 hours. CTS 3.4.1.2, Action b, states that when no reactor coolant loops are in operation, all operations involving a reduction in boron concentration of the RCS must be suspended and action must be initiated to return the required loop to operation. ITS 3.4.5, Action A, states that when one of the two required RCS loops is inoperable, it must be restored within 72 hours. Action C states that if two required RCS loops are inoperable or the required RCS loop(s) are not in operation, the Rod Control System must be placed in a condition incapable of rod withdrawal, operations that would cause introduction into the RCS, coolant with boron concentration less than required to meet the SDM of LCO 3.1.1 must be suspended, and action must be immediately initiated to restore one RCS loops to operable status and operation. This changes the CTS by revising the actions to be taken if both required RCS loops are inoperable. The change in the action from suspending reductions in boron concentration to suspending introduction of coolant with a boron concentration less than required to meet LCO 3.1.1 is described in DOC L.1.	3.4.5 Actions A and C	3.4.1.2

Table M – More Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.4.5 M.2	CTS 3.4.1.2 requires two reactor coolant loops to be OPERABLE with each loop consisting of an RCS loop, its associated steam generator, and the reactor coolant pump. CTS 3.4.1.2 does not contain any OPERABILITY requirements for the steam generator. ITS SR 3.4.5.2 requires verification that each required steam generator has a secondary side water level $\geq 17\%$ (narrow range instrumentation) every 12 hours.	SR 3.4.5.2	3.4.1.2
3.4.5 M.3	CTS 3.4.1.2 states that at least two reactor coolant loops shall be OPERABLE and at least one must be in operation. This requirement is modified by a note that states that all reactor coolant pumps may be de-energized for up to 1 hour. ITS 3.4.5 contains the same allowance, but limits the use of the 1 hour exception to once per 8 hour period.	3.4.5	3.4.1.2
3.4.6 M.1	CTS 3.4.1.3, Action a, states that when less than the two required coolant loops are OPERABLE, immediate action must be taken to return the required loops to OPERABLE status as soon as possible and the unit must be in cold shutdown within 20 hours. CTS 3.4.1.3, Action b, states that when no coolant loops are in operation, all operations involving a reduction in boron concentration of the RCS must be suspended and action must be initiated to return the required coolant loop to operation. ITS 3.4.6, Action A applies when one of the required coolant loops is inoperable. ITS 3.4.6, Action B, states that if two of the required coolant loops are inoperable or the required loop is not in operation, operations that would cause introduction into the RCS, coolant with boron concentration less than required to meet the SDM of LCO 3.1.1 must be suspended, and action must be immediately initiated to restore one coolant loop to operable status and operation. This changes the CTS by revising the actions to be taken if both required coolant loops are inoperable. Both the CTS and the ITS require immediate initiation of corrective action to return the required loops to OPERABLE status. The change in the action from suspending reductions in boron concentration to suspending introduction of coolant with a boron concentration less than required to meet LCO 3.1.1 is described in DOC L.3.	3.4.6 Actions A and B	3.4.1.3 Actions a and b
3.4.6 M.2	CTS 3.4.1.3 states that at least two coolant loops shall be OPERABLE and at least one must be in operation. This requirement is modified by a note that states that all reactor coolant pumps and residual heat removal pumps may not be in operation for up to 1 hour. ITS 3.4.6 contains the same allowance, but limits the use of the 1 hour exception to once per 8 hour period.	3.4.6	3.4.1.3



