June 5, 2006

Mr. John T. Conway
Site Vice President
Monticello Nuclear Generating Plant
Nuclear Management Company, LLC
2807 West County Road 75
Monticello, MN 55362-9637

SUBJECT: MONTICELLO NUCLEAR GENERATING PLANT (MNGP) - ISSUANCE OF AMENDMENT FOR THE CONVERSION TO THE IMPROVED TECHNICAL SPECIFICATIONS WITH BEYOND-SCOPE ISSUES (TAC NOS. MC7505, MC7597 THROUGH MC7611, AND MC8887)

Dear Mr. Conway:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 146 to Facility Operating License No. DPR-22 for Monticello Nuclear Generating Plant (MNGP). The amendment consists of changes to the MNGP Operating License and Appendix A, Technical Specifications (TSs), in response to your application dated June 29, 2005, as supplemented by letters dated April 25 (two letters), May 4, and May 12, 2006.

The amendment converts the current TSs (CTSs) to the improved TSs (ITSs) format and relocates certain requirements to other licensee-controlled documents. The ITSs are based on NUREG-1433, “Standard Technical Specifications General Electric Plants BWR/4,” Revision 3, dated June 2004; the Commission's Final Policy Statement, "NRC Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors," dated July 22, 1993 (58 FR 39132); and 10 CFR 50.36, "Technical specifications." The purpose of the conversion is to provide clearer and more readily understandable requirements in the TSs for MNGP to ensure safer operation of the unit. In addition, the amendment includes a number of issues that are considered beyond the scope of NUREG-1433.

The amendment is complete except for the following two issues requiring further NRC staff review: (1) the bus undervoltage allowable value in ITS Table 3.3.8.1-1, Function 2.a, and (2) ITS Limiting Condition for Operation (LCO) 3.5.1.D regarding low pressure coolant injection (LPCI) system operability. The amendment retains the CTS bus undervoltage trip setting value, and maintains the intent of the CTS LPCI LCO, modified only to the extent that it integrates into the ITS format. The NRC staff is still reviewing these issues under TAC Nos. MD1267 and MD1294, respectively, and will address them by future correspondence.

The amendment and associated draft safety evaluation (SE) were sent to you for review and comment by my letter dated April 7, 2006. The draft SE was based on your June 29, 2005, application and the information provided to the NRC staff through the joint NRC-Monticello Nuclear Power Plant ITS Conversion web page. On April 25, 2006, you submitted for docketing a copy of the questions and answers from the web page and a supplement to your June 29, 2005, application.

Included in the amendment are the following two conditions for the MNGP operating license: (1) the relocation of CTSs requirements into licensee-controlled documents during the implementation of the ITSs, and (2) the schedule for the first performance of new and revised surveillance requirements for the ITSs. These license conditions, which are discussed in the enclosed SE, are part of the implementation of the ITSs and constitute enforceable commitments that the NRC staff is relying upon in approving the amendment.

The ITSs will become the governing TSs for MNGP upon the date of implementation, but no later than September 30, 2006, as stated in the license conditions. This means that until the implementation of the ITSs is complete, the CTSs shall remain in effect. Upon complete implementation of the ITSs, please submit a letter stating as such within 14 days of the date of completion.

A copy of our related SE for the amendment is also enclosed. A Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

/RA/

Terry A. Beltz, Project Manager
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-263

Enclosures:
1. Amendment No. 146 to DPR-22
2. Safety Evaluation

cc w/o encls: See next page

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Sincerely,
/RA/
Terry A. Beltz, Project Manager
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
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Package Accession Number: **ML061240241**
Amendment Accession Number: **ML061070577**
Tech. Spec. pages Accession Number: **ML061510164**
Table A Accession Number: **ML061240255**
Table M Accession Number: **ML061240259**
Table L Accession Number: **ML061240264**
Table LA Accession Number: **ML061240266**
Table R Accession Number: **ML061240269**

OFFICE	LPL3-1/PM	LPL3-1/PM	LPL3-1/LA	TECH BR	NRR/ITSB/BC	OGC	LPL3-1/BC
NAME	TBeltz	PTam	THarris	(See note)	TKobetz	PMoulding	LRaghavan
DATE	5/4/06	5/5/06	5/4/06	--	5/9/06 memo	5/24/06	5/26/06

Note: Safety evaluation input on beyond-scope issues has been provided by the respective technical branches. The memos transmitting the SEs may be found in ADAMS under the TAC Nos. listed in the title above.

OFFICIAL RECORD COPY

NUCLEAR MANAGEMENT COMPANY, LLC

DOCKET NO. 50-263

MONTICELLO NUCLEAR GENERATING PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 146
License No. DPR-22

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Nuclear Management Company, LLC (the licensee), dated June 29, 2005, as supplemented by letters dated April 25 (two letters), May 4, and May 12, 2006, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-22 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 146, are hereby incorporated in the license. NMC shall operate the facility in accordance with the Technical Specifications.

3. License Condition 2.C.9 is added to the Operating License:

For surveillance requirements that are new in Amendment No. 146, the first performance is due at the end of the first surveillance interval, which begins on the date of implementation of this amendment.

For surveillance requirements that existed prior to Amendment No. 146, 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 surveillance requirements that existed prior to Amendment No. 146 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 surveillance requirements that existed prior to Amendment No. 146, whose intervals of performance are being extended, the first extended surveillance interval begins upon completion of the last surveillance performed prior to implementation of this amendment.

4. License Condition 2.C.10 is added to the Operating License:

License Amendment No. 146 authorizes the relocation of certain technical specifications to other licensee-controlled documents. Implementation of this amendment shall include relocation of these requirements to the specified documents, as described in (1) Section 5.0 of the NRC staff's Safety Evaluation, and (2) Table LA, Removed Detail Changes, and Table R, Relocated Specifications, attached to the NRC staff's Safety Evaluation.

5. This license amendment is effective as of its date of issuance and shall be implemented no later than September 30, 2006.

FOR THE NUCLEAR REGULATORY COMMISSION

\RA

L. Raghavan, Chief
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment: Changes to the Operating License and Technical Specifications

Date of Issuance: June 5, 2006

ATTACHMENT TO LICENSE AMENDMENT NO. 146

TO FACILITY OPERATING LICENSE NO. DPR-22

DOCKET NO. 50-263

Replace the following pages of the Operating License (OL) and Appendix A, Technical Specifications (TS), with the attached revised pages. The revised OL pages are identified by amendment number and contain marginal lines indicating the areas of change.

