May 9, 2001

Mr. Mark Reddemann Site Vice President Kewaunee and Point Beach Nuclear Plants Nuclear Management Company, LLC 6610 Nuclear Road Two Rivers, WI 54241

SUBJECT: POINT BEACH NUCLEAR POWER PLANT, UNITS 1 AND 2 - DRAFT SAFETY EVALUATION FOR THE CONVERSION TO IMPROVED TECHNICAL SPECIFICATIONS (TAC NOS. MA7186 AND MA7187)

Dear Mr. Reddemann:

Enclosed for your review is a draft safety evaluation (SE) for the conversion of the current Technical Specifications (CTS) for Point Beach Nuclear Plant, Units 1 and 2, to improved Technical Specifications (ITS). The draft SE includes tables that list the changes to the CTS. As agreed to by your staff, please provide your comments on the draft SE by June 7, 2001, to support the Nuclear Regulatory Commission (NRC) staff's review schedule.

The NRC staff's review is ongoing. The NRC staff should complete its review after receipt of Supplement 12 to your ITS application, which is expected by May 11, 2001. We understand that Supplement 12 will contain various clarifying items including license conditions for implementing ITS, revisions to the ITS submittal to incorporate a recent amendment, correction of typographical errors, and answers to some outstanding questions pertaining to beyond-scope items. The beyond-scope items are addressed in Section 3.0.G of the SE. While some beyond-scope items remain under NRC review and in an effort to meet the overall completion date of August 6, 2001, we are issuing the draft SE with place holders for the incorporation of the NRC staff's assessment of those beyond-scope items. We will provide, for your comment, draft evaluations for those beyond-scope items as soon as they are resolved.

Sincerely,

/RA/

Beth Wetzel, Senior Project Manager, Section 1 Project Directorate III Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket Nos. 50-266 and 50-301

Enclosure: Draft Safety Evaluation with Tables

cc w/encl: See next page

Mr. Mark Reddemann Site Vice President Kewaunee and Point Beach Nuclear Plants Nuclear Management Company, LLC 6610 Nuclear Road Two Rivers, WI 54241

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Point Beach Nuclear Plant, Units 1 and 2

CC:

Mr. John H. O'Neill, Jr. Shaw, Pittman, Potts & Trowbridge 2300 N Street, NW Washington, DC 20037-1128

Mr. Richard R. Grigg President and Chief Operating Officer Wisconsin Electric Power Company 231 West Michigan Street Milwaukee, WI 53201

Site Licensing Manager Point Beach Nuclear Plant Nuclear Management Company, LLC 6610 Nuclear Road Two Rivers, WI 54241

Mr. Ken Duveneck Town Chairman Town of Two Creeks 13017 State Highway 42 Mishicot, WI 54228

Chairman Public Service Commission of Wisconsin P.O. Box 7854 Madison, WI 53707-7854

Regional Administrator, Region III U.S. Nuclear Regulatory Commission 801 Warrenville Road Lisle, IL 60532-4351

Resident Inspector's Office U.S. Nuclear Regulatory Commission 6612 Nuclear Road Two Rivers, WI 54241 Ms. Sarah Jenkins Electric Division Public Service Commission of Wisconsin P.O. Box 7854 Madison, WI 53707-7854

Michael D. Wadley Chief Nuclear Officer Nuclear Management Company, LLC 700 First Street Hudson, WI 54016

Nuclear Asset Manager Wisconsin Electric Power Company 231 West Michigan Street Milwaukee, WI 53201

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. TO FACILITY OPERATING LICENSE NO. DPR-24

AND AMENDMENT NO. TO FACILITY OPERATING LICENSE NO. DPR-27

NUCLEAR MANAGEMENT COMPANY, LLC

POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

DOCKET NOS. 50-266 AND 50-301

1.0 INTRODUCTION

Point Beach Nuclear Plant, Units 1 and 2 (Point Beach) has been operating with Technical Specifications (TS) issued with the original operating licenses on October 5, 1970, for Unit 1 and March 8, 1973, for Unit 2, as amended. By letter dated November 15, 1999, as supplemented by letters dated March 15, March 20, June 15, June 19, July 28, August 17, September 14, and December 21, 2000, February 23, March 19, May 7, and . . . , 2001, Nuclear Management Company, LLC (NMC) (Wisconsin Electric Power Company¹ (WEPCo) prior to October 5, 2000), the licensee, proposed to convert the current Technical Specifications (CTS) to improved Technical Specifications (ITS). The conversion is based upon:

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

Hereinafter, the proposed or improved TS for Point Beach are referred to as the ITS, the existing TS are referred to as the CTS, and the improved standard TS, such as in

¹WEPCo was subsequently succeeded by NMC, as the licensed operator of Point Beach, Units 1 and 2. By letter dated October 5, 2000, NMC requested the staff to continue to process and disposition licensing actions previously docketed and requested by WEPCo.

NUREG-1431, are referred to as the STS. The corresponding TS Bases are ITS Bases, CTS Bases, and STS Bases, respectively. For convenience, a list of acronyms used in this safety evaluation (SE) is provided in Attachment 1.

In addition to basing the ITS on the STS, the Final Policy Statement, and the requirements in 10 CFR 50.36, the licensee retained portions of the CTS as a basis for the ITS. Plant-specific issues, including design features, requirements, and operating practices, were discussed with the licensee during a series of telephone conference calls that concluded on [date], 2001. These plant-specific changes serve to clarify the ITS with respect to the guidance in the Final Policy Statement and STS. Also, 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 proposed changes to STS through the NRC/Nuclear Energy Institute's Technical Specifications Task Force (TSTF). These generic issues were considered for specific applications in the Point Beach ITS. Consistent with the Final Policy Statement, the licensee proposed transferring some CTS requirements to licensee-controlled documents (such as the final safety analysis report (FSAR) for Point Beach, for which changes to the documents by the licensee are controlled by a regulation such as 10 CFR 50.59 and may be changed without prior NRC approval). NRC-controlled documents, such as the TS, may not be changed by the licensee without prior NRC approval. In addition, human factors principles were emphasized to add clarity to the CTS requirements being retained in the ITS, and to define more clearly the appropriate scope of the ITS. Further, significant changes were proposed to the CTS Bases to make each ITS requirement clearer and easier to understand.

The overall objective of the proposed amendment, consistent with the Final Policy Statement, is to rewrite, reformat, and streamline the TS for Point Beach to be in accordance with 10 CFR 50.36.

Since the licensee prepared the November 15, 1999, application, a number of amendments to the Point Beach operating license were approved. Table 1 provides the subjects of the amendments and the dates of issuance.

Amendment Nos. Unit 1 Unit 2		Description of Change	Date
191	196	Removed test requirements for snubbers from CTS.	12/6/99
192	197	Updated FSAR references in CTS Table 15.3.5-5, Post Accident Monitoring Instrumentation, and in CTS 15.4.6.A.2, diesel generator safety-related load timing sequence.	12/23/99
193	198	CTS changes related to design and operation of Point Beach fuel cycle to incorporate Westinghouse 422V+ fuel assemblies into the reactor cores.	2/8/00

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Amendmer Unit 1	nt Nos. Unit 2	Description of Change	Date
194	199	Change to CTS 15.5.4 to remove one of the two separate methods for verifying the acceptability of reactor fuel for placement and storage in the spent fuel pool and new fuel storage vault. Also restores a phrase mistakenly removed from CTS page 15.5.4-1 by Amendment 193/198.	3/20/00
195	200	Relaxed surveillance interval for partial movement of all rods in CTS 15.4.1.B, Table 15.4.1-2, Item 10, from every two weeks to quarterly, as recommended by Generic Letter 93-05, "Line Item Technical Specifications Improvements to Reduce Surveillance Requirements for Testing During Power Operation."	3/22/00
196	201	Clarification of containment tendon surveillance regarding selection of the control tendon in CTS 15.4.4.II.A, for consistency with the Point Beach Containment Tendon Surveillance Program.	6/27/00
197	202	Transfer of Point Beach Operating Licenses from WEPCo to NMC.	8/7/00
198	203	Eliminated license condition requiring submittal of an amendment transmitting a control room dose analysis without reliance on potassium iodide (KI), as well as a schedule for implementing the proposed changes.	8/15/00
not applicable		Revised Bases for CTS 15.3.1.B (reactor coolant system pressure-temperature limits) to incorporate use of ASME Code Case N-641. A calculation using this code case demonstrated that CTS pressure-temperature curves and LTOP (low temperature overpressure protection system) setpoints are valid to 23.6 effective full power years (EFPY) for both units.	10/10/00
199	204	Revised CTS 15.3.3.D, service water (SW) system, to more clearly define the requirements for SW system operability in accordance with the system configuration assumed in the SW system analysis.	11/17/00

- 3 -

The licensee has incorporated these amendments, as appropriate, into the ITS.

The NRC staff's evaluation of the application dated November 15, 1999, is presented in this SE. The NRC staff issued requests for additional information (RAIs) dated April 19, May 5 and 15,

June 21, July 3, August 24, November 6 and 20, 2000, and January 25, 2001. The staff also sent NMC a letter January 31, 2001, regarding a change in the review schedule.

The license conditions implementing the conversion will make enforceable the following aspects of the conversion: (1) the relocation of requirements from the CTS and (2) the implementation schedule for new and revised SRs in the ITS.

The Commission's proposed action on the Point Beach application for an amendment dated November 15, 1999, was published in the *Federal Register* on , 2001 (66 FR). The *Federal Register* notice also addressed beyond scope changes identified in the licensee's submittals. Two beyond scope changes proposed by the licensee to be included in the ITS amendment, but submitted in separate correspondence, were the establishment of a Core Operating Limits Report (COLR) and a Pressure and Temperature Limits Report (PTLR).

The licensee submitted a separate application dated March 2, 2000, requesting implementation of a COLR concurrent with ITS implementation. The Commission's proposed action on the Point Beach COLR application was published in the *Federal Register* on August 9, 2000 (65 FR 48740).

The licensee also submitted a separate application dated March 10, 2000, as supplemented on November 20, 2000, and April 10, 2001, requesting implementation of a PTLR concurrent with ITS implementation. The Commission's proposed action on the Point Beach PTLR application was published in the *Federal Register* on August 23, 2000 (65 FR 51364).

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's conclusion that the licensee can develop ITS based on STS, as modified by plant-specific changes, and that the use of the ITS is acceptable for continued operation. The SE also explains the NRC staff's conclusion that the ITS, which are based on the STS as modified by plant-specific changes, are consistent with the Point Beach current licensing basis and the requirements of 10 CFR 50.36.

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

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

2.0 BACKGROUND

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

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

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

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

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

On July 22, 1993, the Commission issued its Final Policy Statement, expressing the view that satisfying the guidance in the policy statement also satisfies Section 182a of the Act and 10 CFR 50.36 (58 FR 39132). The Final Policy Statement described the safety benefits of the STS, and encouraged licensees to use the STS as the basis for plant-specific TS amendments, and for complete conversions to ITS based on the STS. Further, the Final Policy Statement gave guidance for evaluating the required scope of the TS and defined the guidance criteria to be used in determining which of the LCOs and associated SRs should remain in the TS. The Commission noted that, in allowing certain items to be relocated to licensee-controlled documents while requiring that other items be retained in the TS, it was adopting the qualitative standard enunciated by the Atomic Safety and Licensing Appeal Board in *Portland General Electric Co.* (Trojan Nuclear Plant), ALAB-531, 9 NRC 263, 273 (1979). There, the Appeal Board observed:

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

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

- *Criterion 1* Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
- *Criterion 2* A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
- *Criterion 3* A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
- *Criterion 4* A structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety.