Table M – More Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.4.7 M.1	CTS 3.4.1.3 states that two coolant loops must be OPERABLE in MODES 4 and 5 and one loop must be in operation. The coolant loops may be any combination of RCS loops and RHR loops. ITS 3.4.7 states that one RHR loop must be OPERABLE and in operation in MODE 5 and an additional loop, consisting of another OPERABLE RHR loop or a steam generator filled to at least 17%, must be available. This changes the CTS by requiring one RHR loop to be OPERABLE and in operation in MODE 5 when an RCS or RHR loop is allowed by the CTS. The change to RCS loop requirements is described in L.1.	3.4.7	3.4.1.3.
3.4.7 M.2	CTS 3.4.1.3, Action a, states that when less than the two required coolant loops are OPERABLE, immediate action must be taken to return the required loops to OPERABLE status as soon as possible and the unit must be in cold shutdown within 20 hours. CTS 3.4.1.3, Action b , states that when no coolant loops are in operation, all operations involving a reduction in boron concentration of the RCS must be suspended and action must be initiated to return the required coolant loop to operation. ITS 3.4.7, Action A applies when one required RHR loop is inoperable and one RHR loop is OPERABLE or when one or more required steam generator secondary side water levels are not within limits and one RHR loop is OPERABLE and requires immediate action to restore the RHR or steam generator. ITS 3.4.7, Action B states that when one or more required SGs secondary side water levels are not within limits and one RHR loop is OPERABLE, action must be taken to restore a second RHR loop to OPERABLE status or to restore the SG secondary side water level within limit immediately. ITS 3.4.7, Action C, states that if no required RHR loops are OPERABLE or if the required RHR loop is not in operation, all operations cause introduction into the RCS, coolant with boron concentration less than required to meet SDM of LCO 3.1.1 be suspended and action must be immediately initiated to restore one RHR loop to OPERABLE status and operation. This changes the CTS by revising the actions to be taken if both RHR loops are inoperable. The change in the action from suspending reductions in boron concentration to suspending introduction of coolant with a boron concentration less than required to meet LCO 3.1.1 is described in DOC L.4.	3.4.7 Actions A, B and C	3.4.1.3 Actions a and b
3.4.7 M.3	CTS 3.4.1.3 states that at least two coolant loops shall be OPERABLE and at least one must be in operation. This requirement is modified by a note that states that all reactor coolant pumps and residual heat removal pumps may be de-energized for up to 1 hour. ITS 3.4.7 also allows the RHR pumps to be stopped for 1 hour, but limits the use of the 1 hour exception to once per 8 hour period.	3.4.7	3.4.1.3

Table M – More Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.4.8 M.1	CTS 3.4.1.3, Action a, states that when less than the two required coolant loops are OPERABLE, immediate action must be taken to return the required loops to OPERABLE status as soon as possible and the unit must be in cold shutdown within 20 hours. CTS 3.4.1.3, Action b , states that when no coolant loops are in operation, all operations involving a reduction in boron concentration of the RCS must be suspended and action must be initiated to return the required coolant loop to operation. ITS 3.4.8, Action A applies when one required RHR loop is inoperable and requires immediate action to restore the RHR loop to OPERABLE status. ITS 3.4.8, Action B, states that if no required RHR loops are OPERABLE or the required RHR loop is not in operation, all operations involving a reduction in RCS boron concentration must be suspended and action must be immediately initiated to restore one RHR loop to OPERABLE status and operation. This changes the CTS by revising the actions to be taken if both RHR loops are inoperable from immediate initiation of corrective action to return the required loops to OPERABLE status to take immediate action to suspend RCS boron concentration reductions and restore an RHR loop to OPERABLE status and operation.	3.4.8 Actions A and B	3.4.1.3, Actions a and b
3.4.8 M.2	CTS 3.4.1.3 contains an allowance for all reactor coolant pumps or RHR pumps to be de-energized for up to one hour. ITS 3.4.8 allows all RHR pumps to be removed from operation for ≤ 15 minutes for switching from one loop to the other only and also requires that no draining operations to further reduce the RCS water volume are permitted.	3.4.8	3.4.1.3
3.4.9 M.1	ITS SR 3.4.9.2 requires verification that the capacity of the required groups of pressurizer heaters is ≥ 125 kW every 18 months. This requirement does not exist in the CTS.	SR 3.4.9.2	None
3.4.10 M.1	CTS 3.4.3.1, Action, states that when one pressurizer safety valve is inoperable, it must be restored to OPERABLE status within 15 minutes or be in hot shutdown within 12 hours. ITS 3.4.10 states that when one pressurizer safety valve is inoperable, it must be restored to OPERABLE status within 15 minutes or be in MODE 3 within 6 hours and in MODE 4 with any RCS cold leg temperature ≤ 235 °F (Unit 1), 270°F (Unit 2) within 12 hours. This changes the CTS by requiring the unit to be in MODE 3 in 6 hours. Other changes are discussed in DOC M.2.	3.4.10	3.4.3.1
3.4.10 M.2	CTS 3.4.3.1, Action, states that when one pressurizer safety valve is inoperable, it must be restored to OPERABLE status within 15 minutes or be in hot shutdown within 12 hours. ITS 3.4.10 states that when one pressurizer safety valve is inoperable, it must be restored to OPERABLE status within 15 minutes or be in MODE 3 within 6 hours and in MODE 4 with any RCS cold leg temperature ≤ 235 °F (Unit 1), 270°F (Unit 2) within 12 hours. This changes the CTS by requiring the unit to be in MODE 4 with any RCS cold leg temperature ≤ 235 °F (Unit 1), 270°F (Unit 2) in 12 hours instead of being required to be in MODE 4. Other changes are discussed in DOC M.1.	3.4.10	3.4.3.1

Table M – More Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.4.10 M.3	CTS 3.4.2 requires one pressurizer code safety valve to be OPERABLE in MODE 4. ITS 3.4.10 requires three pressurizer code safety valves to be OPERABLE in MODE 4 when all RCS cold leg temperatures > 235 °F (Unit 1), 270°F (Unit 2). This changes the CTS by requiring three safety valves to be OPERABLE in MODE 4.	3.4.10	3.4.2
3.4.11 M.1	CTS 4.4.3.2.1.b.2 requires operating the solenoid air control valves and check valves on the associated accumulators in the PORV control systems through one complete cycle of full travel every 18 months. ITS SR 3.4.11.4 requires performing a complete cycle of each solenoid control valve and check valve for the accumulators in the PORV control systems every 18 months. This changes the CTS by specifying that each solenoid control valve and check valve in the normal air and backup nitrogen PORV control systems must be tested every 18 months.	SR 3.4.11.4	4.4.3.2.1.b.2
3.4.11 M.2	CTS 3.4.3.2, Actions A.6 and B.3, state, "The provisions of Specification 3.0.4 are not applicable." ITS LCO 3.4.11 does not contain a similar allowance. This changes the CTS by eliminating an explicit Specification 3.0.4 exception.	None	3.4.3.2 Actions A.6 and B.3
3.4.12 M.1	CTS 3.4.9.3, Action f, states that the provisions of Specification 3.0.4 are not applicable. ITS 3.4.12 does not contain an equivalent Action, but SR 3.4.12.7 states that a COT must be performed on each required PORV, excluding actuation, and the SR is modified by a Note that states that the test is not required to be met until 12 hours after decreasing RCS cold leg temperature to ≤ 235°F (Unit 1), 270°F (Unit 2).	SR 3.4.12.7 Note	3.4.9.3 Action f
3.4.12 M.2	CTS 3.5.3, LCO Note #, states that a maximum of one charging pump and one low head safety injection pump shall be OPERABLE and capable of injecting into the RCS whenever the temperature of one or more of the RCS cold legs is less than or equal to 235°F (Unit 1), 270°F (Unit 2). The only exception to this requirement is two charging pumps may be OPERABLE and capable of injecting into the RCS during pump switch operation. There are no CTS Actions to be taken if these requirements are not met, so 3.0.3 would be entered. ITS LCO 3.4.12 contains the same requirements on the pumps, and Actions 3.4.12.A and 3.4.12.B state that if two LHSI pumps or two or more charging pumps, respectively, are capable of injection into the RCS, action must be initiated immediately to limit to a maximum of one LHSI pump and charging pump capable of injecting into the RCS.	LCO 3.4.12, 3.4.12 Actions A and.B	3.5.3 Note "#"

Table M – More Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.4.12 M.3	CTS 3.5.3, LCO Note #, states that a maximum of one charging pump and one low head safety injection pump shall be OPERABLE and capable of injecting into the RCS whenever the temperature of one or more of the RCS cold legs is less than or equal to 235°F (Unit 1), 270°F (Unit 2). The only exception to this requirement is two charging pumps may be OPERABLE and capable of injecting into the RCS during pump switch operation. CTS SR 4.5.3.4 states that every 12 hours it must be verified that a maximum of one charging pump and one low head safety injection pump is OPERABLE and capable of injecting into the RCS whenever the temperature of one or more of the RCS cold legs is less than or equal to 235°F (Unit 1), 270°F (Unit 2). It is modified by a footnote that states that two charging pumps may be OPERABLE and capable of injecting into the RCS during pump switching operations. ITS LCO 3.4.12 states that a maximum of one charging pump and one LHSI pump may be capable of injecting into the RCS. ITS 3.4.12, LCO Note states that two charging pumps may be capable of injecting into the RCS during pump swap operation for ≤ 1 hour. This changes the CTS by limiting the amount of time that two charging pumps may be capable of injecting into the RCS for pump swap operations to ≤ 1 hour.	LCO 3.4.12, LCO 3.4.12 Note	3.5.3 Note "#", 4.5.3.4
3.4.12 M.4	The CTS LTOP specifications provide no limitations on the accumulators. ITS LCO 3.4.12 states that the LTOP system shall be OPERABLE and the accumulators shall be isolated with power removed from the accumulator isolation valve operators. The ITS LCO contains a Note which states, "Accumulator isolation is only required when accumulator pressure is greater than the PORV lift setting." ITS 3.4.12, Action C, states that if an accumulator is not isolated or power is available to an accumulator isolation valve operator when the accumulator pressure is greater than the PORV lift setting, the affected accumulator must be isolated immediately and power must be removed from the isolation valve operator within 1 hour. If this isolation is not accomplished, ITS 3.4.12, action D, states that the RCS cold leg temperature must be increased to above the LTOP arming temperature (235°F (Unit 1), 270°F (Unit 2)) or the affected accumulator must be depressurized to less than the PORV lift setting. Twelve hours is allowed for these actions. ITS SR 3.4.12.3 requires verification that each accumulator is isolated with power removed from the isolation valve operator every 12 hours.	LCO 3.4.12, LCO 3.4.12 Note, Actions C and D, and SR 3.4.12.3	None
3.4.13 None	N/A	N/A	N/A
3.4.14 M.1	The Unit 1 CTS does not require testing of RCS PIVs following actuation. ITS SR 3.4.14.1 contains a Frequency which requires RCS PIVs to be tested within 24 hours following valve actuation due to automatic or manual action or flow through the valve. SR 3.4.14.1, Note 3, states that such testing does not have to be performed more than once on valves if a repetitive testing loop cannot be avoided.	SR 3.4.14.1 and SR 3.4.14.1 Note 3	None

Table M – More Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.4.15 M.1	CTS 3.4.6.1 does not include an Action to analyze grab samples of the containment atmosphere if the required containment atmosphere radioactivity monitor is inoperable. ITS 3.4.15 Required Action B.1.1 states, "Analyze grab samples of the containment atmosphere." This changes CTS by adding a Required Action.	3.4.15 Action B.1.1	3.4.6.1
3.4.16 None	N/A	N/A	N/A
3.4.17 M.1	CTS 3.4.1.1 states that the reactor coolant loops must be in operation with power removed from the loop stop valve isolators in MODES 1 and 2. ITS 3.4.17 states that the loop isolation valves must be open with power removed from the isolation valve operators in MODES 1, 2, 3 and 4. This changes the CTS by requiring that the loop isolation valves be open with power removed from the loop operators in MODES 3 and 4 in addition to MODES 1 and 2.	3.4.17	3.4.1.1
3.4.17 M.2	CTS 3.4.1.1 states that the reactor coolant loops must be in operation with power removed from the loop stop valve operators in MODES 1 and 2. The action states that if less than the required reactor coolant loops are in operation, the unit must be in hot standby within 1 hour. ITS 3.4.17 states that if a loop isolation valve is closed, the valve must be maintained closed, the unit must be in MODE 3 within 6 hours and be in MODE 5 in 36 hours. The Condition is modified by a Note that states that all of the Required Actions must be completed whenever the condition is entered. The Actions are modified by a Note that states that separate condition entry is allowed for each RCS loop isolation valve.	3.4.17 and Notes	3.4.1.1
3.4.17 M.3	ITS 3.4.17.1 states, "Verify each RCS loop isolation valve is open," at a Frequency of once prior to removing power to the valve operator. CTS does not include an explicit requirement to verify each RCS loop isolation valve is open. This changes CTS by adding an explicit Surveillance Requirement to verify each RCS loop isolation valve is open.	3.4.17.1	None
3.4.18 M.1	CTS LCO 3.4.1.5 contains a Note which states, "A cold leg stop valve in a reactor coolant loop may be closed for up to two hours for valve maintenance or testing. If the stop valve is not opened within two hours, A.C. power shall be removed from the valve and the breaker locked open." ITS LCO 3.4.18 contains a Note which states, "A hot or cold leg isolation valve may be closed for up to two hours for valve maintenance or testing. If the isolation valve is not opened within 2 hours, the loop shall be isolated." This changes the CTS by expanding the application of the Note to either a hot or cold leg isolation valve and to require that the loop be isolated if the valve is not opened within two hours. The requirement to lock open the valve breaker is discussed in DOC L.3. The change to allow a hot or cold leg isolation valve to be opened is discussed in DOC M.2.	LCO 3.4.18 Note	3.4.1.5 Note