Operating License:

REMOVE	INSERT
3	3
5	5
--	6

Technical Specifications:

REMOVE	INSERT
All pages	All pages

4. Pursuant to the Act and 10 CFR Parts 30, 40 and 70, NMC to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and

5. Pursuant to the Act and 10 CFR Parts 30 and 70, NMC to possess, but not separate, such byproduct and special nuclear material as may be produced by operation of the facility.

C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission, now or hereafter in effect, and is subject to the additional conditions specified or incorporated below:

1. Maximum Power Level

   NMC is authorized to operate the facility at steady state reactor core power levels not in excess of 1775 megawatts (thermal).

2. Technical Specifications

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 146, are hereby incorporated in the license. NMC shall operate the facility in accordance with the Technical Specifications. |

3. Physical Protection

   NMC shall implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Monticello Nuclear Generating Plant Physical Security Plan", with revisions submitted through November 30, 1987; "Monticello Nuclear Generating Plant Guard Training and Qualification Plan," with revisions submitted through February 26, 1986; and "Monticello Nuclear Generating Plant Safeguards Contingency Plan," with revisions submitted through August 20, 1980. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.

8. Additional Conditions

The Additional Conditions contained in Appendix C, as revised through Amendment No. 110, are hereby incorporated into this license. NMC shall operate the facility in accordance with the Additional Conditions.

9. Implementation of New and Revised Surveillance Requirements

For surveillance requirements that are new in Amendment No. 146, the first performance is due at the end of the first surveillance interval, which begins on the date of implementation of this amendment.

For surveillance requirements that existed prior to Amendment No. 146, 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 surveillance requirements that existed prior to Amendment No. 146 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 surveillance requirements that existed prior to Amendment No. 146, whose intervals of performance are being extended, the first extended surveillance interval begins upon completion of the last surveillance performed prior to implementation of this amendment.

10. Removed Details and Requirements Relocated to Other Controlled Documents

License Amendment No. 146 authorizes the relocation of certain technical specifications to other licensee-controlled documents. Implementation of this amendment shall include relocation of these requirements to the specified documents, as described in (1) Section 5.0 of the NRC staff's Safety Evaluation, and (2) Table LA, Removed Detail Changes, and Table R, Relocated Specifications, attached to the NRC staff's Safety Evaluation.

D. NMC shall immediately notify the NRC of any accident at this facility which could result in an unplanned release of quantities of fission products in excess of allowable limits for normal operation established by the Commission.

E. Northern States Power Company shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.

F. NMC shall observe such standards and requirements for the protection of the environment as are validly imposed pursuant to authority established under Federal and State law and as determined by the Commission to be applicable to the facility covered by this facility operating license.

G. This license is effective as of the date of issuance and shall expire at midnight, September 8, 2010.

FOR THE NUCLEAR REGULATORY COMMISSION

Original, signed by: Darrell G. Eisenhut

Darrell G. Eisenhut, Director
Division of Licensing

Attachments: 1. Appendix A - Technical Specifications
2. Appendix B - (Deleted per Amendment 15, 12/17/82)
3. Appendix C - Additional Conditions

Date of Issuance: January 9, 1981

~~Correction Letter of 8/25/00~~

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 146 TO FACILITY OPERATING LICENSE NO. DPR-22

NUCLEAR MANAGEMENT COMPANY, LLC

MONTICELLO NUCLEAR GENERATING PLANT

DOCKET NO. 50-263

1.0 INTRODUCTION

By application dated June 29, 2005, as supplemented by the three letters discussed below, the Nuclear Management Company (NMC, or the licensee), requested changes to the technical specifications (TSs) for the Monticello Nuclear Generating (MNGP), to convert the current TSs (CTSs) to improved TSs (ITSs).

The supplemental letters to the application provided the following information for the proposed ITS conversion:

- Letter from John T. Conway, Site Vice President, Monticello Nuclear Generating Plant, to U.S. Nuclear Regulatory Commission Document Control Desk dated April 25, 2006 (ADAMS Accession No. ML061230549), which supplements the licensee's application and provides the revisions to the TS changes in the application, additional technical information, and proposed license conditions for the implementation of this amendment.

- Letter from John T. Conway, Site Vice President, Monticello Nuclear Generating Plant, to U.S. Nuclear Regulatory Commission Document Control Desk, dated April 25, 2006 (ADAMS Accession No. ML061180108), which provides a copy of Nuclear Regulatory Commission (NRC) requests for additional information (RAIs) and the licensee's responses to the RAI questions that were on the NRC-MNGP ITS Conversion web page discussed below. The information being provided does not include licensee acknowledgments or RAI status tracking.

- Letters dated May 4 (ADAMS Accession No. ML061290457) and 12 (ADAMS Accession No. ML061350038), 2006, which provide the retyped copy of TS pages to be issued in this amendment.

ENCLOSURE

On April 7, 2006, the NRC provided the licensee with a preliminary draft safety evaluation (SE) (ADAMS Accession No. ML060950548). The licensee's comments have been incorporated in this final SE.

The following SE on the proposed ITS conversion is based on the application dated June 29, 2005, and the information provided to the NRC through the NRC-MNGP ITS Conversion web page. To expedite review of the application, the NRC staff posted its RAIs to a secure database through the MNGP ITS Conversion web page. The licensee then posted RAI responses to the database, also through the web page. Access to the RAI database was restricted so that only designated licensee and NRC staff could enter information into the database; however, the public could view the database.

To comply with Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.4 for written communications and with the requirements of 10 CFR 50.30 for oath or affirmation, each amendment of each application must be executed in a signed original by the applicant or duly authorized officer thereof under oath or affirmation. To meet this requirement, the licensee submitted amendment-related portions of their responses, which were posted on the web site, under oath or affirmation. To meet the NRC's record keeping requirements, the licensee provided an information-only copy of the entire database.

The additional information provided in the database and in the supplemental letter dated April 25, 2006, did not expand the scope of the application as noticed and does not change the NRC staff's original notice published in the *Federal Register* on November 16, 2005 (70 FR 70889).

The NRC staff also conducted a pre-submittal meeting with the licensee on December 7, 2004, to discuss the proposed amendment, and a subsequent public meeting on August 16, 2005.