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

3.0 EVALUATION

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

- A Administrative changes to the CTS that result in no changes to existing restrictions and flexibility (i.e., nontechnical changes in the presentation of CTS requirements).
- M More Restrictive changes to the CTS that result in added restrictions or reduced flexibility (i.e., additional TS requirements).
- L Less Restrictive "Specific" changes to the CTS that result in reduced restrictions or added flexibility (i.e., changes, deletions, and relaxations of CTS requirements).
- LA Less Restrictive changes to the CTS that relocate details out of the CTS and into the Bases, FSAR, or other appropriate licensee-controlled document (i.e., design details, system descriptive details, and procedural details).
- LB Less Restrictive "Generic" changes that remove details that are redundant to other regulatory requirements.
- R Relocations relaxations to the CTS in which whole CTS specifications (the LCO, and associated action and surveillance requirements) are removed from the CTS and placed in licensee-controlled documents.

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

In its review, the NRC staff identified the need for clarifications and additions to the November 15, 1999, ITS application in order to establish an appropriate regulatory basis for translation of CTS requirements into ITS. The NRC staff's comments were documented as requests for additional information (RAIs) and forwarded in letters dated April 19, May 5, May 15, June 21, July 3, August 24, November 6, November 20, 2000, and January 25, . . ., and . . ., 2001. The licensee provided responses to the RAIs in letters dated June 15, June 19, July 28, August 17, September 14, December 21, 2000, February 23, March 19, May 7, and . . ., 2001. The letters clarified the licensee's bases for translating the CTS requirements into ITS. The NRC staff finds that the licensee's submittals, including the responses to the RAIs, provide

sufficient detail to allow the staff to reach a conclusion regarding the adequacy of the licensee's proposed changes to the CTS.

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

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

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

The NRC staff's evaluation and additional description of the six kinds of changes to the CTS requirements listed in Tables A, M, L, and R, are presented in Sections A through E below, as follows:

- Section A Administrative (A)
- Section B More Restrictive (M)
- Section C Less Restrictive and Less Restrictive "Generic" (L and LB)
- Section D Removed Details (LA)
- Section E Relocated Specifications (R))

The control of specifications, requirements and information relocated from the CTS is described in Section F below, and other TS changes (i.e., beyond scope changes) are described in Section G below.

A. Administrative Changes to the CTS

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:

- Identifying plant-specific wording for system names, etc.;
- Splitting up requirements currently grouped under a single current specification to more appropriate locations in two or more specifications of ITS;
- Combining related requirements currently presented in separate specifications of the CTS into a single specification of ITS;
- Presentation changes that involve rewording or reformatting for clarity (including moving

an existing requirement to another location within the TSs) but which do not involve a change in requirements;

- Wording changes and additions that are consistent with CTS interpretation and practice, and that more clearly or explicitly state existing requirements;
- Deletion of TSs which no longer apply;
- Deletion of details that are strictly informational and have no regulatory basis; and
- Deletion of redundant TS requirements that exist elsewhere in the TS.

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

B. More Restrictive Changes to the CTS

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

C. Less Restrictive and Less Restrictive "Generic" Changes to the CTS

Less restrictive requirements include deletions and relaxations to portions of the CTS requirements that are being retained in ITS. When requirements have been shown to give little or no safety benefit, their relaxation or removal from the TS may be appropriate. In most cases, relaxations previously granted to individual plants on a plant-specific basis were the result of: (1) generic NRC actions, (2) new NRC staff positions that have evolved from technological 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 Point Beach design was also reviewed to determine if the specific design basis and licensing basis for Point Beach are consistent with the technical basis for the model requirements in the STS, and thus provide a basis for the ITS.

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

- Relaxation of LCO Requirement (Category 1)
- Relaxation of Applicability (Category 2)
- Relaxation of Surveillance Requirement (Category 3)
- Relaxation of Required Action (Category 4)
- Relaxation of CTS Reporting Requirements (Category 5)
- Relaxation of Completion Time (Category 6)
- Deletion of Requirements Redundant to Regulation (Category 7)

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

1. Relaxation of LCO Requirement (Category 1)

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

2. Relaxation of Applicability (Category 2)

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

In another application of this category of change, CTS requirements may be eliminated during conditions for which the safety function of the specified safety system is met because

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

3. Relaxation of Surveillance Requirement (Category 3)

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

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

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

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

These relaxations of CTS SRs optimize test requirements for the affected safety systems and increase operational flexibility. Therefore, because of the reasons stated, less restrictive changes to CTS SRs falling within Category 3 are acceptable.

4. Relaxation of Required Actions (Category 4)

LCOs are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When an LCO is not met, CTS specify actions to be taken

until the equipment is restored to its required capability or performance level, or remedial measures are established. Compared to CTS required actions, the ITS actions result in extending the time period for taking the plant outside the applicability into shutdown conditions. For example, changes in this category include providing an option to: isolate a system, place equipment in the state assumed by the safety analysis, satisfy alternate criteria, take manual actions in place of automatic actions, "restore to operable status" within a specified time frame, place alternate equipment into service, or use more conservative TS setpoints. The resulting ITS actions continue to provide measures that conservatively compensate for the inoperable equipment. The ITS actions are commensurate with safety importance of the inoperable equipment, plant design and industry practice and do not compromise safe operation of the plant. Therefore, these changes which are consistent with STS and fall within Category 4 are acceptable.

5. Relaxation of CTS Reporting Requirements (Category 5)

CTS include requirements to submit Special Reports when specified limits are not met. Typically, the time period for the report to be issued is within 30 days. However, the STS eliminates the TS administrative control requirements for Special Reports and instead relies on the reporting requirements of 10 CFR 50.73. ITS changes to reporting requirements are acceptable because 10 CFR 50.73 provides adequate reporting requirements, and the special reports do not affect continued plant operation. Therefore, this change has no impact on the safe operation of the plant. Additionally, deletion of TS reporting requirements reduces the administrative burden on the plant and allows efforts to be concentrated on restoring TS required limits. Therefore, these changes which are consistent with the STS and fall within Category 5 are acceptable.

6. Relaxation of Completion Time (Category 6)

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

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

7. Deletion of Requirements Redundant to Regulation (Category 7)

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, omit 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 within Category 7 are acceptable.

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

D. Removed Details from the CTS

When requirements have been shown to give little or no safety benefit, their removal from the TS may be appropriate. In most cases, relaxations previously granted to individual plants on a plant-specific basis were the result of (1) generic NRC actions, (2) new staff positions that have evolved from technological advancements and operating experience, or (3) resolution of the Owners Groups comments on STS. The NRC staff reviewed generic relaxations contained in STS and found them acceptable because they are consistent with current licensing practices and the Commission's regulations. The design was also reviewed to determine if the specific design basis and licensing basis are consistent with the technical basis for the model requirements in STS, and thus provide a basis for ITS. Changes to the CTS that involve the removal of specifications, specific requirements and detailed information from individual specifications were all evaluated and grouped within the following Types 1 through 4:

- Type 1 Details of System Design and System Description Including Design Limits
- Type 2 Descriptions of System or Plant Operation
- Type 3 Procedural Details for Meeting TS Requirements and Related Reporting Requirements
- Type 4 Relocated Redundant Requirements

The following discussions address why each of the four types of information or specific requirements are not required to be included in ITS.

1. Details of System Design and System Description Including Design Limits (Type 1)

The design of the facility is required to be described in the FSAR by 10 CFR 50.34. In addition, the quality assurance (QA) requirements of Appendix B to 10 CFR Part 50 require that plant design be documented in controlled procedures and drawings, and maintained in accordance with an NRC-approved QA Program (FSAR Chapter 1.4). In 10 CFR 50.59,

controls are specified for changing the facility as described in the FSAR which includes the new Technical Requirements Manual (TRM) by reference, and in 10 CFR 50.54(a) criteria are specified for changing the QA Program. In the ITS, the Bases also contain descriptions of system design. The Point Beach administrative controls specification ITS 5.5.13 specifies controls for changing the Bases. Removing details of system design from the CTS is acceptable because this information will be adequately controlled by NRC requirements, the FSAR, controlled design documents and drawings, or the TS Bases, as appropriate. Cycle-specific design limits are moved from the CTS to the Core Operating Limits Report (COLR) in accordance with Generic Letter 88-16. ITS Administrative Controls are revised to include the programmatic requirements for controlling the COLR. Therefore, it is acceptable to remove Type 1 details from CTS and place them in licensee-controlled documents.

2. Descriptions of System or Plant Operation (Type 2)

The plans for the normal and emergency operation of the facility are required to be described in the FSAR by 10 CFR 50.34. ITS 5.4.1.a requires written procedures to be established, implemented, and maintained for plant operating procedures. Controls specified in 10 CFR 50.59 apply to changes in procedures as described in the FSAR. In the ITS, the Bases also contain descriptions of system operation. CTS provides lists of acceptable devices that may be used to satisfy LCO requirements. The ITS reflect the STS approach to provide LCO requirements that specify the protective limit that is required to meet safety analysis assumptions for required features. The protective limits replace the lists of specific devices previously found to be acceptable to the NRC staff for meeting the LCO. The ITS changes provide the same degree of protection required by the safety analysis and provide flexibility for meeting limits without adversely affecting operations since equivalent features are required to be operable. It is acceptable to remove details of system operation from the TS because this type of information will be adequately controlled in the FSAR, plant operating procedures, and the TS Bases, as appropriate. Therefore, it is acceptable to remove Type 2 details from CTS and place them in licensee-controlled documents.

3. Procedural Details for Meeting TS Requirements, Related Reporting Requirements, and Indication-only Instrumentation Requirements (Type 3)

Details for performing action and surveillance requirements are more appropriately specified in the plant procedures required by ITS 5.4.1, the FSAR, and the ITS Bases. For example, control of the plant conditions appropriate to perform a surveillance test is an issue for procedures and scheduling and has previously been determined to be unnecessary as a TS restriction. As indicated in Generic Letter 91-04, allowing this procedural control is consistent with the vast majority of other SRs that do not dictate plant conditions for surveillances. Prescriptive procedural information in an action requirement is unlikely to contain all procedural considerations necessary for the plant operators to complete the actions required, and referral to plant procedures is therefore required in any event. Other changes to procedural details include those associated with limits retained in the ITS. For example, the ITS requirement may refer to programmatic requirements such as COLR, included in ITS Section 5.5, which specifies the scope of the limits contained in the COLR and mandates NRC approval of the analytical methodology. The QA Program is approved by the NRC and contained in FSAR Chapter 1.4, and changes to the QA Program are controlled by 10 CFR 50.54(a). The Offsite Dose Calculation Manual (ODCM) is required by ITS section 5.5.1. The TRM is incorporated by reference into the FSAR, and changes to the TRM are controlled by 10 CFR 50.59. The Inservice Test (IST) program is required by ITS 5.5.7 and is controlled by ITS 5.4.1.j. Indication-only instrumentation, test equipment, and alarms used for monitoring system operation and testing are usually not required to be operable to support the operability of a system or component. Thus, the STS generally contain no operability, action and surveillance requirements for indication-only equipment. Control of the availability of, and necessary compensatory activities if not available, for such indication instruments, monitoring instruments, and alarms are presently addressed by plant operational procedures and policies.

The removal of these kinds of procedural details from the CTS is acceptable because they will be adequately controlled by NRC requirements, the FSAR, plant procedures, Bases and COLR, as appropriate. This approach provides an effective level of regulatory control and provides for a more appropriate change control process. Similarly, removal of reporting requirements from LCOs is appropriate because ITS 5.6, 10 CFR 50.36 and 10 CFR 50.73 adequately cover the reports deemed to be necessary. Removal of requirements for indication-only instrumentation is acceptable because such instrumentation usually does not support system operability. Therefore, it is acceptable to remove Type 3 details from CTS and place them in licensee-controlled documents.

4. Relocated Redundant Requirements (Type 4)

Certain CTS administrative requirements are redundant to regulations and thus are relocated to the FSAR or other appropriate licensee-controlled documents. The Final Policy Statement allows licensees to relocate to licensee-controlled documents CTS requirements that do not meet any of the criteria for mandatory inclusion in the TS. Changes to the facility or to procedures as described in the FSAR are made in accordance with 10 CFR 50.59. Changes made in accordance with the provisions of other licensee-controlled documents are subject to the specific requirements of those documents. For example, 10 CFR 50.54(a) governs changes to the QA plan, and ITS 5.5.13 governs changes to the ITS Bases. Therefore, it is acceptable to remove Type 4 details from CTS and place them in licensee-controlled documents.

CTS requirements that are not required to be in TS and that can be adequately controlled by other regulatory or TS requirements, can be relocated to licensee controlled documents. Table R lists the requirements and detailed information in the CTS that are being moved to licensee-controlled documents and not retained in the ITS.

Table R is organized in STS order by each LA- and R-type DOC. It includes the following: (1) the DOC identifier (e.g., 3.1.1 followed by LA1 means STS Specification 3.1.1, DOC LA1); (2) the reference numbers of the associated CTS requirements; (3) a summary description of the relocated details and requirements; (4) the name of the licensee-controlled document to contain the relocated details and requirements (location); (5) the regulation (or ITS Specification) for controlling future changes to relocated requirements (change control process); and (6) a

characterization of the type of change (not applicable to R-type DOCs).

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

- TS Bases controlled in accordance with ITS 5.5.13, "Technical Specifications (TS) Bases Control Program."
- FSAR (which includes the TRM) controlled by 10 CFR 50.59.
- Programmatic documents required by ITS Section 5.5 controlled by ITS Section 5.4.
- Inservice Inspection (ISI) and Inservice Testing Programs controlled by 10 CFR 50.55a.
- Offsite Dose Calculation Manual controlled by ITS 5.5.1.
- Core Operating Limits Report controlled by ITS 5.6.4.
- Pressure and Temperature Limits Report controlled by ITS 5.6.5.
- QA plan, as approved by the NRC and referenced in the FSAR, controlled by 10 CFR Part 50, Appendix B, and 10 CFR 50.54(a).
- Site Emergency Plan controlled by 10 CFR 50.54(q).

To the extent that information has been relocated to licensee-controlled documents, such information is not required to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to public health and safety. Further, where such information is contained in LCOs and associated requirements in the CTS, the NRC staff has concluded that they do not fall within any of the four criteria contained in 10 CFR 50.36 and discussed in the Final Policy Statement (see Section 2.0 of this SE). Accordingly, existing detailed information, such as generally described above, may be removed from the CTS and not included in the ITS.

E. Relocated Specifications (R) from the CTS

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

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

The NRC staff's evaluation of each relocated specification listed in Table R is provided below.

1. <u>Movable Incore Detector System</u>

The relocation of the movable incore detector system is addressed in DOC 3.2.2-R1 and ITS application cover letter Appendix A, Justification 10. CTS requirements for the movable incore detector system are found in CTS 15.3.11.A and 15.3.11.B.

The movable incore detector system is used to perform periodic surveillance of core peaking factors and calibration of the excore detectors. This system is not used continuously and does not provide any automatic protection functions. Therefore, the movable incore detector system CTS requirements do not meet the criteria in 10 CFR 50.36(c)(2)(ii) for retention in the ITS. Consequently, it is acceptable to relocate these requirements to the TRM.

2. Emergency Plan Radiation Monitors

The relocation of the CTS requirements for the emergency plan radiation monitors is addressed in ITS DOC 3.3.1-R1 and in application cover letter Appendix A, Justification 15. CTS requirements for the emergency plan radiation monitors are found in CTS 15.4.1.A, Table 15.4.1-1, Item 29, check, calibration, and test of emergency plan radiation survey instruments.

The emergency plan radiation monitors are not used continuously and do not provide any automatic protection functions. They are not (a) used for detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA); (b) used to indicate status of, or monitor a process variable, design feature, or operating restriction that is an initial condition of a DBA or transient; or (c) part of a primary success path in the mitigation of a DBA or transient. Therefore, the emergency plan radiation monitor CTS requirements do not meet the criteria in 10 CFR 50.36(c)(2)(ii) for retention in the ITS. Consequently, it is acceptable to relocate these requirements to the TRM.

3. Effluent Radiation Monitoring - Area Radiation and Process Monitors

The relocation of the CTS requirements for the area radiation and process monitors is addressed in DOC 3.3.1-R1 and in ITS application cover letter Appendix A, Justification 9. CTS requirements for the area radiation and process monitors are found in CTS 15.4.1.A, Table 15.4.1-1, Item 36 Radiation Monitoring System, check (note 7), calibration (note 14), and test of the monitors RE-218, WDS Liquid Monitor and RE-223, Waste Distillate Overboard Monitor.

The area radiation and process monitors are used to indicate when the radiation in the area or effluent stream has exceeded its allowable setpoint. There are no safety related

automatic functions assumed in accident analyses that are performed by these instruments. The instruments are not used to mitigate a design basis accident or transient. These monitors are not used to detect degradation that could lead to leakage from the RCS to the containment atmosphere. The monitored parameters are not process variables used to define the initial conditions of a DBA or transient. And these monitors are not devices that provide the primary automatic response to a DBA or transient. Therefore, the area radiation and process monitor CTS requirements do not meet the criteria in 10 CFR 50.36(c)(2)(ii) for retention in the ITS. Consequently, it is acceptable to relocate these requirements to the TRM.

4. Steam Generator (SG) Pressure - Temperature (P/T) Limit

The relocation of the CTS requirements for the SG P/T limit is addressed in DOC 3.4.3-R1 and in ITS application cover letter Appendix A, Justification 4. CTS requirements for the SG P/T limit are found in CTS 15.3.1.B.2 and 15.4.1.A, Table 15.4.1-1 Item 10, check (note 16), calibration, and test (note 1) of SG pressure instrumentation.

The limitation on SG pressure and temperature ensures that pressure-induced stresses on the steam generators do not exceed the maximum allowable fracture toughness limits. These pressure and temperature limits are based on maintaining a steam generator reference temperature-nil ductility temperature (RT_{ndt}) sufficient to prevent brittle fracture. As such, the CTS places limits on variables consistent with structural analysis results. These limits do represent operating restrictions, but not the kind addressed by 10 CFR 50.36(c)(2)(ii) Criterion 2. The Final Policy Statement discussion of Criterion 2 indicates that TS need only contain those operating restrictions that are required to preclude unanalyzed accidents and transients. Appendix G to 10 CFR Part 50, provides P/T limits for the reactor coolant pressure boundary (RCPB), and TS requirements for SG tube surveillances ensure the integrity of the boundary between the reactor coolant system and the SG boundary. In addition, 10 CFR 50.55a provides requirements for inservice inspection, including the SG. The SG P/T limit does not represent an operating restriction that is an initial condition of a DBA or transient. Therefore, the SG P/T limit CTS requirements do not meet the criteria in 10 CFR 50.36(c)(2)(ii) for retention in the ITS. Consequently, it is acceptable to relocate these requirements to the TRM, where thay will be controlled in accordance with 10 CFR 50.59 and 10 CFR 50.55a.

5. Pressurizer Heat-up and Cool-down Limits

The relocation of the CTS requirements on pressurizer heat-up and cool-down limits is addressed in DOC 3.4.3-R2 and in ITS application cover letter Appendix A, Justification 5. CTS requirements for pressurizer heat-up and cool-down limits are found in CTS 15.3.1.B.3.

Limits are placed on pressurizer operation to prevent a non-ductile failure. Although the pressurizer operates at temperature ranges above those for which there is reason for concern about brittle fracture, operating limits are provided to assure compatibility of operation with the fatigue analysis performed in accordance with the ASME Boiler and Pressure Vessel Code, Section III, Appendix G. Thus temperature limits (heatup and

cooldown rates and auxiliary spray temperature differential) of CTS 15.3.1.B.3 are placed on the pressurizer to assure compatibility of operation with the fatigue analysis performed in accordance with the ASME Code requirements. However, a failure of pressurizer integrity would result in an analyzed accident (loss of coolant accident) for which adequate mitigation systems and components are provided. ITS will retain suitable requirements to ensure the operability of these systems. Therefore, the pressurizer heat-up and cool-down limits are not relied on to prevent or to mitigate a DBA or transient. Therefore, the requirements specified in CTS 15.3.1.B.3 do not meet the criteria in 10 CFR 50.36(c)(2)(ii) for retention in the ITS. Consequently, it is acceptable to relocate these requirements to the TRM.

6. Reactor Vessel Head Vent System

The relocation of the CTS requirements for the reactor vessel head vent system is addressed in DOC 3.4.4-R1 and in ITS application cover letter Appendix A, Justification 3. CTS requirements for the reactor vessel head vent system are found in CTS 15.3.1.A.7, Reactor Coolant Gas Vent System.

The reactor vessel head vents ensure the availability of an exhaust pathway from the RCS to remove non-condensable gases and steam that could inhibit natural circulation core cooling following any event involving a loss of offsite power and requiring long term cooling, such as a loss-of-coolant accident (LOCA). The reactor vessel head vents function, capabilities, and testing requirements are consistent with the requirements of Item II.B.I of NUREG-0737, "Clarification of TMI Action Plan Requirements." However, the operation of the reactor vessel head vents is not assumed in the Point Beach safety analysis. This is because the operation of the vents is not part of the primary success path. The system is normally isolated and requires manual operator action to initiate flow. The operation of the reactor vessel head vents is required only when there is indication that natural circulation is not occurring in the reactor vessel, inhibiting heat transfer. Therefore, the reactor vessel head vent system CTS requirements do not meet the criteria in 10 CFR 50.36(c)(2)(ii) for retention in the ITS. Consequently, it is acceptable to relocate these requirements to the TRM.

7. Primary System Testing Following Opening

The relocation of the CTS requirements for primary system testing following opening is addressed in DOC 3.4.13-R1 and in ITS application cover letter Appendix A, Justification 11. CTS requirements for the primary system testing following opening are found in CTS 15.4.3.

Primary system testing is used to verify the integrity of the primary system after the system is closed following normal opening, modification or repair. These leak testing and weld nondestructive examination requirements do not support any automatic protection functions. They are not used for detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA). The RCS system integrity requirements (leakage limits and surveillances) are provided as specific requirements in ITS 3.4.13, 3.4.14, and 3.4.15. Therefore, this CTS surveillance requirement for primary system testing following opening does not meet the criteria in 10 CFR 50.36(c)(2)(ii) for retention in the ITS. Consequently, it is acceptable to relocate this requirement to the TRM.

8. <u>Maximum Reactor Coolant Oxygen, Chloride and Fluoride Concentration for Power</u> <u>Operation</u>

The relocation of the CTS requirements for maximum reactor coolant oxygen, chloride and fluoride concentration for power operation is addressed in DOC 3.4.16-R1 and in ITS application cover letter Appendix A, Justification 6. CTS requirements for the maximum reactor coolant oxygen, chloride and fluoride concentration for power operation are found in CTS 15.3.1.E, and CTS 15.4.1.B, Table 15.4.1-2, Item 1, reactor coolant sample requirements for concentrations of chloride (note 8), dissolved oxygen (note 6), and flouride.

The reactor coolant water chemistry program provides limits on particular chemical properties of the primary coolant, and surveillance practices to monitor those properties, to ensure that degradation of the reactor coolant pressure boundary is not exacerbated by poor chemistry conditions. However, degradation of the reactor coolant pressure boundary is a long-term process, and there are other more direct means to monitor and correct the degradation of the reactor pressure boundary which are controlled by regulations and TS; for example, in-service inspection conducted in accordance with 10 CFR 50.55a, and primary coolant leakage limits. The chemistry monitoring activity is of a long term preventive purpose rather than mitigative. Therefore, the CTS requirements for maximum reactor coolant oxygen, chloride and fluoride concentration for power operation do not meet the criteria in 10 CFR 50.36(c)(2)(ii) for retention in the ITS. Consequently, it is acceptable to relocate these requirements to the TRM.

9. Boric Acid System

The relocation of the boric acid system is addressed in DOC 3.5.2-R1 and ITS application cover letter Appendix A, Justification 1. Following are CTSs for the boric acid system:

15.3.2 Chemical and Volume Control System (CVCS)

- 15.3.2.A LCO for boric acid injection flowpath
- 15.3.2.B LCO for CVCS system
- 15.3.2.C LCO for CVCS system for two reactor operation
- 15.3.2.D Action requirements for CVCS and boric acid systems
- 15.3.2, Table 15.3.2-1 Boric Acid Storage Tank Min. Volume/Temperature/Concentration
- 15.4.1.A, Table 15.4.1-1 Items:
 - 21. Boric acid control system instrumentation calibration
 - 22. Boric acid tank level instrumentation check and calibration
 - 23. Charging flow instrumentation calibration
- 15.4.1.B, Table 15.4.1-2 Items:
 - 4. Sample test for boric acid tank boron concentration
 - 20. Boric acid storage tank and piping temperature check; note (19)
 - 31. CVCS charging pump flow test; note (17)

The boric acid system ensures negative reactivity control is available for normal operation

(normal makeup and chemical shim reactivity control) and provides an alternate method for borating the reactor coolant system. However, this system is not assumed to mitigate any design basis accident or transient. Other systems and components (e.g., safety injection pumps) and other borated water sources, such as the refueling water storage tank (RWST), are assumed in the safety analysis to supply borated water to the RCS in the event of a DBA. ITS will retain suitable requirements to ensure the operability of these systems. The boric acid system is not (a) used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a design basis accident (DBA); (b) used to indicate status of, or monitor a process variable, design feature, or operating restriction that is an initial condition of a DBA or transient; or (c) part of a primary success path in the mitigation of a DBA or transient. Therefore, the boric acid system CTS requirements do not meet the criteria in 10 CFR 50.36(c)(2)(ii) for retention in the ITS. Consequently, it is acceptable to relocate these requirements to the TRM.

10. Refueling Communications

The relocation of the CTS requirements for communication during refueling is addressed in DOC 3.9.1-R1 and in ITS application cover letter Appendix A, Justification 7. CTS requirements for communication during refueling are found in CTS 15.3.8.6 (LCO) and 15.3.8.9 (action requirements).

Communication between the control room personnel and personnel in containment performing changes in core geometry or core alterations is maintained to ensure that personnel can be promptly informed of significant changes in the plant status or core reactivity condition during refueling. The communications allow for coordination of activities that require interaction between the control room and containment personnel. However, the refueling system design accident or transient response does not take credit for communications. Communications during refueling operations is not a process variable, design feature, or operating restriction that is an initial condition of a DBA or transient. Therefore, the CTS requirements for communication during refueling do not meet the criteria in 10 CFR 50.36(c)(2)(ii) for retention in the ITS. Consequently, it is acceptable to relocate these requirements to the TRM.

11. Refueling Equipment

The relocation of the CTS requirements for refueling equipment is addressed in DOC 3.9.1-R2 and in ITS application cover letter Appendix A, Justification 8. CTS requirements for refueling equipment are found in CTS 15.4.1.B, Table 15.4.1-2, Item 14, refueling system interlocks functional test each refueling shutdown.

Operability of the refueling equipment ensures that the equipment used to handle fuel within the reactor pressure vessel functions as designed and that the manipulator crane has sufficient load capacity for handling fuel assemblies and/or control rods. Although the interlocks designed to provide the above capabilities can prevent damage to the refueling equipment and fuel assemblies, they are not assumed to function to mitigate the consequences of a design basis accident. Therefore, the CTS requirements for refueling equipment do not meet the criteria in 10 CFR 50.36(c)(2)(ii) for retention in the ITS.

Consequently, it is acceptable to relocate these requirements to the TRM.

12. Sealed Radioactive Sources

The relocation of the CTS requirements for sealed radoactive sources is addressed in ITS application cover letter Appendix A, Justification 12. CTS requirements for refueling equipment are found in CTS 15.4.12, Miscellaneous Radioactive Materials Sources, 15.4.12.A, source leakage test, and 15.4.12.B, surveillance requirements.

The limitations on sealed source contamination are intended to ensure that the total body and individual organ irradiation doses do not exceed allowable limits in the event of ingestion or inhalation. This is done by imposing a maximum limitation of < 0.005 microcuries of removable contamination on each sealed source. However, this requirement and the associated surveillance requirements bear no relation to the conditions or limitations which are necessary to ensure safe reactor operation. Therefore, the CTS requirements for sealed radioactive sources do not meet the criteria in 10 CFR 50.36(c)(2)(ii) for retention in the ITS. Consequently, it is acceptable to relocate these requirements to the TRM.

13. Auxiliary Building Crane Lifting Devices

The relocation of the CTS surveillance requirement for auxiliary building crane lifting devices is addressed in ITS application cover letter Appendix A, Justification 14. CTS requirements for refueling equipment are found in CTS 15.4.14.

This surveillance requirement ensures that operability of lifting devices and slings prior to heavy loads being carried over fuel stored in the spent fuel pool. This requirement, in conjunction with the single-failure-proof design of the auxiliary building Crane, provides assurance that a load drop into the spent fuel pool will not occur. However, these lifting devices are not assumed to function to prevent or mitigate the consequences of a design basis accident. Therefore, the CTS surveillance requirement for auxiliary building crane lifting devices does not meet the criteria in 10 CFR 50.36(c)(2)(ii) for retention in the ITS. Consequently, it is acceptable to relocate this requirement to the TRM.

14. Shock Suppressors (Snubbers)

The relocation of the CTS operability and action requirement for snubbers is addressed in ITS application cover letter Appendix A, Justification 13. CTS operability and action requirements for snubbers are found in CTS 15.3.13. Snubbers are also listed in CTS 15.4.2.B.3 as requiring inservice testing, which is redundant to 10 CFR 50.55a.

The snubbers prevent unrestrained pipe motion under dynamic loads which may occur during a seismic event, a design basis accident (DBA) or transient. The restraining action of the snubbers ensures that the initiating event failure does not propagate to other parts of the failed system or to other safety systems. Snubbers also allow normal thermal expansion of piping and nozzles to eliminate excessive thermal stresses during heatup or cooldown. Snubber testing is required by 10 CFR 50.55a to be performed in accordance with ASME/ANSI OM Part 4, "Examination and Performance Testing of Nuclear Power Plant

Dynamic Restraints." Thus, specifying such testing in TS is unnecessary. Snubber testing will be adequately controlled in accordance with ITS 5.5.7 and 10 CFR 50.55a. It should be noted that detailed testing requirements for snubbers in CTS 15.4.13 were previously removed by license amendment 191/196. Snubbers are not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a DBA. Snubbers are not a design feature or operating restriction that is an initial condition of a DBA or transient. Snubbers are not part of a primary success path in the mitigation of a DBA or transient. Therefore, the CTS requirements for snubbers do not meet the criteria in 10 CFR 50.36(c)(2)(ii) for retention in the ITS. Consequently, it is acceptable to relocate these requirements to the TRM.

The relocated specifications from the CTS discussed above are not required to be in the TS because they do not fall within the criteria for mandatory inclusion in the TS as stated in 10 CFR 50.36(c)(2)(ii). These specifications are not needed to obviate the possibility that an abnormal situation or event will give rise to an immediate threat to the public health and safety. In addition, the NRC staff has concluded that appropriate controls have been established for all of the current specifications and information that are being moved to the FSAR, TRM, ODCM, PCP or IST Program. These relocations are the subject of a new license condition discussed in Section 5.0 of this SE. Until incorporated in licensee-controlled documents, changes to these specifications and information will be controlled in accordance with the current applicable procedures and regulations that control these documents. Following implementation, the NRC may audit the removed provisions to ensure that an appropriate level of control has been achieved. The NRC staff has concluded that, in accordance with the Final Policy Statement, sufficient regulatory controls exist under the regulations, particularly 10 CFR 50.59 and 10 CFR 50.55a. Accordingly, the specifications and information, as described in detail in this SE, may be relocated from the CTS and placed in the licensee-controlled documents identified in the licensee's application dated November 15, 1999, as supplemented by letters dated March 15, March 20, June 15, June 19, July 28, August 17, September 14, and December 21, 2000, February 23, March 19, May 7, and . . . , 2001.

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

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

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

G. <u>Evaluation of Other TS Changes (Beyond Scope Changes) Included in the Application for</u> <u>Conversion to ITS</u>

This section addresses the beyond scope changes in which the licensee proposed changes to both the CTS and STS. The following beyond scope changes were addressed in the notice of consideration of amendment published in the *Federal Register* on , 2001 (66 FR).

The changes discussed below are listed in the order of the applicable ITS specification or section, as appropriate. Also provided are references to the associated discussion of change (DOC) to the CTS and justification for deviation (JFD) from the STS, given in the licensee's application, and the beyond scope change tracking number used by the staff in its review.

1. <u>ITS 3.3.2</u> More Restrictive Action Requirements for ESFAS Instrumentation Functions for Steam Line Isolation on Manual, High Steam Flow, and High High Steam Flow (Beyond Scope Change 25) (DOCs M5 and M7, and JFDs 8 and 9)

The CTS 15.3.0.A requirements apply in the event of inoperable channels of the ESF actuation instrumentation functions High High Steam Flow with SI and High Steam Flow Coincident with Low T_{avg} with safety injection (SI) for Steam Line Isolation. If the minimum operable channels requirement cannot be met, the CTS would require placing the unit in hot shutdown (subcritical with $T_{avg} > 540$ °F) within 8 hours and in cold shutdown (subcritical and T_{avo} < 200°F) within 61 hours. The required action for steam line isolation - manual requires the unit to be placed in hot shutdown in 8 hours if the minimum operable channels cannot be met. The licensee proposes to adopt STS 3.3.2 ACTIONS D and F for the condition of one inoperable channel of these functions, but with more restrictive Completion Times. (Adopting action requirements for one inoperable channel is more restrictive than CTS, which do not limit operation with one inoperable channel of these functions.) Corresponding ITS 3.3.2 ACTIONS D and F will both require restoring the channel to operable status in 1 hour or placing the unit in Mode 3 in 7 hours and Mode 4 in 13 hours. The staff finds this change acceptable, because this is a more restrictive than the STS action requirements for (a) one inoperable channel of the Manual Steam Line Isolation function that require restoring the channel to operable status in 48 hours or placing the unit in Mode 3 in 54 hours and Mode 4 in 60 hours (STS ACTION F); and (b) one inoperable channel of the High Steam Flow or High High Steam Flow Steam Isolation functions that require placing the channel in trip in 6 hours or placing the unit in Mode 3 in 12 hours and Mode 4 in 18 hours (STS ACTION D).

ITS 3.3.2 Addition of Exception to Mode 3 Applicability of the ESFAS Instrument Function SI on Steam Line Pressure - Low During RCS Hydrostatic Testing (Beyond Scope Change 28) (DOC L3 and JFD 65)

The ESF actuation instrumentation, SG low steam pressure/loop SI and SG pressure, have a permissible bypass condition when the primary pressure is less than 1800 psig. The licensee proposed to modify ITS 3.3.2 to allow reactor coolant system (RCS) hydrostatic testing in Mode 3 without the steam line pressure - low SI function being operable. During the RCS hydrostatic testing, all control rods are inserted and the main steam isolation valves (MSIVs) are closed. With the steam line pressure depressurized and pressurizer pressure greater than 1800 psig, a SI signal would be generated. The staff finds this change acceptable because (a) the steam line pressure - low SI is not needed to protect against a steamline break, feed line break, and inadvertent opening of a SG relief or a SG safety valve accident during the RCS hydrostatic testing since the steam lines are depressurized; and (b) the following other SI functions will be operable during the RCS hydrostatic testing: manual, containment pressure - high, pressurizer pressure - low, and automatic actuation logic and relays.

3. <u>ITS 3.3.2 Addition of Condensate Isolation Requirements (Beyond Scope Change 98) (DOC M10 and JFD 44)</u>

Containment pressure condensate isolation CPCI trips the condensate pump and heater drain pumps on high containment pressure (indication of a main steamline break (MSLB) inside containment). This function was added to the Point Beach design after an evaluation of IE Bulletin 80-04 showed that a single failure of a main feedwater regulating valve (MFRV) to close on a SI signal could allow feedwater addition from condensate and heater drain pumps to the faulted SG, leading to containment overpressure. The CPCI function serves as a backup protection function in the event of an MSLB inside containment with a failure of the main feedwater lines to isolate.

The licensee proposed to add Function 7 for CPCI to ITS 3.3.2, Table 3.3.2-1. The CPCI function is required to be operable in Modes 1, 2, and 3, except when all MFRVs and associated bypass valves are closed and deactivated. An inoperable channel is required to be placed in the tripped condition within 6 hours or place the unit in Mode 3 in 12 hours and Mode 4 in 18 hours. The CPCI function is not required in Modes 4, 5, and 6 because there is insufficient energy in the secondary side of the unit to have an accident.

Also, the licensee proposed surveillance requirements (SRs) for the following: (1) to perform channel checks once every 12 hours, (2) to perform an actuation logic test every 31 days on a staggered test basis, (3) to perform a channel operational test (COT) with a 92-day frequency, (4) to perform a master relay test every 18 months, (5) to perform a slave relay test every 18 months, and (6) to perform a channel calibration every 18 months.

The staff finds the proposed changes to be acceptable, because these changes associated with CPCI, though not required by the STS or CTS, are more restrictive.

ITS 3.3.3 Addition of TADOT Surveillance Requirement for CIV Position Indication Post Accident Monitoring (PAM) Instrumentation Function (Beyond Scope Change 29) (DOC M6 and JFD 27)

The licensee proposed a Channel Check, ITS SR 3.3.3.1, and a Trip Actuating Device Operational Test (TADOT), SR 3.3.3.4 for the Containment Isolation Valve (CIV) Position Indication PAM instrumentation function. CTS Table 3.5-5 requires CIV Position Indication to be operable to provide required information to the operators during accident situations; however, there is no surveillance requirement (SR) stated for CIV Position Indication in Table 4.1-1 in the CTS. ITS SR 3.3.3.1 requires the channel check every 31 days. ITS SR 3.3.3.4 requires the performance of a TADOT every 18 months. These surveillances are proposed to replace the STS surveillance requirement to perform Channel Calibration on the CIV Position Indication. The TADOT would consist of verifying the valve position indication against the actual position because the CIV Position Indication has limit switches with no required range or accuracy and is used for indication only. The staff finds the proposed change to be acceptable, because this is more restrictive than the CTS which specifies no surveillance requirements and because the STS requirement is not appropriate.

5. <u>ITS 3.3.5 Revised Action Requirements for LOP DG Start and Load Sequence</u> <u>Instrumentation Functions (Beyond Scope Change 30) (DOCs L3 and M1, and JFD 3)</u>

The licensee will retain the 7 day limiting condition of operation (LCO) for one train of standby emergency power and proposes the STS 2-hour completion time for loss of standby emergency power in both trains. The CTS does not have a LCO for loss of standby emergency power in both trains. The CTS minimum LCO of a single unit is that offsite power be supplied by a single circuit. The CTS minimum LCO of both units is that offsite power be supplied by two circuits. These requirements are established in the LCO by listing the appropriate combination of transformers. These transformers are the XO3 high-voltage station auxiliary transformers (SATs) and the XO4 low-voltage SATs. Also, the CTS has provisions for operation of both units with one XO3 SAT inoperable if the onsite gas turbine is in operation. In this situation, the onsite gas turbine serves in lieu of one of the offsite circuits. The CTS similarly allows operation of one unit without the associated XO3 SAT by using the opposite unit's XO3 SAT and operating the onsite gas turbine. These CTS LCO requirements have been incorporated into the proposed ITS. The licensee proposes to delete the provision to allow operation of one unit at 50% power with both XO3 SATs inoperable and the gas turbine as the sole source of power to the safeguard buses. Converting the CTS to ITS will result in:

• Delete CTS Table 15.3.5-3, Note*****. This note requires using the three-channels-perbus specification for each bus that has been converted to 2-out-of-3 logic for the loss-ofvoltage protection function. Proposed ITS 3.3.4 requires 3 operable channels per bus for the loss-of-voltage protection function. This change is administrative since all buses have been converted 2-out-of-3 logic for the loss-of-voltage protection function. Accordingly, deletion of this note is acceptable.

- Revise CTS Table 15.3.5-3, Note**. This note allows power operation to continue when a channel is determined to be inoperable if the minimum number of channels are operable and the inoperable channel is placed in trip within 1 hour. This note is revised in the associated required actions of ITS 3.3.4, Condition A, to require an inoperable channel to be placed in the tripped condition within 6 hours. The 6-hour completion time is less restrictive, but is in accordance with the STS and is acceptable.
- Revise CTS Table 15.3.5-3, Note## items 4.a.i, 4.a.ii, and 4.b.i. This note allows an inoperable channel to be bypassed for up to 4 hours for surveillance testing of other channels. This note, which corresponds to the note to ITS 3.3.4, Required Action A.1, relaxes the requirement for an inoperable channel to be in the tripped condition, but is in accordance with the STS and is acceptable.
- The operator actions of CTS Table 15.3.5-3, items 4.a.i and 4.a.ii, are revised. Table 15.3.5-3, Note *** requires declaring the EDG bus for the affected bus inoperable when the condition for the operability of the minimum channels is not met; the applicable LCO for degraded voltage and loss-of-voltage functions must then be entered. Proposed ITS 3.3.4, Condition B, is entered with two or more inoperable loss-of-offsite power (LOP) EDG start-and-load sequence instrumentation channels per bus. Required Action B.1 allows 1 hour to restore all but one channel to operable status. If this required action and the associated completion time are not met, Condition C is entered. Required Action C.1 requires the immediate entry into the applicable condition(s) and required action(s) for the associated EDG made inoperable by LOP EDG start-and-load sequence instrumentation. This change relaxes the current requirements, but is in accordance with the STS and is acceptable.
- Revise CTS Table 15.3.5-3, item 4.b.i, "480 V buses (B03, B04) Loss of Voltage." This item requires the unit be in hot shutdown in 8 hours if the minimum operable channels requirement cannot be met. This required action is modified by Note*, which requires the unit be in cold shutdown within 48 hours of the event if the minimum conditions are not met within 24 hours after reaching hot shutdown. Proposed ITS LCO 3.3.4 Condition D is entered when two or more 480 V loss-of- voltage channels per bus are inoperable. Required Action D.1 requires the restoration of all but one of the channels within 1 hour. If this action cannot be completed in 1 hour, Condition E is entered, requiring the unit be in Mode 3 within 6 hours and Mode 5 in 36 hours. On the basis of operating experience, the licensee states that this is a reasonable amount of time to power down without challenging systems. The staff finds this change acceptable.
- ITS 3.3.4 has been revised to reflect the instrumentation used to start the EDGs on loss of power (LOP) and sequence the loads onto the safety-related buses. An undervoltage condition detected on either 4.16 kV bus will start the associated EDG. During a loss of voltage to the safety related 480 V buses, protective relays initiate load shedding and block automatic safety injection load sequencing until voltage returns to the buses. This function is necessary to prevent overloading the EDGs. Additionally, the licensee adopted new Conditions D and E to provide actions in the event of inoperable 480 V loss-of-voltage channels. Condition D requires the restoration of all but one inoperable channel

within 1 hour. The completion time of 1 hour for restoring all but one inoperable channel should allow ample time to repair most failures.

Condition E is entered if the required action and associated completion time of Condition A (for the 480 V loss-of-voltage function) or Condition D are not met. Requirement Action E.1 requires the unit be placed in Mode 3 in 6 hours and Mode 5 in 36 hours. The completion times are reasonable, based on operating experience, to reach the required unit condition from full power without challenging systems. The staff finds this deviation to be acceptable.

The STS nomenclature for STS 3.3.5, "LOP DG Start Instrumentation," has been changed to "LOP DG Start and Load Sequence Instrumentation" for ITS 3.3.4 to more accurately reflect the functions performed by the 4.16 kV loss-of-voltage, 4.16 kV degraded voltage and 480 V loss-of-voltage instrumentation at Point Beach. This change is acceptable.

- ITS 3.3.4 Required Action A.1 requires placing an inoperable channel in trip within 6 hours. The bases discussion of Required Action A.1 states: "With a channel in trip, the LOP DG start instrumentation channels are configured to provide a one-out-of-three logic to initiate a trip..." This statement has been revised to reflect the fact that with one of three channels in trip, the instrument channels are actually in a "one-out-of-two" logic configuration to initiate a trip.
- References to "trip setpoint" in the ITS 3.3.4 bases are eliminated. The setpoint methodology at Point Beach uses allowable values derived from the analytical limits in the safety analysis, is consistent with the STS, and is acceptable.
- The bases for ITS 3.3.4 discusses LOP start on loss of voltage or degraded voltage "in the switchyard." These bases have been modified to reflect Point Beach design. The LOP start is generated on a loss-of-voltage or degraded voltage condition on the safeguard buses, and the deviation is acceptable.
- The ITS definition of the trip actuating device operational test (TADOT) has been revised to eliminate verification of the setpoint because the current CTS does not have this requirement. Therefore, the ITS SR 3.3.4.2 bases have been modified to reflect this change.

The STS 3.3.5, "Loss of power (LOP) diesel generator (DG) and load sequence instrumentation," is being adopted as ITS 3.3.4. The STS 3.3.4, "Remote Shut down System," has not been adopted as part of the Point Beach's conversion to the ITS, because the Point Beach CTS does not contain any specifications which require operability of instrumentation or controls associated with the Remote Shutdown Panel. Therefore, since the Remote Shutdown System Specification is not adopted as part of the Point Beach's conversion to the ITS, the STS 3.3.5 is renumbered as 3.3.4. This is acceptable. Also, the STS title of License Condition for Operation (LCO) 3.3.5, "LOP DG Start Instrumentation," has been changed to "LOP DG Start and Load Sequence Instrumentation," in ITS 3.3.4 to more accurately reflect the functions of the 4.16 kV Degraded Voltage and 4.16 kV and 480

V loss of voltage instrumentation at Point Beach. This change is administrative in nature and therefore acceptable.

The STS 3.3.5 is renumbered ITS 3.3.4 as discussed above. The renumbered ITS 3.3.4 is changed to reflect the instrumentation used at Point Beach to start the DGs on LOP and sequence the loads onto the safety buses. The brackets have been removed and the number of channels per safety bus, including the proper plant-specific safety bus information is given for the required instrumentation. CTS Table 15.3.5-3 contains requirements for minimum operable channels, permissible bypass conditions, and operator actions if conditions cannot be met. Items 4.a and 4.b of Table 15.3.5-3 have notes limiting unit operation. The proposed ITS 3.3.4 combines these requirements by specifying the number of required channels for each function to be operable and required operator actions. Therefore, the requirements in Table 15.3.5-3, items 4.a and 4.b, for number of channels required to be operable (column 2) are now included in ITS 3.3.4, a. (4.16 kV bus loss of voltage), b. (4.16 kV bus degraded voltage), and c. (480 V bus loss of voltage). An undervoltage condition (loss of, or degraded voltage) condition on either 4.16 kV bus will start the associated safety DG. However, during a loss of voltage to the safety-related 480 V buses, protective relays initiate load shedding and block automatic safety injection (SI) load sequencing until voltage returns to the buses. This function is necessary to prevent overloading of the DGs. ITS 3.3.4 has been changed to ITS 3.3.4.a, 3.3.4.b and 3.3.4.c. to reflect the instrumentation used at Point Beach for minimum operable channels to reflect the requirements of Table 15.3.5-3, items 4a.i, 4.a.ii and 4.b.i. This change is acceptable because it includes the appropriate number of operable channels and instrumentation used at Point Beach to start the DGs on LOP.

The proposed ITS 3.3.4 states the number of channels required for each function to meet operability requirements and avoid taking required actions to mitigate the conditions. The operator actions given in CTS Table 15.3.5-3 for items 4.a.i, 4.a.ii, and 4.b.i are transferred to the Actions section of ITS 3.3.4 as discussed below:

 The Actions section of ITS 3.3.4, Condition B, is changed to include the 4.16 kV buses for loss-of-voltage and degraded voltage functions. This change adds plant-specific information on the safety buses for Condition B. Also, the Operator Actions of CTS Table 15.3.5-3, items 4.a.i and 4.a.ii, have been revised to conform to ITS 3.3.4, Condition B. Table 15.3.5-3, Note ***, requires that the associated standby emergency power supply for the affected bus be declared inoperable and subsequent entry into the applicable LCO. Proposed ITS 3.3.4, Condition B, is entered when two or more 4.16kV loss-of-voltage or 4.16 kV degraded voltage channels per bus are inoperable. Required Action B.1 allows 1 hour to restore all but one channel to operable status. If this required action and associated completion time are not met, Condition C is entered. Required Action C.1 requires the immediate entry into the applicable condition(s) and required action(s) for the associated standby emergency power source made inoperable by LOP DG start instrumentation. This change is a relaxation of the current requirement contained in table 15.3.5-3 Note *** that does not allow 1 hour for restoration to operable status as in Required Action B.1. This poses minimal risk because of the low probability of an event requiring LOP start during the additional 1 hour. Further, the proposed adoption to ITS

3.3.4, Condition B is in accordance with the guidance given in NUREG-1431. Therefore the revision is acceptable.

- The Actions section of ITS 3.3.4, Condition C is changed to include the words "of Condition A for 4.16 kV Functions or Condition B." This change of Condition C adds plant-specific information on the safety buses for Condition A or Condition B. In addition, the ITS 3.3.4 reference to "DG" has been changed to "standby emergency power source," to be consistent with current Point Beach nomenclature. These changes to ITS 3.3.4, Condition C, add plant-specific information on safety buses and are consistent with current Point Beach nomenclature. These changes are acceptable since they add plant-specific nomenclature of the safety buses used at Point Beach and clarify the specifications without altering the original intent of the specifications.
- The Condition D has been added to the Actions section of ITS 3.3.4 to provide actions for inoperable 480 V loss-of-voltage channels. This requirement is currently covered in CTS Table 15.3.5-3, item 4.b.i, "480 Volt Buses (B03, B04) - Loss of Voltage," which requires that the unit be in hot shutdown in 8 hours if the minimum operable channels requirement cannot be met. This required action is changed by Note *, which requires that the unit be in cold shutdown within 48 hours of the event if the minimum conditions are not met within 24 hours after reaching hot shutdown. Proposed ITS 3.3.4 Condition D is entered when two or more 480 V loss-of-voltage channels per bus are inoperable. Required Action D.1 requires the restoration of all but one inoperable channel within 1 hour. The completion time of 1 hour for restoring all but one inoperable channels should allow ample time to repair most failures and takes into account the low probability of an event requiring an LOP start and load sequence during this interval. However, if this condition cannot be completed in 1 hour, Condition E is entered. Condition E has been added to the Actions section of ITS LCO 3.3.4 to provide actions if the required action and associated completion time of Condition A for 480 V loss-of-voltage function or Condition D are not met. Required Actions E.1 and E.2 require the unit to be placed in Mode 3 (hot shutdown) in 6 hours and Mode 5 (cold shutdown) in 36 hours respectively. The addition of Conditions D and E to the Actions section of proposed ITS 3.3.4 adds restrictions on unit operation, based on plant operating experience, to reach the required unit condition from full power conditions in an orderly manner and without challenging unit systems. The completion times proposed for Conditions D and E are more restrictive than those of CTS Table 15.3.5-3, item 4.b.1, and therefore are acceptable.
- ITS 3.4.3 and ITS 5.6.5 Establishment of the Pressure and Temperature Limits Report (PTLR) and Addition of Surveillance Requirement to Verify RCS Pressure and Temperature, and RCS Heatup and Cooldown Rates Are Within Limits of the PTLR (Beyond Scope Changes 37 and 37a) (DOCs M1, LA1, and LA2, and JFD 2)
 - <u>Establishment of the PTLR</u> The licensee submitted a separate application dated March 10, 2000, as supplemented on November 20, 2000, and April 10, 2001, requesting implementation of a PTLR concurrent with ITS implementation. The staff completed its review and approval of the licensee's PTLR methodology as documented in a letter forwarding the Point Beach PTLR safety evaluation dated , 2001. The ITSs have accordingly incorporated changes to CTS pressure and temperature requirements in a

format consistent with the STSs, including the establishment of ITS 5.6.5. The staff finds the licensee's incorporation of PTLR in the ITSs acceptable based on its previous review and consistency with the STS presentation. The licensee will thus implement the Point Beach PTLR when it implements the ITSs.

• <u>SR 3.4.3.1</u> The licensee proposes to adopt STS SR 3.4.3.1, but with a difference in the associated note. Corresponding ITS SR 3.4.3.1 requires the licensee to verify that reactor coolant system (RCS) pressure, temperature, and heatup and cooldown rates are within the limits specified in the pressure and temperature limits report (PTLR). The note to STS SR 3.4.3.1 states that the SR is only required to be performed during RCS heatup and cooldown operations, and during RCS inservice leak and hydrostatic testing. The note in ITS SR 3.4.3.1 would include an additional condition of when $k_{eff} < 1.0$ for requiring the performance of the SR. The effect of the proposed change is to delete the requirement for the licensee to perform ITS SR 3.4.3.1 when $k_{eff} \ge 1.0$.

Proposed ITS 3.4.2, "RCS Minimum Temperature for Criticality," requires each RCS loop average temperature (T_{avg}) to be $\geq 540^{\circ}$ F when the plant is in Mode 1 or when the plant is in Mode 2 with $k_{eff} \geq 1.0$. In addition, proposed ITS Table 1.1-1, "MODES," and ITS 3.9.1, "Boron Concentration," require that k_{eff} be less than 1.0 in all modes other than Modes 1 and 2. Therefore, the combination of ITS 3.4.2, ITS Table 1.1-1, and ITS 3.9.1 proposed by the licensee requires $T_{avg} \geq 540^{\circ}$ F whenever $k_{eff} \geq 1.0$. Based on the above, the proposed change to delete the requirement for the licensee to perform ITS SR 3.4.3.1 when $k_{eff} \geq 1.0$ translates to deletion of the requirement when the plant is in Modes 1 or 2 and $T_{avg} \geq 540^{\circ}$ F.

As stated in ITS Bases Section B 3.4.3, ITS 3.4.3, "RCS Pressure and Temperature (P/T) Limits" establishes operating limits that provide a margin to brittle failure of the reactor vessel and piping of the reactor coolant pressure boundary. However, it is also stated that Modes 1 and 2, which include plant configurations with T_{avg} of 540 °F, are above the temperature range of concern for nonductile (i.e, brittle) failure. Based on the basis for ITS 3.4.3, ITS SR 3.4.3.1 is not necessary from the standpoint of protection against brittle failure when $T_{avg} \ge 540^{\circ}$ F.

The staff has reviewed the change proposed to the note in SR 3.4.3.1. Based on (1) the basis for ITS SR 3.4.3.1 being to protect the reactor coolant pressure boundary against brittle failure, (2) the proposed ITS 3.4.2, ITS Table 1.1-1, and ITS 3.9.1 which together require $T_{avg} \ge 540^{\circ}F$ whenever $k_{eff} \ge 1.0$, and (3) the RCS average temperature of 540°F being above the temperature range of concern for brittle failure of the reactor coolant pressure boundary, the staff finds the licensee's proposed change acceptable.

7. <u>ITS 3.4.5 Increased Operability and Surveillance Requirements for RCS Loops (Beyond Scope Change 38) (DOCs M1 and M3, and JFD 2)</u>

In MODE 3 the CTS requires one Reactor Coolant Pump (RCP) be in operation and one Steam Generator (SG) be operable. The ITS adds the requirement that two RCS loops be operable, which means two RCPs and two SGs are required to be operable, and one of the RCS loops must be in operation. Only one RCS loop is required to be in operation in MODE 3 to provide sufficient flow to ensure adequate boron mixing and decay heat removal. With reactor trip breakers (RTB's) in the closed position and the rod control system capable of rod withdrawal, accidental control rod withdrawal from a subcritical condition is postulated and requires one RCS loop to be operable and in operation to ensure that the accident analysis limits are met. Two RCS loops are required to be operable to provide redundant capability for decay heat removal. The STS requirement that two RCS loops be in operation when the rod control system is capable of rod withdrawal is not applicable to the Point Beach accident analysis, and therefore is not included in the ITS. ITS ACTIONS A, B, and C, associated Completion Times, and Surveillance Requirements SR 3.4.5.1, SR 3.4.5.2, and SR 3.4.5.3 are added consistent with the plant's accident analysis and the STS. This change is consistent with the plant safety analysis and is therefore acceptable.

8. <u>ITS 3.4.15 Addition of Explicit Operability, Action, and Surveillance Requirements for the</u> <u>Containment Sump Monitor (Beyond Scope Change 58) (DOC M2 and JFD 1)</u>

The RCS leakage detection systems must have the capability to detect significant reactor coolant pressure boundary degradation as soon after occurrence as practical to minimize the potential for propagation to a gross failure. STS 3.4.15 requires that one containment sump (level or discharge) monitor and one containment atmosphere radioactivity monitor (gaseous or particulate) shall be operable during power operation. These instruments of diverse monitoring principles provide a high degree of confidence that extremely small leaks are detected in time to allow actions to place the plant in a safe condition when RCS leakage indicates possible reactor coolant pressure boundary degradation. The licensee proposed to use one containment sump level alarm system and one containment atmosphere radioactivity monitor. The containment sump high level alarm alerts operators to significant increases in condensate flow from the containment air cooler units which is equivalent to containment sump (level or discharge) monitor. Thus, the containment sump level alarm in combination with a gaseous or particulate radioactivity monitor, meets the LCO requirements. The staff finds this proposal acceptable.

 ITS 3.5.3 Additional Requirement to Meet Surveillances for Auto Actuation of ECCS Valves and Auto Start of ECCS Pumps in Mode 4 (Beyond Scope Change 60) (DOC M3 and JFD 9)

ITS SR 3.5.3.1 requires meeting ITS SR 3.5.2.3 and SR 3.5.2.4 during Mode 4 operation for all emergency core cooling system (ECCS) equipment required to be operable in Mode 4. These SRs have an 18 month Frequency and are normally performed during refueling outages, consistent with CTSs 15.4.5.1.A.1 and 15.4.5.1.A.2, but are not currently required to be met during the range of plant conditions covered in ITS Mode 4, which is consistent with STS SR 3.5.3.1. ITS SR 3.5.2.3 requires verifying that each ECCS automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal. ITS SR 3.5.2.4 requires verifying that each ECCS pump starts automatically on an actual or simulated actuation signal. The ITS SR 3.5.3.1 requires meeting these SRs in Mode 4 to ensure consistency in SI instrumentation and equipment operability requirements. For example, ITS 3.3.2 Table 3.3.2-1 Function 1.a requires the automatic safety injection (SI) logic for the SI manual

actuation instrument function to be operable in Mode 4. In addition, the ITS and STS Bases for these SRs states "The actuation logic is tested as part of the engineered safety feature (ESF) actuation system (ESFAS) testing." This deviation from the STS and change in CTS ECCS operability requirements between 200°F and 350°F, are acceptable because they are consistent with plant design and safety analysis assumptions regarding the start of ECCS pumps and actuation of valves in the SI flow paths upon receipt of a SI actuation signal in Mode 4.

10. ITS 3.7.2 Changes to MSIV and Non-Return Check Valve Action Requirements (Beyond Scope Change 67) (DOCs L1, M1, M2, M4, and M5, and JFD 1)

STS 3.7.2 is written for a typical design in which each main steam line contains a single MSIV, which is a gate valve. This valve closes when called upon and stops flow in either direction through the line.

The Point Beach plant uses a different arrangement. Each main steam line contains two valves. One valve is a type of check valve which can be held open by an operating mechanism, or can be allowed to be pushed closed by flow through the line, like a simple check valve. It is called the MSIV. This valve is normally held open during plant operation, but, when released, will close to prevent flow out of the containment.

The other valve in the line is a simple check valve, oriented in the opposite direction from the first valve, so that it stops flow <u>into</u> the containment. It is called the non-return check valve. During normal operation, the non-return check valve is held open by the flow of steam out of the containment, but, during certain off-normal conditions, it closes. For example, during a main steam line break inside containment, it prevents flow into the containment from the other steam generator and the steam piping outside containment, thus limiting the amount of steam mass and energy put into the containment atmosphere and ultimately limiting the peak pressure and temperature in the containment.

In the Point Beach design, therefore, both valves in each line are needed to be able to stop flow in either direction, whereas the typical design accomplishes this with a single gate valve. Thus, Point Beach's combination of MSIV and non-return check valve is functionally equivalent to a single MSIV of the gate valve type.

The CTS for Point Beach allow one of the four valves (one MSIV and one non-return check valve in each of two main steam lines) to be inoperable for up to 4 hours. If not restored in 4 hours, then the plant must be in Mode 3 (hot standby) in the following 6 hours. Operation in Mode 3 may continue indefinitely with one to four valves inoperable, provided that they are closed; otherwise, CTS 3.0.3 will require a shutdown to Mode 5 (cold shutdown).

The STS allow up to 8 hours for one inoperable MSIV in a main steam line. If not restored in 8 hours, then the plant must be in Mode 2 (startup) in the following 6 hours. Operation in Mode 2 or 3 may continue indefinitely with one or more of these valves inoperable (with separate condition entry allowed), provided that they are closed; otherwise, the plant must go to Mode 3 in the next 6 hours and Mode 4 (hot shutdown) in the following 6 hours.

The proposed ITS allows up to 8 hours for one or two inoperable valves on the same main steam line. If not restored in 8 hours, then the plant must be in Mode 2 in the following 6 hours. Operation in Mode 2 or 3 may continue indefinitely with one or more of these valves inoperable (with separate condition entry allowed), provided that they are closed; otherwise, the plant must go to Mode 3 in the next 6 hours and Mode 4 in the following 6 hours.

Given the functional equivalence of Point Beach's combination of MSIV and non-return check valve, when compared to a single MSIV of the gate valve type, the NRC staff finds that the proposed ITS are equivalent to the STS, modified to fit Point Beach's arrangement of valves. The proposed ITS are less restrictive than the CTS in that there is a relaxation of the actions required to exit the applicability, and a relaxation of the completion times. The NRC staff finds that they are acceptable on the bases described below.

 Relaxation of Actions Required to Exit Applicability CTS require that in the event specified Limiting Conditions for Operation (LCOs) are not met, penalty factors to reactor operation, such as resetting setpoints, and power reductions, shall be initiated as the method to reestablish the appropriate limits. The ITS are constructed to specify actions for conditions of required features made inoperable. Adopting ITS action requirements for exiting LCO applicabilities is acceptable because the plant remains within analyzed parameters by performance of required actions, or the actions are constructed to minimize risks associated with continued operation while providing time to repair inoperable features. Such actions add margin to safety or verify equipment status such as interlock status for the mode of operation, thereby providing assurance that the plant is configured appropriately or operations that could result in a challenge to safety systems are exited in a time period that is commensurate with the safety importance of the system. Additionally, other changes to TS actions include placing the reactor in a mode where the specification no longer applies, usually resulting in an extension to the time period for taking the plant into shutdown conditions. These actions are commensurate with industry standards for reductions in thermal power in an orderly fashion without compromising safe operation of the plant.

The proposed ITS for the MSIVs are equivalent to the STS, and, on the basis provided above, the relaxation of actions required to exit applicability (compared to CTS) is acceptable.

• <u>Relaxation of Completion Time</u> Upon discovery of a failure to meet an LCO, STS specify times for completing required Actions of the associated TS conditions. Required Actions of the associated conditions are used to establish remedial measures that must be taken within specified completion times (allowed outage times). These times define limits during which operation in a degraded condition is permitted.

Adopting completion times from the STS is acceptable because completion times take into account the operability status of the redundant systems of TS required features, the capacity and capability of remaining features, a reasonable time for repairs or replacement of required features, and the low probability of a design basis accident (DBA) occurring during the repair period. The proposed changes for the MSIVs are consistent with the STS, and the proposed allowed outage time extensions are acceptable.

Based on the foregoing evaluation, the NRC staff finds the proposed TS changes to be acceptable.

11. <u>ITS 3.7.3 Addition of Operability, Action, and Surveillance Requirements for Main</u> <u>Feedwater Isolation Valves (Beyond Scope Change 68) (DOC M1, M3, and M4, and JFD 1)</u>

Point Beach CTS 4.1.A requires that MFW isolation on safety injection (SI) be required at all plant conditions and testing be performed each refueling interval. MFW isolation at Point Beach is provided by the MFW regulation valves or bypass valves. In the event of a main feed regulating valve or bypass valve failing to close, auto trip of the MFW pumps will terminate MFW flow to the steam generators (SGs) at normal operating pressures, with termination of the MFW flow at reduced SG pressures accomplished by the Containment Pressure Condensate Isolation (CPCI) circuit, which trips the condensate and heater drain pumps. The licensee proposed to make the MFW Isolation applicable in Modes 1, 2, and 3; this is when there is significant mass and energy in the SGs in the event of main steamline break inside containment. In addition, the licensee proposed to have limited conditions of operation (LCOs) for the following: (1) inoperability of one or more main feed reg valves and bypass valves, (2) inoperability of the MFW pump trip and CPCI condensate and heater drain pump trips, (3) and the simultaneous inoperability of one or more unisolated inoperable main feed reg or bypass valves with one or more operating MFW, condensate or heater drain pumps with inoperable trip systems. Also, the licensee proposed surveillance requirements (SRs) for the following: (1) to verify auto closure capability of the main feed reg and bypass valves, (2) to verify the MFW pumps will auto trip on an actuation signal, and (3) to test the CPCI circuit that trips the condensate and heater drain pumps on a containment high pressure signal. These SRs are proposed to be performed at least once every 18 months. This represents a more restrictive change. The revised requirement appears as ITS 3.7.3. The staff finds the proposed change to be consistent with STS; therefore, this change is acceptable.

12. <u>ITS 3.7.4 Changes to Atmospheric Dump Valve Flow Path Action and Surveillance</u> <u>Requirements (Beyond Scope Changes 69 and 70) (DOCs L2 and M1, and JFDs 1 and 3)</u>

[Evaluation discussion pending.]

13. <u>ITS 3.7.5 Changes to AFW System Nomenclature and Changes to Frequency of AFW</u> <u>System Surveillance Requirements (Beyond Scope Changes 72 and 73) (DOCs A1, L5, M4, and M6, and JFDs 1 and 19)</u>

The auxiliary feedwater (AFW) system at Point Beach Units 1 and 2 consists of four pumps; one turbine driven pump for each unit and two shared motor driven pumps. Each motor driven AFW pump can supply 100 percent of the AFW system design flow rate to either unit. Motor driven AFW pump P-38A supplies the "A" steam generator in both units while motor driven AFW pump P-38B supplies the "B" steam generators. Each turbine driven

AFW pump is capable of supplying 200 percent of the design AFW flow rate and supplies both steam generators of its respective unit. The AFW pumps are fed from a common suction header from the condensate storage tanks. The service water system also provides the back up safety related source of water for the AFW system.

The licensee has proposed the following deviations to STS, for the AFW system at Point Beach:

- The proposed ITS 3.7.5 refers to "AFW pump systems" instead of "AFW trains" as specified in STS,
- The proposed ITS SR 3.7.5.5 conditions performance of the AFW flow path alignment verification "prior to Thermal Power exceeding 5% RTP" instead of "prior to entering Mode 2" as specified in STS, and
- The proposed ITS SR 3.7.5.2 and 3.7.5.4 Notes differ from STS by allowing turbine driven pump flow (head) test and start test to be performed 24 hours after Thermal Power ≥5% RTP instead of "within 24 hours after ≥ 1000 psig in the steam generator."

The licensee stated that only the motor driven AFW pumps use the "train" designation. The turbine driven pump system is not referred to as a train. As such, the licensee has determined that referring to AFW systems rather than AFW trains reflects the actual configuration of the AFW system at Point Beach. The licensee proposed that ITS 3.7.5 state that "The AFW System shall be OPERABLE with: one turbine driven AFW pump system and two motor driven AFW pump systems." The staff finds the proposed change of nomenclature acceptable.

In response to requests for additional information regarding proposed SR 3.7.5.5 frequency, the licensee has modified ITS SR 3.7.5.5 to be consistent with the Point Beach CTS. The revision to the proposed ITS SR 3.7.5.5 frequency states that "Prior to THERMAL POWER exceeding 2% RTP whenever unit has been in MODE 5, MODE 6, or defueled for a cumulative period of > 30 days." Since the proposed ITS SR 3.7.5.5 frequency meets the current licensing basis, the staff finds the proposed change acceptable.

In response to requests for additional information regarding ITS SR 3.7.5.2 and 3.7.5.4 Notes, the licensee proposed the following modifications. ITS SR 3.7.5.2 Note has been changed to reflect the allowance of the current licensing basis. The revision to the proposed SR 3.7.5.2 Note is as follows: "Not required to be performed for the turbine driven AFW pump until 24 hours after THERMAL POWER exceeds 2% RTP." Since the proposed ITS SR 3.7.5.2 Note meets the current licensing basis, the staff finds the proposed change acceptable. Additionally, ITS SR 3.7.5.4 Note has been changed to be consistent with the STS. The revision to the proposed ITS SR 3.7.5.4 Note states the following: "Not required to be performed for the turbine driven AFW pump until 24 hours after \geq 1000 psig in the steam generator." The proposed change is consistent with the STS and therefore, is acceptable.

14. <u>ITS 3.7.7 Changes to Component Cooling Water System Operability and Action</u> <u>Requirements (Beyond Scope Change 74) (DOCs M1, M2, M4, and M5, and JFD 1)</u>

[Evaluation discussion pending.]

15. <u>ITS 3.7.9 Additional Surveillance Requirement for CREFS (Beyond Scope Change 78)</u> (DOC 3.7.10 - M3) (JFD 3.7.10 - 1)

The licensee stated in JFD 1 to STS 3.7.10 that "CREFS does not automatically restart after being load shed following a loss of offsite power; manual action is required to restart CREFS. . ." Therefore, the licensee proposed to add a surveillance not contained in the STS, ITS SR 3.7.9.5. The proposed SR requires verification of CREFS manual start and realignment capability every 18 months. The licensee further stated in DOC 3.7.10 - M3 that "The proposed frequency for this surveillance is consistent with that specified for manual action testing of the control room emergency filtration system in NUREG 1431, and is considered acceptable based on the inherent reliability of manual actuation circuits." The staff reviewed the proposed SR and finds it acceptable because it is a conservative change and is adequate to assure the operability of the CREFS manual start and manual system realignment capability.

16. <u>ITS 3.6.5 Revised Containment Air Temperature Limit (Beyond Scope Change 96) (DOCs</u> <u>A1 and M1, and JFD 2)</u>

The licensee has proposed ITS 3.6.5, Containment Air Temperature. The licensee has proposed an action requirement ITS 3.6.5 for containment average air temperature to be equal or less than 120°F to obtain peak accident pressure and temperature when their current TS basis for Section 4.4 uses an initial air temperature of 105°F.

The proposed ITS 3.6.5 provides assurance that the containment air temperature limit is maintained. This ITS 3.6.5 establishes a containment average air temperature limit of 120°F consistent with the accident analysis, in addition to appropriate Conditions and Requirement Actions if temperature is found to be outside of the limit, and a Surveillance Requirement to periodically verify compliance with the limit. The LCO, Conditions and Required Actions, and SRs proposed are appropriate for Point Beach and are consistent with the STS.

The staff has reviewed the licensee submittals and Point Beach FSAR Section 14.3.4 "Containment Integrity Evaluation" for assumed containment initial air temperature. The staff finds the proposed ITS 3.6.5 for containment average air temperature and associated bases are consistent with the containment analysis of record and the STS, and therefore, acceptable.

17. <u>ITS 3.9.5 Addition of Surveillance Requirement to Verify One RHR Loop is in Operation in</u> <u>Mode 6 (Beyond Scope Change 95) (DOC M3 and JFD 4)</u>

The CTSs do not have a SR that addresses RHR flow in MODE 6. ITS SR 3.9.4.1 is added to demonstrate that one RHR loop is in operation and circulating reactor coolant.

Verification includes flow rate, temperature, or pump status monitoring. The flow rate for the RHR loop in operation, specified in the corresponding STS SR 3.9.5.1, has not been adopted. For Point Beach, the boron dilution accident is the only accident postulated to occur in MODE 6 which assumes that the RHR system is in operation. The accident analysis only assumes that there is some mixing of the borated coolant as a result of the RHR pump being in operation, and does not specify a flow rate. There is no analytical basis for inclusion of the flow rate. The Frequency of 12 hours for this SR is acceptable, considering the continuous indications of RHR flow available to the operator in the control room. This change is consistent with the plant safety analysis and the current licensing basis, and is therefore acceptable.

18. ITS 5.6.4 COLR (Beyond Scope Change 97) (DOC 3.4.1 LA1)

The licensee submitted a separate application on March 2, 2000, requesting implementation of a Core Operating Limits Report (COLR) concurrent with ITS implementation. The proposed changes would relocate cycle-specific parameters from the CTS to the COLR and establish administrative control requirements for the COLR, ITS 5.6.4.

NRC Generic Letter (GL) 88-16, "Removal of Cycle-Specific Parameter Limits from Technical Specifications," provided guidance for licensees to allow relocation of cycledependent variables from the TSs. This guidance contained the following criteria necessary for acceptance: (a) the values of these cycle-dependent variables are included in a COLR; (b) the values of these cycle-dependent variables are determined with NRC-approved methodologies referenced in the Tss; (c) changes are reported to the NRC staff as they are made; and (d) the appropriate safety limits would be maintained in the TSs.

The licensee proposed to relocate the following cycle-specific parameter values to the COLR, omitting them in the listed ITS Specifications:

- 3.1.1 Shutdown Margin
- 3.1.3 Moderator temperature Coefficient (MTC)
- 3.1.5 Shutdown Bank Insertion Limit
- 3.1.6 Control Bank Insertion Limits
- 3.2.1 Height Dependent Heat Flux Hot Channel Factor (F_Q)
- 3.2.2 Nuclear Enthalpy Rise Hot Channel Factor $(F^{N}_{\Delta H})$
- 3.2.3 Axial Flux Difference
- 3.9.1 Refueling Boron Concentration

The staff previously approved relocation of these parameters to the COLR for Westinghouse plants. In addition, these parameters, as well as the NRC-approved analytical methods used to determine them, will be referenced in the COLR section of the ITS. Therefore, the relocation of these parameters to the COLR is acceptable.

Also, the licensee proposes to relocate the following reactor core safety limit curves from ITS 2.1 to the COLR and replace them with the following departure from nucleate boiling ratio (DNBR) design limits (as per supplement to the PBNP November 15, 1999, ITS conversion application) and fuel centerline melt temperature limits:

DNBR \geq 1.22/1.21 (typical/thimble) for the WRB-1 correlation for cores not containing 422V+ fuel.

DNBR \geq 1.24/1.23 (typical/thimble) for the WRB-1 correlation for cores containing 422V+ fuel.

OR

 $\label{eq:DNBR} DNBR \geq 1.30 \mbox{ for the W-3 correlation when system pressure is } 1000 \mbox{ psia.} \\ DNBR \geq 1.45 \mbox{ for the W-3 correlation when system pressure is } 500 \mbox{ psia and } \leq 1000 \mbox{ psia.} \\ \end{tabular}$

In addition, the following peak fuel centerline temperature limit will be added:

T < 5080°F, decreasing by 58°F per 10,000 MWD/MTU of burnup.

The relocation of the reactor core safety limit curves to the COLR and their replacement by the DNBR limits and peak fuel centerline temperature limits in the safety limit TS was approved by the staff as described in WCAP-14483-A, "Generic Methodology for Expanded Core Operating Limits Report." The COLR reactor core safety limit curves will be referenced by ITS 2.1.1. Therefore, these proposed changes are acceptable.

The relocation of the cycle-specific DNB parameters related to reactor coolant system (RCS) temperature, pressure, and flow from ITS 3.4.1 to the COLR is also proposed. As stated in WCAP-14483-A, the relocation of these parameters to the COLR has been approved by the staff with the provision that the minimum staff-approved flow limits be retained in the TS. Therefore, the licensee proposes to retain the following RCS design minimum flow limits in ITS 3.4.1:

RCS flow \ge 181,800 gpm for cores not containing 422V+ fuel assemblies. RCS flow \ge 182,400 gpm for cores containing 422V+ fuel assemblies.

These proposed changes conform to WCAP-14483-A; therefore, they are acceptable.

The licensee proposes to relocate the overtemperature and overpower ΔT setpoint parameters and function modifiers to the COLR. The relocation of these parameters to the COLR has previously been approved by the NRC and is therefore acceptable.

4.0. COMMITMENTS RELIED UPON

In reviewing the proposed ITS conversion for Point Beach, the staff has relied upon the licensee commitment to relocate certain requirements from the CTS to licensee-controlled documents as described in Table R, "Relocated Specifications and Removal of Details," attached to this SE. This table reflects the relocations described in the licensee's submittals on the conversion. The staff requested and the licensee submitted a license condition to make this commitment enforceable (see Section 5.0). Such a commitment from the licensee is important to the ITS conversion because the acceptability of removing certain requirements from the TS is based on those requirements being relocated to licensee-controlled documents where further changes to

the requirements will be controlled by regulations or other requirements (e.g., in accordance with 10 CFR 50.59).

5.0 LICENSE CONDITIONS

A license condition to define the schedule to begin performing the new and revised SRs after the implementation of the ITS is to be included in the license amendment issuing the ITS. This schedule is:

- For SRs that are new in this amendment, the first performance is due at the end of the first surveillance interval that begins on the date of implementation of this amendment.
- For SRs that existed prior to this amendment whose intervals of performance are being reduced, the first reduced surveillance interval begins upon completion of the first surveillance performed after implementation of this amendment.
- For SRs that existed prior to this amendment that have modified acceptance criteria, the first performance is due at the end of the first surveillance interval that began on the date the surveillance was last performed prior to the implementation of this amendment.
- 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.

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

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

6.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Wisconsin State official was notified of the proposed issuance of the ITS conversion amendment for Point Beach. The State official had [no] comments.

7.0 ENVIRONMENTAL CONSIDERATION

Pursuant to 10 CFR 51.21, 51.32, and 51.35, an environmental assessment and finding of no significant impact was published in the *Federal Register* on ,2001 (64 FR), for the proposed conversion of the CTSs to ITSs for Point Beach. 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.

With respect to other changes included in the application for conversion to Improve Technical Specifications the items change requirements with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments required by these other changes involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission issued proposed findings that the amendments required by these other changes involve no significant hazards consideration, and there has been no public comment on these findings published in the *Federal Register* on , 2001 (64 FR). Accordingly, these changes meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the implementation of these changes.

8.0 CONCLUSION

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

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

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

Attachments: 1. List of Acronyms

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

Principal Contributors:	R. Tjader
	R. Giardina
	C Harbuck

C. Harbuck

J. Lamb J. Tatum E. Tomlinson B. Wetzel

Date:

List of Acronyms

A.C.	Air Conditioning or Alternating Current
AC AFD	Air Conditioning or Alternating Current Axial Flux Difference
AFW	Auxiliary Feedwater System
AOT	Allowed Outage Time
APRM	Average Power Range Monitor
ASME	American Society of Mechanical Engineers
ASTM	American Society of Mechanical Engineers American Society for Testing and Materials
ATWS	Anticipated Transient Without Scram
ATWS-RPT	Anticipated Transient Without Scram - Recirculation Pump Trip
BPWS	Banked Position Withdrawal Sequence
PWR	Pressurized Water Reactor
WOG	Westinghouse Owners Group
CC	Component Cooling Water
CW	City Water
CFR	Code of Federal Regulations
CFT	Channel Functional Test
COLR	Core Operating Limits Report
CRACS	Control Room Air Conditioning System
CRD	Control Rod Drive
CREFS	Control Room Emergency Filtration System
CRVS	Control Room Ventilation System
CRWA Contro	bl Rod Withdrawal Accident
CST	Condensate Storage Tank
CTS	Current Technical Specification
DBA	Design-Basis Accident
DC	Direct Current
DG	Diesel Generator
DNB	Departure from Nucleate Boiling
DOC	Discussion of Change (from the CTS)
ECCS	Emergency Core Cooling System
EDG	Emergency Diesel Generator
EPA	Electrical Protection Assembly
ESFAS	Engineered Safety Features Actuation System
FR	Federal Register
FRTP	Fraction of Rated Thermal Power
FSBEVS GDC	Fuel Storage Building Emergency Ventilation System General Design Criteria
GE	General Electric
HEPA	High Efficiency Particulate Air
Hz	Hertz
IRM	Intermediate Range Monitor
ISI	Inservice Inspection
IVSW	Isolation Valve Seal Water
ITS	Improved Technical Specification
kV	Kilovolt
kW	Kilowatt

LCO	Limiting Condition for Operation
LLS	Low-Low Set
LOCA	Loss of Coolant Accident
LOOP	Loss of Offsite Power
LOP	Loss of Power
LPCS	Low Pressure Core Spray
LPRM	Local Power Range Monitor
LSFT	Logic System Functional Test
LTOP	Low Temperature Overpressure Protection
MG	Motor Generator
MSIV	Main Steam Isolation Valve
MTC	Moderator Temperature Coefficient
MWD/T	Megawatt Days/short Ton
NMC	Nuclear Management Company, LLC
NUMAC	Nuclear Measurement Analysis and Control
ODCM Offsite	Dose Calculation Manual
PAM	Post-Accident Monitoring
PIV	Pressure Isolation Valve
P/T	Pressure/Temperature
PORV	Power Operated Relief Valve
QA	Quality Assurance
QPTR	Quadrant Power Tilt Ratio
RAI	Request for Additional Information
RBM	Rod Block Monitor
RCS	Reactor Coolant System
RCIC	Reactor Core Isolation Cooling
RCS	Reactor Coolant System
RG	Regulatory Guide
RHR	Residual Heat Removal
RPS	Reactor Protection System
RPV	Reactor Pressure Vessel
RSCS	Rod Sequence Control System
RTP	Rated Thermal Power
RWCUReacto	or Water Cleanup
RWM	Rod Worth Minimizer
RWST Reactor Water Storage Tank	
SCIV	Secondary Containment Isolation Valve
SDC	Shutdown Cooling
SDM	Shutdown Margin
SDV	Scram Discharge Volume
SE	Safety Evaluation
SER	Safety Evaluation Report
SG	Steam Generator
SGT	Standby Gas Treatment
SLC	Standby Liquid Control
SR	Surveillance Requirement
SRM	Source Range Monitor
SRV	Safety/Relief Valve

- SSER Supplemental Safety Evaluation Report
- STS Improved Standard Technical Specification, NUREG-1431, Rev. 1
- SW Service Water
- TRM Technical Requirements Manual
- TS Technical Specification
- TSTF Technical Specifications Task Force (re: generic changes to the STSs)

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- UHS Ultimate Heat Sink
- UPS Uninterruptible Power Supply
- FSAR Final Safety Analysis Report
- V Volt
- VAC Volts Alternating Current
- VFTP Ventilation Filter Test Program
- WEPCo Wisconsin Electric Power Company