Table M – More Restrictive Changes  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	Description of Change	ITS Requirement	CTS Requirement
3.4.18 M.2	The CTS LCO 3.4.1.5 note allows a cold leg stop valve to be closed for up to two hours for maintenance or testing. The ITS LCO 3.4.18 Note allows a hot or cold leg isolation valve to be closed for maintenance or testing. This changes the CTS by placing a time limit on how long a hot leg isolation valve can be closed under the conditions of the Note.	LCO 3.4.18 Note	3.4.1.5 Note
3.4.18 M.3	CTS LCO 3.4.1.5 and LCO 3.4.1.6 require closed loop isolation valves to have A.C. power removed. There is not a CTS Action for the condition of A.C. power not removed from a closed isolation valve, but CTS 3.4.1.5, Action, allows two hours to remove power from an isolation valve and lock open the breaker. As CTS LCO 3.0.3 is not applicable in MODES 5 and 6, failure to remove power from the operator of a closed isolation valve would result in no required actions. ITS 3.4.18, Action F, applies in the condition of power not removed from the operator of a closed isolation valve when the conditions of LCO 3.4.18.a.1 or LCO 3.4.18.b.1 are not met and requires power to be removed within 30 minutes. This changes the CTS by applying a time limit on action to remove power from a valve operator. The change to the CTS 3.4.1.5 Action is discussed in DOC M.4.	3.4.18 Action F	3.4.1.5 and 3.4.1.6
3.4.18 M.4	CTS 3.4.1.5 Action states that if the requirements on opening a cold leg stop valve on an undrained loop are not met, the startup of the isolated loop is to be suspended. The Action also requires that A.C. power be removed from the loop stop valves and the breakers be locked open within 2 hours. ITS 3.4.18, Action B applies in the same circumstance and requires that the cold leg isolation valve be closed. ITS 3.4.18, Action F, states that if power is not removed from a closed isolation valve when the conditions of LCO 3.4.18.a.1 or 3.4.18.b.1 are not met, power must be removed within 30 minutes. This changes the CTS by reducing the time available to remove A.C. power from the valve operator from 2 hours to 30 minutes. Other changes are discussed in DOCS L.3 and A.4.	3.4.18 Actions B and F	3.4.1.5
3.4.18 M.5	CTS 3.4.1.5.a requires the isolated loop to have been operating on recirculation flow greater than or equal to 125 gpm for at least 90 minutes before opening the cold leg isolation valve. ITS 3.4.18.a.2 contains the same recirculation requirement. ITS SR 3.4.18.3 requires verification that the recirculation requirements is met within 30 minutes prior to opening the cold leg isolation valve.	SR 3.4.18.3	3.4.1.5.a
3.4.19 None	N/A	N/A	N/A
CTS 3.7.9.2 None	N/A	N/A	N/A

Table R – Relocated Specifications and Removed Details  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.4.1 LA.1	3.2.5	CTS 3.2.5 places limits on RCS T <sub>avg</sub> , pressurizer pressure, and RCS total flow rate. ITS 3.4.1 states that the limits on RCS T <sub>avg</sub> , pressurizer pressure, and RCS total flow rate shall not exceed the limits specified in the COLR or the minimum RCS flow rate specified in the LCO. This changes the CTS by relocating the cycle specific values of RCS T <sub>avg</sub> , pressurizer pressure, and RCS total flow rate to the COLR.	COLR	ITS 5.6.5, Core Operating Limits Report	5
3.4.2 None	N/A	N/A	N/A	N/A	N/A
3.4.3 LA.1	3.4.9.1	CTS 3.4.9.1 states that the RCS (except the pressurizer) temperature and pressure shall be limited. The LCO also contains limits on RCS heatup and cooldown rates. ITS 3.4.3 states that the RCS pressure, temperature, and RCS heatup and cooldown rates shall be maintained within limits. This changes the CTS by moving the exclusion of the pressurizer from the LCO to the Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	1

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.4.3 LA.2	3.4.9.1	CTS 3.4.9.1 Action states that with any of the P/T limits exceeded, restore the temperature and/or pressure to within the limit within 30 minutes; perform an engineering evaluation to determine the effects of the out-of limit condition on the structural integrity of the RCS; determine that the RCS remains acceptable for continued operations or be in at least hot standby within the next 6 hours and reduce the RCS T <sub>avg</sub> and pressure to less than 200°F and 500 psig, respectively, within the following 30 hours. ITS 3.4.3, Conditions A and C state that with the requirements of the LCO not met, restore the parameter(s) to within limit(s) and determine the RCS is acceptable for continued operation. This changes the CTS by moving the requirement to perform an engineering evaluation to determine the effects of the out-of limit condition on the structural integrity of the RCS to the Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.4.3 LA.3	4.4.1.1	CTS Surveillance 4.4.1.1 states that the required reactor coolant loops shall be verified to be in operation and circulating reactor coolant at least once per 12 hours. ITS SR 3.4.4.1 states that each reactor coolant loop shall be verified to be in operation every 12 hours. This changes the CTS by moving the Surveillance requirement to verify that the reactor coolant loops are circulating reactor coolant to the Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.4.5 LA.1	3.4.1.2	CTS 3.4.1.2 states that two reactor coolant loops shall be OPERABLE and contains a description of what constitutes an OPERABLE loop. ITS 3.4.5 requires two RCS loops to be OPERABLE. This changes the CTS by moving the details of what constitutes an OPERABLE loop to the Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	1

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report



Table R – Relocated Specifications and Removed Details  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.4.5 LA.2	4.4.1.2.2	CTS Surveillance 4.4.1.2.2 states that at least one required reactor coolant loop shall be verified to be in operation and circulating reactor coolant at least once per 12 hours. ITS SR 3.4.5.1 states that the required reactor coolant loop shall be verified to be in operation every 12 hours. This changes the CTS by moving the requirement to verify that the reactor coolant loops are circulating reactor coolant to the Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.4.6 LA.1	3.4.1.3	CTS 3.4.1.3 states that two coolant loops consisting of any combination of RCS loops and RHR loops shall be OPERABLE and contains a description of what constitutes an OPERABLE Reactor Coolant loop and Residual Heat Removal loop. ITS 3.4.5 requires two loops consisting of any combination of RCS loops and RHR loops to be OPERABLE. This changes the CTS by moving the the details of what constitutes an OPERABLE loop to the Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	1
3.4.6 LA.2	4.4.1.3.4	CTS Surveillance 4.4.1.3.4 states that at least one Reactor Coolant pump or RHR loop shall be verified to be in operation and circulating reactor coolant at least once per 12 hours. ITS SR 3.4.6.1 states that an RHR or RCS loop shall be verified to be in operation every 12 hours. This changes the CTS by moving the requirement to verify that the coolant loop is circulating reactor coolant to the Bases. Other changes to CTS Surveillance 4.4.1.3.4 are described in LA.3.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.4.6 LA.3	4.4.1.3.4	CTS Surveillance 4.4.1.3.4 states that at least once per 12 hours it must be verified that at least one coolant loop is in operation and circulating reactor coolant by verifying at least one RCP is in operation or at least one RHR loop is in operation. It goes on to provide minimum RHR flow rates dependent on RCS temperature or time since entry into MODE 3. ITS Surveillance 3.4.6.1 requires verification that one RHR or RCS loop is in operation every 12 hours. This changes the CTS by moving the RHR minimum flow requirements to the Technical Requirements Manual.	Technical Requirements Manual	10 CFR 50.59	3
3.4.7 LA.1	4.4.1.3.4	CTS Surveillance 4.4.1.3.4 states that at least one Reactor Coolant pump or RHR loop shall be verified to be in operation and circulating reactor coolant at least once per 12 hours. ITS SR 3.4.7.1 states that an RHR loop shall be verified to be in operation every 12 hours. This changes the CTS by moving the requirement to verify that the RHR loop is circulating reactor coolant to the Bases. Other related changes are described in LA.3 and L.1.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.4.7 LA.2	4.4.1.3.4.b	CTS Surveillance 4.4.1.3.4.b states that at least once per 12 hours it must be verified that one RHR loop is in operation. It goes on to provide minimum RHR flow rates dependent on RCS temperature or time since entry into MODE 3. ITS Surveillance 3.4.7.1 requires verification that one RHR loop is in operation every 12 hours. This changes the CTS by moving the RHR minimum flow requirements to the Technical Requirements Manual.	Technical Requirements Manual	10 CFR 50.59	3

- Change Category:
- 1 - Removing Details of System Design and System Description, Including Design Limits
  - 2 - Removing Descriptions of System Operation
  - 3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting
  - 4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms
  - 5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.4.8 LA.1	4.4.1.3.4	CTS Surveillance 4.4.1.3.4 states that at least one Reactor Coolant pump or RHR loop shall be verified to be in operation and circulating reactor coolant at least once per 12 hours. ITS SR 3.4.8.1 states that a required RHR loop shall be verified to be in operation every 12 hours. This changes the CTS by moving the requirement to verify that the RHR loop is circulating reactor coolant to the Bases. Other related changes are described in LA.2 and A.2.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.4.8 LA.2	4.4.1.3.4.b	CTS Surveillance 4.4.1.3.4.b states that at least once per 12 hours it must be verified that one RHR loop is in operation. It goes on to provide minimum RHR flow rates dependent on RCS temperature or time since entry into MODE 3. ITS Surveillance 3.4.8.1 requires verification that one RHR loop is in operation every 12 hours. This changes the CTS by moving the RHR minimum flow requirements to the Technical Requirements Manual.	Technical Requirements Manual	10 CFR 50.59	3
3.4.9 None	N/A	N/A	N/A	N/A	N/A
3.4.10 LA.1	3.4.3.1 and 3.4.2	CTS LCO 3.4.3.1 and LCO 3.4.2 are modified by a note that states that the pressurizer lift setting pressure shall correspond to ambient conditions of the valve at nominal temperature and pressure. The ITS does not contain this information and it is moved to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.4.11 LA.1	4.4.3.2.1.b.1	CTS 4.4.3.2.1.b.1 states that at least once per 18 months each PORV must be operated through one complete cycle of full travel during MODES 3 and 4. ITS SR 3.4.11.3 states that a complete cycle of each PORV must be made at a Frequency of 18 months. This changes the CTS by relocating the requirement to perform the testing in MODES 3 and 4 to the Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3

**Change Category:**  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.4.12 LA.1	3.4.9.3 Action d	CTS 3.4.9.3, Action d, states that when the RCS is vented, the vent pathway must be verified at least once per 31 days when the pathway is provided by a valve(s) that is locked, sealed, or otherwise secured in the open position; otherwise, the vent pathway must be verified every 12 hours. ITS SR 3.4.12.4 states that an RCS vent must be verified open every 12 hours for unlocked open vent valve(s) and every 31 days for other vent paths. This changes the CTS by moving the detail that a vent valve may be considered locked open if it is sealed or otherwise secured in position to the Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	2
3.4.13 LA.1	3.4.5	CTS 3.4.5 states, "Each steam generator in a non-isolated reactor coolant loop shall be OPERABLE." The ITS does not contain a similar requirement. However, the Bases for the RCS loop specifications which require one or more steam generators, Specifications 3.4.4, 3.4.5, 3.4.6, and 3.4.7, define an OPERABLE steam generator as one which is OPERABLE in accordance with the Steam Generator Tube Surveillance Program. This changes the CTS by moving the definition of an OPERABLE steam generator to the ITS Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	1
3.4.14 LA.1	3.4.6.2	CTS 3.4.6.2 contains a list of the RCS PIVs and their associated leakage limits. ITS 3.4.14 does not contain a list of the RCS PIVs and the leakage limits are located in SR 3.4.14.1. This changes the CTS by relocating the list of PIVs to the Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	1

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
3.4.14 LA.2	4.4.6.2.2	Unit 1 CTS 4.4.6.2.2 is modified by a footnote that states that, to satisfy ALARA requirements, leakage may be measured indirectly (as from the performance of pressure indicators) if accomplished in accordance with approved procedures and supported by computations showing that the method is capable of demonstrating valve compliance with the leakage criteria. ITS SR 3.4.14.1 does not contain this information. This changes the CTS by moving this information on how the Surveillance may be performed to the Bases.	Bases	ITS 5.5.13, Technical Specifications Bases Control Program	3
3.4.15 LA.1	Table 3.3-6	CTS 3.3.3.1 Table 3.3-6 includes Measurement Ranges for the RCS Leakage Detection instrumentation. ITS does not include these details. This changes the CTS by moving these details to the UFSAR.	UFSAR	10 CFR 50.59	1
3.4.16 None	N/A	N/A	N/A	N/A	N/A
3.4.17 None	N/A	N/A	N/A	N/A	N/A
3.4.18 None	N/A	N/A	N/A	N/A	N/A
3.4.19 None	N/A	N/A	N/A	N/A	N/A

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
CTS 3.4.6.3 R.1	3.4.6.3	CTS 3.4.6.3 provides limits on primary to secondary leakage in addition to the limits in CTS 3.4.6.2 and ITS 3.4.13. These additional limits lower the amount of allowed primary to secondary leakage when the reactor is operating above 50% power and were implemented to reduce the probability of a steam generator tube rupture following the Unit 1 steam generator tube rupture event at North Anna Unit 1 on July 15, 1987. The CTS 3.4.6.2 leakage limits were continued to be used in the accident analysis, not the addition limits in CTS 3.4.6.3. The North Anna Units 1 and 2 steam generators have been replaced with models that are not susceptible to the fatigue induced cracks which resulted in the tube rupture. As a result, these additional limits are not needed to lower the probability of a steam generator tube rupture. This LCO does not meet the criteria for retention in the ITS; therefore, it will be retained in the Technical Requirements Manual.	Technical Requirements Manual	10 CFR 50.59	R

- Change Category:
- 1 - Removing Details of System Design and System Description, Including Design Limits
  - 2 - Removing Descriptions of System Operation
  - 3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting
  - 4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms
  - 5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
CTS 3.4.6.4 R.1	3.4.6.4	CTS 3.4.6.4 states requirements on primary to secondary leakage detection systems. These leakage detection systems are in addition to those systems required by CTS 3.4.6.1 and ITS 3.4.15 and were installed to monitor the stringent primary to secondary leakage limits in CTS 3.4.6.3. These additional primary to secondary leakage detection systems were added to the Technical Specifications following the Unit 1 steam generator tube rupture (SGTR) event at North Anna Unit 1 on July 15, 1987. Subsequently, the North Anna Units 1 and 2 steam generators have been replaced and steam generator primary to secondary leakage is insignificant. As a result, the requirements in ITS 3.4.15 are sufficient to indicate significant abnormal RCS leakage. This LCO does not meet the criteria for retention in the ITS; therefore, it will be retained in the Technical Requirements Manual.	Technical Requirements Manual	10 CFR 50.59	R
CTS 3.4.7 R.1	3.4.7	CTS 3.4.7 provides limits on the oxygen, chloride and fluoride content in the RCS to minimize corrosion. Minimizing corrosion of the RCS will reduce the potential for RCS leakage or failure due to stress corrosion, and ultimately ensure the structural integrity of the RCS. This LCO does not meet the criteria for retention in the ITS; therefore, it will be retained in the Technical Requirements Manual.	Technical Requirements Manual	10 CFR 50.59	R

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report

Table R – Relocated Specifications and Removed Details  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
CTS 3.4.9.2 R.1	3.4.9.2	CTS 3.4.9.2 states that the pressurizer temperature shall be limited to a maximum heatup of 100°F or cooldown of 200°F in any one hour period and a maximum spray water temperature and pressurizer temperature differential of 320°F. The pressurizer temperature limits are placed on the pressurizer to prevent non-ductile failure. The limits meet the requirements given in the ASME Boiler and Pressure Vessel Code, Section III, Appendix G. This LCO does not meet the criteria for retention in the ITS; therefore, it will be retained in the Technical Requirements Manual.	Technical Requirements Manual	10 CFR 50.59	R
CTS 3.4.10.1 R.1	3.4.10.1	CTS 3.4.10.1 provides requirements for the ASME Code Class 1, 2 and 3 components to ensure their structural integrity. These requirements are in addition to the requirements in CTS 4.0.5. This LCO does not meet the criteria for retention in the ITS; therefore, it will be retained in the Technical Requirements Manual.	Technical Requirements Manual	10 CFR 50.59	R
CTS 3.4.11.1 R.1	3.4.11.1	CTS 3.4.11.1 provides requirements on the reactor vessel head vents. The reactor coolant head vents are provided to exhaust noncondensable gases or steam, which could inhibit core cooling, from the Reactor Coolant System. The reactor vessel head vents are not credited in any UFSAR accident analysis. The reactor vessel head vents are included in the Emergency Operating Procedures for mitigation of beyond design basis accidents. This LCO does not meet the criteria for retention in the ITS; therefore, it will be retained in the Technical Requirements Manual.	Technical Requirements Manual	10 CFR 50.59	R

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report



Table R – Relocated Specifications and Removed Details  
ITS Section 3.4 – Reactor Coolant System (RCS)

DOC No.	CTS Requirement	Description of Relocated Requirements	Location	Change Control Process	Change Category
CTS 3.7.9.1 R.1	3.7.9.1	CTS 3.7.9.1 states that two residual heat removal (RHR) subsystems shall be OPERABLE in MODES 1, 2, and 3. The RHR System is used to remove decay heat from the reactor in MODES 4, 5, and 6. The RHR does not operate in MODES 1, 2 and 3 and must be isolated from the reactor coolant system in those MODES to prevent overpressurization of the RHR components. The RHR System serves no accident mitigation function in any MODE. This LCO does not meet the criteria for retention in the ITS; therefore, it will be retained in the Technical Requirements Manual.	Technical Requirements Manual	10 CFR 50.59	R
CTS 3.7.9.2 LA.1	4.7.9.2.c.1	CTS Surveillance 4.7.9.2.c.1 requires cycling of each remote or automatically operated valve in the RHR subsystem flowpath through at least one complete cycle of full travel every 18 months. ITS 3.4.6, 3.4.7, and 3.4.8 do not contain this requirement. This changes the CTS by relocating these Surveillances to the TRM.	Technical Requirements Manual	10 CFR 50.59	3

Change Category:  
1 - Removing Details of System Design and System Description, Including Design Limits  
2 - Removing Descriptions of System Operation  
3 - Removing Procedural Details for Meeting TS Requirements and Related Reporting  
4 - Removing Performance Requirements for Indication-Only Instrumentation and Alarms  
5 - Removal of Cycle-Specific Parameter Limits from the Technical Specifications to the Core Operating Limits Report