2.0 BACKGROUND

MNGP has been operating with the TSs issued with the original Facility Operating Licenses dated January 9, 1981, as amended. The proposed conversion to the ITSs is based upon:

- NUREG-1433, "Standard Technical Specifications for General Electric Plants, BWR/4, Revision 3, published June 2004;
- "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);
- The MNGP CTSs.

Hereinafter, the proposed TSs for the MNGP are referred to as the ITSs, the existing TSs are referred to as the CTSs, and the improved standard TSs, given in NUREG-1433, are referred to as the ISTSs. The corresponding Bases are ITS Bases, CTS Bases, and ISTS Bases, respectively. For convenience, a list of acronyms used in this SE is provided in Attachment 1 to this SE.

In addition to basing the ITSs on the ISTSs, the Final Policy Statement, and the requirements in 10 CFR 50.36, the licensee retained portions of the CTSs as a basis for the ITSs.

During the course of its review, the NRC held routine conference calls to verify the status of information requested on the web page database. These calls and the information posted on the web page served to clarify the ITSs with respect to the guidance in the Final Policy Statement and the ISTSs.

Consistent with the Commission's Final Policy Statement and 10 CFR 50.36, the licensee proposed transferring some CTS requirements to licensee-controlled documents (such as the MNGP Updated Safety Analysis Report (USAR) and Technical Requirements Manual (TRM)), for which changes to the documents by the licensee are controlled by a regulation (e.g., 10 CFR 50.59) and which may be changed without prior NRC approval. NRC-controlled documents, such as the TSs, 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 ITSs, and to define more clearly the appropriate scope of the ITSs. 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 CTSs for MNGP, while still satisfying the requirements of 10 CFR 50.36. During its review, the NRC staff relied on the Final Policy Statement and 10 CFR 50.36, and the ISTSs as guidance for acceptance of CTS changes. This SE provides a summary basis for the NRC staff's conclusion that use of the licensee's proposed ITSs based on ISTSs, as modified by plant-specific changes, is acceptable for continued operation of MNGP. This SE also explains the NRC staff's conclusion that the ITSs are consistent with the MNGP current licensing basis (CLB) and the requirements of 10 CFR 50.36.

The license conditions included in the proposed amendment will make enforceable the following aspects of the conversion: (1) the schedule for the first performance of new and revised surveillance requirements (SRs) (four conditions); and (2) the relocation of CTS requirements into licensee-controlled documents as part of the implementation of the ITSs.

For the reasons stated *infra* in this SE, the NRC staff finds that the ITSs 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 accordance with the common defense and security and provide adequate protection of the health and safety of the public.

3.0 REGULATORY REQUIREMENTS

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

> ... Such 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 TSs. 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 TSs "those items that are directly related to maintaining the integrity of the physical barriers designed to contain radioactivity." Pursuant to 10 CFR 50.36, TSs 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 TSs.

For several years, NRC and industry representatives have sought to develop guidelines for improving the content and quality of nuclear power plant TSs. On February 6, 1987, the Commission issued an interim policy statement on TS improvements, "Interim Policy Statement on Technical Specification Improvements for Nuclear Power Reactors" (52 FR 3788). During the period from 1989 to 1992, utility owners groups and the NRC staff developed ISTSs (e.g., NUREG-1433) that would establish model TSs based on 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 TSs, which gives appropriate consideration to human factors engineering principles and was used throughout the development of plant-specific ITSs.

In September 1992, the Commission issued NUREG-1433, which was developed using the guidance and criteria contained in the Commission's Interim Policy Statement. The ISTSs in NUREG-1433 were established as a model for developing the ITSs for General Electric (GE) BWR/4 plants, in general. The ISTSs reflect the results of a detailed review of the application of the Interim Policy Statement criteria, which have been incorporated in 10 CFR 50.36(c)(2)(ii), to generic system functions, which were published in a "Split Report" issued to the nuclear steam supply system vendor owners groups in May 1988. ISTSs also reflect the results of extensive discussions concerning various drafts of ISTSs 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-1433 provide an abundance of information regarding the extent to which the ISTSs present requirements that are necessary to protect public health and safety. The ISTSs in NUREG-1433, Revision 3, as modified, apply to MNGP.

On July 22, 1993, the Commission issued its Final Policy Statement, expressing the view that satisfying the guidance in the policy statement also satisfies Section 182a of the Act and 10 CFR 50.36. The Final Policy Statement described the safety benefits of the ISTSs and encouraged licensees to use the ISTSs as the basis for plant-specific TS amendments and for complete conversions to ITSs based on the ISTSs. In addition, the Final Policy Statement gave guidance for evaluating the required scope of the TSs and defined the guidance criteria to be used in determining which of the LCOs and associated SRs should remain in the TSs. The Commission noted that, in allowing certain items to be relocated to licensee-controlled documents while requiring that other items be retained in the TSs, 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 TSs; 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 (DBA) 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 DBA 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 risk assessment (PRA) has shown to be significant to public health and safety.

Part 4.0 of this SE explains the NRC staff's conclusion that the MNGP conversion to ITSs based on ISTSs, as modified by plant-specific changes, is consistent with the MNGP CLB, the requirements and guidance of the Final Policy Statement, and 10 CFR 50.36.

4.0 EVALUATION

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

A Administrative - Changes to the CTSs that do not result in new requirements or change operational restrictions and flexibility.

M More Restrictive - Changes to the CTSs that result in added restrictions or reduced flexibility.

L Less Restrictive - Changes to the CTSs that result in reduced restrictions or added flexibility.

LA Removed Details - Changes to the CTSs that eliminate detail and relocate the detail to a licensee-controlled document. Typically, this involves details of system design and system description including design limits, description of system operation, procedural details for meeting TS requirements or reporting requirements, and cycle-specific parameter limits and TS requirements redundantly located in other licensee-controlled documents.

R Relocated Specifications - Changes to the CTSs that relocate the requirements that do not meet the selection criteria of 10 CFR 50.36(c)(2)(ii).

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

The changes to the CTSs, as presented in the ITS application, are listed and described in the following five tables (for each ITS section) provided as Attachments 2 through 6 to this SE:

- Table A - Administrative Changes
- Table M - More Restrictive Changes
- Table L- Less Restrictive Changes
- Table LA - Removed Detail Changes
- Table R - Relocated Specifications

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

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

- Section A - Administrative Changes
- Section B - More Restrictive Changes
- Section C - Less Restrictive Changes
- Section D - Removed Details
- Section E - Relocated Specifications

The control of specifications, requirements, and information relocated from the CTSs to licensee-controlled documents is described in Section F below, and other CTS changes

(i.e., beyond-scope changes, changes beyond the scope of a TS conversion) are described in Section G below.

A. Administrative Changes to the CTS

Administrative changes are intended to incorporate human factors principles into the form and structure of the ITSs 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 ITSs reflects this type of change. In order to ensure consistency, the NRC staff and the licensee have used the ISTSs 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 and moving them to more appropriate locations in two or more specifications of the ITSs;
- Combining related requirements currently presented in separate specifications of the CTSs into a single specification of ITSs;
- Presentation changes that involve rewording or reformatting for clarity (including moving an existing requirement to another location within the TSs) but that 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 that 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 TSs.

Table A attached to this SE lists the administrative changes being made in the MNGP ITS conversion. Table A is organized in ITS order by each A-type DOC to the CTSs, provides a summary description of the administrative change that was made, and provides 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 the ISTSs, do not result in any change in operating requirements, and are consistent with the Commission's regulations.

B. More Restrictive Changes to the CTSs

The licensee, in electing to implement the specifications of the ISTSs, proposed a number of requirements that are more restrictive than those in the CTSs. The ITS requirements in this category include requirements that are either new, more conservative than corresponding requirements in the CTSs, or have additional restrictions that are not in the CTSs, but are in the ISTSs. Examples of more restrictive requirements are placement of an LCO on plant equipment that is not required by the CTSs, more restrictive requirements to restore inoperable equipment, and more restrictive SRs.

Table M attached to this SE lists the more restrictive changes being made in the MNGP ITS conversion. Table M is organized in ITS order by each M-type DOC to the CTSs, provides a

summary description of each more restrictive change that was adopted, and references the affected CTSs and ITSs. These changes are additional restrictions on plant operation that enhance safety and are acceptable.

C. Less Restrictive Changes to the CTSs

Less restrictive requirements include deletions of and relaxations to portions of the CTS requirements that are being retained in the ITSs. When requirements have been shown to give little or no safety benefit, their relaxation or removal from the TSs 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 ISTSs. The NRC staff reviewed generic relaxations contained in the ISTSs and found them acceptable because they are consistent with current licensing practices and the Commission's regulations. The MNGP design was also reviewed to determine if the specific design basis and licensing basis are consistent with the technical basis for the model requirements in the ISTSs and thus provide a basis for ITSs.

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

Category 1 – Relaxation of LCO Requirement
Category 2 – Relaxation of Applicability
Category 3 – Relaxation of Completion Time
Category 4 – Relaxation of Required Action
Category 5 – Deletion of SR
Category 6 – Relaxation of SR Acceptance Criteria
Category 7 – Relaxation of Surveillance Frequency, Non-24 Month Type
Category 8 – Deletion of Reporting Requirements
Category 9 – Deletion of SR Shutdown Performance Requirements
Category 10 – Changing Instrumentation Allowable Values

The following discussion addresses why these categories of less restrictive changes are acceptable:

Category 1 – Relaxation of LCO Requirement

Certain CTS LCOs specify limits on operational and system parameters beyond those necessary to ensure meeting safety analysis assumptions and, therefore, are considered overly restrictive. The CTSs also contain operating limits that have been shown to give little or no safety benefit to the operation of the plant. The ITSs, consistent with the guidance in the ISTSs, would delete or revise such operating limits. CTS LCO changes of this type include: (1) redefining operating modes, including mode title changes; (2) deleting or revising operational limits to establish requirements consistent with applicable safety analyses; (3) deleting requirements for equipment or systems that establish system capability beyond that assumed to function by the applicable safety analyses, or that are implicit to the ITS requirement for systems, components, and devices to be operable; and (4) adding allowances to use

administrative controls on plant devices and equipment during times when automatic control is required, or to establish temporary administrative limits, as appropriate, to allow time for systems to establish equilibrium operation. TSs changes represented by this type allow operators to more clearly focus on issues important to safety. The resultant ITS LCOs maintain an adequate degree of protection consistent with the safety analysis. They also improve focus on issues important to safety and provide reasonable operational flexibility without adversely affecting the safe operation of the plant. Changes involving the relaxation of LCOs are consistent with the guidance established by the ISTSs taking into consideration the MNGP CLB. Therefore, based on the above, Category 1 changes are acceptable.

Category 2 – Relaxation of Applicability

The CTSs require compliance with the LCO during the applicable Mode(s) or other conditions specified in the Specification's Applicability statement. When CTS Applicability requirements are inconsistent with the applicable accident analyses assumptions for a system, subsystem, or component specified in the LCO, the licensee proposed to change the LCO to establish a consistent set of requirements in the ITSs. These modifications or deletions are acceptable because, during the operational or other conditions specified in the ITSs applicability requirements, the LCOs are consistent with the applicable safety analyses. Changes involving relaxation of applicability requirements are consistent with the guidance established by the ISTSs, taking into consideration the MNGP CLB. Therefore, based on the above, Category 2 changes are acceptable.

Category 3 – Relaxation of Completion Time

Upon discovery of a failure to meet an LCO, the TSs specify time limits for completing Required Actions of the associated TS Conditions. Required Actions establish remedial measures that must be taken within specified Completion Times. Completion Times specify limits on the duration of plant operation in a degraded condition. Incorporating longer Completion Times is acceptable because such Completion Times will continue to be based on the operability status of redundant TSs required features, the capacity and capability of remaining TS-required features, provision of a reasonable time for repairs or replacement of required features, vendor-developed standard repair times, and the low probability of a DBA occurring during the repair period. Changes involving relaxation of Completion Times are consistent with the guidance established by the ISTSs, taking into consideration the MNGP CLB. Therefore, based on the above, Category 3 changes are acceptable.

Category 4 – Relaxation of Required Action

LCOs specify the lowest functional capability or performance level of equipment that is deemed adequate to ensure safe operation of the facility. When an LCO is not met, the CTSs specify actions to restore the equipment to its required capability or performance level, or to implement remedial measures providing an equivalent level of protection. Compared to CTS-required actions, certain proposed ITS actions would result in extending the time period during which the licensee may continue to operate the plant with specified equipment inoperable. (Upon expiration of this time period,

further action, which may include shutting down the plant, is required.) Changes of this type include providing an option to (1) isolate a system, (2) place equipment in the state assumed by the safety analysis, (3) satisfy alternate criteria, (4) take manual actions in place of automatic actions, (5) "restore to operable status" within a specified time frame, (6) place alternate equipment into service, or (7) use more conservative TS instrumentation actuation setpoints. The resulting ITS actions provide measures that adequately compensate for the inoperable equipment, and are commensurate with the safety importance of the inoperable equipment, plant design, and industry practice. Therefore, these action requirements will continue to ensure safe operation of the plant. Changes involving relaxations of action requirements are consistent with the guidance established by the ISTSs, taking into consideration the MNGP CLB. Therefore, based on the above, Category 4 changes are acceptable.

Category 5 – Deletion of Surveillance Requirement

The CTSs require maintaining LCO-specified structures, systems, and components (SSCs) operable by meeting SRs in accordance with specified SR frequencies. This includes conducting tests to demonstrate that such SSCs are operable and that LCO-specified parameters are within specified limits. When the test acceptance criteria and any specified conditions for the conduct of the test are met, the equipment is deemed operable. The changes of this category relate to deletion of CTS SRs, including deletion of an SR in its entirety, deletion of acceptance criteria, and deletion of the conditions required for performing the SR.

Deleting the SRs, including acceptance criteria and/or conditions for performing the SRs, for these items provides operational flexibility, consistent with the objective of the ISTSs, without reducing confidence that the equipment is operable. For example, the CTSs contain SRs that are not included in the ISTSs for a variety of reasons. This includes deletion of SRs for measuring values and parameters that are not necessary to meet ISTS LCO requirements. Also, the ISTSs may not include reference to specific acceptance criteria contained in the CTSs, because these acceptance criteria are not necessary to meet ISTS LCO requirements, or are defined in other licensee-controlled documents. The changes to SR acceptance criteria are acceptable because appropriate testing standards are retained for determining that the LCO-required features are operable as defined by the ISTSs.

Deleting conditions for performing SRs includes not requiring testing of deenergized equipment (e.g., instrumentation channel checks) or equipment that is already performing its intended safety function (e.g., position verification of valves locked in their safety actuation position). This category also includes allowing verification of the position of valves in high radiation areas by administrative means. ITS administrative controls (ITS 5.7) regarding access to high radiation areas make the likelihood of mispositioning such valves small. Waiving performance of a surveillance under these conditions is acceptable because the equipment is already performing its intended safety function.

The deletion of these CTS SRs optimizes test requirements for the affected safety systems and increases operational flexibility. Changes involving relaxations of SRs, as described, are consistent with the guidance established by the ISTSs, taking into

consideration the MNGP CLB. Therefore, based on the above, Category 5 changes are acceptable.

Category 6 – Relaxation of Surveillance Requirement Acceptance Criteria

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 time interval thereafter, the CTSs require establishing 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 would include relaxing both the acceptance criteria and the conditions of performance. Also, the ITSs would permit 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. These CTS SR relaxations are consistent with the guidance established by the ISTSs in consideration of the MNGP CLB.

Category 7 – Relaxation of Surveillance Frequency, Non-24 Month Type

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 time interval (frequency) thereafter, the CTSs require establishing 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, at a specified frequency based on the reliability and availability of the LCO-required components. Relaxations of CTS SRs would include extending the interval between the SRs. This interval is the surveillance test interval (STI). These relaxations of CTS SR frequencies (or extending the STI) optimize test requirements for the affected safety systems and increase operational flexibility. These CTS SR frequency relaxations (or extending the STI) are consistent with the guidance established by the ISTSs in consideration of the MNGP CLB.

Category 8 – Deletion of Reporting Requirements

The CTSs contain requirements that are redundant to reporting regulations in 10 CFR. For example, CTSs include requirements that a “Reportable Event” is any of those conditions specified in 10 CFR 50.73. However, consistent with the ISTSs, the ITSs would omit many of the CTS reporting requirements because the reporting requirements in the regulations cited do not need repeating in the TSs to ensure timely submission to the NRC. Therefore, Category 8 changes have no impact on the safe operation of the plant. Deletion of these requirements is beneficial because it reduces

the administrative burden on the licensee and in turn allows increased attention to plant operations important to safety. Therefore, Category 8 changes have no impact on the safe operation of the plant and are acceptable.

Category 9 – Deletion of Surveillance Requirement Shutdown Performance Requirements

The CTSs require maintaining LCO equipment operable by conducting SRs in accordance with specified SR intervals. The changes of this category relate to deleting the requirement to perform certain SRs during shutdown conditions only. The TSs that specify shutdown conditions would be changed to specify a frequency only. The control of the unit conditions appropriate to perform the test is an issue for procedures and scheduling, and has been determined by the NRC staff to be unnecessary as a TS restriction. As indicated in NRC generic letter (GL) 91-04, allowing this control is consistent with the vast majority of other TS Surveillances that do not dictate unit conditions for the Surveillance. These changes are consistent with the guidance established by the ISTSs in consideration of the MNGP CLB and, in view of the above, are acceptable.

Category 10 – Changing Instrumentation Allowable Values

The CTSs require maintaining LCO equipment operable by conducting SRs in accordance with specified SR intervals. The changes of this category relate either to listing allowable values (AVs) in the ITS instead of trip settings, which were in the CTS, or to actual changed AVs determined through revisions to AV calculations. These changes are consistent with the guidance established by the ISTSs. The CLB of MNGP, including the setpoint methodology, was considered and these changes are deemed acceptable.

For the reasons presented above, the proposed less restrictive changes to the CTSs are acceptable because they will not adversely impact safe operation of the facility. The ITS requirements are consistent with the CLB, operating experience, and plant accident and transient analyses, and provide reasonable assurance that public health and safety will be protected.

Table L attached to this SE lists the less restrictive changes being made in the MNGP ITS conversion. Table L, which is organized in ITS order by each L-type DOC to the CTSs, provides a summary description of the less restrictive change that was made, the CTS and ITS references, and a reference to the specific change type discussed above.

The NRC staff is continuing to review (TAC No. MD1294) a less restrictive change associated with low pressure coolant injection (LPCI). CTS 3.5.A.3.f addresses LPCI operability associated with a loss of both LPCI injection paths, and allows 72 hours to restore injection path operability. ITS 3.5.1 ACTION D addresses the condition by allowing two LPCI subsystems to be inoperable for 72 hours and, therefore, allow three or four LPCI pumps to be inoperable for up to 72 hours. Currently a shutdown is required by CTSs if three or more LPCI pumps are inoperable since CTS 3.5.A.3 does not provide an action condition. Until the NRC staff completes its additional review of this issue, the ITS amendment will be issued with the actions described in CTS 3.5.A.3.f, modified only to the extent that it integrates into the ITS format.

Since MNGP is currently operating with this CTS, which is more restrictive than that proposed in the ITS, issuing the ITSs with similar CTS actions will continue to maintain adequate safety and is considered acceptable.

D. Removed Details

When requirements have been shown to give little or no safety benefit, their removal from the TSs 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 ISTSs. The NRC staff reviewed generic relaxations contained in the ISTSs and found them acceptable because they are consistent with current licensing practices and the Commission's regulations. The MNGP design was also reviewed to determine if the specific design basis and licensing basis are consistent with the technical basis for the model requirements in the ISTSs and thus provide a basis for ITSs. A significant number of changes to the CTSs involved the removal of specific requirements and detailed information from individual specifications evaluated to be Types 1 through 6 as described below:

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

The design of the facility is required to be described in the USAR 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 Quality Assurance Topical Report (QATR). The regulation at 10 CFR 50.59 specifies controls for changing the facility as described in the USAR. The regulation at 10 CFR 50.54(a) specifies criteria for changing the QATR. The TRM is a general reference in the USAR and changes to it are accordingly also subject to 10 CFR 50.59. The ITS Bases also contain descriptions of system design. ITS 5.5.9 specifies controls for changing the Bases. Removing details of system design is acceptable because the associated CTS requirements being retained without these details are adequate to ensure safe operation of the facility. In addition, retaining such details in TS is unnecessary to ensure proper control of changes. Cycle-specific design limits are contained in the Core Operating Limits Report (COLR) in accordance with GL 88-16, "Removal of Cycle-Specific Parameter Limits From Technical Specifications," dated October 3, 1988. ITS Section 5.6, "Reporting Requirements," includes the programmatic requirements for the COLR. Therefore, it is acceptable to remove Type 1 details from the CTSs and place them in licensee-controlled documents.

Type 2 - Removing Descriptions of System Operation

The plans for normal and emergency operation of the facility are required to be described in the USAR by 10 CFR 50.34. ITS 5.4.1.a and 5.4.1.e will require written procedures to be established, implemented, and maintained for plant operating procedures recommended in Appendix A of Regulatory Guide (RG) 1.33, "Quality Assurance Program Requirements (Operation)," Revision 2, dated February 1978, and in all programs specified in ITS Section 5.5, respectively. The ITS Bases also

contain descriptions of system operation. Controls specified in 10 CFR 50.59 apply to changes in procedures as described in the USAR and TRM. ITS 5.5.9 specifies controls for changing the Bases. Removing details of system operation is acceptable because the associated CTS requirements being retained without these details are adequate to ensure safe operation of the facility. In addition, retaining such details in TS is unnecessary to ensure proper control of changes. Therefore, it is acceptable to remove Type 2 details from the CTSs and place them in licensee-controlled documents.

Type 3 - Removing Procedural Details for Meeting TS Requirements or Reporting Requirements

Details for performing TS SRs or for regulatory reporting are more appropriately specified in the plant procedures. Prescriptive procedural information in a TS requirement is unlikely to contain all procedural considerations necessary for the plant operators to comply with TSs and all regulatory reporting requirements, and referral to plant procedures is therefore required in any event. Changes to procedural details include those associated with limits retained in the ITSs. For example, Specification 5.4.1 requires that written procedures covering activities that include all programs specified in Specification 5.5 be established, implemented, and maintained. ITS 5.5.6, “Inservice Testing Program,” requires a program to provide controls for inservice testing (IST) of American Society of Mechanical Engineers (ASME) Code Class 1, 2, and 3 components. The program includes defining testing frequencies specified in the ASME Operation and Maintenance Standards and Codes (OM Codes), and applicable addenda. The CTSs also contain requirements to test specific components such as pumps and valves, and to establish IST of Quality Group A, B, and C pumps and valves performed in accordance with the requirements for ASME Code Class 1, 2 and 3 components specified in the ASME OM Codes and addenda, subject to the applicable provisions of 10 CFR 50.55a. Therefore, it is acceptable to remove Type 3 details from the CTSs and place them in licensee-controlled documents.

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

Certain CTS requirements are for instruments and alarms that are not required for operability of the LCO-required equipment, and thus may be relocated to the USAR or other appropriate licensee-controlled documents. Changes to the facility or to procedures as described in the USAR 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 QATR, and ITS 5.5.9 governs changes to the ITS Bases. Therefore, it is acceptable to remove Type 4 details from CTSs and place them in licensee-controlled documents.

Type 5 - Removal of Cycle-Specific Parameter Limits from the TSs to the COLR

Certain CTS requirements contain cycle-specific parameter limits that are redundantly specified in the COLR, and thus, are relocated to the licensee-controlled COLR. 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 TSs. Changes are made to the COLR in accordance with the provisions of ITS 5.6.3. Therefore, it is acceptable to remove Type 5 details from CTSs and place them in licensee-controlled documents.

Type 6 - Removal of an LCO, a SR, or other TS Requirement to the TRM, USAR, Offsite Dose Calculation Manual (ODCM), Operational Quality Assurance Plant (OQAP), or Inservice Inspection Program (IIP)

Certain CTS administrative requirements are redundant with respect to current regulations and thus are relocated to the USAR or other appropriate licensee-controlled documents, including the TRM, ODCM, OQAP, or IIP. 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 TSs. Changes to the facility or to procedures as described in the USAR 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 OQAP, and ITS 5.5.9 governs changes to the ITS Bases. Therefore, it is acceptable to remove Type 6 details from CTSs and place them in licensee-controlled documents.

Table LA attached to this SE lists the less restrictive removal of detail changes being made in the MNGP ITS conversion. Table LA is organized in ITS order by each LA-type DOC and includes the following:

1. The ITS/CTS number, followed by the DOC number, (e.g. LA.1);
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.

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

- Bases controlled in accordance with ITS 5.5.9, “Technical Specifications (TS) Bases Control Program.”
- USAR (which references the TRM) controlled by 10 CFR 50.59.
- Programmatic documents required by ITS Section 5.5 and controlled by ITS Section 5.4.
- IST Program and IIP controlled by 10 CFR 50.55a.
- ODCM controlled by ITS 5.5.1.
- COLR controlled by ITS 5.6.3.
- OQAP, as approved by the NRC, referenced in the USAR, and controlled by 10 CFR Part 50, Appendix B, and 10 CFR 50.54(a).

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

E. Relocated Specifications

The Final Policy Statement states that LCOs and associated requirements that do not satisfy or fall within any of the four specified criteria (now contained in 10 CFR 50.36(c)(2)(ii)) may be relocated from existing TSs (an NRC-controlled document) to appropriate licensee-controlled documents as noted in Section D above.

This section discusses the relocation of entire specifications from the CTSs to licensee-controlled documents. These specifications generally would include LCOs, Action Statements (i.e., Actions), and associated SRs. In its application and supplements, the licensee proposed relocating such specifications from the CTSs to a licensee-controlled document such as the USAR, the TRM, or other document under regulatory control such as the COLR, ODCM, OQAP, IST program, and IIP. The NRC staff has reviewed the licensee's submittals and finds that relocation of these requirements is acceptable in that the LCOs and associated requirements were found not to fall within the scope of 10 CFR 50.36(c)(2)(ii) and changes to licensee-controlled documents will be adequately controlled by 10 CFR 50.59, 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 attached to this SE lists the relocated changes that would be made in the MNGP ITS conversion and lists all specifications that are being relocated from the CTSs to licensee-controlled documents. Table R includes the following in columns:

1. References to the ITS/CTS section and DOC number;
2. References to the relocated CTS requirement;
3. Summary descriptions of the relocated CTS requirement;
4. Names of the document that will contain the relocated specifications (i.e., the new location); and
5. The method for controlling future changes to the relocated specifications (i.e., the regulatory change control process).

The NRC staff's evaluation of each relocated specification listed in Table R is provided below. The new locations for the relocated CTSs are listed in Table R.

E.1 Reactor Protection System (RPS)

CTS 3/4.1.A and B; Table 3.1.1, Trip Function 9; Table 4.1.1, Instrument Channel 5; and, Table 4.1.2, Instrument Channel 7 (Turbine Condenser Low Vacuum) - DOC R.1

CTS 3.1.A requires the RPS Turbine Condenser Low Vacuum Trip Function (CTS Table 3.1.1, Trip Function 9) to be OPERABLE, while CTS 4.1.A requires the RPS turbine condenser low vacuum trip function channels to be functionally tested and calibrated as indicated in Tables 4.1.1 and 4.1.2, respectively. The turbine condenser low vacuum scram is provided to protect the main condenser from overpressurization in the event that vacuum is lost. A loss of condenser vacuum would cause the turbine stop valves to close, resulting in a turbine trip transient. The low condenser vacuum trip anticipates this transient and scrams the reactor. No DBA or transient takes credit for this scram signal. This specification does not meet the criteria for retention in the ITSs and will be retained in the TRM.

This change is acceptable because the requirements of CTS 3.1.A and CTS 4.1.A, related to the turbine condenser low vacuum trip function, do not meet the 10 CFR 50.36(c)(2)(ii) criteria for inclusion into the ITSs. The 10 CFR 50.36(c)(2)(ii) Criteria Evaluation is as follows:

- The turbine condenser low vacuum scram instrumentation is not an instrument used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a DBA. The turbine condenser low vacuum trip function does not satisfy Criterion 1.

- The turbine condenser low vacuum scram instrumentation is not a process variable that is an initial condition of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The turbine condenser low vacuum trip function does not satisfy Criterion 2.

- The turbine condenser low vacuum scram instrumentation is not a SSC that is part of the primary success path and that functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The turbine condenser low vacuum trip function does not satisfy Criterion 3.

- The loss of the turbine condenser low vacuum scram instrumentation is an insignificant risk contributor to core damage frequency (CDF) and offsite releases. The turbine condenser low vacuum trip function does not satisfy Criterion 4.

Since the 10 CFR 50.36(c)(2)(ii) criteria have not been met, the turbine condenser low vacuum LCO, actions, and associated surveillances may be relocated out of the TSs. The turbine condenser low vacuum specification will be relocated to the TRM. Changes to the TRM will be controlled by the provisions of 10 CFR 50.59.

E.2 Control Rod Block Actuations

CTS 3.2.C.1 and CTS Tables 3.2.3 and 4.2.1, in part, specify the limiting conditions of operation, associated Actions, and SRs for the Source Range Monitor (SRM), Intermediate Range Monitor (IRM), Average Power Range Monitor (APRM), and Scram Discharge Volume (SDV) Rod Block Functions. The SRM, IRM, APRM, and SDV rod blocks are intended to prevent rod withdrawal when plant conditions make such withdrawal imprudent.

The licensee states that there are no safety analyses dependent on these rod blocks to prevent, mitigate, or establish initial conditions for a DBA or transient. The evaluation

summarized in NEDO-31466 determined that the loss of SRM, IRM, APRM, and SDV rod blocks would be an insignificant risk contributor to CDF and offsite releases.

The rod block functions are addressed below:

CTS 3/4.2.C.1 Control Rod Block Actuation, Table 3.2.3, Function 1 (SRM) - DOC R.1

SRM signals are used to monitor neutron flux during refueling, shutdown, and startup conditions. When IRMs are not above Range 2, the SRM control rod block functions to prevent a control rod withdrawal if the count rate exceeds a preset value or falls below a preset limit. No DBA or transient analysis takes credit for rod block signals initiated by the SRMs.

This change is acceptable because the SRM Control Rod Block in Table 3.2.3, Function 1, does not meet the 10 CFR 50.36(c)(2)(ii) criteria for inclusion into the ITSs. The 10 CFR 50.36(c)(2)(ii) Criteria Evaluation is as follows:

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

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

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

- The loss of the SRM control rod block function is an insignificant risk contributor to CDF and offsite releases.

Since the 10 CFR 50.36(c)(2)(ii) criteria have not been met, the control rod block actuation LCO and surveillances applicable to SRM instrumentation may be relocated to other plant-controlled documents outside the TSs. The SRM control rod block LCO and surveillances will be relocated to the TRM. Changes to the TRM will be controlled by the provisions of 10 CFR 50.59.

CTS 3/4.2.C.1 Control Rod Block Actuation, Table 3.2.3, Function 2 (IRM) - DOC R.1

IRMs are provided to monitor the neutron flux levels during refueling, shutdown, and startup conditions. The IRM control rod block functions to prevent a control rod withdrawal if the IRM reading exceeds a preset value, or if the IRM is inoperable. No DBA or transient analysis takes credit for rod block signals initiated by the IRMs.

This change is acceptable because the IRM Control Rod Block in Table 3.2.3, Function 2, does not meet the 10 CFR 50.36(c)(2)(ii) criteria for inclusion into the ITSs. The 10 CFR 50.36(c)(2)(ii) Criteria Evaluation is as follows:

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

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

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

- The loss of the IRM control rod block function is an insignificant risk contributor to CDF and offsite releases.

Since the 10 CFR 50.36(c)(2)(ii) criteria have not been met, the control rod block actuation LCO and surveillances applicable to IRM instrumentation may be relocated to other plant controlled documents outside the TSs. The IRM control rod block LCO and surveillances will be relocated to the TRM. Changes to the TRM will be controlled by the provisions of 10 CFR 50.59.

CTS 3/4.2.C.1 Control Rod Block Actuation, Table 3.2.3, Function 3 (APRM) - DOC R.1

The APRM control rod block functions to prevent conditions that would require RPS action if allowed to proceed, such as during a control rod withdrawal error at power. The APRMs utilize local power range monitor (LPRM) signals to create the APRM rod block signal and provide information about the average core power. The rod block function is not used to mitigate a DBA or transient.

This change is acceptable because the APRM control rod blocks in Table 3.2.3, Function 3, do not meet the 10 CFR 50.36(c)(2)(ii) criteria for inclusion into the ITSs. The 10 CFR 50.36(c)(2)(ii) Criteria Evaluation is as follows:

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

- The APRM control rod block instrumentation is not used to monitor a process variable that is an initial condition of a DBA or transient analysis.

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

- The loss of the APRM control rod block function is an insignificant risk contributor to CDF and offsite releases.

Since the 10 CFR 50.36(c)(2)(ii) criteria have not been met, the control rod block actuation LCO and surveillances applicable to APRM instrumentation may be relocated to other plant-controlled documents outside the TSs. The APRM control rod block LCO and surveillances will be relocated to the TRM. Changes to the TRM will be controlled by the provisions of 10 CFR 50.59.

CTS 3/4.2.C.1 Control Rod Block Actuation, Table 3.2.3, Function 5 (SDV) - DOC R.1

The SDV control rod block functions to prevent control rod withdrawals, utilizing SDV signals to create the rod block signal if water is accumulating in the SDV. The purpose of measuring the

SDV water level is to ensure that there is sufficient volume remaining to contain the water discharged by the control rod drives during a scram, thus ensuring that the control rods will be able to insert fully. This rod block signal provides an indication to the operator that water is accumulating in the SDV and prevents further rod withdrawals. With continued water accumulation, a RPS-initiated scram signal will occur. Thus, the SDV water level rod block signal provides an opportunity for the operator to take action to avoid a subsequent scram. No DBA or transient takes credit for rod block signals initiated by the SDV instrumentation.

This change is acceptable because the SDV control rod blocks in Table 3.2.3, Function 5, do not meet the 10 CFR 50.36(c)(2)(ii) criteria for inclusion into the ITSs. The 10 CFR 50.36(c)(2)(ii) Criteria Evaluation is as follows:

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

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

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

- The loss of the SDV control rod block function is an insignificant risk contributor to CDF and offsite releases.

Since the 10 CFR 50.36(c)(2)(ii) criteria have not been met, the control rod block actuation LCO and surveillances applicable to SDV instrumentation may be relocated to other plant-controlled documents outside the TSs. The SDV control rod block LCO and surveillances will be relocated to the TRM. Changes to the TRM will be controlled by the provisions of 10 CFR 50.59.

E.3 CTS 4.5.A.4, Automatic Depressurization System (ADS) Inhibit Switch - DOC R.1

CTS 4.5.A.4 requires the performance of an ADS inhibit switch operability test. The ADS inhibit switch allows the operator to defeat ADS actuation as directed by the emergency operating procedures (EOP) under conditions during which ADS would not be desirable. For example, during an anticipated transient without scram (ATWS) event, low pressure emergency core cooling system (ECCS) system activation would dilute sodium pentaborate injected by the standby liquid control (SLC) system, thereby reducing the effectiveness of the SLC system's ability to shut down the reactor.

While 10 CFR 50.36(c)(2) criteria are not normally used for an individual SR, they are used in this case since the previous BWR STSs included the ADS manual inhibit switch as a separate specification and the NRC evaluated it as such as documented in a May 9, 1988, letter (ADAMS Accession No. 8805240041, Microform Address: 45586:203 - 45586:260) from T.E. Murley (NRC) to W.S. Wilgus, addressing the NRC Staff Review of each NSSS [Nuclear Steam Supply System] Vendor Owners Group application of the Commissions Interim Policy Criteria to STSs.

This SR does not meet the criteria for retention in the ITSs and, therefore, will be retained in the TRM.

This change is acceptable because the ADS inhibit switch surveillance in CTS 4.5.A.5 does not meet the 10 CFR 50.36(c)(2)(ii) criteria for inclusion into the ITSs. The 10 CFR 50.36(c)(2)(ii) Criteria Evaluation is as follows:

- The ADS inhibit switch is not an instrument used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a DBA. ADS inhibit switch operability is not required to satisfy Criterion 1.

- The ADS inhibit switch is not used for, nor capable of, monitoring a process variable that is an initial condition of a DBA or transient analysis. ADS inhibit switch operability is not required to satisfy Criterion 2.

- The ADS inhibit switch is not used as part of a primary success path in the mitigation of a DBA or transient. The inhibit feature was added to allow defeat of the automatic ADS function when such action is required by the EOPs. Manual operator action is not credited in a DBA or transient analysis. ADS inhibit switch operability is not required to satisfy Criterion 3.

- The loss of the ADS inhibit switch is an insignificant risk contributor to CDF and offsite releases. ADS inhibit switch operability is not required to satisfy Criterion 4.

Since the 10 CFR 50.36(c)(2)(ii) criteria have not been met, the ADS inhibit switch operability test may be relocated to other plant-controlled documents outside the TSs. The ADS inhibit switch LCO and surveillances will be relocated to the TRM. Changes to the TRM will be controlled by the provisions of 10 CFR 50.59.

E.4 CTS 3/4.6.C.2, 3/4.6.C.3 and 3/4.6.C.4, