Duke Energy

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September 8, 1998

U. S. Nuclear Regulatory Commission
Washington, DC 20555

Attention: Document Control Desk

Subject: Duke Energy Corporation
Catawba Nuclear Station
Docket Numbers 50-413, and -414
Improved Technical Specifications, Supplement 9
TAC Nos. M95298 and M95299

By letter dated August 11, 1998, the NRC transmitted the draft Safety Evaluation (SE) for the conversion to Improved Technical Specifications. The letter requested comments on the draft SE and also requested that the licensee propose appropriate license conditions for the relocated material from the current technical specifications and for the scheduling of new more restrictive requirements. Finally, the letter requested a certified copy of the proposed Technical Specifications and Bases.

Enclosure 1 of this letter provides a markup of the draft SE with annotated comments. Enclosure 2 of this letter provides the changes necessary to the ITS submittal, as amended, to resolve open items identified within the draft SE and items identified by Duke Energy during the review. Enclosure 3 of this letter provides proposed license conditions to address the material proposed for relocation from the current technical specifications and to address the scheduling of new more restrictive surveillance requirements. These proposals are consistent with license conditions incorporated into other Facility Operating Licenses for recently approved technical specification conversions. Enclosure 4 provides the final proposed Technical Specifications and Bases.

The proposed changes are administrative in nature and have been determined to be within the scope of the original PORC and NSRB reviews.

Pursuant to 10 CFR 50.91(b)(1), a copy of this amendment has been provided to the appropriate State of South Carolina officials.

If any additional information is needed, please call Lee A. Keller at 704-382-5826.

Very truly yours,

M. S. Tuckman

Enclosure

xc: w/enclosures

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M. S. Tuckman, being duly sworn, states that he is Executive Vice President of Duke Energy Corporation; that he is authorized on the part of said Company to sign and file with the Nuclear Regulatory Commission revisions to the Facility Operating Licenses of Catawba Nuclear Station; and that all the statements and matters set forth herein are true and correct to the best of his knowledge.

M. S. Tuckman

M. S. Tuckman, Executive Vice President

Subscribed and sworn to before me this 8TH day of September, 1998

Mary P. Nelms

Notary Public

My Commission Expires:

JAN 22, 2001

ENCLOSURE 1

CATAWBA NUCLEAR STATION

COMMENTS ON THE ITS DRAFT SAFETY EVALUATION

DRAFT SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO

AMENDMENT NO. TO FACILITY OPERATING LICENSE NPF-35

AND AMENDMENT NO. TO FACILITY OPERATING LICENSE NPF-52

CATAWBA NUCLEAR STATION, UNITS 1 AND 2

DUKE ENERGY CORPORATION, ET AL.

DOCKET NOS. 50-413 AND 50-414

AND

AMENDMENT NO. TO FACILITY OPERATING LICENSE NPF-9

AND AMENDMENT NO. TO FACILITY OPERATING LICENSE NPF-17

MCGUIRE NUCLEAR STATION, UNITS 1 AND 2

DUKE ENERGY CORPORATION, ET AL.

DOCKET NOS. 50-369 AND 50-370

I. INTRODUCTION

Catawba Nuclear Station (CNS), Units 1 and 2, and McGuire Nuclear Station (MNS) Units 1 and 2, have been operating with technical specifications (TS) issued with the original operating licenses on January 17, 1985, May 15, 1986, June 12, 1981, and March 3, 1983, respectively, as amended from time to time. By separate letters for each facility dated March 27, 1997, as supplemented by separate letters dated March 9, March 20, April 20, May 28, June 3, June 24, July 7, and July 21, 1998, Duke Energy Corporation (DEC or the licensee) proposed to convert the existing TS to the improved TS. The improved TS are based upon NUREG-1431, "Standard Technical Specifications for Westinghouse Plants," Revision 1, dated April 1995, and upon guidance in the "NRC 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, as amended July 19, 1995 (60 FR 36953). The overall objective of the proposed amendments, consistent with the Final Policy Statement, was to rewrite, reformat, and streamline the TS for CNS and MNS to be in accordance with 10 CFR 50.36, "Technical Specifications."

Hereafter, the improved TS are the ITS, the existing or current TS are the CTS, and the improved standard TS, such as in NUREG-1431, are the STS. The corresponding TS Bases are the ITS Bases, CTS Bases, and STS Bases, respectively. For discussions applying to just one of the two facilities, the acronyms ITS and CTS are preceded by CNS or MNS, as appropriate.

In addition to basing the ITS on the STS, the Commission's Final Policy Statement, and the requirements in 10 CFR 50.36, the licensee retained portions of the CTS as a basis for the ITS. Plant-specific issues, including design features, requirements, and operating practices, were discussed with the licensee during a series of conference calls and meetings that concluded on July 10, 1998, (the meeting summaries were issued on November 26, 1997, and June 1, June 29, and July 13, 1998). Based on these discussions, the licensee proposed matters of a generic nature that were not in STS. The NRC staff requested that the licensee submit such generic issues as a proposed change to STS through the NRC/Nuclear Energy Institute's Technical Specifications Task Force (TSTF). These generic issues were considered for specific applications in the CNS and MNS ITS. Consistent with the Final Policy Statement, the licensee proposed transferring some CTS requirements to licensee-controlled documents such as the Updated Final Safety Analysis Report (UFSAR) for the CNS and MNS, for which changes by licensees to the documents are controlled by a regulation such as 10 CFR 50.59. These licensee controlled-documents may be changed without prior staff approval, whereas NRC-controlled documents, such as the TS, may not be changed by the licensee without prior staff 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.

delete

for MNS.

The Commission's proposed actions on the CNS and MNS applications for amendments both dated May 27, 1997, were published in the *Federal Register* on July 14, 1997 (62 FR 37628) for CNS, and on July 15, 1997 (62 FR 37940). The staff's evaluation of these applications, including the supplements listed above, that resulted from NRC requests for additional information (RAIs) and discussions with the licensee during the NRC staff review, is presented in this safety evaluation. The staff issued RAIs dated January 16, January 30, March 27, April 15, April 28, May 14, May 22, and July 6, 1998. The plant-specific changes contained in these supplements serve to clarify the ITS with respect to the guidance in the Final Policy Statement and STS. Therefore, these plant-specific changes are within the scope of the action described in the *Federal Register* notices, except for the beyond scope changes that were the subject of separate notices. These notices were issued on May 6, 1998 (63 FR 25106), May 20, 1998 (63 FR 27760), and July 13, 1998 (63 FR 40553) for CNS, and on May 6, 1998 (63 FR 25107), and also on May 6, 1998 (63 FR 25108) in two separate notices, May 20, 1998 (63 FR 27761), and July 29, 1998 (63 FR 40554) for MNS.

(CNS) and July 7 (MNS)

Following the initial May 27, 1998, applications for operating license amendments to convert the CTS to the ITS for CNS and MNS, the NRC staff approved other amendments to the CNS and MNS operating licenses. These amendments, which DEC has incorporated as appropriate into the ITS, are the following:

Catawba Nuclear Station, Units 1 and 2

Date Issued	Amendment No. Unit 1	Amendment No. Unit 2	Description
7/21/97	160	152	Revised TS requirements for the standby shutdown system. These requirements are not retained in the ITS but are relocated to Chapter 16 of the UFSAR; see Table LA, Discussion of Change 3.7 - LA.1 R.6.
8/22/97	161	153	Changed licensee name from Duke Power Company to Duke Energy Corporation in operating licenses.
10/9/97	162	-	Allowance to permit natural circulation testing in Mode 3 following steam generator replacement in 1996. Not retained in the Unit 1 ITS because this allowance has expired.
11/13/97	-	154	Deletion of steam generator tube repair criteria - incorporated into Unit 2 ITS 5.5.9.
3/2/98	163	155	Revised references to COLR methodologies - incorporated into ITS 5.6.5.
4/23/98	164	156	Revised operating licenses to delete outdated license conditions and exemptions, and to correct errors.
4/27/98	165	157	Revised qualifications of Safety Review Group (SRG). Not retained in the ITS - relocated to the Quality Assurance Topical Report; see Table LA, Discussion of Change 5.0 - LA.3.
6/17/98	166	158	Revision of surveillance requirements for pressurizer heaters to be consistent with current plant design - incorporated into ITS 3.4.9.
7/9/98	167	159	Relaxed Applicability of control room area ventilation actuation instrumentation function - incorporated into ITS 3.3.7. Must revise Bases for ITS 3.7.10 to discuss lack of auto start for CRAVS outside Modes 1, 2, 3, and 4.
?	?	?	Deletion of ASME pressure test of diesel generator fuel oil system - incorporated in ITS 3.8.3.

Delete - Actuation is discussed in ITS 3.3.7

continued

Catawba Nuclear Station, Units 1 and 2

Date Issued	Amendment No. Unit 1	Amendment No. Unit 2	Description
?	?	?	Revised TS requirements for low temperature overpressure protection (LTOP) - incorporated into ITS 3.4.3 and 3.4.12.
?	?	?	Revised trip set point and allowable value for nuclear service water suction transfer on low pit level - incorporated into ITS 3.3.2 and Table 3.3.2-1.
?	?	?	Relaxed TS requirements for stored ice weight - incorporated into ITS 3.6.12.
?	?	?	Change in frequency for inspections of ice condenser lower inlet plenum support structure and turning vanes

Add to CNS and MNS

McGuire Nuclear Station, Units 1 and 2

Date Issued	Amendment No. Unit 1	Amendment No. Unit 2	Description
11/25/97	177	159	Revised trip set point and allowable values for the RWST level automatic switchover to recirculation - incorporated into ITS 3.3.2 and Table 3.3.2-1.
4/8/98	178	160	*Revised references to COLR methodologies - incorporated into ITS 5.6.5.*
7/30/98	179	161	Revised CTS Figure 5.1-1 regarding location of the meteorological tower. Not retained in ITS - see Table LA, Discussion of Change 4.0 - LA.1
?	?	?	Added allowance for 72 cumulative hours of operation with elevated temperatures in the containment lower compartment - incorporated into ITS 3.6.1.5
?	?	?	Remove references to steam line low pressure safety injection function - incorporated into ITS 3.3.2 and Table 3.3.2-1.
?	?	?	Revised the trip set points of the power range neutron flux high trip function in the event of inoperable main steam safety valves - incorporated into ITS 3.7.1.

During its review, the NRC 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 NRC staff conclusion that CNS and MNS can develop ITS based on STS, as modified by plant-specific changes, and that the use of the ITS is acceptable for continued operation. The NRC staff also acknowledges that, as indicated in the Final Policy Statement, the conversion to ITS based on

the STS is a voluntary process. Therefore, it is acceptable that the ITS differs from the STS, reflecting the current licensing bases for CNS and MNS. The NRC staff approves the licensee's changes to the CTS with modifications documented in the supplemental submittals.

In the letter of August XX, 1998, (September 8,) the licensee proposed license conditions for the implementation of the ITS. Also, in this letter, the licensee submitted revised ITS pages. The license conditions and revised ITS pages do not change the notices in the *Federal Register* on July 14, 1997 (62 FR 37628) and July 15, 1997 (62 FR 37940), for the conversion from the CTS to the ITS for CNS and MNS, respectively. In addition to these notices, there were three notices for CNS and six notices for MNS in the *Federal Register* for the beyond scope issues associated with the conversion, as listed previously, that are discussed in Section III.G of this safety evaluation (SE).

For the reasons stated *infra* in this SE, the NRC staff finds that the CNS ITS and MNS 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.

II. 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; 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." Statement of Consideration, "Technical Specifications for Facility Licenses; Safety Analysis Reports," 33 FR 18610 (December 17, 1968). Pursuant to 10 CFR 50.36, TS are required to include items in the following five specific categories: (1) safety limits, limiting safety system settings and limiting control settings; (2) limiting conditions for operation (LCOs); (3) surveillance requirements (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.

comments were documented as requests for additional information (RAIs) and forwarded in letters dated January 16, January 30, March 27, April 15, April 28, May 14, May 22, and July 6, 1998. The licensee provided responses in letters dated March 9, March 20, April 20, June 3, June 24, July 7, July 21, and [illegible] 1998. The letters clarified and revised the licensee basis for translating the CTS requirements into ITS. The NRC staff finds that the licensee's submittals including responses to RAIs provide sufficient detail to allow the staff to reach a conclusion regarding the adequacy of the licensee's proposed changes to the CTS.

The license amendment application was organized such that changes were included in each of the following CTS change categories, as appropriate:

- Administrative Changes, (A), i.e., non-technical changes in the presentation of CTS requirements;

- Technical Changes - More Restrictive, (M), i.e., new or additional CTS requirements;

- Technical Changes - Less Restrictive (specific), (L), i.e., changes, deletions and relaxations of CTS requirements;

- Technical Changes - Less Restrictive (generic), (LA), i.e., deletion of CTS requirements by movement of information and requirements from existing specifications (that are otherwise being retained) to licensee-controlled documents, including the ITS Bases; and

- Relocated Specifications, (R), i.e., relaxations in which whole specifications (the LCO and associated action and surveillance requirements) are removed from the CTS (an NRC-controlled document) and placed in licensee-controlled documents.

These general categories of changes to the licensee's CTS requirements and STS differences may be better understood as follows:

A. Administrative Changes

Administrative (non-technical) 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 NRC 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 NRC staff are:

(1) providing the appropriate numbers, etc., for STS bracketed information (information that must be supplied on a plant-specific basis and that may change from plant to plant);

(2) identifying plant-specific wording for system names, etc.;

advancements and operating experience, or (3) resolution of the Owners Groups comments on the STS. The NRC 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 CNS and MNS designs were also reviewed to determine if the specific design bases and licensing bases for CNS and MNS are consistent with the technical basis for the model requirements in the STS, and thus provide a basis for the ITS.

A significant number of changes to the CTS involved changes, deletions and relaxations to portions of the CTS requirements evaluated in Categories I through VIII as follows:

Category I	Relaxation of Applicability
Category II	Relaxation of Surveillance Frequency
Category III	Relaxation of Completion Time
Category IV	Relaxation of Required Actions
Category V	Relaxation of Surveillance Requirement
Category VI	Relaxation of LCOs and Administrative Controls
Category VII	Deletion of Surveillance Requirements
Category VIII	Deletion of Requirements Redundant to Regulation

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

Relaxation of Applicability (Category I)

CNS and MNS CTS typically specify the Applicability of the requirements associated with a limiting condition for operation (LCO) in terms of reactor operational conditions, using the CTS-defined term Operational Mode, or Mode. This definition includes Mode 1 - Power Operation, Mode 2 - Startup, Mode 3 - Hot Standby, Mode 4 - Hot Shutdown, Mode 5 - Cold Shutdown, and Mode 6 - Refueling. These six Modes are defined by inclusive combinations of reactor core reactivity, power level, and average coolant temperature. CTS Applicability statements typically specify meeting the LCO requirements during one or more of these Modes; some specify all six Modes; others specify "at all times." CTS Applicabilities may also specify other plant conditions or operations such as whenever irradiated fuel is in the storage pool, during storage of fuel in the spent fuel pool, during Core Alterations, and during movement of irradiated fuel assemblies. In some cases, the CTS contain footnotes to limit the scope of a Mode of Applicability to more closely match the conditions during which the LCO is needed to support the plant safety analysis. Consistent with the STS, the ITS retain the intent of this approach which is to specify Applicabilities that are consistent with the application of the plant safety analysis assumptions for operability of the required features. For a

experience, industry practice, industry standards, or manufacturers' recommendations have shown that components usually pass the SR when performed at the specified interval. In such cases, therefore, relaxed SR Frequencies are acceptable because they do not reduce, but can increase system reliability.

The ITS relax some CTS SR Frequencies by eliminating the requirement to perform the surveillance "on a Staggered Test Basis." Consistent with the STS, the ITS omits CTS staggered (alternating) test requirements that have been shown by operating experience to contribute little to safety. This is beneficial because staggered testing imposes additional constraints on plant operation, scheduling, and manpower, and may also increase the time safety systems are unavailable from testing. Typically, the ITS, consistent with the STS, only specifies staggered testing for certain systems or components where this method is most practical or where it contributes to safety. Therefore, the elimination of *staggered testing* requirements, consistent with the guidance of the STS, is acceptable. ⟨font⟩

The ITS also relax CTS SR Frequencies by adding specific exceptions, consistent with the STS, in the form of a SR note or an addition to the Frequency itself to allow performing the surveillance at an optimum time or plant condition. Such an exception might allow entry into a specified Mode or condition in the Applicability of the associated LCO prior to performing the surveillance. Exceptions are also specified to allow delay in the performance of certain SRs for ac and dc sources during shutdown conditons when such performance would result in less than the minimum Operable LCO-required electrical power sources. Such exceptions are acceptable because the affected features usually pass the surveillance and the delay in performance is expected to be of short duration. These exceptions ensure the surveillances are performed at the correct time or plant condition to provide the desired verification of system Operability or protective limit. Therefore, the addition of these exceptions, consistent with the guidance of the STS, is acceptable.

The ITS may also base CTS SR Frequency relaxations on staff-approved topical reports. The NRC staff has accepted topical report analyses that bound the plant-specific design and component reliability assumptions.

SR Frequency relaxations in the ITS typically remove unnecessary burdens on plant operation from testing but ensure adequate verification that the associated LCO requirements are being met. Therefore, less restrictive changes falling within Category II are acceptable.

Relaxation of Completion Time (Category III)

Upon discovery of a condition in which an LCO is not met, the CTS require performing the applicable specified action requirements. These specified action requirements, or Required Actions as they are called in the ITS and STS, are remedial measures that must be completed within specified time limits. In the ITS and STS, these time limits are formally called Completion Times. Completion Times define limits during which

CTS contain requirements that are redundant to regulations in 10 CFR. For example, many CTS reporting requirements are also required by 10 CFR 50.72 and 10 CFR 50.73. The CTS include requirements to submit Special Reports when specified limits, LCOs, or action requirements are not met. However, the ITS, consistent with the STS, omits many of the CTS reporting requirements because the reporting requirements in the regulations cited are acceptable and do not need repeating in the TS to ensure timely submission to the NRC. In addition, these redundant CTS reporting requirements are administrative in nature and do not affect plant safety. Therefore, this type of change has no impact on the safe operation of the plant. Deletion of these requirements is beneficial because it reduces the administrative burden on the plant and fosters a better focus on operational matters important to safety. Therefore, less restrictive changes falling under Category VIII are acceptable.

Table L - Less Restrictive Changes lists the less restrictive changes to the CTS in converting to the ITS. Table L of is organized in ITS order by each L-type DOC to the CTS, and provides a summary description of each less restrictive change that was made, the CTS and ITS references, and a reference to the applicable change categories as discussed above (if applicable). For ease of reference, the eight less restrictive change categories are listed at the bottom of each page of Table L.

Additionally, in electing to adopt the specifications of the STS, the licensee also proposed a number of less restrictive changes to the CTS which do not apply to the above categories of changes, deletions, and relaxations of CTS requirements. These changes are characterized as unique in Table L and are evaluated below. The evaluations for each section are preceded by the ITS section and each evaluation is labeled with the DOC identifier (e.g., L.1) associated with the change. Most of these changes to the CTS were consistent with the STS and/or the current licensing basis and, therefore, were not beyond the scope of the ITS conversion. Those unique changes that were beyond the scope of the conversion are addressed in Section III.G of this safety evaluation.

ITS Section 3.2, Power Distribution Limits

L.5 CTS 4.2.1.1.a.2 requires monitoring AFD once per hour for 24 hours after restoring the AFD alarm to operable status. CTS 4.2.1.1.b requires monitoring once per hour for 24 hours and once per 30 minutes thereafter when the alarm is inoperable. These requirements are a carryover from the previous methodology (constant axial offset) and are not necessary for the current methodology (relaxed axial offset control) for AFD and are thus deleted. Logging of AFD was previously required to establish penalty minutes for being outside of constant target bands. Target bands are not associated with the relaxed axial offset control schemes. ITS SR 3.2.3.1 requires monitoring once within 1 hour and once per hour thereafter when the alarm is inoperable. There is no basis for providing increased monitoring after 24 hours of alarm inoperability and the requirement adds an unnecessary administrative burden to the operating staff. A failure of the alarm to function does not affect the ability of the operator to routinely monitor control board indication of AFD as part of the normal operating practice, nor does the alarm failure itself cause AFD to not be within limits. For these reasons, these changes are acceptable.

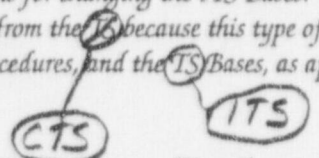
For a system to be considered Operable, the definition of Operability as it pertains to the system must be satisfied. In addition, the specified SRs associated with the LCO governing the system must be met. Some CTS LCOs contain information concerning design and configuration implying that they relate to meeting the Operability requirements of the LCO. Such information is usually incomplete and is actually redundant to the definition of Operability and the associated SRs. Because the Operability requirements for the affected systems and supporting SRs are being retained in the improved TS, and adequate TS or regulatory controls exist for any changes to the removed information, moving such information to licensee-controlled documents has no impact on the effectiveness of the ITS to ensure safe operation of the plant.

Limits such as the cycle-specific core design limits, are moved from the CTS to other documents. The cycle-specific core design limits are moved to the Core Operating Limits Report (COLR) in accordance with Generic Letter (GL) 88-16. Removal of these limits is acceptable because ITS administrative controls include adequate programmatic requirements to control limits removed from the CTS to such documents as the COLR.

Relocation of details of system design from the CTS is consistent with the content, format, and presentation of information in the STS. In addition, existing regulations and TS administrative controls will ensure an effective level of regulatory control of this information and will provide a more appropriate change control process. Therefore, changes falling within Type 1 are acceptable.

Descriptions of System Operation (Type 2)

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 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. ITS 5.5.14, *Bases Control Program, specifies controls for changing the ITS Bases. It is acceptable to remove details and descriptions of system operation from the TS because this type of information will be adequately controlled in the UFSAR, plant operating procedures, and the ITS Bases, as appropriate. Therefore, changes falling within Type 2 are acceptable.*



Procedural Details for Meeting TS Requirements (Type 3)

Details for performing CTS action and surveillance requirements, maintaining and controlling CTS administrative requirements, and statements providing clarification of CTS requirements are more appropriately specified in the UFSAR, QA plan, Selected Licensee Commitments Manual (SLC), or ITS Bases as appropriate. Changes to the information governed by one of these documents requires an evaluation in accordance with 10 CFR 50.54, 10 CFR 50.59, or ITS 5.5.14, Bases Control Program.

The control of the plant conditions appropriate to perform a surveillance test is typically an issue for procedures and scheduling (except where a Mode or condition specified in the Applicability of the LCO must first be entered in order to perform the surveillance). The inclusion of routine procedural guidance has previously been determined to be unnecessary as a TS restriction. As indicated in Generic Letter 91-04, allowing this procedural control is consistent with the vast majority of other SRs that do not dictate specific plant conditions for surveillances. In addition, lists or tables containing TS related information or data have also previously been determined to be unnecessary as a TS restriction. Generic Letter 93-08 specifically approved the removal from the TS of the surveillance acceptance criteria in the instrument response time tables. The ITS extends the allowance provided in Generic Letter 93-08 to include the removal of most tables and lists of information pertaining to surveillances or LCOs from the TS. Similarly, prescriptive procedural information in action requirements are unnecessary as a TS restriction. The inclusion of specific procedural detail in action requirements is unlikely to contain all the procedural considerations necessary for the plant operators to complete the actions required, and referral to plant procedures is therefore required in any event. The CTS also contain many general statements intended to explain or clarify the intent of requirements in LCOs, action statements, and surveillances. The ITS Bases document provides a more appropriate location for these types of informational statements. <Font>

CTS also contain procedural details for meeting CTS administrative controls such as requirements for the Nuclear Safety Review Board (NSRB). The CTS specify such details as the function, composition, alternatives, consultants, meeting frequency, quorum, review, audits, and records of the NSRB. These details of the NSRB activities can be adequately addressed in the QA Plan documentation and do not need to be included in the ITS. Changes to the QA Plan must be evaluated in accordance with the guidance in 10 CFR 50.54; thus adequate regulatory control is ensured. In addition to the QA Plan, other similar procedural details for meeting CTS administrative controls are moved to the UFSAR or SLC which are adequately controlled by the provisions of 10 CFR 50.59.

Other changes involving the removal of procedural details include those details removed from the CTS which are associated with limits retained in the ITS. For example, the ITS requirement may simply refer to programmatic requirements such as the Ventilation Filter Testing Program (VFTP), included in ITS 5.5.11, which specifies the limits and test requirements contained in the VFTP. The ITS VFTP provides adequate programmatic control of the associated procedural details removed from the CTS. Changes to the VFTP must be approved by the NRC. ITS 5.5.11

These changes are consistent with the content, format, and presentation of information in the STS. In addition, existing regulations and TS administrative controls will ensure an effective level of regulatory control of this information and will provide a more appropriate change control process. Therefore, changes falling within Type 3 are acceptable.

Table LA lists the requirements and detailed information in the CTS that are relocated to licensee-controlled documents and not retained in the ITS. Table LA is organized in ITS order by each LA-type DOC to the CTS. It includes: the ITS section designation followed by the DOC identifier; e.g., 3.3 followed by LA.1 means ITS Section 3.3, DOC LA.1; CTS reference; a summary description of the relocated details (summary of change); the name of the document to contain the relocated details or requirements (destination document); the method for controlling future changes to relocated requirements (control process); and a reference to the specific change type, as discussed above, for not including the information or specific requirements in the ITS.

The licensee, in electing to implement the specifications of the STS, also proposed, in accordance with the criteria in the Final Policy Statement and 10 CFR 50.36, to entirely remove certain specifications from the CTS and place them in licensee-controlled documents noted in Table R of relocated current technical specifications. Table R lists all specifications that are relocated from the CTS based on the Final Policy Statement and 10 CFR 50.36, to licensee-controlled documents. Table R is organized by each R-type DOC to the CTS, in a manner consistent with the organization of requirements in the ITS, followed by a reference to the associated relocated CTS specification; a summary description of the relocated CTS specification; the name of the document that will contain the relocated specification (destination document); and the method for controlling future changes to the relocated specification (control process). The NRC staff's evaluation of each relocated specification presented in Table R is provided below with the corresponding DOC identifier given in parenthesis after the title of each relocated specification.

1. 3/4.1.2.1 Minimum Boron Injection Flow Paths, Modes 5 and 6 (3.1 - R.1)
   3/4.1.2.2 Minimum Boron Injection Flow Paths, Modes 1, 2, 3, and 4 (3.1 - R.2)
   3/4.1.2.3 Charging Pump in Boron Injection Flow Path, Modes 5 and 6 (3.1 - R.3)
   3/4.1.2.4 Charging Pumps, Modes 1, 2, 3, and 4 (3.1 - R.4)
   3/4.1.2.5 Borated Water Sources, Modes 5 and 6 (3.1 - R.5)
   3/4.1.2.6 Borated Water Sources, Modes 1, 2, 3, and 4 (3.1 - R.6)

CTS 3/4.1.2 specifies requirements for boration flow paths and borated water sources in MODES 5 and 6. CTS 3.1.2.6 specifies requirements for borated water sources. The boration subsystem of the chemical and volume control system (CVCS) provides the means to meet one of the functional requirements of the CVCS, i.e., to control the chemical neutron absorber (boron) concentration in the reactor coolant system (RCS) and to help maintain the shutdown margin. To accomplish this functional requirement, the CTS require a source of borated water, one or more flow paths to inject this borated water into the RCS, and appropriate charging pumps to provide the necessary charging head.

The boration subsystem is not assumed to be operable to mitigate the consequences of a design basis accident (DBA) or transient. In the case of a malfunction of the CVCS that causes a boron dilution event, the operator must take action to close the appropriate valves in the reactor makeup system before the shutdown margin is lost. Operation of the boration subsystem is not assumed to mitigate this event. In addition, the boration subsystem is not used for, nor is capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a DBA. It also is not used to monitor a process variable, or the status of any design feature, or operating restriction that is an initial condition of a DBA or transient. The boration subsystem is not part of a primary success path in the mitigation of a DBA or transient. Therefore, CTS 3/4.1.2.1 through 3/4.1.2.6 do not meet any of the criteria in 10 CFR 50.36 and may be removed from the CTS and relocated to the Selected Licensee Commitments (SLC) Manual (UFSAR Chapter 16).

Note that CTS 4.1.2.4.2 is retained as ITS LCO 3.4.12 for low temperature over pressure protection requirements. Any changes to these former requirements regarding

irradiated fuel assemblies within the fuel building so that an automatic actuation is not necessary. ITS 3.7.13 also requires a suspension of fuel handling activities, should the system become inoperable. Based on this, the fuel storage pool high gaseous radioactivity monitor does not provide an actuation function that is credited to mitigate a fuel handling accident.

The fuel storage pool criticality radiation monitor (EMF-15) for Catawba monitors radioactivity in the fuel storage pool area. This monitor does not provide any mitigation of a DBA. The monitor does, however, prevent the new fuel elevator from raising spent fuel assemblies. It may also function as a criticality monitor upon detection of high radiation. These functions do not contribute to DBA analysis assumptions.

The criticality radiation monitor (EMF-17 for Unit 1 and EMF-4 for Unit 2) for McGuire monitors radioactivity in the fuel storage pool area. This monitor does not provide any mitigation of a DBA. It is provided as a criticality monitor, and it does sound the containment evacuation alarm upon detection of high radiation.

The control room air intake gaseous radiation monitors (EMF-43A, 43B) are provided to identify increasing levels of radioactivity in the control room intakes. The control room area ventilation system operates continuously in a filtered mode and does not rely on these monitors to perform any actuation function to mitigate the effects of a DBA.

The auxiliary building ventilation gaseous radioactivity monitor (EMF-41) for Catawba is provided to monitor the auxiliary building ventilation system for increasing levels of radiation. These monitors will realign the ventilation system to filtered operation on high levels of radioactivity. Although these monitors perform an automatic actuation function, this is a design feature of the system and is not credited in the licensing basis of the plant for any DBA. The safety function for the ventilation system is to filter the ECCS pump rooms following a loss of coolant accident (LOCA). Filtered operation is automatically accomplished by the safety injection signal. But no credit is taken for radiation monitor operation during a LOCA. This monitor only provides indication of effluent releases.

The component cooling water system radiation monitors (EMF-46A, 46B) for Catawba are provided to identify leaks of contaminated water into the component cooling system. These monitors provide no control or actuation function and serve only to alert operators to isolate a leaking heat exchanger. No credit is taken for radiation monitor operation to mitigate or identify a DBA.

Therefore, CTS 3/4.3.3.1 does not meet any of the criteria in 10 CFR 50.36 and may be removed from the CTS and relocated to the SLC Manual. Any changes to these former requirements regarding these radiation monitors, as relocated to the SLC Manual, will require a safety evaluation pursuant to 10 CFR 50.59. Thus, under 10 CFR 50.59, sufficient regulatory controls exist to ensure continued protection of the public health and safety.

4. 3/4.3.3.2 Movable Incore Detection System (3.3 - R.1)

in a ready state for mitigative action, this requirement is directed more toward prevention of degradation and continued long term maintenance of acceptable structural conditions. The inservice inspection (ISI) program is also required by 10 CFR 50.55(a). These controls ensure that any changes to these requirements are appropriately reviewed. Hence, it is not necessary to retain a separate requirement to ensure immediate Operability of safety systems. Furthermore, this CTS requirement prescribes inspections to be conducted during plant shutdown, and is not directly important for responding to a DBA. Therefore, CTS 3/4.4.10 does not meet any of the criteria in 10 CFR 50.36 and may be removed from the CTS and relocated to the SLC Manual, with the exception of the RCP flywheel inspection surveillance. The RCP flywheel inspection requirement has been retained as ITS 5.7. Any changes to these former requirements regarding the structural integrity of ASME code class 1, 2, and 3 components, as relocated to the SLC Manual, will require a safety evaluation pursuant to 10 CFR 50.59. Thus, under 10 CFR 50.59, sufficient regulatory controls exist to ensure continued protection of the public health and safety.

11. 3/4.4.11 RCS Vent Paths Operable and Closed for Reactor Vessel Head and Pressurizer Steam Space (CNS)
3/4.4.11 Reactor Vessel Head Vent Paths Operable and Closed (MNS)
(3.4 - R.5)

The reactor vessel head vents are provided to exhaust noncondensible gases and steam from the RCS which could inhibit natural circulation core cooling following any event involving a loss of offsite power and requiring long term cooling, such as a LOCA. The function, capabilities, and testing requirements are consistent with the requirements of Item II.B.1 of NUREG-0737, "Clarification of TMI Action Plan Requirements," however, the operation of these vents is an operator action after the event has occurred and is only required when there is indication that natural circulation is not occurring. Therefore, CTS 3/4.4.11 does not meet any of the criteria in 10 CFR 50.36 and may be removed from the CTS and relocated to the SLC Manual. Any changes to these former requirements regarding the reactor coolant system vents, as relocated to the SLC Manual, will require a safety evaluation pursuant to 10 CFR 50.59. Thus, under 10 CFR 50.59, sufficient regulatory controls exist to ensure continued protection of the public health and safety.

12. 3/4.6.5.2 Ice Bed Temperature Monitoring System (3.6 - R.1)

The ice bed temperature monitoring system monitors the temperature of the ice bed to ensure that the ice bed temperature does not increase above the required limits undetected. However, it is not required in the ITS to ensure the ice bed temperature is maintained within limits. ITS 3.6.12, "Ice Bed," will continue to ensure that temperature is maintained within the required limits. Therefore, CTS 3/4.6.5.2 does not meet any of the criteria in 10 CFR 50.36 and may be removed from the CTS and relocated to the SLC Manual. Any changes to these former requirements regarding the ice bed temperature monitoring system, as relocated to the SLC Manual, will require a safety evaluation pursuant to 10 CFR 50.59. Thus, under 10 CFR 50.59, sufficient regulatory controls exist to ensure continued protection of the public health and safety.

13. 3/4.6.5.4 Ice Condenser Inlet Door Position Monitoring System (3.6 - R.2)

The inlet door position monitoring system monitors the position of the ice bed inlet doors during normal operation to ensure that the ice bed inlet doors do not open (which could allow the ice bed temperature to increase above the required limits). However, it is not required in the ITS to ensure the inlet doors remain closed and ice bed temperature is maintained within limits. ITS 3.6.12, "Ice Bed," will continue to ensure that the inlet doors remain closed and temperature is maintained within the required limits. Therefore, CTS 3/4.6.5.4 does not meet any of the criteria in 10 CFR 50.36 and may be removed from the CTS and relocated to the SLC Manual. Any changes to these former requirements regarding the Inlet door position monitoring system, as relocated to the SLC Manual, will require a safety evaluation pursuant to 10 CFR 50.59. Thus, under 10 CFR 50.59, sufficient regulatory controls exist to ensure continued protection of the public health and safety.

14. 3/4.7.2 Steam Generator Pressure/Temperature Limitations (3.7 - R.1)

CTS 3/4.7.2, "Steam Generator Pressure/Temperature Limitations," specifies limits on steam generator (SG) pressures and temperatures to ensure that pressure induced stresses on the SG do not exceed the maximum allowable fracture toughness limits. These pressure and temperature limits are based on maintaining a SG reference transition nil ductility temperature (RTNDT) sufficient to prevent brittle fracture. These limits, however, are not initial condition assumptions of a DBA or transient, but represent operating restrictions which are not included in 10 CFR 50.36. Therefore, CTS 3/4.7.2 does not meet any of the criteria in 10 CFR 50.36 and may be removed from the CTS and relocated to the SLC Manual. Any changes to these former requirements regarding the SG pressures and temperatures, as relocated to the SLC Manual, will require a safety evaluation pursuant to 10 CFR 50.59. Thus, under 10 CFR 50.59, sufficient regulatory controls exist to ensure continued protection of the public health and safety.

15. 3/4.7.8 Snubbers (3.7 - R.5)

Snubbers support the operability of primary components whose operation or function may be an assumption of a safety analysis. However, snubbers are not considered to be part of the primary success path. Their purpose is to prevent unrestrained pipe motion under dynamic loads while also allowing normal thermal expansion of piping and nozzles to eliminate excessive thermal stresses during heatup and cooldown. The requirements for snubber inspection are also contained in 10 CFR 50.55a and do not need to be repeated in the ITS. Snubber details are defined in ISI program. Changes to the ISI program are adequately controlled by 10 CFR 50.55a. Therefore, CTS 3/4.7.8 does not meet any of the criteria in 10 CFR 50.36 and may be removed from the CTS and relocated to the SLC Manual. Any changes to these former requirements regarding the snubbers and associated surveillances, as relocated to the SLC Manual, will require a safety evaluation pursuant to 10 CFR 50.59. Thus, under 10 CFR 50.59, sufficient regulatory controls exist to ensure continued protection of the public health and safety.

16. 3/4.7.9 Sealed Source Contamination Limits (3.7 - R.3)

CTS 3/4.7.9, "Sealed Source Contamination," provides limitations on sealed source contamination to ensure the total body and individual organ irradiation doses do not exceed allowable limits in the event of ingestion or inhalation. This requirement is not necessary to ensure safe reactor operation. Therefore, CTS 3/4.7.9 does not meet any of the criteria in 10 CFR 50.36 and may be removed from the CTS and relocated to the SLC Manual. Any changes to these former requirements regarding the sealed source contamination and surveillances, as relocated to the SLC Manual, will require a safety evaluation pursuant to 10 CFR 50.59. Thus, under 10 CFR 50.59, sufficient regulatory controls exist to ensure continued protection of the public health and safety.

17. 3/4.7.12 Ground Water Level near Reactor and Auxiliary Buildings (CNS)
3/4.7.13 Ground Water Level near Auxiliary Building (MNS)
(3.7 - R.4)

groundwater level is a slow changing parameter that has no immediate affect on reactor operation

Groundwater level limits are required to be maintained at or below the top of the adjacent floor slabs of the reactor containment building and the auxiliary building to preclude movement of the building from the floating effect of groundwater. These limits, however, are not necessary to ensure safe reactor operation because (licensee to supply basis). Therefore, the ground water level requirements in CTS 3/4.7.12 for CNS and CTS 3/4.7.13 for MNS do not meet any of the criteria in 10 CFR 50.36 and may be removed from the CTS and relocated to the SLC Manual. Any changes to these former requirements regarding the groundwater level limits, as relocated to the SLC Manual, will require a safety evaluation pursuant to 10 CFR 50.59. Thus, under 10 CFR 50.59, sufficient regulatory controls exist to ensure continued protection of the public health and safety.

18. 3/4.7.12 Area Temperature Monitoring (MNS) (3.7 - R.2)

CTS 3/4.7.12 requires area temperature monitoring to indicate that safety-related equipment in various areas of the plant is not being subjected to conditions beyond the defined environmental qualification envelope. This information, however, does not serve any primary safety function. Therefore, CTS 3/4.7.12 does not meet any of the criteria in 10 CFR 50.36 and may be removed from the CTS and relocated to the SLC Manual. Any changes to these former requirements regarding the area temperature monitoring and surveillances, as relocated to the SLC Manual, will require a safety evaluation pursuant to 10 CFR 50.59. Thus, under 10 CFR 50.59, sufficient regulatory controls exist to ensure continued protection of the public health and safety.

19. 3/4.7.13 Standby Shutdown System (CNS) (3.7 - R.6)

CTS 3/4.7.13 identifies diesel generators, makeup pumps, and batteries as standby shutdown system equipment which is used to ensure that a fire requiring evacuation of the control room will not preclude achieving safe shutdown. This equipment is independent of areas where fire could damage those systems normally used to shutdown the reactor. *This system is credited in certain beyond design basis loss of function scenarios (e.g., loss of service water or component cooling water) to minimize core damage frequency and offsite releases. And this system is subject to*

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the regulations associated with the maintenance rule and fire protection. These regulations ensure adequate regulatory control over the availability of this equipment for standby shutdown. However, this system is not used to detect a degradation of the reactor coolant pressure boundary, nor is it assumed to mitigate a DBA or transient event. Thus, the standby shutdown requirements for this equipment are not necessary to ensure safe reactor operation. Therefore, CTS 3/4.7.13 does not meet any of the criteria in 10 CFR 50.36 and may be removed from the CTS and relocated to the SLC Manual. Any changes to these former requirements regarding the standby shutdown system equipment, as relocated to the SLC Manual will require a safety evaluation pursuant to 10 CFR 50.59. Thus, under 10 CFR 50.59 and the other regulatory requirements cited, sufficient regulatory controls exist to ensure continued protection of the public health and safety.

20. 3/4.8.4 Containment Penetration Conductor Overcurrent Protection Devices (3.8 - R.1)

The primary function of the containment penetration conductor overcurrent protection devices is to open appropriate control and power circuits whenever the load conditions exceed the present current demands. Doing so will protect the circuit conductors in the containment penetrations from overcurrent heating effects that could cause damage or failure of the conductors and the penetration. The continuous monitoring of the operating status of the overcurrent protection devices, however, is not practicable and is not a part of normal control room monitoring, except after breaker trip condition indications. In the event an overcurrent protective device fails to trip the circuit, the design includes an upstream protective device that will operate to isolate the faulty circuit. Thus, the protective devices that provide coordination against losing the redundant power source are at a much higher level in the power system. This backup device ensures, that in the event of a single failure loss of the primary device, there is still a device to protect the penetration. In the worst case fault condition, a single division of protective functions can be lost, without loosing the capability to adequately respond to a DBA event. Therefore, CTS 3/4.8.4 does not meet any of the criteria in 10 CFR 50.36 and may be removed from the CTS and relocated to the SLC Manual. Any changes to these former requirements regarding the containment penetration conductor overcurrent protective devices, as relocated to the SLC Manual, will require a safety evaluation pursuant to 10 CFR 50.59. Thus, under 10 CFR 50.59, sufficient regulatory controls exist to ensure continued protection of the public health and safety.

21. 3/4.9.5 Communications Between Control Room and Refueling Station (3.9 - R.1)

CTS 3/4.9.5, "Communications" ensures that refueling station personnel can be promptly informed of significant changes in facility status or core reactivity conditions during Core Alterations. Communications allow for coordination of activities that require interaction between the control room and containment personnel. However, the refueling system design accident or transient response does not take credit for communications. Therefore, CTS 3/4.9.5 does not meet any of the criteria in 10 CFR 50.36 and may be removed from the CTS and relocated to the SLC Manual. Any changes to these former requirements regarding the requirements for communications

removed provisions to ensure that an appropriate level of control has been achieved. The NRC staff has concluded that, in accordance with the Commission's Final Policy Statement, sufficient regulatory controls exist under the regulations, particularly 10 CFR 50.59. Accordingly, these specifications, information, and requirements, as described in detail in this SE, may be relocated from the CTS and placed in the identified licensee-controlled documents as specified in the licensee's letter dated May 27, 1997, as supplemented by letters dated March 9, March 20, April 20, June 5, June 24, July 7, July 21, August 5, and September 8, 1998

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 Section III.D and III.E above. The facility and procedures described in the UFSAR and SLC Manual, incorporated into the UFSAR by reference, 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 other applicable regulatory requirements; for example, the ODAM can be changed in accordance with ITS 5.5.1, the emergency plan implementing procedures (EPIPs) can be changed in accordance with 10 CFR 50.54(q); 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. Temporary procedure changes are also controlled by 10 CFR 50.54(a). The documentation of these changes will be maintained by the licensee in accordance with the record retention requirements specified in the licensee's QA plans for CNS and MNS and such applicable regulations as 10 CFR 50.59.

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The license condition for the relocation of requirements from the CTS in Section V of this SE will address the implementation of the ITS conversion, and when the licensee stated that the relocation of the CTS requirements into licensee-controlled documents will be completed. The relocations to the UFSAR and SLC Manual may be included in the next required update of these documents in accordance with 10 CFR 50.71(e).

G. Evaluation of Other TS Changes Included in the Application for Conversion to ITS

This section addresses the beyond scope issues in which the licensee proposed changes to the CTS that differ from the corresponding requirements in the STS. The staff has provided notices of consideration for these beyond scope issues in the Federal Register; however, some of the notices issued for the proposed amendments were provided for changes to the CTS that are now not considered beyond scope issues in that they are now not considered both a change to the CTS and a deviation from the STS. The changes discussed below are listed in the order of the applicable ITS Sections and requirements. Each evaluation is annotated with the associated discussion of change (DOC) number as appropriate.

1. *Steam Generator Water Level Low-Low - Deletion of Time Constant Requirement from Channel Calibration*
CNS Unit 1 CTS 3/4.3.1, Table 4.3-1 Functional Unit 12, Table Notation 13
CNS Unit 1 ITS 3.3.1, Table 3.3.1-1, Function 13, SR 3.3.1.10

Item 1

CNS 3.3-A.68 The CTS Channel Calibration surveillance requirement for the CNS Unit 1 steam generator water level low-low instrumentation function specifies setting the filter time constant to a value ≤1.5 seconds. This criterion was introduced by CNS Unit 1 Operating License Amendment No. 13 on September 30, 1986. The associated safety evaluation stated that the filter time constant was to reduce spurious reactor trips and auxiliary feedwater initiations. Despite this allowance, in its ITS submittal, the licensee stated that CNS Unit 1 currently has no filter time constant associated with this circuitry, and that the filter time constant was never implemented. Thus the licensee proposed to omit the requirement for this time constant from the ITS Channel Calibration for this instrument function, ITS SR 3.3.1.10. This change is administrative because it deletes a meaningless requirement from the CTS and does not alter how CNS Unit 1 is operated. In addition, it brings the Unit 1 Channel Calibration requirements for this function into conformity with Unit 2. Therefore, this change is acceptable.

2. Turbine Trip and Feedwater Isolation Instrumentation - Addition of T_{avg}-Low Coincident with Reactor Trip Actuation Function
MNS CTS 3/4.3.2; Tables 3.3-3, 3.4-4, and 4.3-2; Functional Unit 5
MNS ITS 3.3.2, Table 3.3.2-1 Function 5.d

MNS 3.3-M.24 The CTS 3/4.3.2 requirements for the turbine trip and feedwater isolation instrumentation function are increased to also require an initiation signal from T_{avg}-low coincident with reactor trip (P-4). This signal relationship limits an excessive reactor coolant system (RCS) cooldown following a reactor trip by terminating main feedwater flow to the steam generators. The inclusion of this initiation signal in ITS 3.3.2.5.d is acceptable because it enhances plant safety and is consistent with the plant design and safety analysis.

3. Containment Pressure Control System - Revised Action Requirements
CNS CTS 3/4.3.2, Table 3.3-3, Functional Unit 7, Action 16b.a
CNS ITS 3.3.2 Action P, Table 3.3.2-1 Function 9
MNS CTS 3/4.3.2, Table 3.3-3, Functional Unit 6, Action 26
MNS ITS 3.3.2 Action R, Table 3.3.2-1 Function 9

Background The Containment Pressure Control System (CPCS) is described in CNS UFSAR Section 7.6.4 and MNS UFSAR Section 7.6.16. It consists of two redundant trains with four differential pressure transmitters or channels per train, each channel supporting a redundant independent component or system. These systems are the containment spray system and the air return fan system. In addition, the CPCS for MNS supports the hydrogen skimmer system. In the event one of the eight channels is inoperable, CTS specify action requirements. These action requirements have been revised so that the ITS action requirements for CNS and MNS are the same.

Each CPCS instrument channel performs a start permissive/terminate function for its associated systems. The purpose of the start permissive/terminate function is to prevent excessive depressurization of the containment through inadvertent or excessive operation of certain engineered safety features such as the containment spray system. When containment pressure is below the terminate setpoint, the start/terminate function will automatically stop or prevent actuation of the associated features to protect against inadvertent actuation and the resulting negative pressure transient in the containment. The start/terminate function blocks actuation of the associated features until containment pressure has increased to the start permissive setpoint. When

containment pressure is above the start permissive setpoint, the features are enabled to perform their containment protective functions; e.g., to prevent over pressurization of the containment in the event of a DBA. These instrumentation controls to block and permit actuation of the associated features are automatic, but each channel may individually be manually overridden by placing the channel in the test mode and setting the setpoint to either permit or prevent (or terminate) system operation. Selecting one precludes the other.

CNS 3.3-M.25; Discussion for CNS In the event one channel is inoperable, the CNS CTS require placing that channel in trip within one hour. For example, should the start permissive/terminate function for the channel be inoperable, manually placing the channel in the start permissive mode would render the terminate function for that channel unavailable. The proposed FTS action requirement does not require placing the channel in trip, an action which would disable the other safety mode of that channel. Rather, it requires immediately declaring the associated supported feature inoperable. This is a more restrictive action because the CTS would allow operation to continue indefinitely provided the channel is in trip, whereas the supported feature's action requirements, in most cases, would place a limit on unit operation. This change is acceptable because the specified action requirements associated with the LCO for the supported feature are adequate to ensure protection of the public health and safety.

In the event more than one CPCS channel is inoperable, the CNS CTS provide no action requirements; thus a unit shutdown in accordance with CTS 3.0.3 would be required. In some cases this may be overly restrictive. The proposed FTS action requirement to immediately enter the LCOs of the supported features applies even if more than one CPCS channel is inoperable. With two or more channels inoperable, the FTS may require a unit shutdown, which is consistent with the CTS. In other cases, however, the supported features' action requirements may allow operation to continue temporarily to allow time to restore the inoperable CPCS channels to Operable status. In these cases, the FTS action requirement would be less restrictive. The FTS action requirement provides adequate assurance that operation with any number of inoperable CPCS instrument channels is limited consistent with the Required Action Completion Times associated with the LCOs for the supported features. This change is acceptable because the specified action requirements associated with the LCO for the supported feature are adequate to ensure protection of the public health and safety.

MNS 3.3-L.28; Discussion for MNS In the event one CPCS channel is inoperable, the MNS CTS require placing that channel in the start permissive mode within one hour. If other channels become concurrently inoperable, the same action requirement applies; a shutdown in accordance with CTS 3.0.3 would not necessarily be required, which would be the case under the CNS CTS. In addition, the MNS CTS require applying the applicable action statement of the features supported by the inoperable channel. The FTS action requirement retains this action requirement but omits the CTS requirement to place the inoperable channel in the start permissive mode. This is less restrictive because it permits greater operational flexibility; in some plant conditions, it may be advantageous to place the channel in the terminate mode. The FTS actions are acceptable because they add appropriate flexibility while maintaining the level of safety afforded by the CTS action requirements.

4. *Hydrogen Monitors - Deletion of Analog Channel Operational Test, Relaxation of Channel Check Frequency, and Removal of Staggered Test Requirement from Channel Calibration*
   CNS CTS 4.6.4.1
   CNS FTS SR 3.3.3.1 and SR 3.3.3.2

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CNS 3.3-L.11 CTS 4.6.4.1 for the hydrogen monitors requires a Channel Check once per 12 hours, an Analog Channel Operational Test (ACOT; COT in the ITS) once per 31 days, and a Channel Calibration every 92 days on a Staggered Test Basis. The ITS relaxed the test interval of the Channel Check to 31 days in ITS SR 3.3.3.1. This is acceptable because it is consistent with the ITS SR Frequencies established for all other post-accident monitoring (PAM) instrumentation. The ITS also omitted the staggered testing requirement from the Channel Calibration in ITS SR 3.3.3.2. This is acceptable because the hydrogen monitors do not perform a mitigative function. In addition, deleting the staggered testing requirement simplifies scheduling and will preclude missing a Channel Calibration simply because of a missed staggered test interval. Finally, the ITS omits the COT. This is acceptable because the hydrogen monitors are passive devices, do not initiate any automatic actuations, and are used only during post accident conditions. The staff agrees that the revised SRs are commensurate with the monitoring function of the hydrogen monitors. Therefore, these changes which are consistent with the STS, are acceptable.

5. Post-Accident Monitoring System Instrumentation - Revised Action Requirements
CNS CTS 3/4.3.3.6 Actions
CNS CTS 3/4.6.4.1 Actions
CNS ITS 3.3.3 Actions

CNS 3.3-L.8 CNS CTS 3/4.3.3.6 Action a and c allow 7 days to restore an inoperable channel of post-accident monitoring (PAM) instrumentation. Corresponding ITS 3.3.3 Actions A, B, and C relaxed this to 30 days. This change is acceptable based on operating experience and because these channels are passive and perform no actuation function. In addition, the remaining operable channels, the remaining operable diverse variable, or alternate monitoring method will ensure adequate monitoring of plant conditions following an accident.

CNS 3.3-L.9 CNS CTS 3/4.3.3.6 Action a and 3/4.6.4.1 Action a require a unit shutdown when one required PAM channel is inoperable and the actions cannot be completed within the allowed time. ITS 3.3.3 Action D replaces the shutdown requirement with a requirement to immediately initiate action in accordance with ITS 5.6.7, "PAM Report." This change will allow continued operation in this condition for functions with two required channels and for those with one required channel if the associated diverse channel or alternate monitoring method is operable, provided a special report is written to the NRC within 14 days detailing planned corrective actions. This change is acceptable because with either a remaining operable channel, or a diverse operable channel, the monitoring function is not lost.

In the event one channel of the containment area radiation monitor or reactor coolant radiation level monitor is inoperable and the alternate monitoring method is also inoperable, the CTS would require a unit shutdown in accordance with CNS CTS 3.0.3 because CNS CTS 3/4.3.3.6 does not specify an action requirement for this specific condition. The ITS addresses this situation for PAM radiation monitoring instrumentation by requiring, in ITS 3.3.3 Action D, that if one of the inoperable channels cannot be restored to operable status within 7 days a special report would be prepared and submitted to the NRC within 14 days. This is consistent with the STS and is acceptable for the reasons given above.

CNS 3.3-L.10 CNS CTS 3/4.3.3.6 Action b requires a unit shutdown if the minimum number of operable PAM channels cannot be restored within 48 hours. The ITS relaxes this Completion Time to 7 days in ITS 3.3.3 Actions E and F. This change is acceptable based on the low probability of an event requiring PAM instrument operation and the availability of alternate means to obtain the required information.

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6. *Reactor Coolant System (RCS) Low Temperature Overpressure Protection (LTOP) System - Addition of Allowance to Operate Two Charging Pumps Concurrently*
*MNS CTS 3/4.4.9.3 Action a and Footnote **
MNS ITS 3.4.12 Required Action A.4

*MNS 3.4-L.26 In the event two or more centrifugal charging pumps or two or more safety injection pumps are capable of injecting into the reactor coolant system (RCS) when LTOP is required, CTS 3/4.4.9.3 Action a requires immediately reducing the number of capable pumps to the number allowed by CTS 3.4.9.3. However, Footnote * to CTS Action a specifies an exception to this action for the condition of two centrifugal charging pumps being capable. This exception permits two capable centrifugal charging pumps when two power-operated relief valves (PORVs) are secured open with block valves open with their power removed. ITS 3.4.12 Action A also permits this allowance for two capable charging pumps for the additional alternative condition in Required Action A.4 that the RCS is depressurized and an RCS vent of greater than or equal to 4.5 square inches is established. This change is acceptable because the vent size was evaluated in the MNS low-temperature overpressure protection analysis and is approximated by the two open PORVs. That is, with two capable charging pumps, the level of overpressure protection afforded by a vented and depressurized RCS is equivalent to that provided by two PORVs with open de-energized block valves.*

7. *Reactor Coolant System Leakage Detection Instrumentation - Revised Action Requirements*
CNS and MNS CTS 3/4.4.6.1 Actions
CNS and MNS ITS 3.4.15 Actions

The staff reviewed CNS and MNS's proposed ITS 3.4.15 which is based on STS 3.4.15, "Reactor Coolant System Leakage Detection Instrumentation," for changes to CNS and MNS CTS 3/4.4.6.1 that are also deviations from the STS. A change to the LCO and action requirements for an inoperable containment atmosphere radioactivity monitor (gaseous or particulate for CNS; gaseous for MNS) satisfied this description.

Background (CNS and MNS 3.4-A.1 and CNS 3.4-A.41) ITS 3.4.15 differs from the STS to reflect plant-specific system names, which include changing the STS's "containment sump level monitor" to the ITS's "containment floor and equipment sump level monitor," and changing the STS's "containment air cooler condensate flow rate monitor" to the ITS's "containment ventilation condensate drain tank (CVCDT) level monitor." Also, the CNS CTS 3.4.6.1 requirement for the Operability of containment sump discharge flow monitor was not retained because the actual system monitors level changes, not flow rate. The staff found that these deviations from the STS terminology were acceptable because they are consistent with existing CNS and MNS terminology and leak detection system design.

CNS and MNS 3.4-L.17 In the event a containment atmosphere radioactivity monitor (gaseous or particulate for CNS; gaseous for MNS) is inoperable, CTS 3/4.4.6.1 Action allows continued plant operation for 30 days provided grab samples of the containment atmosphere are taken and analyzed every 24 hours. For this condition, CNS and MNS ITS 3.4.15, in Required Action B.1, retain the requirement for daily grab samples of the containment atmosphere, but add the option in Required Action B.2, consistent with the STS, to instead perform an RCS inventory balance every 24 hours. This added

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flexibility is acceptable because both methods provide an effective mechanism to detect RCS leakage. This part of the change to the CTS action requirements, however, is within the scope of the ITS conversion.

CNS and MNS ITS 3.4.15 Action B differs from the STS and the CTS because it does not require restoring the inoperable monitor within 30 days. In addition, the ITS does not adopt the STS's option to verify the Operability of the CVCDT level monitor within 30 days. Omitting these two STS action requirements is beyond the scope of the ITS conversion. The ITS omit these action requirements because they provide no additional limitation beyond that imposed by the other Actions of ITS 3.4.15, all of which are consistent with the STS action requirements.

Discussion for CNS In the STS, if the CVCDT level monitor is Operable, then the second optional action requirement would be taken, and operation of the unit could continue indefinitely. If the CVCDT level monitor is not operable, however, then this action requirement to verify the Operability of the CVCDT level monitor within 30 days is unnecessary. In addition, CNS ITS 3.4.15 Action D already addresses the condition of both the containment atmosphere radioactivity monitor (gaseous or particulate) and the CVCDT level monitor being inoperable. This Action requires restoring one of these monitors within 30 days. Thus the 30-day requirement, when it would apply, is contained in the ITS action requirements without including it in CNS ITS 3.4.15 Action B.

Discussion for MNS *In the STS, if the CVCDT level monitor is Operable, then the second optional action requirement would be taken, and operation of the unit could continue indefinitely. If the CVCDT level monitor is not operable, however, then this action requirement to verify the Operability of the CVCDT level monitor within 30 days is unnecessary because* the containment floor and equipment sump monitor and the *containment atmosphere particulate monitor* would be available to monitor leakage. In addition, if the containment atmosphere particulate monitor is also inoperable, MNS ITS 3.4.15 Action C would require restoring one of these monitors within 30 days. Thus the 30-day requirement, when it would apply, is contained in the ITS action requirements without including it in MNS ITS 3.4.15 Action B.

Therefore, as long as the CVCDT level monitor is Operable and either a containment grab sample is obtained and analyzed or an RCS inventory balance is performed daily, ITS 3.4.15 Action B will allow plant operation to continue indefinitely with an inoperable containment atmosphere radioactivity monitor *(gaseous or particulate for CNS; gaseous for MNS).* This is acceptable because diverse indication of RCS leakage is maintained by the CVCDT level monitor and the containment floor and equipment sump monitor, and for MNS, the containment atmosphere particulate monitor. Based on the above, the staff finds that ITS 3.4.15 Action B for CNS and MNS is acceptable.

8. Accumulator Isolation Valves - Revised Pressure Limit for Removing Power
CNS and MNS CTS 4.5.1.1.c
CNS and MNS ITS SR 3.5.1.5

CNS and MNS 3.5-M.2 CTS 4.5.1.1.c requires that the power be removed from the accumulator isolation valves when reactor coolant system pressure is greater than 2000 psig. Removal of power will ensure that the accumulators are not isolated from the RCS, and can inject coolant into the RCS when the conditions exist. Corresponding ITS SR 3.5.1.5 specifies a more restrictive pressure threshold of 1000 psig. The licensee cited Westinghouse Nuclear Safety Advisory Letter (NSAL) 97-003 to support this change. NSAL 97-003 addresses operating bypasses and compliance with IEEE 279-1971. The revised pressure setpoint is consistent with the operability assumptions described in the NSAL for a loss of coolant accident while shutdown, and is also consistent with existing practice. Therefore, the staff finds this change acceptable.

9. Refueling Water Storage Tank (RWST) - Deletion of Outside Air Temperature Condition for Performing RWST Temperature Verification Surveillance

CNS and MNS CTS 4.5.4.b
CNS and MNS ITS SR 3.5.4.1

CNS and MNS 3.5-M.3 Every 24 hours, CTS 4.5.4.b requires verifying that the refueling water storage tank (RWST) temperature is within the range 70 °F to 100 °F "when the outside air temperature is less than 70 °F or greater than 100 °F." This SR is retained as ITS SR 3.5.4.1. The ambient temperature condition is deleted so that the daily requirement to monitor the RWST temperature applies without regard to the ambient temperature. Under the current Section 4.5.4.b, licensee personnel have to verify the outside temperature every 24 hours, and determine if there is any need to verify RWST water temperature; under the proposed SR 3.5.4.1, personnel simply verify the RWST temperature every 24 hours regardless of outside ambient temperature. This proposed change is acceptable because it increases the monitoring of RWST temperature to whenever the RWST is required to be Operable.

10. *Hydrogen Mitigation System - Revised Minimum Number of Required Hydrogen Igniters*

{Ref. UFSAR 6.2.7}

MNS CTS 4.6.4.3.a
MNS ITS SR 3.6.9.1

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MNS 3.6-A.37 CTS 4.6.4.3.a requires that 32 of 33 hydrogen igniters be operable on each train. Corresponding ITS SR 3.6.9.1 requires 34 igniters per train to be operable. The actual design contains 34 igniters per train. This change is administrative because it corrects an inadvertent error in the CTS and is consistent with current operation of the system. The correct number of igniters was increased as discussed in MNS SER Supplement 7, Attachment C, after the first refueling outage of each unit. This change corrects the TS with the approved licensing basis as described in the SER supplement. Therefore this change is acceptable.

11. *Ice Bed - Relaxation of SR Frequency to Verify Boron Concentration and pH*

CNS and MNS CTS 4.6.5.1.b.1
CNS and MNS ITS SR 3.6.12.3

Background The boron in the ice of the ice bed is used to reduce the volatility of radioiodines and to ensure that the overall boron concentration in the sump is not diluted during the ice melt following a design basis loss of coolant accident. The pH of the ice facilitates removal of radioiodines and minimizes corrosion within containment during the recirculation phase of a design basis loss of coolant accident.

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CNS 3.6-L.26 CTS 4.6.5.1.b.1 requires verifying the boron concentration and pH of the ice bed is within limits once per 9 months, which is the test interval given in the STS. Corresponding ITS SR 3.6.12.3 increases the surveillance interval to 18 months. Sampling of the ice baskets is performed at random by sampling the top few feet after removing a few inches of ice from the top of the basket. Data from past sampling of the ice beds indicates that there have been few failures for this surveillance. The boron in the ice is in the form of sodium tetra borate (a salt), and is not volatile even though the ice itself may sublimate. As a result, not only would the boron concentration not decrease, it will increase in inverse proportion to the quantity of ice remaining. This was demonstrated by past surveillance data, showing that the boron concentration associated pH routinely met the acceptance criteria (specified in CTS 3.6.5.1.a and retained in ITS SR 3.6.12.3). Accordingly, the SR Frequency may be relaxed to once per 18 months, consistent with the frequency of refueling outages. A benefit of this relaxation is that it will reduce the number of routine containment entries during power operation. This relaxation is acceptable because of the favorable surveillance record and the tendency of the ice bed boron concentration to increase over time.

MNS 3.6-L.26 CTS 4.6.5.1.b.1 requires verifying the boron concentration and pH of the ice bed is within limits once per 9 months, which is the test interval given in the STS. Corresponding ITS SR 3.6.12.3 increases the surveillance interval to 18 months. Sampling of the ice baskets is performed at random by sampling the top few feet after removing a few inches of ice from the top of the basket. Data from boron sampling in the ice beds indicates that there have been few failures for this surveillance since 1986.

These early failures at MNS have been attributed to the initial ice loading or ice makeup techniques in use at that time. During the initial years of operation, ice sublimation rates were higher than expected and several methods were used to increase the ice basket weight. These included reloading with fresh flake ice, reloading with ice blocks formed from a borax solution in molds, and the direct addition of borax to the baskets. As a result, effective sampling for these baskets during this time frame was difficult because the sample may not have been representative. The data reviewed for the ten-year period (1986 to 1996) indicate that of the over 500 baskets sampled, 26 had concentrations less than 1800 ppm, and that 7 of these 26 baskets were reloaded, and the remaining baskets were averaged with the other baskets.

The boron in the ice is in the form of sodium tetra borate (a salt), and is not volatile even though the ice itself may sublimate. As a result, not only would the boron concentration not decrease, it will increase in inverse proportion to the quantity of ice remaining. This was demonstrated by past surveillance data, showing that the boron concentration and associated pH routinely met the acceptance criteria (specified in CTS 3.6.5.1.a and retained in ITS SR 3.6.12.3), except as noted above. Accordingly, the SR Frequency may be relaxed to once per 18 months, consistent with the frequency of refueling outages. A benefit of this relaxation is that it will reduce the number of routine containment entries during power operation. This relaxation is acceptable because of the favorable surveillance record of recent years and the tendency of the ice bed boron concentration to increase over time.

12. *Containment Valve Injection Water System - Deletion of Surge Tank Water Supply Requirement and Reduction of Required Seal Injection Flow Rate*
CNS CTS 4.6.6.1 and 4.6.6.2
CNS ITS SR 3.6.17.1 and SR 3.6.17.2

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Background The containment valve injection water system prevents leakage of containment atmosphere past certain gate valves used for containment isolation following a loss-of-coolant accident (LOCA) by injecting seal water at a pressure exceeding containment pressure between two seating surfaces of the flex edge valves as described in CNS UFSAR Section 6.2.4.2.2.

CNS 3.6-L.23 CTS 4.6.6.1 requires verification every 31 days that the surge tanks of the system have a 30-day supply of wate . Corresponding ITS SR 3.6.17.1 omits this requirement because the nuclear service water system (NSWS) is the assured automatic source of water after a LOCA. The NSWS is designed for long term (30 day) cooling. Therefore, it is not necessary to specifically require this to be verified on a monthly basis. Thus the supply of water is assured with or without the surveillance requirement. Therefore, deletion of the surge tank water supply requirement from this surveillance is acceptable.

CTS 4.6.6.2 requires verifying once per 18 months that system pressure is ≥ 45 psig, and that the system flow rate is less than 1.7 gpm for Train A and 1.4 gpm for Train B with a tank pressure ≥ 45 psig. These criteria are based on two NSWS pumps in operation. The ITS criteria are based on a single NSWS pump in operation. Specifically, corresponding ITS SR 3.6.17.2 requires a flow rate to be less than 1.29 gpm for Train A and less than 1.16 gpm for Train B with a surge tank pressure ≥ 36.4 psig. In its submittal, the licensee stated that at this lower surge tank pressure, the pressure at the valve with the greatest system head loss from the surge tank is ≥16.2 psig, which is 110 percent of peak containment pressure following a LOCA. Thus specifying the required system pressure with a surge tank pressure of ≥ 36.4 psig is equivalent to specifying a system pressure of ≥16.2 psig. These changes in surveillance requirement acceptance criteria are acceptable because they are adequate to ensure that the containment valve injection water system will perform its containment isolation function following a design basis LOCA.

13. *Main Steam Safety Valves (MSSVs) - Revised Action Requirements*
CNS CTS 3/4.7.1.1 Action a and Table 3.7-1
CNS ITS 3.7.1 Action A and Table 3.7.1-1

Background The main steam safety valves are code safety valves (five associated with each of the four steam generators) and ensure that the secondary system pressure will be limited to within 110 percent (1304 psig) of its design pressure of 1185 psig during the most severe anticipated system operational transient. Each valve provides 20 percent of the relieving capacity. CNS CTS 3/4.7.11 allows plant operation during the operational conditions of Hot Standby, Startup, and Power Operation (Modes 3, 2, and 1) with some of these valves inoperable provided the steam flow and thermal power are limited. The staff transmitted Westinghouse's Nuclear Safety Advisory Letter (NSAL) 94-001 to licensees by Information Notice 94-60, dated August 22, 1994. NSAL 94-001 recommended reducing the existing limits on thermal power.

CNS 3.7-M21 CNS CTS 3/4.7.1.1 Action a references Table 3.7-1, to specify the maximum allowable power range neutron flux high setpoints (percent of reactor rated thermal power) as 87, 65, 43 for 4, 3, 2 code safety valves operable, respectively, on a steam generator. In response to a recommendation received from the nuclear steam supply system (NSSS) vendor Westinghouse in NSAL 94-001, the licensee proposed to reduce the setpoints to 58, 41, 24 for 4, 3, 2 code safety valves operable, respectively. These new setpoints were calculated using the formula provided in NSAL 94-001, and will replace the old setpoints in corresponding CNS ITS Table 3.7.1-1. This change is

- 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.

→ Insert Attached

VI. STATE CONSULTATION

In accordance with the Commission's regulations, the North Carolina and South Carolina State officials were notified of the proposed issuance of the ITS conversion amendments for the CNS Units 1 and 2 and MNS Units 1 and 2. The State officials had no comments.

VII. 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 _____ for the proposed conversion from the CTS to the ITS for the CNS ~~and MNS. Accordingly,~~ based upon the environmental assessment, the Commission has determined that issuance of this amendment will not have a significant effect on the quality of the human environment.

and MNS

Included in these amendments are changes that were beyond the scope of the ITS conversion for the CNS. These changes are discussed in Section III.G of this safety evaluation and were either included in the Federal Register notice of July 14, 1997 for Catawba (62 FR 37628), and July 15, 1997 for McGuire (62 FR 37940) or in separate notices in the Federal Register. These changes altered requirements with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that these 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 has previously issued proposed findings that the amendment involves no significant hazards consideration, and there has been no public comment on such findings (for Catawba: 63 FR 25106, 63 FR 27760, 63 FR 40553; for McGuire: 63 FR 25107, 63 FR 25108, 63 FR 27761, 63 FR 20554). Accordingly, the amendment meets 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 issuance of the amendment.

VIII. CONCLUSION

The CNS and MNS ITS provide clearer, more readily understandable requirements to ensure safer operation of the stations. The NRC staff concludes that the ITS satisfy the guidance in the Commission's Final Policy Statement with regard to the content of TS, and conform to the STS provided in NUREG-1431 with appropriate modifications for plant-specific considerations. The NRC staff further concludes that the ITS satisfy Section 182a of the Atomic Energy Act, 10

Insert for Section V

"In its letter of September 8, 1998, the licensee also proposed a license condition that will enforce the relocation of requirements from the CTS to licensee-controlled documents. The relocations are provided in Table LA of Removal of Information from the Current Technical Specifications and Table R of Relocated Current Technical Specifications. The license condition states that the relocations would be completed, during the implementation of the ITS, within 90 days of the issuance of this amendment (McGuire) by January 31, 1999 (Catawba). This schedule is acceptable."

TABLE A - ADMINISTRATIVE CHANGES
SECTION 1.0 USE AND APPLICATION

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
1.0 A.12	The CTS electrical power requirement in the CTS definition of OPERABILITY was clarified to explicitly state "normal or emergency electrical power." The intent of the CTS language "necessary...electrical power" is to only require one source of power for a feature to be OPERABLE. Similarly, the CTS language "specified function" was replaced with "specified safety function(s)" to clarify that OPERABILITY does not encompass any non-safety functions a system may also perform.	1.1	1.19
1.0 A.13	The CTS definition of MODE was clarified to include "with fuel in the reactor vessel." This is editorial in nature since the statement was already included in CTS Table 1.2 which defined Operational Modes. Therefore, the ITS definition of MODE is equivalent to CTS requirements.	1.1	1.20
1.0 A.14	Not used. [SP] RATIO		
1.0 A.15	In the event one excore detector is inoperable, the CTS definition of QUADRANT POWER TILT RATION (QPTR) requires computing QPTR using the three remaining excore detectors to compute the average detector output. This requirement is retained as a note in ITS SR 3.2.4.1 to determine the QPTR.	SR 3.2.4.1 Note	1.25
1.0 A.16	In the determination of SHUTDOWN MARGIN (SDM), CTS 4.1.1.1 and 4.1.1.2 require accounting for the reactivity worth of any rod cluster control assemblies (RCCAs) which are not capable of being fully inserted. This requirement is retained in the ITS definiton of SDM, consistent with the STS. In addition, the CTS definition of SDM is clarified consistent with the STS and current practice to specify using nominal zero power level values for fuel and moderator temperatures to calculate SDM during operation in MODES 1 and 2.	1.1	1.30 4.1.1.1 4.1.1.2
1.0 A.17	The CTS definition of STAGGERED TEST BASIS is modified to be consistent with its usage throughout the ITS. The intent of the frequency of testing components on a STAGGERED TEST BASIS is not changed. The ITS 1.1 definition allows specifying staggered test intervals for applicable ITS SRs in the SR Frequency column, independent of the number of subsystems. The modification of the definition does not involve any technical changes to the staggered intervals specified in the CTS and only affects the presentation of this information.	1.1	1.35

(C) Catawba specific
(M) McGuire specific

TABLE A - ADMINISTRATIVE CHANGES
SECTION 1.0 USE AND APPLICATION

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
1.0 A.18	The CTS definition of FREQUENCY NOTATION and associated CTS Table have been deleted since the abbreviations in the CTS Table are no longer used within the ITS. The CTS FREQUENCY NOTATIONS are replaced in the ITS by the direct specification of all frequencies without the use of "Notations".	1.1	1.14, Table 1.1
1.0 A.19	The note in CTS Table 1.2 that helps define MODE 6, Refueling, is revised to delete the phrase "with the head removed." This change is administrative because this note also describes Mode 6 with the bounding phrase "with the head closure bolts less than fully tensioned." The vessel head can only be removed if the head closure bolts are less than fully tensioned. Thus MODE 6 may be defined without the phrase "or with the head removed."	Table 1.1-1 Note c	Table 1.2 Note *
1.0 A.20 format problem	The ITS contains three new sections, 1.2 - Logical Connectors, 1.3 - Completion Times, and 1.4 - Frequency, to ensure consistent understanding and use of the ITS format and presentation style. These new sections do not change any CTS operational restrictions or limits. Their addition is, therefore, an administrative change.	1.2, 1.3, and 1.4	1.0
1.0 A.21	The average reactor coolant temperature threshold for MODES 1 and 2 specified in CTS Table 1.2 was changed to NA (not applicable) in corresponding ITS Table 1.1-1. In the ITS, individual specification applicability statements specify the applicable average reactor coolant temperature limits in MODES 1 and 2. In particular, the 350°F MODE 1 and 2 temperature specified in the CTS table is unnecessary because the minimum required reactor coolant temperature for MODES 1 and 2 is specified in the appropriate ITS Section 3.4 specifications. The ITS definitions for MODES 1 and 2 retain the CTS theshold values of reactivity (K_{eff}) and thermal power level. These thresholds are the principal basis for the applicability of CTS requirements in MODES 1 and 2. Therefore, specifying reactor coolant temperature boundaries in the applicability statements of only those ITS specifications that require it, and omiting it from the ITS definitions for MODES 1 and 2 is an administrative change.	Table 1.1-1	Table 1.2

(C) Catawba specific
(M) McGuire specific

TABLE A - ADMINISTRATIVE CHANGES
SECTION 1.0 USE AND APPLICATION

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
1.0 A.22	The definitions of Hot Shutdown (MODE 4) and Cold Shutdown (MODE 5) in CTS Table 1.2 are clarited for completeness to preclude misinterpretation. Specifically, a note was added to specify that these Modes require "all reactor vessel head closure bolts fully tensioned." The addition of this note is an administrative change because it eliminates a potential overlap in defined operational modes and reflects actual industry practice.	Table 1.1-1 Note b	Table 1.2
1.0 A.23	The definition of REFUELING (MODE 6) in CTS Table 1.2 was changed to remove the 140°F upper limit on average reactor coolant temperature. When the average coolant temperature exceeded 140°F, the CTS could be misinterpreted as not requiring the application of TS requirements that are needed when the reactor vessel head bolts are not fully tensioned. Removing the temperature reference will ensure observance of the MODE 6 TS requirements should the average coolant temperature exceed 140°F. This change is administrative because it makes clear the intent of the CTS and is consistent with current practice.	Table 1.1-1	Table 1.2
1.0 A.24	The CTS definition of CHANNEL CALIBRATION was revised to include calibration of required displays. The majority of CTS channels which require a calibration are those that perform trip or actuation functions and do not have a "required" display function. However, CTS 4.3.3.6 requires a calibration of the post accident monitoring channels. The safety function performed by these channels is a display function only. Therefore, the inclusion of required displays within the ITS definition of CHANNEL CALIBRATION is an administrative change because it is consistent with the CTS calibration requirements for the post accident monitoring system instrumentation channels and with current practice.	1.1	1.5

(C) Catawba specific
(M) McGuire specific

TABLE A - ADMINISTRATIVE CHANGES
SECTION 3.2 POWER DISTRIBUTION LIMITS

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.2 A.7	A Note was added to the CTS Actions to clarify that a power reduction is not required to meet the required actions if, prior to reducing power below 75% (or 50%), $F_{\Delta H}(X,Y)$ is restored within limit. No technical requirements are added or deleted by this change.	3.2.2 Actions	3.2.3 Actions
3.2 A.8	The CTS Action that allows operation to proceed and THERMAL POWER to be increased provided $F_{\Delta H}(X,Y)$ is demonstrated within limit prior to increasing THERMAL POWER whenever power is reduced because $F^{M}_{\Delta H}(X,Y)$ is not within limit has been reformatted as a Note to the required actions in ITS Actions.	~~3.2.3 Action~~ d 3.2.2 Actions	~~3.2.2 Actions~~ 3.2.3 Action d
3.2 A.9	The CTS allowance for an exemption to the provisions of Specification 4.0.4 that allowed the plant to change MODES (enter MODE 1) without requiring the Surveillance Requirement to be performed is retained in the Frequency requirements of the corresponding ITS Surveillance Requirement.	SR 3.2.2.1	4.2.3.1
3.2 A.10	The CTS Surveillance Requirements for verification of hot channel factors after the QPTR indicated by the excore detectors is normalized using incore detectors was converted to an action in the ITS QPTR LCO. The CTS requirements are retained intact in the form of Actions.	3.2.4 Actions	4.2.2.2.b and 4.2.3.2.b
3.2 A.11	Not used.		
3.2 A.12	The CTS SRs for a determination that $F_{\Delta H}$ is within the surveillance limit and for an extrapolation of recent $F_{\Delta H}$ measurements to determine if the surveillance limit would be exceeded in the next 31 EFPD were reformatted and retained in the corresponding ITS Surveillance Requirement. No technical changes were introduced when reformatting the CTS requirements.	SR 3.2.2.2	4.2.3.2.c.1 and 4.2.3.2.d
3.2 A.13	The CTS Surveillance contains Actions if the $F_{\Delta H}$ surveillance margin has not been met. The Action requirements in the Surveillance are redundant to the Actions provided in the associated LCO. Since, if the Surveillance was not met the LCO Actions would be applicable, the Actions contained in the CTS Surveillance are not required and have been deleted.	3.2.2 Actions	4.2.3.2.c.2

(C) Catawba specific
(M) McGuire specific

TABLE A - ADMINISTRATIVE CHANGES
SECTION 3.3 INSTRUMENTATION

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.3 A.22 (M)	A clarification has been added to the single channel Source Range Neutron Flux function in MODES 3, 4, and 5. The ITS Note clarifies that this function is required when the reactor trip breakers are open. A note already exists for the two channel function in these modes that states two channels are required Operable when the reactor trip breakers are closed and the rod control system is capable of rod withdrawal. Therefore, this addition only provides clarifying information.	Table 3.3.1-1	Table 3.3-1
3.3 A.23 (M)	The applicability of the CTS Turbine Trip function was modified by a Note consistent with the design for this function. The note specifies that the function is required operable above the P-8 interlock which conforms with the normal operation of the P-8 interlock. Below the interlock, a turbine trip does not cause an automatic reactor trip.	Table 3.3.1-1	Table 3.3-1
3.3 A.24	A Note was added to the CTS Actions that allows separate condition entry for each ESFAS Function. The Note provides explicit instructions for proper application of the Actions for TS compliance. In conjunction with the ITS 1.3, "Completion Times," this Note provides direction consistent with the intent of the existing actions for the ESFAS Instrumentation.	3.3.2 Actions	3.3.2 Actions
3.3 A.25	The CTS reference to Table 4.3-2 for the required Surveillance Requirements applicable to each Function was converted into an ITS SR Note which references ITS Table 3.3.2-1 for the Surveillance Requirements applicable to each Function.	SR Note	4.3.2.1
3.3 A.26	The CTS ESFAS Table which lists the, "Total No. of Channels," "Channels to Trip," and "Minimum Channels Operable" was replaced with one ITS column that lists the, "Required Channels." The ITS actions classify inoperabilities based on the required channels, whereas the CTS actions were constructed based on total channels and minimum number of channels. A clarification was also made to the APPLICABLE MODES column. The phrase "or other specified conditions" was added to the APPLICABLE MODES column title. This change is intended to cover the Notes used to modify the modes listed in this column. The Notes modify the modes in the Table or identify conditions beyond the defined modes. Therefore, this change provides a more appropriate column title. In addition, the CTS ACTION column was renamed to the CONDITION column and all CTS actions are replaced with ITS Conditions. The above changes only affect the presentation of the information on the Tables.	(C) Tables 3.3.2-1, 3.3.6-1, 3.3.7-1, and 3.3.8-1 (M)Table 3.3.2-1 (3.3.6-1)	Table 3.3-3

(C) Catawba specific
(M) McGuire specific

TABLE A - ADMINISTRATIVE CHANGES
SECTION 3.3 INSTRUMENTATION

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.3 A.60 (C)	The CTS ESFAS Control Area Ventilation Operation function which includes requirements for a loss of power initiation with specific channel requirements, actions, and surveillance requirements was moved to the ITS LCO specifically for this instrumentation (3.3.7). The requirements for the loss of power initiation feature of this system are redundant to other TS requirements and were eliminated from the new ITS instrumentation LCO for this system. The loss of power DG start function is addressed by ITS LCO 3.3.5 and the verification that required loads are auto connected through the sequencer on a loss of power is contained in CTS 3.8.1.1 and is maintained in ITS SR 3.8.1.11.	3.3.7	3.3.2
3.3 A.61(C)	A note was added to the CTS to require the CRAVS train be placed in the chlorine gas protection mode if automatic transfer to the chlorine gas protection mode is inoperable. This addition is consistent with the requirements of CTS 3.3.3.7 which has been relocated from the TS.	3.3.7	3.3.2 Action 24
3.3 A.62 (C)	The CTS requirements for the Auxiliary Building Filtered Ventilation Exhaust System (ABFVES) actuation instrumentation were moved to a new LCO in the ITS.	3.3.8	3.3.2
3.3 A.63 (C)	A Note was added to the CTS that allows separate condition entry for each ABFVES Actuation Instrumentation. This Note in the ITS provides explicit instructions for proper application of the actions for Technical Specification compliance. In conjunction with ITS 1.3, "Completion Times," this Note provides direction consistent with the intent of the existing actions for the ESFAS Instrumentation.	3.3.8	3.3.2 Actions
3.3 A.64 (C)	The CTS requirements for surveillance testing of the Source Range Neutron Flux Monitors consistent with CTS Table 4.3-1 when relying on these monitors to meet the requirements for the BDMS were made into specific SRs in the ITS LCO for the BDMS (3.3.9). No reference is used in the ITS to another LCO. In addition, the CTS error in referencing a monthly test in Table 4.3-1 was corrected. The referenced test on table 4.3-1 is a quarterly test and the new ITS surveillance is consistent with the frequency specified in Table 4.3-1.	SR 3.3.9.6 SR 3.3.9.4	4.3.3.11.2.a Table 4.3-1
3.3 A.65	The CTS requirement for a TADOT on the manual initiation function for Containment Purge and Exhaust was revised to clarify that verification of the setpoint is not required for the surveillance. The TADOT definition includes setpoint verification, however, this is a manual actuation with no associated setpoints.	SR 3.3.6.4	Table 4.3-2

(C) Catawba specific
(M) McGuire specific

TABLE A - ADMINISTRATIVE CHANGES
SECTION 3.3 INSTRUMENTATION

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.3 A.66	CTS requirement for a TADOT on the manual initiation function for SI, Containment Spray, Phase A, Phase B, and Steam Line Isolation was revised to clarify that the verification of setpoint is not required for this surveillance. The TADOT definition includes setpoint verification, however, these are manual actuations with no associated setpoints.	(C) SR 3.3.2.8 (M) SR 3.3.2.7	Table 4.3-2
3.3 A.67	The CTS requirement for a TADOT on the manual initiation function for reactor trip, reactor trip bypass breakers, and SI input to reactor trip was revised to clarify that the verification of setpoint is not required for this surveillance. The TADOT definition includes setpoint verification, however, these are manual actuations with no associated setpoints.	SR 3.3.1.14	Table 4.3-1
3.3 A.68 (C)	(Unit 1 only) concerning the filter time constant in the Unit 1 steam generator low-low level reactor trip circuitry was deleted. Unit 1 presently has no filter time constant associated with this circuitry. This note was added to the Unit 1 Technical Specifications on September 30, 1986, via license amendments 13 and 5 for Units 1 and 2, respectively. The purpose of the time constant was to assist in reducing the number of spurious low-low steam generator level reactor trips that occurred early in the plant operating history. The subject filter time constant was never actually implemented.	3.3.1	Note 13 on Table 4.3-1
3.3 A.69	The portion of the CTS note in the RTS Specification regarding the exception to the provisions of Specification 4.0.4 for entry into Modes 1 or 2 for the detector plateau curve verification was moved to the applicable ITS SR.	SR 3.3.1.11 Note 2	Note 5 on Table 4.3-1
3.3 A.70 (C)	The CTS Channel Calibration requirement for the overtemperature and overpower delta T functions was revised by the addition of a clarifying note which states that the surveillance shall include verification that the time constants are adjusted to the proscribed values. The overpower and overtemperature delta T functions have several time constants specified in their setpoints. As these constants are part of the CTS (and ITS) setpoint they are routinely verified in Channel Calibrations (which are required to verify the specified setpoints). Therefore the addition of this ITS surveillance note serves as a clarification or reminder that the Channel Calibration should include the time constants.	SR 3.3.1.10 SP prescribed	Table 4.3-1

(C) Catawba specific
(M) McGuire specific

TABLE A - ADMINISTRATIVE CHANGES
SECTION 3.3 INSTRUMENTATION

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.3 A.71	A new ITS Note has been included in the ESFAS Channel Calibration surveillance requirement to require that the channel calibration include verification of time constants. Time constants are specified in the ESFAS as part of the setpoint. In CTS Table 3.3-4 the setpoints for McGuire Function 4.d and Catawba Function 4.e contain time constants for which the ITS note is applicable. As the time constants are specified as part of the function setpoint and the fact that a channel calibration must verify each function's setpoint, the addition of the ITS note provides a clarification and does not introduce a technical change in the calibration of any ESFAS function.	(M) SR 3.3.2.8 (C) SR 3.3.2.9	Table 4.3-2
3.3 A.72	A new ITS Note has been added to the CTS requirement for ESFAS Response Time Testing that provides an exception for the performance of Response Time Testing of the Turbine Driven AFW pump. The addition of this ITS note is consistent with an existing CTS allowance for testing the turbine-driven AFW pump contained in the Plant Systems Technical Specifications for the AFW system. As this allowance already exists in the CTS pump testing requirements, the addition of the ITS Response Time Surveillance Note serves only as a clarification of the existing CTS requirements.	(C) SR 3.3.2.10 (M) SR 3.3.2.9	4.3.2.2
3.3 A.73	The CTS surveillance requirement for the P-6 and P-10 interlocks is revised to more clearly identify the Nuclear Instrumentation channels associated with each interlock. The identification of the Intermediate Range Instrumentation in association with the P-6 interlock and the Power Range Instrumentation in association with the P-10 interlock is consistent with the design of those interlocks.	SR 3.3.1.8	Table 4.3-1 Note 9
3.3 A.74 (M)	The Plant specific Doghouse Water Level High-High Function Actions are based on the loss of one entire train (less than the minimum required number of channels operable or more than one channel inoperable). Therefore, the typical conversion to the ITS of the CTS Total number of channels with an Action for one channel inoperable does not apply. Instead of the total number of channels being used in the ITS "Required Channels" column, the CTS specified minimum number of channels per train is used in the ITS. The ITS Required Channels and Action Conditions preserve the CTS requirements in the ITS format.	Table 3.3.2-1 Function 5.e Conditions L and M	Action #25 Table 3.3-3

(C) Catawba specific
(M) McGuire specific

TABLE A - ADMINISTRATIVE CHANGES
SECTION 3.3 INSTRUMENTATION

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.3 A.75 (C)	The CTS table notation which states that the "Trip function is automatically blocked above P-11 interlock and may be blocked below P-11 when Safety Injection on low steam line pressure is not blocked" was revised in the ITS Applicability to state the signal may be blocked below P-11 when Steam Line Isolation Steam Line Pressure-Low is not blocked. The reference to SI has been deleted. Amendment No. 158/150 was issued by the NRC on April 3. 1997 to delete the steam line pressure-low safety injection signal. The CTS inadvertently included an additional reference to this SI signal which should have been deleted.	Table 3.3.2-1, Item 4.d.(2)	Table 3.3-3, Table Notation ##

(C) Catawba specific
(M) McGuire specific

TABLE A - ADMINISTRATIVE CHANGES
SECTION 3.4 REACTOR COOLANT SYSTEM

for CNS and January 12, 1995 (TAC Nos. M88659 and M88660) for MNS.

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.4 A.7	The CTS requirement for determining the RCS total flow rate by measurement on an 18 month interval was left over from a previously deleted requirement to perform a precision heat balance to determine RCS total flow. This requirement was deleted by license amendment dated February 17, 1995 (TAC Nos. M88480 and M88658). The deletion of this requirement should have included 4.2.5.3. As the resulting CTS 4.2.5.3 is effectively the same as the requirements in CTS 4.2.5.1 to determine total flow using the indicators every 12 hours, 4.2.5.3 is redundant and should have been deleted.	3.4.1	4.2.5.3
3.4 A.8	The CTS applicability requirement for monitoring pressure and temperature limits in the CTS SR has been reformatted from text in the body of the surveillance requirement to an SR note.	SR 3.4.3.1	4.4.9.1.1
3.4 A.9	The CTS requirements for RCS Loops in MODE 4 have been reformatted consistent with the STS and split into two separate Actions. This change effectively keeps the same Actions in a different format.	3.4.6	3.4.1.3 Action a
3.4 A.10	The presentation of the CTS pressurizer safety valves setpoint limits of 2485 psig +3% and -2% was revised to apply the tolerances to the setpoint and state the limits as $\geq$ 2435 psig and $\leq$ 2559 psig.	3.4.10	3.4.2.2
3.4 A.11	The CTS Actions were revised by the addition of a note to indicate that separate Condition entry is permitted for each PORV. This Note provides a clarification of the ITS format for permitting multiple entry into the Conditions, as described in ITS Section 1.3, Completion Times and is consistent with the intent of the CTS requirements.	3.4.11	3.4.4
3.4 A.12	The explicit CTS Action for RCS PORVs to either restore an inoperable component, or comply with the required action was not retained in ITS. The allowance to restore inoperable components is an inherent feature of any action, as described in LCO 3.0.2.	3.4.11	3.4.4
3.4 A.13	The CTS cross reference to CTS 4.0.5 for the Pressurizer Relief Valves was not retained in the corresponding ITS requirement. Requirements for inservice testing (4.0.5) are provided in ITS 5.5.8 and need not be referenced in individual specifications. These types of cross references are not used in the ITS.	3.4.11	4.4.4.1

(C) Catawba specific
(M) McGuire specific

TABLE A - ADMINISTRATIVE CHANGES
SECTION 3.4 REACTOR COOLANT SYSTEM

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.4 A.14 (M)	A note has been added to the applicability of the CTS to clarify the restrictions for accumulator isolation. The ITS Note is consistent with the CTS action b for an unisolated accumulator, i.e., the actions place the unit outside the mode of applicability. The CTS Action has also been clarified to include this statement.	3.4.12	3.4.9.3
3.4 A.15 (M)	The CTS Action a and the associated footnotes were reformatted to incorporate the footnotes into the required actions.	3.4.12	3.4.9.3
3.4 A.16	Not used.		
3.4 A.17	The CTS Action requirements for two inoperable PORVs, failure to meet the requirements of an Action, or for an inoperable LTOP System for any other reason, were reformatted and collected into a single Action in the ITS.	3.4.12	3.4.9.3
3.4 A.18	The CTS requirement for an ANALOG CHANNEL OPERATIONAL TEST or ACOT was revised consistent with the new ITS Section 1.1, definition of the corresponding ITS surveillance the CHANNEL OPERATIONAL TEST or COT which incorporates the key aspects of the ANALOG CHANNEL OPERATIONAL TEST. Any changes to the definition which are the result of the changes in Section 1.1, are described in the Discussion of Changes for that section.	(C) SR 3.4.12.5 (M) SR 3.4.12.6	4.9.3.1.a
3.4 A.19	Several CTS surveillance requirements have been combined into one ITS surveillance requirement.	SR 3.4.12.1	4.1.2.3.2, 4.1.2.4.2, 4.5.3.2 (M) 4.4.9.3.3
3.4 A.20	The CTS interval for verification that the RCS vent is properly maintained has been reformatted from an SR and footnote, to a SR with two Frequencies. The intervals retained in ITS remain the same.	(C) SR 3.4.12.3 (M) SR 3.4.12.4	4.4.9.3.2
3.4 A.21	The CTS requirements regarding the RCS Controlled Leakage have been moved to a separate ITS specification for Seal Injection Flow.	3.5.5	3.4.6.2.e and 4.4.6.2.1.c
3.4 A.22	The CTS requirements regarding the RCS Pressure Isolation Valves and RHR interlock have been moved to a separate ITS specification for RCS Pressure Isolation Valve (PIV) Leakage.	3.4.14	3.4.6.2.f, 3.4.6.2 section c, 4.4.6.2.2, and 4.5.2

(C) Catawba specific
(M) McGuire specific

TABLE A - ADMINISTRATIVE CHANGES
SECTION 3.4 REACTOR COOLANT SYSTEM

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.4 A.38	The CTS requirements for a radiochemical analysis of the reactor coolant to determine E-bar has been reformatted to match the ITS presentation of this information. The change re-organizes the requirements but does not include any technical revisions.	SR 3.4.16.3	Table 4.4-4
3.4 A.39	The detailed information in the CTS table describing the analysis for E-bar has been deleted. This information is redundant to the Definition for E-bar in ITS Section 1.0.	3.4.16	Table 4.4-4
3.4 A.40	The LCO requirement in CTS to maintain all RCS loops in operation has been explicitly clarified to read "Four RCS loops shall be OPERABLE and in operation." The addition of the word OPERABLE is consistent with the existing plant interpretation of this requirement, i.e. the RCS loops including the steam generators must be OPERABLE.	3.4.4	3.4.1.1
3.4 A.41 (C)	The name of the sump monitor in the CTS has been changed to delete reference to "flow." This change clarifies that this monitor is a level monitor in the containment floor and equipment sump. Leakage rate or flow is actually calculated by a rate of change in level using the plant computer.	3.4.15	3.4.6.1
3.4 A.42	The CTS requirement that the reactor coolant DOSE EQUIVALENT I-131 $\leq$ 1.0 µCi/gm be verified following power changes > 15% in 1 hour when in MODES 1, 2, and 3 was revised to only require this verification in MODE 1. This change is based on the intent of the surveillance to ensure iodine remains within limit during normal operation and following fast power level changes when fuel failure is more likely to occur. Power level changes >15% cannot occur in MODES 2 and 3.	SR 3.4.16.2	Table 4.4-4
3.4 A.43 (M)	The CTS Actions that take exception to declaring the PORVs inoperable due to inoperable block valve actions which require disabling the PORV were retained in the ITS Actions for one block valve inoperable. This exception is not necessary for two or three block valves inoperable since the actions do not require disabling the PORV for these subsequent inoperabilities.	3.4.11 Required Actions B.1 and B.2	3.4.4 Actions e, f, and g

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(C) Catawba specific
(M) McGuire specific

TABLE A - ADMINISTRATIVE CHANGES
SECTION 3.7 PLANT SYSTEMS

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.7 A.34 (C)	The CTS surveillance requirement for the control room and nearby area temperature was revised into a separate LCO for "Control Room Area Chilled Water Systems (CRACWS)." The creation of a new LCO for this requirement is a change in format and presentation the limits and intent of the CTS SR were retained.	3.7.11	3.7.6, 4.7.6 a.
3.7 A.35 (C)	The CTS Action requirements for inoperable ventilation system heaters were reformatted consistent with the ITS method of referencing a special report contained in Section 5.0 instead of stating the reporting requirements in the Action. The technical requirements of the Action were retained.	3.7.12 Action C	3.7.7 Action b
3.7 A.36	The CTS Actions and Surveillance Requirements for the testing of ventilation filters in accordance with Regulatory Positions and ASTM codes have been moved to the Programs section of the ITS Chapter 5.0, "Administrative Controls". The applicable ITS SR is constructed to require the testing in accordance with the Ventilation Filter Testing Program as described in Chapter 5.0. No technical changes to the requirements were made.	(C) SR 3.7.12.2 (M) SR 3.7.11.2	3.7.7
3.7 A.37	The CTS SR requirement for an actuation test signal to be used during testing was revised to allow an actual, as well as a simulated test signal, to meet the Surveillance Requirement in ITS. The acceptance criteria of the surveillance remains unchanged and unaffected by this revision.	(C) SR 3.7.12.3 (M) SR 3.7.11.3	4.7.7 d.2
3.7 A.38	The CTS Action requirements for the Control Room Area Ventilation in Modes 1, 2, 3, and 4 were revised by the addition of an Action to enter LCO 3.0.3 with the loss of 2 CRACWS trains. This addition does not change the CTS which implicitly required the same Action.	Action E (C) 3.7.12 (M) 3.7.11	3.7.6
3.7 A.39	The CTS requirement for the Operable Fuel Handling Ventilation Exhaust System (FHVES) to be operating has been reformatted in the ITS LCO and stated as one train of FHVES shall be Operable and in operation. The change maintains the technical requirements of the CTS.	(C) 3.7.12 (M) 3.7.11	4.9.11.1

(C) Catawba specific
(M) McGuire specific

TABLE A - ADMINISTRATIVE CHANGES
SECTION 3.8 ELECTRICAL POWER SYSTEMS

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.8 A.1	The CTS have been reformatted and renumbered in accordance with the STS. As a result, the TS are easier to read and understand by plant operators as well as other users. The reformatting, renumbering, and rewording process serves only to clarify the CTS requirements and involves no technical changes to the CTS.	3.8	3/4.8
3.8 A.2	The requirement for the automatic load sequencers for Trains A and B is added to the CTS LCO. The OPERABILITY of the sequenc .s is required by the SRs in CTS 4.8.1.1.2 to demonstrate OPERABILITY of the diesel generators. Therefore, this change only clarifies the CTS operability requirements.	LCO 3.8.1	3.8.1.1 4.8.1.1.2.e(M) 4.8.1.1.2.g(C)
3.8 A.3	The CTS action requirement to periodically (within 1 hour and every 8 hours thereafter) demonstrate the OPERABILITY of the remaining AC electrical power sources when one offsite circuit and one diesel generator (DG) are inoperable is retained in the individual ITS Actions for an inoperable offsite circuit and for an inoperable DG. In accordance with ITS Section 1.3, "Completion Times," the ITS would require entering both these Actions and thus require perfoming the verification at the specified frequency, if the condition of an inoperable offsite circuit and DG existed. Thus the specific Action for this conditon, Action D, need not explicitly contain this CTS action requirement.	3.8.1 Required Actions A.1 and B.1; and Action D	3.8.1.1 Action b.1
3.8 A.4	Not used.		
3.8 A.5	A Note was added to CTS Actions to clarify that entry in the applicable Conditions and Required Actions of ITS LCO 3.8.9, "Distribution Systems - Operating" is required for any train that becomes de-energized with the loss of an offsite circuit and a DG. This change is administrative because the note reflects the CTS 3.0.1 requirement to meet the associated action requirements for LCOs that are not met - in this case the action requirements for any denergized ac distribution bus. This note is needed because the ITS contains a new provision, LCO 3.0.6, which would only require entering the Actions of ITS 3.8.1. The ITS 3.8.1 Note to Action D which requires entering ITS LCO 3.8.9 is an exception to ITS 3.0.6 See Table M, DOC 3.0-M.3 regarding ITS LCO 3.0.6.	3.8.1 Action D Note	3.0.1 3.8.1.1 Action b

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(C) Catawba specific
(M) McGuire specific

TABLE A - ADMINISTRATIVE CHANGES
SECTION 3.8 ELECTRICAL POWER SYSTEMS

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.8 A.11	Three ITS SR Notes were added to the CTS SR. The Notes maintain the technical requirements of the CTS and only represent a change in presentation and format to conform with the ITS style.	SR 3.8.1.2	4.8.1.1.2.a.4
3.8 A.12	The CTS SR clarification for an engine prelube prior to a DG start was reformatted into an ITS note used in each applicable ITS SR consistent with manufacturer recommendations.	3.8.1 SRs involving diesel generator starts	4.8.1.1.2.a.4
3.8 A 13	The information contained in the CTS SR footnote was reformatted into two ITS style notes and applied to the corresponding ITS SR. The ITS SR Notes represent a change in presentation to conform to the STS and maintain the technical requirements of the CTS. Therefore, this change is administrative.	SR 3.8.1.3	4.8.1.1.2.a.5 footnote
3.8 A.14	The CTS requirement to perform certain SRs "during shutdown" (Modes 5 and 6) has been reformatted into an ITS note which prohibits testing with the reactor at power (Modes 1-4). The ITS language is equivalent, thus this change is administrative.	(C) SRs 3.8.1.11, 3.8.1.13, 3.8.1.14, 3.8.1.16, 3.8.1.17, 3.8.1.19 and 3.8.4.8	(C) 4.8.1.1.2.g.4, 6, 7, 9, 10 and 4.8.1.1.4 d
		(M)SR 3.8.1.11, 3.8.1.16, 3.8.1.17, and 3.8.1.19	(M) 4.8.1.1.2.e.4, 6, 10, and 11
3.8 A.15	The CTS surveillance requirements for DG operation were revised to include an ITS note which indicates that momentary transients outside the load and power factor ranges do not invalidate the test. This change is considered a clarification of the existing requirements since it is not considered to alter the overall technical requirement to operate the DG loaded for the specified period. Therefore, this change is administrative.	(C) SR 3.8.1.14 and 3.8.1.15 (M) SR 3.8.1.14	(C) 4.8.1.1.2.g.7 and 4.8.1.1.2.g.15 (M) 4.8.1.1.2.e.8 footnote
3.8 A.16	Not used.		

(C) Catawba specific
(M) McGuire specific

TABLE A - ADMINISTRATIVE CHANGES
SECTION 3.8 ELECTRICAL POWER SYSTEMS

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.8 A.25 (M)	The CTS action requirement that the RCS must be depressurized and vented within 8 hours through a 4.5 square inch vent was revised to require a vent size of 2.75 square inches. This change corrects an error in the CTS. As a part of a license amendment dated March 29, 1995 and approved by the NRC as Amendment 162/144 on January 11, 1996, the correct RCS vent size for overpressure protection is 2.75 square inches. This requirement with the correct vent size is also reformatted to conform with the STS.	3.8.10 Required Action A.2.6	3.8.1.2 Action
3.8 A.26	The CTS requirement for the Fuel Storage System was used as the basis for new separate specification, ITS3.8.3, "Diesel Fuel Oil, Lube Oil and Starting Air". Currently, the fuel oil and the starting air subsystems are evaluated for DG OPERABILITY, but are not explicitly specified in the CTS ac sources LCO. The addition of the new requirements for these subsystems maintains the current interpretations for required DG subsystems. Thus, this change is administrative.	3.8.3	3.8.1.1 b. 2)
3.8 A.27	A Note was added to the DG support system requirements to allow separate Action Condition entry for each DG. The addition of the ITS Note does not modify current requirements and is therefore an administrative change.	3.8.3 Actions	3.8.1.1 Actions
3.8 A.28	An Action was added to the CTS DG support system requirements that requires the DG to be immediately declared inoperable if Required Actions and associated Completion Times of the support system Actions Conditions are not met. The addition of the ITS Action does not modify any technical requirement and is therefore an administrative change.	3.8.3 Action F (C) 3.8.3 Action E (M)	3.8.1.1
3.8 A.29	The CTS requirements for sampling of new and stored DG fuel oil have been moved to Section 5.0, Administrative Controls. The corresponding ITS SR refers to the requirements in Section 5.5.13 but does not modify any technical requirement.	SR 3.8.3.3 (C) 5.5.13 SR 3.8.3.2 (M)	(C) 4.8.1.1.2.e and 4.8.1.1.2.f. (M) 4.8.1.1.2.c and 4.8.1.1.2.d.
3.8 A.30	Not used.		
3.8 A.31 (C)	The CTS battery requirements were combined with the CTS diesel generator's battery and charger requirements and reformatted into the ITS LCO for the DC sources required for Modes 1 through 4. This change in presentation is administrative.	3.8.4	3/4.8.2.1 3/4.8.1.1

(C) Catawba specific
(M) McGuire specific

TABLE A - ADMINISTRATIVE CHANGES
SECTION 3.8 ELECTRICAL POWER SYSTEMS

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.8 A.47 (C)	In the event either battery EBA or EBD inoperable, CTS 3/4.8.2.1 Action d allows 10 days to restore the battery to operable status provided the associated DG (DGBA or DGBB) DC subsystem powers the associated DC train subsystem (EDE or EDF bus). This action requirement was reformatted, consistent with the STS as ITS 3.8.4 Action A. It maintains the requirement to supply DC power from either the DC channel or the DG DC subsystem. In the event the DG DC subsystem is also inoperable, ITS 3.8.4 Action D requires immediately entering the applicable Condition(s) and Required Action(s) of ITS LCO 3.8.9, "Distribution Systems-Operating". ITS 3.8.9 Action D would allow 2 hours to restore the DG DC subsystem. This is the same time allowed by CTS 3/4.8.2.1 Action a, for an inoperable DG DC subsystem. Therefore, the ITS action requirements represent an administrative reformatting of the CTS action rerquirements.	3.8.4 Action A 3.8.4 Action D	3.8.2.1 Action d 3.8.2.1 Action a
3.8 A.48	The CTS SRs have been combined and reformatted to form a single ITS SR. The ITS SR maintains the technical requirements of the CTS.	SR 3.8.9.1	(C) SR 4.8.2.1.2 and 4.8.3.1 (M) 4.8.2.1.1 and 4.8.3.1
3.8 A.49	Portions of two CTS specifications were reformatted and used in the new ITS specification for "Distribution Systems - Operating". No technical changes were made to the CTS requirements.	3.8.9	3/4.8.3.1 3/4.8.2.1
3.8 A.50	The CTS specification is reformatted into the ITS specification for Distribution Systems during shutdown. The technical requirements of the CTS are maintained.	3.8.10	3/4.8.3.2
3.8 A.51	Not used.		
3.8 A.52	Two CTS SRs are combined and reformatted to form a single ITS SR. The technical requirements of the CTS are maintained.	SR 3.8.10.1	4.8.2.2.1 and 4.8.3.2

(C) Catawba specific
(M) McGuire specific

TABLE A - ADMINISTRATIVE CHANGES
SECTION 3.8 ELECTRICAL POWER SYSTEMS

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.8 A.53 (C) This change is still under staff review.	The CTS actions requirements in the event one or more required electrical distribution subsystems are inoperable were revised by the addition of new ITS action requirements. ITS 3.8.10 Required Action A.1 requires immediately declaring inoperable associated supported features. Licensee to explain how this is consistent with the current interpretation of the CTS. insert attached	3.8.10 Required Action A.1	3.8.3.2 Actions
	Alternatively, the operators may follow ITS 3.8.10 Required Action A.2. Required Actions A.2.1 through A.2.4 specifically retain the remedial measures speciifed in CTS 3/4.8.3.2 Actions.	3.8.10 Required Actions A.2.1 - A.2.4	
	In addition, Required Action A.2.5 requires immediately declaring the associated RHR subsystem inoperable and not in operation. Licensee to explain how this is consistent with the current interpretation of the CTS. <addressed by revised M.17>	3.8.10 Required Action A.2.5	
	Finally, Required Action A.2.6 requires immediately declaring affected LTOP features inoperable. See DOC 3.8 - A.60 to see why this is consistent with the CTS action requirements.	3.8.10 Required Action A.2.6	
	The changes contained in ITS 3.8.10 Action A are administrative because the new action requirements are consistent with the current interpretation of the CTS and represent no technical changes in the restrictions of the CTS. remove shading		
3.8 A.54 (M)	The CTS note which allows, during period of station modifications, a one time exception for up to 112 hours for CTS 3.8.3.1 and 30 days for CTS 3.8.2.1, for batteries replacement was deleted. The applicable modifications will be completed before approval of the operating license amendment issuing the ITS; thus the exception provided by the note is no longer required. are	3.8.4, 3.8.7	3.8.3.1 and 3.8.2.1
3.8 A.55 (C)	Two CTS Actions for an inoperable dc source were reformatted and combined into one ITS Action. The technical requirements of the CTS are maintained. DC	3.8.4 Action A	3.8.2.1 Actions c and b
3.8 A.56 (M)	The portion of the CTS table for High Specific Gravity cells was deleted. This type of cell was replaced and that part of the CTS Table is no longer applicable to the plant design.	Table 3.8.6-1	Table 4.8-3

(C) Catawba specific
(M) McGuire specific

Insert 3.8 A.53 (C)

The CTS definition of OPERABILITY requires the normal or emergency power source, therefore, if the bus were deenergized, the supported equipment would be considered inoperable. The addition of ITS 3.0.6 would not specifically require the actions of supported equipment be taken, therefore this action maintained this option.

TABLE A - ADMINISTRATIVE CHANGES
SECTION 3.8 ELECTRICAL POWER SYSTEMS

add comma

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.8 A.57 (M)	The CTS LCO note which provides conditions when an inverter may be disconnected from its dc source for up to 72 hours, if CTS 3.8.2.1 Action b is satisfied was deleted. The CTS note is redundant to the Actions contained in the corresponding ITS specification.	3.8.4 Required Action A.2	3.8.3.1 Note
3.8 A.58 (M)	The CTS Action which allows continued operation with an inoperable dc source for 72 hours provided the associated bus tie breakers are closed within 2 hours was reformatted consistent with the corresponding ITS Action but maintains the technical content of the CTS.	3.8.4 Action A	3.8.2.1 Action b.2
3.8 A.59	Not used.		
3.8 A.60 (C)	The CTS Action requirements for the condition of less than the minimum required sources Operable that require the RCS to be depressurized and vented within 8 hours through a 4.5 square inch vent was retained and reformatted consistent with the ITS. Specifically, ITS 3.8.10 Required Action A.2.6 requires immediately declaring affected LTOP features inoperable. ITS 3.4.12 for LTOP contains the above CTS action requirement. Thus this change maintains the technical requirements of the CTS, and is administrative.	3.8.10 Action A.2.6 3.4.12 Actions remove shading	3.8.1.2, 3.8.2.2, and 3.8.3.2 Actions
3.8 A.61	Not used.		
3.8 A.62	Not used.		
3.8 A.63	Not used.		
3.8 A.64	Not used.		
3.8 A.65	Not used.		
3.8 A.66 (M)	The CTS footnote which states, "Required for both Units 1 and 2" and the CTS action which also states that it applies to both units are clarifications that were deleted. The deleted clarifications were applicable to shared systems and necessary when both units TS were combined. Licensee to revise consistent with combined ITS for both units.	3.8.10	3.8.3.2.c footnote *

DC

(C) Catawba specific
(M) McGuire specific

(1) LCO 3.0.8 and SR 3.0.5 state that LCOs and SRs apply to each unit individually, therefore, the footnote is redundant and unnecessary.

TABLE A - ADMINISTRATIVE CHANGES
SECTION 3.8 ELECTRICAL POWER SYSTEMS

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.8 A.67	The CTS Actions were clarified to require ITS LCO 3.0.3 to be entered immediately if two or more of the required buses or channels are inoperable and a loss of safety function exists, consistent with the rules of usage of the ITS. Thus is an administrative change because in this condition the CTS would require a unit shutdown consistent with CTS 3.0.3. THIS	3.8.9	3.8.3.1 and 3.8.2.1 3.0.3
3.8 A.68	The CTS inverter requirements for Modes 5 and 6 are reformatted into the ITS specification for the inverters during shutdown. The CTS LCO statement was clarified to indicate that whenever a second AC vital bus distribution system is required operable by ITS LCO 3.8.10, the distribution system need only be energized (inverter or regulated voltage transformer) consistent with current requirements and the definition of operability.	3.8.8 LCO 3.8.8	3.8.3.2

(C) Catawba specific
(M) McGuire specific

TABLE A - ADMINISTRATIVE CHANGES
SECTION 5.0 ADMINISTRATIVE CONTROLS

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
5.0 A.10	Not used.		
5.0 A.11	The CTS reactor coolant pump flywheel surveillance requirements were moved to the ITS Administrative Controls as the "Reactor Coolant Pump Flywheel Inspection Program."	5.5.7	4.4.10
5.0 A.12	The annual report submittal date in the CTS as a separate requirement is omitted from the ITS because the individual reports described in the CTS and retained as ITS have been modified to include the required submittal dates. The submittal date for the Occupational Radiation Exposure Report is revised from March 1 to April 30. This change in submittal date is administrative because it does not change any CTS restrictions on plant operation.	5.6.1 through 5.6.7, except 5.6.4 5.6.1	6.9.1.4 6.9.1.5.a
5.0 A.13	The CTS Surveillance Requirements for inspecting the Steam Generator Tubes were moved to the ITS Administrative Controls section as the "Steam Generator Tube Surveillance Program."	5.5.9	4.4.5.1 through 4.4.5.5
5.0 A.14	The CTS Surveillance Requirements for the following ventilation systems were moved to the Administrative Controls section as the, "Ventilation Filter Testing Program (VFTP)." Annulus Ventilation System; Control Room Area Ventilation System; Auxiliary Building Filtered Exhaust System; Reactor Building Containment Purge System; and Fuel Handling Ventilation Exhaust System	5.5.11	McGuire - 4.6.1.8.b.1, b.2, c, d.1, d.5; 4.7.6.c.1, c.2, d, e.1, e.4; 4.7.7.1.a.1, a.2, b, c; 4.9.4.2.a.1, a.2, b, c; and 4.9.11.2.a.1, a.2, b, c.1 Catawba - 4.6.1.8.b.1, b.2, c, d.1, d.5; 4.7.6.c.1, c.2, d, e.1, e.4; 4.7.7.b.1, b.2, c, d.1, d.5; 4.9.4.2.b.1, b.2, c, d.1, d.2; and 4.9.11.2.b.1, b.2, c, d.1, d.4

(C) Catawba specific
(M) McGuire specific

TABLE M - MORE RESTRICTIVE CHANGES
SECTION 3.3 INSTRUMENTATION

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.3 M.6	The CTS Action 15 for Turbine Trip-Low Emergency Trip Fluid Pressure (Interlocked with P-9) and 11 for Turbine Trip-Turbine Stop Valve Closure requires an LCO 3.0.3 entry if an inoperable channel cannot be placed in trip in 6 hours. LCO 3.0.3 requires THERMAL POWER to be reduced to < P-9 within the following 7 hours. The time allowed by this CTS Action was reduced by three hours in the corresponding ITS Action.	3.3.1 conditions O and P	3.3.1 Action 6.a 11 and
3.3 M.7	The CTS Action for Reactor Trip System interlocks requires entry into LCO 3.0.3 if one channel is inoperable and the interlock cannot be verified in the required state for the existing unit conditions within 1 hour. This CTS Action was revised consistent with the ITS to require either the plant be placed in mode 2 or 3 in 6 hours, depending on the applicability of the interlock. This change is slightly more restrictive because it reduces the time limit to get outside the mode of applicability by one hour.	3.3.1	3.3.1 Action 8
3.3 M.8	The CTS Actions that allow an RTB to be bypassed for maintenance on the undervoltage or shunt trip mechanisms were revised by the addition of a two hour RTB bypass time limit for maintenance on the undervoltage and shunt trip mechanisms.	(C) 3.3.1, Action Q (M) 3.3.1, Action R	3.3.1 Action statement 12
3.3 M.9 (M)	The CTS Action requires shutdown margin to be verified within 1 hour and once per 12 hours thereafter when the only required source range neutron flux monitor becomes inoperable. This CTS Action was revised by the addition of requirements to suspend all operations which involve positive reactivity additions immediately and to close all unborated water source isolation valves within 1 hour.	3.3.1 Action L	3.3.1 Action 5
3.3 M.10 (M)	The CTS RTS surveillance requirements were revised by the addition of a requirement to perform a channel operational test for the Reactor Trip System Interlocks.	SR 3.3.1.13	CTS Table 4.3-1
3.3 M.11	If the CTS ESFAS Action requirements are not met an LCO 3.0.3 entry is required. This CTS convention is revised by the addition of a specific ITS Action to require the unit to be in mode 3 within the following 6 hours and, if applicable, mode 4 within the following 12 hours if the Actions are not met. This change is slightly more restrictive, because with the CTS LCO 3.0.3 requirement, one additional hour is allowed prior to beginning the shutdown.	3.3.2	Table 3.3-3 Actions 15, 15a (C), 15b (M), 16, 19, and 20

(C) Catawba specific
(M) McGuire specific

TABLE M - MORE RESTRICTIVE CHANGES
SECTION 3.4 REACTOR COOLANT SYSTEM (RCS)

DISCUSSION OF CHANG	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.4 M.15	Not used.		
3.4 M.16	Not used.		
3.4 M.17	The Frequency of the CTS SR to verify all but one charging pump is inoperable was changed from 31 days to 12 hours; the language of the CTS SR was also replaced with equivalent language. ITS SR 3.4.12.1 states "Verify a maximum of one charging pump is capable of injecting into the RCS."	SR 3.4.12.1	4.1.2.3.2 and 4.1.2.4.2
3.4 M.18	CTS Action a allows up to 72 hours to restore one, two, or three inoperable coolant loops to Operable status. Corresponding ITS 3.4.5 Action A only allows the 72 hours for the condition of one or two required RCS loops inoperable. If three loops are inoperable, ITS 3.4.5 Required Action D.3 requires immediately taking action to restore one RCS loop to Operable status, which is more restrictive for a third concurrently inoperable RCS loop.	3.4.5 Action A and Required Action D.3	3.4.1.2 Action a and Action c
3.4 M.19	Not used.		
3.4 M.20	In the event the containment floor and equipment sump monitoring system is inoperable, the CTS allows continued operation for up to 30 days. The ITS retains this allowance but adds the conditional action to perform a precision water balance of the RCS once per 24 hours in accordance with ITS SR 3.4.13.1 during this 30-day period.	3.4.15 Action A	3.4.6.1 Action
3.4 M.21	The restricted range of operation region in CTS 3/4.2.5 Figure 3.2-1 has been deleted. Therefore, plant operation in Mode 1 is no longer allowed with reactor coolant system flow below 382,000 gpm, regardless of thermal power level. This change was made because the restricted range of operation is no longer supported by the existing safety analysis as described in LER 97-10 for McGuire Nuclear Station and LER 97-07 for Catawba Nuclear Station. Note: This change is an open item pending staff review of the revised ITS Figure 3.4.1-1.	3.4.1 Figure 3.4.1-1	3/4.2.5 Figure 3.2-1

Delete - no license amendment has been submitted

(C) Catawba specific
(M) McGuire specific

TABLE M - MORE RESTRICTIVE CHANGES
SECTION 3.7 PLANT SYSTEMS

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.7 M.1	Not used.		
3.7 M.2 (M)	The CTS Action to place the plant in Cold Shutdown within 30 hours was revised to require the plant to be brought to MODE 4 (outside the Applicability) within 12 hours.	3.7.1	3.7.1.1
3.7 M.3	The exception in the CTS MSIV Applicability in Modes 2 and 3 was revised by the addition of a restriction requiring that inoperable MSIVs be de-activated as well as closed.	3.7.2	3.7.1.4
3.7 M.4	The CTS Actions to close an inoperable MSIV in MODE 2 and 3 were revised by the addition of an 8 hour time limit to close the valve and a requirement to verify the MSIV closed once per 7 days.	3.7.2 Action C	3.7.1.4
3.7 M.5	The CTS Plant Systems Section was revised by the addition of a new LCO containing requirements for the Main Feedwater Control Valves (MFCVs), Main Feedwater Isolation Valves (MFIVs), their bypass valves and the tempering valves. The new ITS requirements add an LCO, as well as the associated Actions, and Surveillance Requirement for the valves. (C) or the MFW to AFW Nozzle Bypass Valves (M)	3.7.3	3.7
3.7 M.6 (M)	The CTS Plant Systems section was revised to include specific requirements for the Steam Generator Power Operated Relief Valves (SG PORVs). The new requirements include a new LCO, Actions, and Surveillance Requirements for these valves.	3.7.4	3.7
3.7 M.7	The CTS requirements for AFW were revised to include requirements to address the condition where a steam generator is being required for heat removal in Mode 4. In this condition, an Operable AFW train must be available to supply a source of makeup water to the required steam generator. This change represents new operability requirements for the AFW.	3.7.5	3.7.1.2
3.7 M.8	The CTS Action were revised by the addition of a new Actions Condition which requires the restoration of the affected trains within 10 days from discovery of failure to meet the requirements of the LCO. This addition represents a new restriction on plant operation.	3.7.5	3.7.1.2

(C awba specific
(M) McGuire specific

TABLE M - MORE RESTRICTIVE CHANGES
SECTION 3.7 PLANT SYSTEMS

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.7 M.9 (C)	(Unit 1 only) The CTS Plant System Section was revised by the addition of a new specification for the Condensate Storage System. The new ITS LCO includes a surveillance to periodically verify required inventory and action requirements to restore the inventory to within the limit within 7 days or commence a plant shutdown .	3.7.6	3.7
3.7 M.10	Not used.		
3.7 M.11	The CTS Applicability was revised by the addition of "during movement of irradiated fuel assemblies" Other related changes involve actions to alieviate these potential hazards with various levels of Control Room ventilation degradation. This change imposes new restrictions on plant operation.	(C) 3.7.10 (M) 3.7.9	3.7.6
3.7 M.12 (C)	The CTS CRAVS LCO is revised by the addition of a new Surveillance Requirement that requires the CRAVS trains to be started on a simulated or actual actuation signal once per 18 months.	SR 3.7.10.3	3.7.6
3.7 M.13	Not used.		
3.7 M.14	Not used.		
3.7 M.15	The CTS CRAVS Applicability is revised by the addition of "during movement of irradiated fuel assemblies". This change imposes new restrictions on plant operation.	(C) 3.7.11 (M) 3.7.10	3.7.6
3.7 M.16	Not used.		
3.7 M.17	Not used.		
3.7 M.18	The CTS requirement for the determination of DOSE EQUIVALENT I-131 to be performed once per 31 days whenever the gross radioactivity determination indicates concentrations greater than or equal to 10% of the allowable limit for radioiodines and once per 6 months whenever the gross radioactivity determination indicates concentrations less than or equal to 10% of the allowable limit for radioiodines was revised to simply require the DOSE EQUIVALENT I-131 to be determined once per 31 days, regardless of the gross radioactivity.	(C) 3.7.17 (M) 3.7.16	4.7.1.3

(C) Catawba specific
(M) McGuire specific

TABLE M - MORE RESTRICTIVE CHANGES
SECTION 3.8 ELECTRICAL POWER SYSTEMS

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.8 M.1	The CTS Actions were revised by the addition of a second Completion Time requirement for the return of an inoperable AC source, either an offsite circuit or a DG, to OPERABLE status. In addition to the 72 hours requirement, a 6 day limit from discovery of failure to meet the LCO is added to limit the total time that the LCO is not met.	3.8.1 Required Actions A.3 and B.4	3.8.1.1 Action a and Action c (C) d (M)
3.8 M.2	The CTS Actions were revised by the addition of an Action that requires declaring a required feature inoperable in 12 hours when both offsite circuits and a required redundant feature are inoperable.	3.8.1 Required Action C.1	3.8.1.1 Action e
3.8 M.3	The CTS was revised by the addition of a new ITS Action. The new Action requires that a redundant required feature must be declared inoperable in 24 hours when one offsite circuit and a required feature are inoperable.	3.8.1Required Action A.2	3.8.1.1 Action a
3.8 M.4	Not used.		
3.8 M.5	The CTS surveillance requirement to perform a load rejection test on the DG and the CTS surveillance requirement for a DG be loaded and operated for 24 hours were revised to require that when the DG is paralleled with offsite power these tests must be performed at a DG power factor of ≤ 0.9.	(C) SRs 3.8.1.9 and 3.8.1.14	(C) 4.8.1.1.2.g.2, 4.8.1.1.2.g.7 (M) 4.8.1.1.2.e.2, 4.8.1.1.2.e.8
3.8 M.6	The CTS surveillance for the DG was revised by the addition of a new requirement that the emergency bus permanently connected loads be verified to remain energized from the offsite source after the DG start.	SR 3.8.1.12	(C) 4.8.1.1.2g 5) (M) 4.8.1.1.2e.5
3.8 M.7	The CTS requirement for testing both DGs with a simultaneous start once every 10 years was revised to include acceptance criteria for both voltage and frequency voltage and frequency requirements.	SR 3.8.1.20	(C) 4.8.1.1.2.h (M) 4.8.1.1.2.f
3.8 M.8	Not used.		
3.8 M.9	The CTS action requirements were revised by the addition of an ITS Action to declare required features inoperable when no offsite power is available. This new Action establishes requirements on plant operation that did not previously exist.	3.8.2 Required Action A.1	3.8.1.2
3.8 M.10	Not used.		

(C) Catawba specific
(M) McGuire specific

TABLE M - MORE RESTRICTIVE CHANGES
SECTION 3.8 ELECTRICAL POWER SYSTEMS

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.8 M.11	Not used.		
3.8 M.12	Not used.		
3.8 M.13 (C)	Deleted the CTS action requirement which allowed continued operation temporarily in the event two 125 VDC batteries and/or their full-capacity chargers are inoperable. ITS 3.8.4 does not include an Action for the condiiton of two or more channels of DC inoperable; thus ITS would requires immediately entering LCO 3.0.3 which requires a plant shutdown.	3.8.4 Actions LCO 3.0.3	3.8.2.1 Action e
3.8 M.14	The CTS requirements for the batteries were revised by the addition of an ITS Action to verify that the battery cell parameters are within the Category C limits every 7 days after the initial 24 hour verification.	3.8.6 Required Action A.2	Table 4.8-3
3.8 M.15	The CTS battery cell parameter requirements were revised by the deletion of the temperature compensation allowance from the float voltage limit of Category B parameter requirements. This change also deletes an allowance to adjust the float voltage range.	3.8.6 Table 3.8.6-1	Table 4.8-3, footnote (6) (C), footnote (c) (M)
3.8 M.16	The CTS Actions were revised by the addition of a second Completion Time requirement to limit the time the LCO is not met. This additional requirement limits the time from discovery of failure to meet the LCO to a total time of 16 hours.	3.8.9 Actions	3.8.2.1 Actions 3.8.3.1 Actions
3.8 M.17	The CTS Applicability requirements for the AC or DC sources or inverters in MODES 5 or 6 was revised to include "during movement of irradiated fuel assemblies." (M) The CTS Actions were also revised by the addition of the following requirements to immediately: declare the affected required features inoperable, OR suspend Core Alterations, suspend movement of irradiated fuel assemblies, initiate action to suspend operations involving positive reactivity additions, and initiate action to restore required equipment to OPERABLE status. For inoperable distribution systems, the ITS also added requirements for cascading to the applicable RHR LCO and declaring the affected LTOP features inoperable. (M)	3.8.2 (C) 3.8.5 3.8.8 3.8.10	(C) 3.8.1.2, 3.8.2.2, and 3.8.3.2 (M) 3.8.2.2 or 3.8.3.2
3.8 M.18	Not used.		
3.8 M.19 (C)	The CTS DG requirements were revised by the addition of specific surveillance requirements for the lubricating oil inventory and the starting air receiver pressure.	SR 3.8.3.2 and 3.8.3.4	4.8.1.1

(C) Catawba specific
(M) McGuire specific

TABLE M - MORE RESTRICTIVE CHANGES
SECTION 3.8 ELECTRICAL POWER SYSTEMS

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.8 M.20	The CTS DG surveillance requirements were revised by the addition of [illegible]. The Notes require the performing the surveillance on only one diesel at a time and immediately following the performance of either ITS SR 3.8.1.2 or 3.8.1.7, without a shutdown of the diesel.	(C) SR 3.8.1.8 Notes (M) SR 3.8.1.3 Notes	4.8.1.1.2 a.5
3.8 M.21	Not used.		
3.8 M.22 (M)	The CTS Applicability was revised by the addition the condition of "movement of irradiated fuel assemblies." This change requires the necessary electrical equipment to be Operable whenever irradiated fuel assemblies are being moved.	3.8.2 Applicability	3.8.1.2 Applicability
3.8 M.23 (M)	The CTS requirements that the DG fuel oil system contain 28,000 gallons of fuel in Modes 5 and 6 and 39,500 gallons of fuel in Modes 1-4 were revised to require that the DG fuel oil system contain 39,500 gallons of fuel whenever the associated DG is required operable, including during Modes 5 and 6.	SR 3.8.3.1	3.8.1.1.b.2 3.8.1.2.b.2
3.8 M.24	The CTS surveillance requirement to start the DG within 5 minutes after the 24 hour was revised by the addition of a requirement to verify steady state voltage and frequency during the restart test.	SR 3.8.1.15	(C) 4.8.1.1.2.g.15 (M) 4.8.1.1.2.e.8
3.8 M.25 (C)	The CTS requirements for the DG were revised by the addition of specific DG lube oil requirements (SR and Action). This change represents an additional restriction for plant operation.	3.8.3	3.8.1.1
3.8 M.26 (C)	The CTS requirements for the DG were revised by the addition of specific DG air start pressure requirements (SR and Action). This change represents an additional restriction for plant operation.	3.8.3	3.8.1.1
3.8 M.27	The CTS notes which provided allowances regarding disconnecting a vital bus from its DC source for 24 hours and for disconnecting an inverter during a battery equalizing charge were deleted.	3.8.7 3.8.9	3.8.2.1 3.8.3.1
3.8 M.28 (M)	Deleted the CTS allowance for testing of the battery capacity via a dummy load at ≥ 440 amps for 60 minutes while maintaining the battery terminal voltage ≥ 105 VDC.	3.8.4	4.8.2.1.2 d.2

(C) Catawba specific
(M) McGuire specific

TABLE M - MORE RESTRICTIVE CHANGES
SECTION 3.8 ELECTRICAL POWER SYSTEMS

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENT	CTS REQUIREMENT
3.8 M.29	If the required ac sources are inoperable when the plant is in Mode 5 with the RCS loops not filled or in Mode 6 with water level less than 23 feet, the CTS requires immediately initiating action to restore the required ac sources to operable status. This action requirement was revised to require these actions in Mode 5 or Mode 6 or during movement of irradiated fuel regardless of whether loops are not filled or water level is below 23 feet. The expansion of the applicability of the Actions is more restrictive.	3.8.2 Required Actions A.2.4 and B.4	3.8.1.2 Action
3.8 M.30	The CTS limits for battery cell specific gravity which specify that battery charging current be less than 2 amps when on float charge were revised to limit the use of the float charge current for meeting specific gravity requirements to 7 days and to require that specific gravity be measured prior to expiration of the 7 days.	Table 3.8.6-1 Note (c)	Table 4.3-8 footnote (b)

(C) Catawba specific
(M) McGuire specific

TABLE L - LESS RESTRICTIVE CHANGES
SECTION 3.1 REACTIVITY CONTROL SYSTEMS

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENTS	CTS REQUIREMENTS	CATEGORY
3.1 L.1	The CTS LCO for "Shutdown Margin - T_{avg} greater than 200 °F" was revised by the addition of appropriate actions consistent with the associated surveillance requirement for performing an overall core reactivity balance. The new Actions to be taken in the event the overall core reactivity balance did not meet the surveillance requirement allow a Completion Time of 72 hours for re-evaluation of core design, safety analysis and a determination if the core is acceptable for continued operation. In addition, appropriate operating restrictions and surveillance requirements must be established or the plant is required to be placed in MODE 3 within 6 hours.	3.1.2	~~3.3.3~~ 4.1.1.1.2	IV
3.1 L.2	The CTS 4.1.1.3.b requirement that specifies a measurement of MTC at 300 ppm, and if not within the limit, to continue the surveillance and measure MTC every 14 effective full power days (EFPDs) was revised by the addition of a note that allows the performance of the surveillance to be suspended if the measured MTC at the 60 ppm surveillance is less than the COLR limit.	SR 3.1.3.2	4.1.1.3.b	II
3.1 L.3	Deleted the CTS action requirement to reduce the High Neutron Flux Trip Setpoints to ≤ 85% of RTP when a rod is not restored within alignment limits.	3.1.4 Action B	3.1.3.1 Action c.3.d	IV
3.1 L.4	Not used.			
3.1 L.5	The CTS Surveillance requirement to verify shutdown rod insertion limits within 15 minutes prior to withdrawal of any control rods during an approach to criticality was deleted.	SR 3.1.5.1	4.1.3.5.a	VII
3.1 L.6	The CTS Actions which address one shutdown rod not within insertion limits were revised to address one or more shutdown banks out of limit.	3.1.5 Actions	3.1.3.5 Actions	IV

(C) Catawba specific
(M) McGuire specific

Categories:
I. Relaxation of Applicability
II. Relation of Surveillance Frequency
III. Relaxation of Completion Time
IV. Relaxation of Required Actions
V. Relaxation of Surveillance Requirement
VI. Relaxation of LCO and Administrative Controls
VII. Deletion of Surveillance Requirement
VIII. Deletion of Requirements Redundant to Regulations

TABLE L - LESS RESTRICTIVE CHANGES
SECTION 3.3 INSTRUMENTATION

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENTS	CTS REQUIREMENTS	CATEGORY
3.3 L.1	The requirement to reduce the power range neutron flux high trip setpoints is deleted.	3.3.1 Condition D	3.3.1, Action 2c	IV
3.3 L.2	The CTS Action requirement for the Intermediate Range monitors between P-6 and P-10 which specifies that an inoperable channel must be restored to OPERABLE status prior to increasing power above 10% was revised to require power to be adjusted to either below P-6 or above P-10 within 2 hours.	3.3.1, Condition F	3.3.1, Action 3.b	IV
3.3 L.3	The CTS requirements for the Intermediate Range Neutron Flux Instrumentation (when below P-6) to be restored to operable status prior to increasing THERMAL POWER above P-6 with one channel inoperable were revised to provide the same action when two channels are inoperable. CTS requires entry into 3.0.3.	3.3.1, Condition H	3.3.1 Action 3.a	IV
3.3 L.4	The CTS requirements for the RTBs were revised by the addition of a one hour Completion Time to restore the RTBs to operable status. This one hour is in addition to the 6 hours currently allowed to be in mode 3.	(C) 3.3.1, Actio Q (M) 3.3.1, Actio R	3.3.1 Action statement 9	III
3.3 L.5	The CTS 3.3.1 S/U (startup) frequencies for the Power Range Neutron Flux Low, Source Range Neutron Flux, and Intermediate Range Neutron Flux Channel Operational Test requirements were revised from 31 days prior to startup to 92 days prior to startup.	SR 3.3.1.7 and SR 3.3.1.8	Table 4.3-1	III II
3.3 L.6	The requirement in the CTS for the AFW Pump Manual Initiation Function has been deleted.	Table 3.3.2-1	Tables 3.3-3, 3.3-4, and 4.3-2	VI
3.3 L.7 (C)	The requirement in the CTS for the Turbine Trip Manual Initiation Function has been deleted.	Table 3.3.2-1	Tables 3.3-3, 3.3-4, and 4.3-2	VI
3.3 L.8	The CTS Completion Time of 7 days for an inoperable channel of post accident monitoring (PAM) instrumentation was revised to 30 days.	3.3.3, Condition B	3.3.3.6 Action a (M) and c	III

3.3.3.6 Action a and c (C)

(C) Catawba specific
(M) McGuire specific

Categories:
I. Relaxation of Applicability
II. Relation of Surveillance Frequency
III. Relaxation of Completion Time
IV. Relaxation of Required Actions
V. Relaxation of Surveillance Requirement
VI. Relaxation of LCO and Administrative Controls
VII. Deletion of Surveillance Requirements
VIII. Deletion of Requirements Redundant to Regulations

TABLE L - LESS RESTRICTIVE CHANGES
SECTION 3.3 INSTRUMENTATION

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENTS	CTS REQUIREMENTS	CATEGORY
3.3 L.9	The CTS requirements for inoperable PAM channels that specify a unit shutdown when one required channel is inoperable and the actions cannot be completed were revised to allow continued operation in this condition for functions with two required channels and to those with one required channel if the associated diverse channel or alternate monitoring method is operable provided a special report is written to the NRC detailing the planned corrective actions.	3.3.3 Conditions C and H	3.3.3.6 Action a and 3.6.4.1 Action a	IV
3.3 L.10	The CTS Completion Times (48 hours and 72 hours) for inoperable Pam channels were extended to 7 days for all channels, except hydrogen monitors which were extended from 48 hours to 72 hours.	3.3.3 Conditions D, E, and F	3.3.3.6 Action b (M) 3.7.4.a	III
3.3 L.11	The CTS requirements for the Hydrogen Monitors that specify a channel check once per 12 hours, a monthly analog channel operational test, and a channel calibration 92 days on a staggered test basis were revised to require a channel check once per 31 days and a channel calibration once per 92 days. The channel operational test was eliminated.	SR 3.3.3.1 and SR 3.3.3.2	4.6.4.1	II
3.3 L.12	The CTS requirement for the inoperable remote shutdown system instrument channels to be restored to operable status within 7 days was increased from 7 days to 30 days.	3.3.4 Condition A	3.3.3.5 Action a	III
3.3 L.13	The CTS requirement for both the auxiliary feedwater flow and the steam generator level as separate indication of Decay Heat Removal via the SGs was revised to allow the use of either one or the other indicators rather than both.	Table 3.3.4-1	Table 3.3-9	VI
3.3 L.14 (M)	CTS PAM requirement for a CHANNEL CALIBRATION to be performed every refueling was revised by the addition of a Note allowing the neutron detectors to be excluded from the CHANNEL CALIBRATION.	SR 3.3.3.3	Table 4.3-7	V

(C) Catawba specific
(M) McGuire specific

Categories:
I. Relaxation of Applicability
II. Relation of Surveillance Frequency
III. Relaxation of Completion Time
IV. Relaxation of Required Actions
V. Relaxation of Surveillance Requirement
VI. Relaxation of LCO and Administrative Controls
VII. Deletion of Surveillance Requirements
VIII. Deletion of Requirements Redundant to Regulations

TABLE L - LESS RESTRICTIVE CHANGES
SECTION 3.3 INSTRUMENTATION

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENTS	CTS REQUIREMENTS	CATEGORY
3.3 L.20 (C)	CTS Action requirement that the unit be in mode 3 in 6 hours and mode 4 in the following 6 hours if one channel of the automatic actuation logic is inoperable was revised to increase the Completion Time for the ABFVES actuation instrumentation function to 7 days.	3.3.8 Condition A	3.3.2, Action 21a	III
3.3 L.21	Not used.			
3.3 L.22 (M)	The CTS Actions that allow operation to proceed with one inoperable channel (placed in trip) until the next performance of the COT were revised by the addition of a note that allows the channel to be placed in bypass for surveillance testing on other channels.	3.3.2 Conditions D, J and P	Table 3.3-3 Actions 15 and 15b	IV
3.3 L.23 (C)	The CTS requirements for Diesel Building Ventilation support system operability have been deleted in the ITS.	3.3.2	Table 3.3-3, 3.3-4, and 4.3-2	VI
3.3 L.24	The RTS CTS Action for an inoperable power range channel that requires power to be reduced to less than or equal to 75% within 4 hours or QPTR to be monitored using the movable incore detectors every 12 hours was revised to require that either QPTR be verified or power be reduced to less than or equal to 75% within 12 hours.	3.3.1 Action D.1.2	Table 3.3-1 Action 2c	III
3.3 L.25	The CTS Actions which allow operation to proceed with one inoperable channel (placed in trip) until the performance of the next operational test were revised to allow operation to continue indefinitely once the channel is placed in trip.	3.3.5 Condition A	3.3.2 Action 15(C) 15a (M)	IV
3.3 L.26 (C)	The CTS requirements for the "Auxiliary Building Filtered Exhaust Operation (ABFVES) Manual Initiation were deleted from the ESFAS LCO. The deletion includes the Function and all associated Actions and Surveillances.	3.3.2 and 3.3.8	3.3.2 Function 16a	VI
3.3 L.27 (C)	The CTS surveillance requirement which verifies the automatic actuations of the BDMS upon receipt of a trip signal is revised to allow an actual or simulated signal to be used for the testing.	SR 3.3.9.3	4.3.3.11.1.c	V

(C) Catawba specific
(M) McGuire specific

Categories:
I. Relaxation of Applicability
II. Relation of Surveillance Frequency
III. Relaxation of Completion Time
IV. Relaxation of Required Actions
V. Relaxation of Surveillance Requirement
VI. Relaxation of LCO and Administrative Controls
VII. Deletion of Surveillance Requirements
VIII. Deletion of Requirements Redundant to Regulations

TABLE L - LESS RESTRICTIVE CHANGES
SECTION 3.4 REACTOR COOLANT SYSTEM

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENTS	CTS REQUIREMENTS	CATEGORY
3.4 L.9 (C)	The CTS requirement to place the controls for a PORV with an inoperable associated block valve in the closed position was revised to require the valve to be placed in manual control.	3.4.11 Action C and Action F	3.4.4 Action d	IV
3.4 L.10	The CTS requirement for the performance of an ACOT within 31 days prior to entry into the LTOP mode of applicability, and at least once per 31 days thereafter was revised by a Note which allows up to 12 hours after entering the LTOP mode of applicability to complete the required surveillance test.	SR 3.4.12.5	4.4.9.3.1.a	II
3.4 L.11	Deleted the CTS requirements to verify that RCS leakages are within limits by use of the containment atmosphere radioactivity and sump level monitors, once per 12 hours, and by use of the reactor head flange leakoff system once per 24 hours.	SR 3.4.13.1 N/A N/A N/A SR 3.4.15.1 SR 3.4.15.2 SR 3.4.15.4	4.4.6.2.1.d 4.4.6.2.1.a 4.4.6.2.1.b 4.4.6.2.1.e 4.4.6.1 4.4.6.1 4.4.6.1	Unique
3.4 L.12	In the event of one or more flow paths with leakage from one or more PIVs greater than the limit, the CTS requires isolation of the system via two valves within 4 hours before requiring a unit shutdown. These action requirements are relaxed to permit isolation with just one valve within the first 4 hours and restoration of leakage to within the limits within 72 hours, before requiring a unit shutdown.	3.4.14 Action A	3.4.6.2 Action c	III, IV
3.4 L.13	The CTS requirement for the isolation of RCS PIV flow paths with a closed manual or deactivated automatic valve was revised to include the provision for use of a check valve.	3.4.14 Required Action A.1	3.4.6.2 Action c	IV

(C) Catawba specific
(M) McGuire specific

Categories:
I. Relaxation of Applicability
II. Relation of Surveillance Frequency
III. Relaxation of Completion Time
IV. Relaxation of Required Actions
V. Relaxation of Surveillance Requirement
VI. Relaxation of LCO and Administrative Controls
VII. Deletion of Surveillance Requirement
VIII. Deletion of Requirements Redundant to Regulations

TABLE L - LESS RESTRICTIVE CHANGES
SECTION 3.4 REACTOR COOLANT SYSTEM

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENTS	CTS REQUIREMENTS	CATEGORY
3.4 L.19 (C)	The CTS requirement for a shutdown be initiated within 30 days if the containment ventilation unit condensate drain tank (CVCDT) level monitoring system is inoperable was revised to permit continued operation provided either a channel check of the required containment atmosphere radioactivity monitor is performed once per 8 hours or an RCS water inventory balance is performed once per 24 hours in accordance with ITS SR 3.4.13.1.	3.4.15 Action C	3.4.6.1 Action	Unique
3.4 L.20	The CTS Applicability requirement for limits on RCS specific activity in MODES 1 - 5 was revised to only require limits in MODES 1, 2, and in MODE 3 with RCS Tavg $\geq$ 500°F.	3.4.16 Applicability	3.4.8 Applicability	I
3.4 L.21	The CTS requirement to verify RCS gross activity $\leq$ 1 µCi/gm every 72 hours was revised to require this verification every 7 days.	SR 3.4.16.1	4.4.8.1 Table 4.4-4	II
3.4 L.22	In the event gross specific activity of the RCS exceeds its limit of 100/E µCi/gram, CTS requires verifying DOSE EQUIVALENT I-131 activity within limits within 4 hours and placing the unit outside the mode of applicability in 6 hours. This requirement was revised by deletion of the requirement to perform the verification within 4 hours.	3.4.16 Action B	4.4.8.4.a Table 4.4-4	IV
3.4 L.23 (M)	With less than the four required reactor coolant loops in operation, the CTS requires placing the plant in Mode 3 (Hot Standby) within 1 hour; this Completion Time has been relaxed to 6 hours.	3.4.4 Action A	3.4.1.1 Action	III
3.4 L.24	The CTS requirement for each Intermediate, Power Range, and P-7 interlock instrument to be subjected to an Analog Channel Operational Test within 12 hours prior to the start of PHYSICS TESTS was revised to only require testing prior to PHYSICS TESTS without specifying a preset time.	SR 3.4.17.2	4.10.4.2	II

(C) Catawba specific
(M) McGuire specific

Categories:
I. Relaxation of Applicability
II. Relation of Surveillance Frequency
III. Relaxation of Completion Time
IV. Relaxation of Required Actions
V. Relaxation of Surveillance Requirement
VI. Relaxation of LCO and Administrative Controls
VII. Deletion of Surveillance Requirement
VIII. Deletion of Requirements Redundant to Regulations

TABLE L - LESS RESTRICTIVE CHANGES
SECTION 3.5 EMERGENCY CORE COOLING SYSTEM

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENTS	CTS REQUIREMENTS	CATEGORY
3.5 L.9	The CTS Actions that allow 1 hour to restore an inoperable RWST were revised to allow up to 8 hours to restore the RWST to OPERABLE due to the boron concentration or temperature not within limits.	3.5.4	3.5.4	III
3.5 L.10	The CTS Action for an accumulator inoperable due to a closed isolation valve which requires that the valve be opened immediately or a shutdown be initiated was revised to allow 1 hour to correct the inoperability prior to requiring a unit shutdown.	3.5.1	3.5.1.1 Action b	III
3.5 L.11 (C)	A Note was added to the CTS to allow in Mode 3, both safety injection pumps flow paths to be isolated by closing the isolation valves for up to 2 hours to perform valve testing.	3.5.2	3.5.2	VI
3.5 L.12	The CTS requirement that the RCS controlled leakage be within limits during operation in MODES 1-4 was revised to only require that the limits be maintained in MODES 1-3.	3.5.5	3.4.6 ~~a~~ .2.c	I
3.5 L.13	The CTS requirement to provide a special report for ECCS actuation was deleted as being redundant to regulatory requirements in 10 CFR 50.73.	3.5.2 3.5.3	3.5.2 Action b 3.5.3 Action c	VIII

(C) Catawba specific
(M) McGuire specific

Categories:
I. Relaxation of Applicability
II. Relation of Surveillance Frequency
III. Relaxation of Completion Time
IV. Relaxation of Required Actions
V. Relaxation of Surveillance Requirement
VI. Relaxation of LCO and Administrative Controls
VII. Deletion of Surveillance Requirement
VIII. Deletion of Requirements Redundant to Regulation

TABLE L - LESS RESTRICTIVE CHANGES
SECTION 3.6 CONTAINMENT SYSTEMS

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENTS	CTS REQUIREMENTS	CATEGORY
3.6 L.28	The CTS requires that the specified testing be performed using a "test" signal. The ITS permits the use of an actual or simulated actuation signal for testing purposes.	SRs 3.6.3.7, 3.6.6.3, 3.6.6.4, 3.6.8.4, 3.6.10.3, 3.6.11.1, 3.6.11.3, and 3.6.17.3 (C)	4.6.3.2, 4.6.2.c, 4.6.5.6.1.a, 4.6.5.6.1.d, 4.6.1.8.d.2, and 4.6.6.2 (C)	V
3.6 L.29	The CTS requirement for continuously monitoring inlet door positions was revised to require the door position to be monitored every 12 hours.	SR 3.6.13.1	4.6.5.3.1.a	II
3.6 L.30	The CTS requirement to verify that each containment purge valve is sealed closed was revised by the addition of an exception to open one purge valve in a penetration flow path while in Condition E of ITS 3.6.3 to perform repairs.	SR 3.6.3.1	4.6.1.9.1	IV, V
3.6 L.31	The CTS allowance for certain containment isolation valves to be opened under administrative control was revised by the addition of an ITS note to the ACTIONS which provides an allowance to open any containment isolation valve required to be closed (except for the large containment purge/exhaust valves) under administrative controls.	3.6.3, Actions Note	4.6.1.1.a and footnote (M) Table 3.6-2 (C)	IV
3.6 L.32	The CTS requirement for restoring inoperable valves to OPERABLE status was replaced by the ITS Action which specifies isolating the affected penetration flow path by use of at least one closed and deactivated automatic valve, closed manual valve, or blind flange.	3.6.2, Required Action E.1	3.6.1.9, Action c	IV
3.6 L.33	The CTS Surveillance Requirement that specifies requirements for Type B leak rate testing for penetrations which have been opened after testing was deleted. The ITS does not contain this specific SR but contains the broader requirement that all applicable Type B testing specified by 10 CFR 50, Appendix J, Option A must be met. The CTS requirement duplicates the requirements of 10 CFR 50, Appendix J, Option A section III.D.2 which requires that Type B penetrations be retested following opening.	SR 3.6.1.2	4.6.1.1.c	VIII

(C) Catawba specific
(M) McGuire specific

Categories:
I. Relaxation of Applicability
II. Relation of Surveillance Frequency
III. Relaxation of Completion Time
IV. Relaxation of Required Actions
V. Relaxation of Surveillance Requirement
VI. Relaxation of LCO and Administrative Controls
VII. Deletion of Surveillance Requirement
VIII. Deletion of Requirements Redundant to Regulations

TABLE L - LESS RESTRICTIVE CHANGES
SECTION 3.7 PLANT SYSTEMS CHAPTER

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENTS	CTS REQUIREMENTS	CATEGORY
3.7 L.26	CTS requirement that each automatic valve be demonstrated Operable by verifying full closure when tested pursuant to Specification was revised to allow the use of an actual or simulated actuation signal for testing purposes.	SR 3.7.2.1	4.7.1.4	V
3.7 L.27	The CTS requirement that the AFW automatic valves be verified to actuate to the correct position and that the AFW pumps start on the specified test signals was revised to allow the use of an "actual or simulated" test signal.	SRs 3.7.5.3 and 3.7.5.4	4.7.1.2.c.1 and 2	V
3.7 L.28	The CTS requirement that each automatic valve be verified to actuate to the correct position and that the CCW pumps start on the specified test signals was revised to allow the use of an "actual or simulated" test signal.	(C) SRs 3.7.7.2 and 3.7.7.3 (M) SRs 3.7.6.2 and 3.7.6.3	4.7.3.b.1 and 2	V
3.7 L.29	The CTS requirements that each automatic valve in the flow path actuate to its correct position upon receipt of an actuation test signal were revised to exclude automatic valves that are locked, sealed or otherwise secured in position from this verification.	(C) SRs 3.7.5.3, 3.7.7.2, and 3.7.8.2 (M) SRs 3.7.5.3, 3.7.6.2, and 3.7.7.2	4.7.1.2.1.c.1, 4.7.3.b.1, and 4.7.4.b.1	V
3.7 L.30	The CTS requirement that each automatic valve be verified to actuate to the correct position and that the NSWS pumps start on the specified test signals was revised to allow the use of an "actual or simulated" test signal.	(C) SRs 3.7.8.2 and 3.7.8.3 (M) SRs 3.7.7.2 and 3.7.7.3	4.7.4.b.1 and 2	V
3.7 L.31 (M)	The CTS requirement to use a simulated actuation test signal during testing was revised to allow the use of an actual, as well as a simulated test signal.	SR 3.7.9.3	4.7.6.e.2	V

(C) Catawba specific
(M) McGuire specific

Categories:
I. Relaxation of Applicability
II. Relation of Surveillance Frequency
III. Relaxation of Completion Time
IV. Relaxation of Required Actions
V. Relaxation of Surveillance Requirement
VI. Relaxation of LCO and Administrative Controls
VII. Deletion of Surveillance Requirement
VIII. Deletion of Requirements Redundant to Regulations

TABLE L - LESS RESTRICTIVE CHANGES
SECTION 3.8 ELECTRICAL POWER SYSTEMS

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENTS	CTS REQUIREMENTS	CATEGORY
3.8 L.1	The CTS requirement for the specified DG testing be performed on a STAGGERED TEST BASIS was deleted from the corresponding ITS surveillance requirements.	3.8.1 and 3.8.3 SRs	4.8.1.1.2.a	II
3.8 L.2	The CTS action requirement for the performance of surveillances 4.8.1.1.2.a.4 and 4.8.1.1.2.a.5 for the Operable DG if the other DG is inoperable have been relaxed by deleting the requirement to perform the 1 hour load test of 4.8.1.1.2.a.5.	3.8.1 Required Action B.3.1	3.8.1.1 Action d	IV
3.8 L.3	The CTS Action requirement to verify redundant equipment OPERABLE within 2 hours after discovery of an inoperable DG was revised to require this verification within 4 hours.	3.8.1 Required Action B.2	3.8.1.1 Action c	III
3.8 L.4	Not used. (kW, while maintaining voltage at 4160VAC ±)			
3.8 L.5	The CTS requirement for testing the DG load rejection capability of a load of 576 420 VAC) and frequency at 60 Hz (± 1.2 Hz) was revised to allow a frequency of ≤ 63 Hz.	SR 3.8.1.9	(C) 4.8.1.1.2.g 2) (M) 4.8.1.1.2.e.2)	V
3.8 L.6	An new action requirement is added to the CTS (AC) sources specification in the event the quantity of fuel oil for the DG is less than required. By the definition of Operability, CTS would require immediately declaring the associated DG inoperable. The new ITS Action allows an additional period of time (48 hours) to resupply the fuel oil before declaring the associated DG inoperable.	3.8.3 Action A	3.8.1.1 Actions	III
3.8 L.7	Not used.			
3.8 L.8	The CTS requirements for the total particulates allowed in the stored fuel oil is revised to allow the fuel oil to exceed the total particulates limit for 7 days before declaring the associated DG inoperable. By the definition of Operability, CTS would require immediately declaring the associated DG inoperable.	3.8.3 Action B	4.8.1.1.2	III
3.8 L.9	Not used.			

(C) Catawba specific
(M) McGuire specific

Categories:
I. Relaxation of Applicability
II. Relation of Surveillance Frequency
III. Relaxation of Completion Time
IV. Relaxation of Required Actions
V. Relaxation of Surveillance Requirement
VI. Relaxation of LCO and Administrative Controls
VII. Deletion of Surveillance Requirement
VIII. Deletion of Requirements Redundant to Regulations

TABLE L - LESS RESTRICTIVE CHANGES
SECTION 3.8 ELECTRICAL POWER SYSTEMS

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENTS	CTS REQUIREMENTS	CATEGORY
3.8 L.10	The CTS requirement that all diesel fuel oil properties must be within limits for new fuel oil is revised to allow oil properties to be outside required limits of the Fuel Oil Testing Program for 30 days before the DGs must be declared inoperable. By the definition of Operability, CTS would require immediately declaring the associated DG inoperable.	3.8.3 Action C (M) 3.8.3 Action D (C)	(C) 4.8.1.1.2e 2)e (M) 4.8.1.1.2.c.2	III
3.8 L.11(M)	The CTS requirement to verify, every 18 months during shutdown, with all DG air start receivers pressurized to 220 psig or less and the compressors secured that the DG will start twice from ambient conditions and accelerate to at least 57 Hz in 11 seconds or less. This surveillance was replaced with the ITS requirement to verify that the air start receiver pressure is ≥210 psig every 31 days.	SR 3.8.3.3	4.8.1.1.2.e.15	Unique See Safety Evaluation Section III.G.14
3.8 L.12 (M)	The CTS surveillance requirement which tests the DG capability to reject a load of 4000 kW without tripping was revised to require a load of at least 3600 kW but not more than 4000 kW.	SR 3.8.1.10	4.8.1.1.2 e.3	V
3.8 L.13	The CTS was revised by the addition of an allowance to perform a modified performance discharge test instead of the performance discharge test, when verifying battery capacity with less than 80% of manufacturer's rating.	(C) SR 3.8.4.9	(C) 4.8.2.1.1.e, 4.8.2.1.1.f, and 4.8.1.1.4.d	V
		(M) SR 3.8.4.8	(M) 4.8.2.1.2.e and 4.8.2.1.2.f	
3.8 L.14	Not used.			
3.8 L.15 (C)	The CTS requirement to verify, on a weekly basis, no indication of damage from electrolyte leakage for the DC channel batteries was deleted.	SR 3.8.6.1	4.8.2.1.1.a.3	VII
3.8 L.16	The CTS time allowed to restore Category A and B battery parameters to within limits was increased from 7 days to 31 days.	3.8.6 Required Action A.3	Table 4.8-3 Notes (1) and (2)	III

(C) Catawba specific
(M) McGuire specific

Categories:
I. Relaxation of Applicability
II. Relation of Surveillance Frequency
III. Relaxation of Completion Time
IV. Relaxation of Required Actions
V. Relaxation of Surveillance Requirement
VI. Relaxation of LCO and Administrative Controls
VII. Deletion of Surveillance Requirement
VIII. Deletion of Requirements Redundant to Regulations

TABLE L - LESS RESTRICTIVE CHANGES
SECTION 3.8 ELECTRICAL POWER SYSTEMS

DISCUSSION OF CHANGE	SUMMARY OF CHANGE	ITS REQUIREMENTS	CTS REQUIREMENTS	CATEGORY
3.8 L.17 (C)	Following a battery discharge to a voltage of 110 VDC or an overcharge above 150 volts, the CTS require verifying within 7 days that there is no visible corrosion at either terminals or connectors and that the average electrolyte temperature of six connected cells is within limits. This surveillance is deleted for the DG batteries.	SR 3.8.4.1 SR 3.8.6.2	4.8.1.1.4.b	VII
3.8 L.18	The CTS time allowed to demonstrate the OPERABILITY of the remaining OPERABLE DG, when one offsite circuit and one DG are inoperable, was increased from 8 hours to 24 hours.	3.8.1 Actions A, B, and D	3.8.1.1 Action b	III
3.8 L.19 (M)	The CTS requirements were revised by the addition of an action requirement which allows the DG starting air supply to decrease below the required capacity of 210 psig for up to 48 hours.	3.8.3 Action D	4.8.1.1.2.e.15	Unique See Safety Evaluation Section III.G.14
3.8 L.20	The CTS requirement for the simultaneous start of both DGs during shutdown was revised to delete the requirement to perform this surveillance during shutdown.	SR 3.8.1.20	4.8.1.1.2.h (C) 4.8.1.1.2.f (M)	II
3.8 L.21	The CTS shutdown surveillance requirement for the required DG and offsite circuit was revised to delete surveillances that demonstrate capabilities that not required in Modes 5 and 6, or that should not be performed in these modes. A note was also added to exempt performance of certain surveillances for the DG and offsite ac sources being used to satisfy the operability requirements of ITS LCO 3.8.2. (AC)	SR 3.8.2.1 and SR 3.8.2.1 Note	4.8.1.2	VII V
3.8 L.22	The CTS surveillance requirement for the DC Sources - Shutdown was revised by the addition of an allowance which exempts performing certain surveillances on the DC sources required to be operable to satisfy ITS LCO 3.8.5.	SR 3.8.5.1 Note	4.8.2.2.2	VII

(C) Catawba specific
(M) McGuire specific

Categories:
I. Relaxation of Applicability
II. Relation of Surveillance Frequency
III. Relaxation of Completion Time
IV. Relaxation of Required Actions
V. Relaxation of Surveillance Requirement
VI. Relaxation of LCO and Administrative Controls
VII. Deletion of Surveillance Requirement
VIII. Deletion of Requirements Redundant to Regulations

TABLE LA - REMOVAL OF INFORMATION FROM THE CTS
SECTION 3.2 POWER DISTRIBUTION

DISCUSSION OF CHANGE	CTS REQUIREMENT	SUMMARY OF CHANGE	DESTINATION DOCUMENT	CONTROL PROCESS	CHANGE TYPE
3.2 LA.1	3.2.2	The formulas in the CTS for determining the values of $F_Q^M(X,Y,Z)$, P, F_Q^{RTP}, and K(Z).	3.2.1 Bases	Bases control program	3
3.2 LA.2	3.2.2, Action c and 4.2.2.2.c	The CTS references to trip setpoint constants and instrument scales.	3.2.1 Bases	Bases control program	1
3.2 LA.3	4.2.2.2.e 4.2.2.2.d	The CTS exceptions for various core planes and core regions used when determining $F_Q^M(X,Y,Z)$.	3.2.1 Bases	Bases control program	3
3.2 LA.4	4.2.2.3	The CTS requirements for the measured value of $F_Q(X,Y,Z)$ to be increased by 3% to account for manufacturing tolerances and 5% for measurement uncertainties.	COLR	5.6.5	3
3.2 LA.5	4.2.2.2 4.2.3.2	The descriptive information for how the peaking factor surveillances are to be performed.	3.2.1 Bases	Bases control program	3
3.2 LA.6	3.2.3	Definitions of $F^M_{\Delta H}(X,Y)$ and $F_{\Delta H}(X,Y)^{LCO}$ $F^L_{\Delta H}$	3.2.2 Bases	Bases control program	1
3.2 LA.7	3.2.3	The CTS references to trip setpoint constants and instrument scales.	3.2.2 Bases	Bases control program	1
3.2 LA.8	4.2.4.2	The CTS information regarding how the incore detectors are used for determining QPTR.	SR 3.2.4.2 Bases	Bases control program	2

(C) Catawba specific
(M) McGuire specific

LA Change Types:
1. Details of System Design
2. Descriptions of System Operation
3. Procedural Details for Meeting TS Requirements

TABLE LA - REMOVAL OF INFORMATION FROM THE CTS
SECTION 3.3 INSTRUMENTATION

DISCUSSION OF CHANGE	CTS REQUIREMENT	SUMMARY OF CHANGE	DESTINATION DOCUMENT	CONTROL PROCESS	CHANGE TYPE
3.3 LA.10 (M)	Table 4.3-2, Note 9	CTS details for performing the surveillance on the high flux at shutdown alarm are moved to the ITS Bases.	SR 3.3.1.7 Bases	Bases control program	3
3.3 LA.11	Table 2.2-1	The Overtemperature ΔT and Overpower ΔT limit equation compensation variable definitions in CTS were moved to the UFSAR.	UFSAR	10 CFR 50.59	1
3.3 LA.12	Table 3.3-5	The CTS Engineered Safety Features Response Time testing, is moved to the UFSAR.	UFSAR	10 CFR 50.59	3
3.3 LA.13	3.3.2 Actions	The descriptive details in the CTS Actions regarding the relationship between Trip Setpoints, Allowable Value, and OPERABILITY have been incorporated into the ITS Bases.	3.3.2 Bases	Bases control program	3
3.3 LA.14	Tables 3.3-3, 3.3-4, and 4.3-2	The CTS design description of Function 1, Safety Injection, including all the functions initiated by a safety injection signal (e.g., Reactor Trip, Feedwater Isolation, etc.) was moved to the ITS Bases.	3.3.2 Bases	Bases control program	1
3.3 LA.15	Table 3.3-3	The CTS AFW design description regarding which initiating signal starts the motor or steam driven pumps was moved to the Bases for ITS 3.3.2.	3.3.2 Bases	Bases control program	1
3.3 LA.16	Table 3.3-4	The CTS design descriptions of the Feedwater Isolation and Auxiliary Feedwater for the SG Level-High High (P-14) and Auxiliary Feedwater for the SG Level-Low Low function trip setpoints and allowable values as "narrow range instrument span," were moved to the ITS Bases .	3.3.2 Bases	Bases control program	1
3.3 LA.17		Not used.			
3.3 LA.18		Not used.			
3.3 LA.19	4.6.4.1	The specific information located in the CTS SR which requires the Channel Calibration to be performed using a sample gas containing hydrogen and the specific calibration points is moved to the ITS Bases.	3.3.3 Bases	Bases control program	3
3.3 LA.20		Not used.			

(C) Catawba specific
(M) McGuire Specific

LA Change Types:
1. Details of System Design
2. Descriptions of System Operation
3. Procedural Details for Meeting TS Requirements

TABLE LA - REMOVAL OF INFORMATION FROM THE CTS
SECTION 3.8 ELECTRICAL POWER SYSTEMS

DISCUSSION OF CHANGE	CTS REQUIREMENT	SUMMARY OF CHANGE	DESTINATION DOCUMENT	CONTROL PROCESS	CHANGE TYPE
3.8 LA.29	(C) 4.8.1.1.2.g.2 (M) 4.8.1.1.2.e 2	The CTS specific value for the single load rejection that a DG must be capable of withstanding, while maintaining a specified frequency has been moved from the TS to the !TS Bases.	SR 3.8.1.9 Bases	Bases control program	3
3.8 LA.30	(C) 4.8.1.1.2.g.14 and 4.8.1.1.2.g.15 (M) 4.8.1.1.2.e.14	Tne CTS requirements to verify diesel lockout features and prevent the diesel from starting when the DG is on the turning gear or the maintenance mode switch is activated have been moved to the SLC. This is a design feature of the DG which is not required within the TS.	SLC	10 CFR 50.59	1
3.8 LA.31(M)	4.8.1.1.2 e.6.c Footnote	The CTS exception to testing the DG when the plant is not in a shutdown condition (Modes 1, 2, 3, and 4) has been moved to the ITS Bases.	SR 3.8.1.13	Bases control program	3
3.8 LA.32	4.8.2.1.2 b.3	The specific number of battery cells listed in the CTS has been moved from the TS to the ITS Bases.	3.8.6 Bases	Bases control program	3
3.8 LA.33 (C)	4.8.1.1.4.a	The CTS footnote describing the procedure to test two different cells on the DG batteries each month has been moved to ITS Bases.	3.8.6 Bases	Bases control program	3

(C) Catawba specific
(M) McGuire Specific

LA Change Types:
1. Details of System Design
2. Descriptions of System Operation
3. Procedural Details for Meeting TS Requirements

out of order inconsistent with other tables

TABLE R - RELOCATED SPECIFICATIONS

DISCUSSION OF CHANGE	CTS REQUIREMENT	DESCRIPTION OF RELOCATED REQUIREMENT	DESTINATION DOCUMENT	CONTROL PROCESS
3.4 R.4	3/4.4.10	Structural integrity of ASME Code Class 1, 2, and 3 components	SLC	10 CFR 50.59 10 CFR 50.55a
3.4 R.5	3/4.4.11	RCS vent paths operable and closed for reactor vessel head and pressurizer steam space (C) and Reactor vessel head vent paths operable and closed (M)	SLC	10 CFR 50.59
3.6 R.1	3/4.6.5.2	Ice bed temperature monitoring system	SLC	10 CFR 50.59
3.6 R.2	3/4.6.5.4	Ice condenser inlet door position monitoring system	SLC	10 CFR 50.59
3.7 R.1	3/4.7.2	Steam generator pressure/temperature limitations	SLC	10 CFR 50.59
3.7 R.5	3/4.7.8	Snubbers	SLC	10 CFR 50.59
3.7 R.3	3/4.7.9	Sealed source contamination limits	SLC	10 CFR 50.59
3.7 R.4	3/4.7.12 (C) 3/4.7.13 (M)	Ground water level near reactor and auxiliary buildings (C) Ground water level near auxiliary building (M)	SLC	10 CFR 50.59
3.7 R.2	3/4.7.12 (M)	Area temperature monitoring	SLC	10 CFR 50.59
3.7 R.6	3/4.7.13 (C)	Standby Shutdown System	SLC	10 CFR 50.59
3.8 R.1	3/4.8.4	Containment penetration conductor overcurrent protection devices	SLC	10 CFR 50.59
3.9 R.1	3/4.9.5	Communications between Control Room and Refueling Station	SLC	10 CFR 50.59
3.9 R.2	3/4.9.6	Reactor building manipulator crane and auxiliary hoist	SLC	10 CFR 50.59
3.9 R.3	3/4.9.7	Load handling restrictions over fuel assemblies in storage pool	SLC	10 CFR 50.59

(C) Catawba specific
(M) McGuire Specific

ENCLOSURE 2

CATAWBA NUCLEAR STATION

CHANGES TO ITS SUBMITTAL

CHANGES TO CATAWBA ITS SUBMITTAL

1. Condition A of ITS LCO 3.2.2 incorrectly includes the words "steady state." This is not consistent with the CTS and results in not having a condition to enter if SR 3.2.2.2 is not met. This error has been corrected.

2. The Bases for ITS 3.3.1 indicates that the Trip Setpoints are the limiting safety system settings (LSSS). This is incorrect and should state that the Allowable Values are the LSSS. This change has been corrected.

3. Discussion of Change (DOC) R4 for Section 3.7 was revised to provide additional justification for the relocation of the groundwater level specification to licensee controlled documents. This was identified as an open item in the draft SE.

4. DOC M17 for Section 3.8 was revised to address the additional actions associated with cascading to the Residual Heat Removal specifications after a loss of the distribution systems in MODES 5 and 6 (LCO 3.8.10). This was identified as an open item for DOC A53 in the draft SE.

5. ITS SR 3.8.1.6 incorrectly indicates that the transfer from the fuel oil storage tanks is accomplished automatically. The CTS only requires that the transfer capability be demonstrated. This is currently done both by an automatic transfer valve or manual valve. The Bases for this SR also indicates that the transfer to the day tanks is accomplished by transfer pumps. The design utilizes gravity feed. This error has been corrected consistent with the design and CTS requirements.

3.2 POWER DISTRIBUTION LIMITS

3.2.2 Nuclear Enthalpy Rise Hot Channel Factor ($F_{\Delta H}(X,Y)$)

LCO 3.2.2 $F_{\Delta H}(X,Y)$ shall be within the limits specified in the COLR.

APPLICABILITY: MODE 1.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. ----------NOTE---------- Required Actions A.3.2.2 and A.4 must be completed whenever Condition A is entered. ---------- $F^M_{\Delta H}$ not within limit.	A.1 Reduce THERMAL POWER $\geq$ RRH% from RTP for each 1% $F^M_{\Delta H}(X,Y)$ exceeds limit.	2 hours
	AND	
	A.2.1 Restore $F^M_{\Delta H}(X,Y)$ to within limit for RTP.	8 hours
	OR	
	A.2.2 Reduce Power Range Neutron Flux — High trip setpoints $\geq$ RRH% for each 1% $F^M_{\Delta H}(X,Y)$ exceeds limit.	8 hours
	AND	
	A.3.1 Restore $F^M_{\Delta H}(X,Y)$ to within limit for RTP.	72 hours
	OR	
	A.3.2.1 Reduce OTΔT Trip Setpoint by $\geq$ TRH for each 1% $F^M_{\Delta H}(X,Y)$ exceeds limit.	72 hours
	AND	

(continued)

POWER DISTRIBUTION LIMITS

3.2.2 NUCLEAR ENTHALPY RISE HOT CHANNEL FACTOR $F_{\Delta H}(X,Y)$

LIMITING CONDITION FOR OPERATION

LCO 3.2.2 $F_{\Delta H}(X,Y)$ shall be limited by imposing the following relationship:

$$F_{\Delta H}^{M}(X,Y) \leq F_{\Delta H}^{L}(X,Y)]^{LCO}$$

Where: $F_{\Delta H}^{M}(X,Y)$ = the measured radial peak.

$[F_{\Delta H}^{L}(X,Y)]^{LCO}$ = the maximum allowable radial peak as defined in the CORE OPERATING LIMITS REPORT (COLR).

APPLICABILITY: MODE 1

ACTION:

Note: Required Action A.3.2.2 and A.4 must be completed whenever Condition A is entered.

with in the area specified in the COLR.

Condition A With $F_{\Delta H}(X,Y)$ exceeding its limit:

A.1 Within 2 hours, reduce the allowable THERMAL POWER from RATED THERMAL POWER at least RRH%[1] for each 1% that $F_{\Delta H}^{M}(X,Y)$ exceeds the limit, and

Within hours either:

A.2.1 Restore $F_{\Delta H}^{M}(X,Y)$ to within the limit of Specification 3.2.3 for RATED THERMAL POWER, or

A.2.2 Reduce the Power Range Neutron Flux-High Trip Setpoint in Table 2.2-1 at least RRH% for each 1% that $F_{\Delta H}^{M}(X,Y)$ exceeds that limit, and

Within 72 hours of initially being outside the limit of Specification 3.2.3, either:

A.3.1 Restore $F_{\Delta H}^{M}(X,Y)$ to within the limit of Specification 3.2.3 for RATED THERMAL POWER, or

2. Perform the following actions:

A.3.2.1 Reduce the OTΔT K_1 term in Table 2.2-1 by at least TRH[2] for each 1% that $F_{\Delta H}^{M}(X,Y)$ exceeds the limit, and

---

(1) RRH is the amount of THERMAL POWER reduction required to compensate for each 1% that $F_{\Delta H}^{M}(X,Y)$ exceeds the limits of Specification 3.2.3 provided in the COLR per Specification 6.9.1.9.

(2) TRH is the amount of OTΔT K_1 setpoint reduction required to compensate for each 1% that $F_{\Delta H}^{M}(X,Y)$ exceeds the limit of Specification 3.2.3, provided in the COLR per Specification 6.9.1.9.

POWER DISTRIBUTION LIMITS

3/4.2.2 NUCLEAR ENTHALPY RISE HOT CHANNEL FACTOR $F_{\Delta H}(X,Y)$

LIMITING CONDITION FOR OPERATION

LCO 3.2.2 $F_{\Delta H}(X,Y)$ shall be limited by imposing the following relationship:

$$F_{\Delta H}^{M}(X,Y) \leq F_{\Delta H}^{L}(X,Y)^{LCO}$$

Where: $F_{\Delta H}^{M}(X,Y)$ = the measured radial peak.

$[F_{\Delta H}^{L}(X,Y)]^{LCO}$ = the maximum allowable radial peak as defined in the CORE OPERATING LIMITS REPORT (COLR).

APPLICABILITY: MODE 1.

NOTE: Required Action A.3.2.2 and A.4 must be completed whenever Condition A is entered.

ACTION:

Condition A With $F_{\Delta H}(X,Y)$ exceeding its limit:

A.1 Within 2 hours, reduce the allowable THERMAL POWER from RATED THERMAL POWER at least RRH%[1] for each 1% that $F_{\Delta H}^{M}(X,Y)$ exceeds the limit, and

Within 8 hours either:

A.2.1 Restore $F_{\Delta H}^{M}(X,Y)$ to within the limit of Specification 3.2.3 for RATED THERMAL POWER, or

A.2.2 Reduce the Power Range Neutron Flux-High Trip Setpoint in Table 2.2-1 at least RRH% for each 1% that $F_{\Delta H}^{M}(X,Y)$ exceeds that limit, and

Within 72 hours of initially being outside the limit of Specification 3.2.3, either:

A.3.1 Restore $F_{\Delta H}^{M}(X,Y)$ to within the limit of Specification 3.2.3 for RATED THERMAL POWER, or

2. Perform the following actions:

A.3.2.1 (a) Reduce the OTΔT K_1 term in Table 2.2-1 by at least TRH[2] for each 1% that $F_{\Delta H}^{M}(X,Y)$ exceeds the limit, and

---

(1) RRH is the amount of THERMAL POWER reduction required to compensate for each 1% that $F_{\Delta H}^{M}(X,Y)$ exceeds the limits of Specification 3.2.3 provided in the COLR per Specification 6.9.1.9.

(2) TRH is the amount of OTΔT K_1 setpoint reduction required to compensate for each 1% that $F_{\Delta H}^{M}(X,Y)$ exceeds the limit of Specification 3.2.3, provided in the COLR per Specification 6.9.1.9.

3.2 POWER DISTRIBUTION LIMITS

3.2.2 Nuclear Enthalpy Rise Hot Channel Factor ($F^{N}_{\Delta H}(X,Y)$)

LCO 3.2.2 $F^{N}_{\Delta H}(X,Y)$ shall be within the limits specified in the COLR.

APPLICABILITY: MODE 1.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. ---------NOTE--------- Required Actions A.2 and A.3 must be completed whenever Condition A is entered. --- $F^{N}_{\Delta H}(X,Y)$ not within limit.	A.1.1 Restore $F^{N}_{\Delta H}(X,Y)$ to within limit for RTP.	8 hours
	OR	
	A.1 Reduce THERMAL POWER to < 50% RTP.	2 hours
	AND	
	A.2.2 Reduce Power Range Neutron Flux—High trip setpoints to ≤ 55% RTP.	8 hours
	AND	
	A.2 Perform SR 3.2.2.1.	24 hours
	AND	

(continued)

≥RRH % from RTP for each 1% $F^{M}_{\Delta H}(X,Y)$ exceeds limit

≥RRH % for each 1% $F^{M}_{\Delta H}(X,Y)$ exceeds limit

A.3.1	Restore $F^{M}_{\Delta H}(X,Y)$ to within limit for RTP.	72 hours
	OR	
A.3.2.1	Reduce OTΔT Trip Setpoint by ≥ TRH for each 1% $F^{M}_{\Delta H}(X,Y)$ exceeds limit.	72 hours
	AND	

WOG ~~STS~~
CNS

BASES

BACKGROUND (continued)

Trip Setpoints and Allowable Values

The Trip Setpoints are the nominal values at which the bistables are set. Any bistable is considered to be properly adjusted when the "as left" value is within the band for CHANNEL CALIBRATION tolerance.

The Trip Setpoints used in the bistables are based on the analytical limits (Ref. 1, 2, and 3). The selection of these Trip Setpoints is such that adequate protection is provided when all sensor and processing time delays, calibration tolerances, instrumentation uncertainties, instrument drift, and severe environment errors for those RTS channels that must function in harsh environments as defined by 10 CFR 50.49 (Ref. 5) are taken into account. The actual nominal Trip Setpoint entered into the bistable assures that the actual trip occurs in time to prevent an analytical limit from being exceeded.

The Allowable Value accounts for changes in random measurement errors between COTs. One example of such a change in measurement error is drift during the surveillance interval. If the COT demonstrates that the loop trips within the Allowable Value, the loop is OPERABLE. A trip within the Allowable Value ensures that the predictions of equipment performance used to develop the Trip Setpoint are still valid, and that the equipment will initiate a trip in response to an AOO in time to prevent an analytical limit from being exceeded (and that the consequences of DBAs will be acceptable, providing the unit is operated from within the LCOs at the onset of the AOO or DBA and the equipment functions as designed). Note that in the accompanying LCO 3.3.1, the Allowable Values of Table 3.3.1-1 are the LSSS.

Each channel of the process control equipment can be tested on line to verify that the signal or setpoint accuracy is within the specified allowance requirements. Once a designated channel is taken out of service for testing, a simulated signal is injected in place of the field instrument signal. The process equipment for the channel in test is then tested, verified, and calibrated. SRs for the channels are specified in the SRs section.

The Trip Setpoints and Allowable Values listed in Table 3.3.1-1 incorporate all of the known uncertainties applicable for each channel. The magnitudes of these uncertainties are factored into the determination of each Trip Setpoint. All field sensors and signal processing equipment

BASES

BACKGROUND

Trip Setpoints and Allowable Values (continued)

Setpoints in accordance with the Allowable Value ensure that SLs are not violated during AOOs (and that the consequences of DBAs will be acceptable, providing the unit is operated from within the LCOs at the onset of the AOO or DBA and the equipment functions as designed). Note that in the accompanying LCO 3.3.1, the Trip Setpoints of Table 3.3.1-1 are the LSSS.

Each channel of the process control equipment can be tested on line to verify that the signal or setpoint accuracy is within the specified allowance requirements of Reference 2. Once a designated channel is taken out of service for testing, a simulated signal is injected in place of the field instrument signal. The process equipment for the channel in test is then tested, verified, and calibrated. SRs for the channels are specified in the SRs section.

The Trip Setpoints and Allowable Values listed in Table 3.3.1-1 are based on the methodology described in Reference 6, which incorporates all of the known uncertainties applicable for each channel. The magnitudes of these uncertainties are factored into the determination of each Trip Setpoint. All field sensors and signal processing equipment for these channels are assumed to operate within the allowances of these uncertainty magnitudes.

Solid State Protection System

The SSPS equipment is used for the decision logic processing of outputs from the signal processing equipment bistables. To meet the redundancy requirements, two trains of SSPS, each performing the same functions, are provided. If one train is taken out of service for maintenance or test purposes, the second train will provide reactor trip and/or ESF actuation for the unit. If both trains are taken out of service or placed in test, a reactor trip will result. Each train is packaged in its own cabinet for physical and electrical separation to satisfy separation and independence requirements. The system has been designed to trip in the event of a loss of power, directing the unit to a safe shutdown condition.

(continued)

RELOCATION

movement of the building from floating effect of the groundwater. ~~This requirement is not necessary to ensure~~*Groundwater level is slow changing and has no immediate affect on* safe reactor operation. It is a non- significant risk contributor to core damage frequency and offsite releases. Therefore, this item is being relocated out of Technical specifications. Any changes to this requirement in the UFSAR require a 10 CFR 50.59 evaluation. The 10 CFR 50.59 evaluation ensures that changes to this requirement will not have any adverse impact on the safe operation of the plant. This change is consistent with NUREG-1431 and the Application of Selection Criteria.

R.5 Details of the Snubber inspection requirements located in CTS 3/4.7.8 are being removed to the Selected Licensee Commitments Manual (SLC)(UFSAR Chapter 16). Any changes to UFSAR will require a 10 CFR 50.59 evaluation. Snubbers support the operability of primary components whose operation or function may be an assumption of a safety analysis. However, snubbers are not considered to be part of the primary success path. Their purpose is to prevent unrestrained pipe motion under dynamic loads while also allowing normal thermal expansion of piping and nozzles to eliminate excessive thermal stresses during heatup and cooldown. The requirements for Snubber Inspection are also contained in 10 CFR 50.55a and do not need to be repeated in the technical specifications. Snubber details are defined in Inservice Inspection (ISI) Program. Changes to the ISI program are adequately controlled by 10 CFR 50.55a. This provides an equivalent level of regulatory control. This change is consistent with NUREG-1431.

R.6 The proposed change relocates CTS 3.7.13, "Standby Shutdown System" to the Selected Licensee Commitments (SLC)(UFSAR Chapter 16). The Standby Shutdown System equipment identified in this Specification (diesel generator, makeup pumps, and batteries) are used to ensure that a fire in the control room will not preclude achieving safe shutdown. This equipment is independent of areas where a fire could damage systems normally used to shutdown the reactor. However, the equipment is not used to detect a degradation of the reactor coolant pressure boundary nor assumed to mitigate a design basis accident (DBA) or transient event. This requirement is not necessary to ensure

SPECIFICATION 3.8.10

3.8 ELECTRICAL POWER SYSTEMS

3.8.10 ~~ONSITE POWER~~ DISTRIBUTION SYSTEMS - SHUTDOWN

~~LIMITING CONDITION FOR OPERATION~~ (Addressed by ITS LCO 3.8.8)

LCO

3.8.~~8.2~~10 As a minimum, the following A.C. electrical busses and inverters shall be OPERABLE and energized:

a. One - 4160-volt essential bus,

b. Two - 600-volt essential busses in a single train, and

c. Two - 120-volt A.C. vital busses energized from their respective inverters connected to their respective D.C. channels.

APPLICABILITY MODES 5 and 6. During the movement of irradiated fuel assemblies

ACTION:

With any of the above required A.C. busses ~~not energized in the required manner~~, immediately suspend all operations involving CORE ALTERATIONS, positive reactivity changes, or movement of irradiated fuel, initiate corrective action to energize the required A.C. busses in the specified manner as soon as possible, ~~and within 8 hours depressurize and vent the Reactor Coolant System through at least a 4.5 square inch vent.~~

SURVEILLANCE REQUIREMENTS

SR 3.8.10.1 ~~4.8.3.2~~ The ~~specified~~ A.C. busses and AC VITAL ~~shall be determined energized in the required manner at least~~ once per 7 days by verifying correct breaker alignment and ~~indicated~~ voltage ~~on the busses~~.

INSERT 1 A.50

The necessary portion of AC, Channels of DC, DC Trains, and AC vital buses electrical power distribution subsystems shall be OPERABLE to support equipment required to be OPERABLE.

INSERT 2

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more required AC, channels of DC, DC trains, or AC vital bus(es) electrical power distribution subsystems inoperable.	A.1 Declare associated supported required feature(s) inoperable.	Immediately
	A.2.5 Declare associated required residual heat removal subsystem(s) inoperable and not in operation.	Immediately
	AND	
	A.2.6 Declare associated Low Temperature Overpressure Protection feature(s) inoperable.	Immediately

A.53

M.17

A.60

3.8 ELECTRICAL POWER SYSTEMS

3.8.10 ONSITE POWER DISTRIBUTION SYSTEMS - SHUTDOWN

LIMITING CONDITION FOR OPERATION

Addressed by ITS LCO 3.8.8

3.8.10.2 As a minimum, the following A.C. electrical busses and inverters shall be OPERABLE and energized:

a. One - 4160-volt essential bus,

b. Two - 600-volt essential busses in a single train, and

c. Two - 120-volt A.C. vital busses energized from their respective inverters connected to their respective D.C. channels.

APPLICABILITY MODES 5 and 6. During the movement of irradiated fuel assemblies

ACTION:

With any of the above required A.C. busses not energized in the required manner, immediately suspend all operations involving CORE ALTERATIONS, positive reactivity changes, or movement of irradiated fuel, initiate corrective action to energize the required A.C. busses in the specified manner as soon as possible, and within 8 hours depressurize and vent the Reactor Coolant System through at least a 4.5 square inch vent.

SURVEILLANCE REQUIREMENTS

SR 3.8.10.1 4.8.3.2 The specified A.C. busses and AC VITAL shall be determined energized in the required manner at least once per 7 days by verifying correct breaker alignment and indicated voltage on the busses.

INSERT 1 (A.50)

The necessary portion of AC, Channels of DC, DC Trains, and AC vital buses electrical power distribution subsystems shall be OPERABLE to support equipment required to be OPERABLE.

INSERT 2

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more required AC, channels of DC, DC trains, or AC vital bus(es) electrical power distribution subsystems inoperable.	A.1 Declare associated supported required feature(s) inoperable.	Immediately
	.	
	.	
	.	
	A.2.5 Declare associated required residual heat removal subsystem(s) inoperable and not in operation.	Immediately
	AND	
	A.2.6 Declare associated Low Temperature Overpressure Protection feature(s) inoperable.	Immediately

(A.53) (M.17) (A.60)

TECHNICAL CHANGES - MORE RESTRICTIVE

discussed in a less restrictive change addressed. These changes are acceptable to adequately monitor the batteries for operability and are consistent with NUREG-1431.

M.15 Footnote (6) to current CTS Table 4.8-3 is deleted with the conversion to ITS format. The removal of the temperature compensation from the float voltage limit of Category B parameter requirements deletes an allowance to adjust the float voltage range. The deletion of this allowance is acceptable because the plant staff does not use this allowance. The change is considered only slightly more restrictive change and is consistent with NUREG-1431.

M.16 A second Completion Time requirement is added to CTS Action 3.8.2.1 and 3.8.3.1. This would limit the time from discovery of failure to meet the LCO to a total time of 16 hours. This limit is considered reasonable for situations in which ITS 3.8.9 Actions A, B, C, or D are not met. This limit is considered reasonable for situations in which various Actions of the LCO could be entered. This type of completion time, which is discussed in example 1.3-3 of ITS Section 1.3, "Completion Times", limits the time period in which serial overlapping entries into independent sets of Conditions for a single LCO can occur. The addition of this requirement to these Actions is a more restrictive requirement for plant operations. The change is consistent with the format of NUREG-1431.

M.17 CTS Action of 3.8.1.2, 3.8.2.2, and 3.8.3.2 requires if one or more required AC or DC sources or inverters are inoperable in MODES 5 or 6, the movement of irradiated fuel assemblies should be immediately suspended. With the conversion to the proposed LCOs 3.8.2, "AC Sources-Shutdown," 3.8.5, "DC Sources-Shutdown," 3.8.8, "Inverters-Shutdown," and 3.8.10, "Distribution Systems-Shutdown," the Mode of Applicability is modified to include "during movement of irradiated fuel assemblies." This requirement would be applicable in the condition with no fuel in the reactor. This is not currently required. *For the inoperable distribution system, the ITS actions also require cascading to the applicable RHR LCO. This is necessary in lower modes because the RHR LCO specifies additional necessary required actions for the loss of residual heat removal.* ~~Therefore, the~~*These* changes ~~is~~ *are* more restrictive to plant operations. This is acceptable because the required

TECHNICAL CHANGES - MORE RESTRICTIVE

electrical power systems are required to be OPERABLE to *mitigate or preclude the potential for an event.* ~~provide necessary equipment with electrical power to mitigate the fuel handling accident.~~ This is consistent with the safety analysis and with NUREG-1431.

M.18 Not used.

M.19 CTS 3.8.1.1 does not specify requirements for the lubricating oil inventory and the starting air receiver pressure for the DGs. ITS SR 3.8.3.2 and 3.8.3.4 require that these parameters be verified once per 31 days on each DG. Although the current broad definition of operability would require monitoring these types of parameters, specific values and frequencies are not specified in the CTS. The additions of these requirements is acceptable to ensure the Operability of the DGs. Therefore, the change is considered more restrictive and is consistent with NUREG-1431.

M.20 Two notes are added to CTS 4.8.1.1.2 a.5. The Notes require the ITS SR 3.8.1.8 to be performed on only one diesel at a time and the requirement is to be immediately preceded by the performance of either ITS SR 3.8.1.2 or 3.8.1.7, without a shutdown of the diesel. These requirements are additional restrictions for the testing of the diesel. These limitations are acceptable because diesel testing is normally conducted only on one at a time and the start of a diesel is normally conducted with either SR 3.8.1.2 or 3.8.1.7. The change is consistent with NUREG-1431.

M.21 Not Used.

M.22/23 Not used.

M.24 CTS 4.8.1.1.2.g.15 requires that the DG be started within 5 minutes after the 24 hour run test and specifies minimum voltage and frequency requirements. ITS SR 3.8.1.15 adds a requirement for steady state voltage and frequency for the hot restart test.

SURVEILLANCE REQUIREMENTS (continued)

	SURVEILLANCE	FREQUENCY
SR 3.8.1.3	----------NOTES---------- 1. DG loadings may include gradual loading as recommended by the manufacturer. 2. Momentary transients outside the load range do not invalidate this test. 3. This Surveillance shall be conducted on only one DG at a time. 4. This SR shall be preceded by and immediately follow without shutdown a successful performance of SR 3.8.1.2 or SR 3.8.1.7. ---------- Verify each DG is synchronized and loaded and operates for $\geq$ 60 minutes at a load $\geq$ 5600 kW and $\leq$ 5750 kW.	31 days
SR 3.8.1.4	Verify each day tank contains $\geq$ 470 gal of fuel oil.	31 days
SR 3.8.1.5	Check for and remove accumulated water from each day tank.	31 days
SR 3.8.1.6	Verify the fuel oil transfer system operates to transfer fuel oil from storage system to the day tank.	31 days

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SR 3.8.1.6

This Surveillance demonstrates that each required fuel oil system operates and transfers fuel oil from its associated storage tanks to its associated day tank. This is required to support continuous operation of standby power sources. This Surveillance provides assurance that the fuel oil valve is OPERABLE, and allows gravity feed of fuel oil to the day tank from underground storage tanks, to ensure the fuel oil piping system is intact, the fuel delivery piping is not obstructed, and the controls and control systems for fuel transfer systems are OPERABLE.

The design of fuel transfer systems is such that the transfer valve operates automatically or the transfer valve bypass valve may be opened manually in order to maintain an adequate volume of fuel oil in the day tanks during or following DG testing. Therefore, a 31 day Frequency is appropriate.

SR 3.8.1.7

See SR 3.8.1.2.

SR 3.8.1.8

Transfer of each 4.16 kV ESF bus power supply from the normal offsite circuit to the alternate offsite circuit demonstrates the OPERABILITY of the alternate circuit distribution network to power the shutdown loads. The 18 month Frequency of the Surveillance is based on engineering judgment, taking into consideration the unit conditions required to perform the Surveillance, and is intended to be consistent with expected fuel cycle lengths. Operating experience has shown that these components usually pass the SR when performed at the 18 month Frequency. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint.

SR 3.8.1.9

Each DG is provided with an engine overspeed trip to prevent damage to the engine. Recovery from the transient caused by the loss of a large load could cause diesel engine overspeed, which, if excessive, might result in a trip of the engine. This Surveillance demonstrates the DG load

ELECTRICAL POWER SYSTEMS

LIMITING CONDITION FOR OPERATION

LA.2 g. With a diesel generator operating at greater than 5750 kW, within 1 hour reduce the diesel generator output to less than or equal to 5750 kW.

LA.3 h. With the Cathodic Protection System inoperable, restore the System to OPERABLE status within 10 days or prepare and submit a Special Report pursuant to Specification 6.9.2 outlining the cause of the inoperability and the plans for restoring the System to OPERABLE.

SURVEILLANCE REQUIREMENTS

4.8.1.1.1 Each of the above required independent circuits between the offsite transmission network and the Onsite Essential Auxiliary Power System shall be:

SR 3.8.1.1 (a) determined OPERABLE at least once per 7 days by verifying correct breaker alignments, indicated power availability, and for each offsite circuit A.1

SR 3.8.1.8 (b) Demonstrated OPERABLE at least once per 18 months by transferring (manually and automatically) unit power supply from the normal offsite circuit to the alternate offsite AC sources circuit.

4.8.1.1.2 Each diesel generator shall be demonstrated OPERABLE:

(a) At least once per 31 days on a STAGGERED TEST BASIS by: L.1

SR 3.8.1.4 (1) Verifying each the fuel level in the day tank, contains ≥ 470 gal of fuel oil A.1

Moved to ITS LCO 3.8.3 (2) Verifying the fuel level in the fuel storage tank,

SR 3.8.1.6 (3) Verifying the fuel transfer system valve can be operated to allow automatically L.1 L.4 A.1 A.11

A.1 fuel oil to be transferred from the storage system to the day tank.

INSERT 8 SR 3.8.1.2 (4) Verifying each DG the diesel starts from standby (prelube) condition achieves and maintains the steady-state generator voltage and frequency at 4160 ± 420 volts and 60 ± 1.2 Hz, respectively. The diesel generator shall be started for this test by using one of the following signals: A.1

a) Manual, or

LA.4 b) Simulated loss of offsite power by itself, or

c) Simulated loss of offsite power in conjunction with an ESF Actuation test signal, or

d) An ESF Actuation test signal by itself.

A.12 INSERT 9 SR 3.8.1.7 (5) Once per 184 days, verify each DG starts start the engine from standby (prelube) condition, and verify generator reaches achieves ≥ 3740 volts and voltage ≥ 57 Hz frequency in ≤ 11 seconds. A.1

and maintains steady state voltage ≥ 3740 v and ≤ 4580 v and frequency ≥ 58.8 Hz and ≤ 61.2 Hz

ELECTRICAL POWER SYSTEMS

LIMITING CONDITION FOR OPERATION

g. With a diesel generator operating at greater than 5750 kW, within 1 hour reduce the diesel generator output to less than or equal to 5750 kW. (LA.2)

h. With the Cathodic Protection System inoperable, restore the System to OPERABLE status within 10 days or prepare and submit a Special Report pursuant to Specification 6.9.2 outlining the cause of the inoperability and the plans for restoring the System to OPERABLE. (LA.3)

SURVEILLANCE REQUIREMENTS

4.8.1.1.1 Each of the above required independent circuits between the offsite transmission network and the Onsite Essential Auxiliary Power System shall be: (A.1)

SR 3.8.1.1 (a) Determined OPERABLE at least once per 7 days by verifying correct breaker alignments, indicated power availability, and for each offsite circuit.

SR 3.8.1.8 (b) Demonstrated OPERABLE at least once per 18 months by transferring (manually and automatically) unit power supply from the normal offsite circuit to the alternate offsite circuit. AC sources

4.8.1.1.2 Each diesel generator shall be demonstrated OPERABLE:

(a) At least once per 31 days on a STAGGERED TEST BASIS by: (L.1)

SR 3.8.1.4 (1) Verifying the fuel level in the day tank. (each) (contains ≥ 470 gal of fuel oil) (A.1)

(moved to ITS LCO 3.8.3) (2) Verifying the fuel level in the fuel storage tank.

SR 3.8.1.6 (3) Verifying the fuel transfer system (oil) valve can be operated to allow (automatically) (L.1) (A.3) (A.10) fuel oil to be transferred from the storage system to the day tank.

(A.4) (INSERT 8) SR 3.8.1.2 (4) Verifying the diesel (each DG) (fuel oil) starts from standby (prelube) condition (<TO NOTE>) and maintains the steady-state generator voltage and frequency at 4160 ± 420 volts and 60 ± 1.2 Hz, respectively. (achieves) (A.1) The diesel generator shall be started for this test by using one of the following signals:

(LA.4)

a) Manual, or

b) Simulated loss of offsite power by itself, or

c) Simulated loss of offsite power in conjunction with an ESF Actuation test signal, or

d) An ESF Actuation test signal by itself.

(A.12) (INSERT 9) SR 3.8.1.7 (5) Once per 184 days, start the engine (verify each DG starts) from standby (prelube) condition (<TO NOTE>), and verify generator (achieves) reaches ≥ 3740 volts and ≥ 57 Hz (voltage) (frequency) in ≤ 11 seconds. (A.1)

and maintains steady state voltage ≥ 3740 v and ≤ 4580 v and frequency ≥ 58.8 Hz and ≤ 61.2 Hz.

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.8.1.3	----------NOTES---------- 1. DG loadings may include gradual loading as recommended by the manufacturer. 2. Momentary transients outside the load range do not invalidate this test. 3. This Surveillance shall be conducted on only one DG at a time. 4. This SR shall be preceded by and immediately follow without shutdown a successful performance of SR 3.8.1.2 or SR 3.8.1.7. ---------- Verify each DG is synchronized and loaded and operates for ≥ 60 minutes at a load ≥ [4500] (5600) kW and ≤ [5000] (5750) kW. (1)	31 days (5) As specified in Table 3.8.1-1
SR 3.8.1.4	Verify each day tank [and engine mounted tank] contains ≥ [220] (470) gal of fuel oil. (1)	31 days
SR 3.8.1.5	Check for and remove accumulated water from each day tank [and engine mounted tank].	[31] days
SR 3.8.1.6	Verify the fuel oil transfer system operates to ~~[automatically]~~ transfer fuel oil from storage [tank(s)] to the day tank [and engine mounted tank]. (SYSTEM) (1)	[92] 31 days

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.8.1.4 (continued)

provided and facility operators would be aware of any large uses of fuel oil during this period.

SR 3.8.1.5

Microbiological fouling is a major cause of fuel oil degradation. There are numerous bacteria that can grow in fuel oil and cause fouling, but all must have a water environment in order to survive. Removal of water from the fuel oil day [and engine mounted] tanks once every [31] days eliminates the necessary environment for bacterial survival. This is the most effective means of controlling microbiological fouling. In addition, it eliminates the potential for water entrainment in the fuel oil during DG operation. Water may come from any of several sources, including condensation, ground water, rain water, contaminated fuel oil, and breakdown of the fuel oil by bacteria. Frequent checking for and removal of accumulated water minimizes fouling and provides data regarding the watertight integrity of the fuel oil system. The Surveillance Frequencies are established by Regulatory Guide 1.137 (Ref. 10). This SR is for preventative maintenance. The presence of water does not necessarily represent failure of this SR, provided the accumulated water is removed during the performance of this Surveillance.

SR 3.8.1.6

This Surveillance demonstrates that each required fuel oil transfer pump operates and transfers fuel oil from its associated storage tank to its associated day tank. This is required to support continuous operation of standby power sources. This Surveillance provides assurance that the fuel oil transfer pump is OPERABLE, the fuel oil piping system is intact, the fuel delivery piping is not obstructed, and the controls and control systems for automatic fuel transfer systems are OPERABLE.

The Frequency for this SR is variable, depending on individual system design, with up to a [92] day interval. The [92] day Frequency corresponds to the testing requirements for pumps as contained in the ASME Code

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.8.1.6 (continued)

Section XI (Ref. 6), however, the design of fuel transfer systems is such that pumps operate automatically or must be started manually in order to maintain an adequate volume of fuel oil in the day [and engine mounted] tanks during or following DG testing. [In such cases,] a 31 day Frequency is appropriate. Since proper operation of fuel transfer system is an inherent part of DG OPERABILITY, the Frequency of this SR should be modified to reflect individual designs.

SR 3.8.1.7

See SR 3.8.1.2.

SR 3.8.1.8

Transfer of each [4.16 kV ESF bus] power supply from the normal offsite circuit to the alternate offsite circuit demonstrates the OPERABILITY of the alternate circuit distribution network to power the shutdown loads. The [18 month] Frequency of the Surveillance is based on engineering judgment, taking into consideration the unit conditions required to perform the Surveillance, and is intended to be consistent with expected fuel cycle lengths. Operating experience has shown that these components usually pass the SR when performed at the [18 month] Frequency. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint.

This SR is modified by a Note. The reason for the Note is that, during operation with the reactor critical, performance of this SR could cause perturbations to the electrical distribution systems that could challenge continued steady state operation and, as a result, unit safety systems. Credit may be taken for unplanned events that satisfy this SR.

SR 3.8.1.9

Each DG is provided with an engine overspeed trip to prevent damage to the engine. Recovery from the transient caused by the loss of a large load could cause diesel engine

(continued)

ENCLOSURE 3

CATAWBA NUCLEAR STATION

PROPOSED LICENSE CONDITIONS

PROPOSED LICENSE CONDITIONS

Section 2.C (2) of the Facility Operating License, NPF-35 and NPF-52, should be revised to include the following additional subparagraph:

> For Surveillance Requirements (SRs) that are new in Amendment [ ] to Facility Operating License NPF-35 {NPF-52 for Unit 2}, the first performance is due at the end of the first surveillance interval that begins at implementation of Amendment [ ]. For SRs that existed prior to Amendment [ ], including SRs with modified acceptance criteria and SRs whose frequency of performance is being extended, the first performance is due at the end of the first surveillance interval that begins on the date the Surveillance was last performed prior to implementation of Amendment [ ].

Appendix D of the Facility Operating License, NPF-35 and NPF-52, should be revised to include the following additional paragraph:

Amendment Number	Additional Condition	Implementation Date
	The licensee is authorized to relocate certain requirements included in Appendix A to licensee-controlled documents. Implementation of this amendment shall include the relocation of these requirements to the appropriate documents, as described in the licensee's letter dated May 27, 1997 and amended by letters dated March 9, 1998, March 20, 1998, April 20, 1998, June 3, 1998, June 24, 1998, July 7, 1998, July 21, 1998, August 5, 1998, and September 8, 1998 evaluated in the NRC staff's Safety Evaluation enclosed with this amendment.	This amendment is effective immediately and shall be implemented by January 31, 1999.

ENCLOSURE 4

CATAWBA NUCLEAR STATION

PROPOSED TECHNICAL SPECIFICATIONS AND BASES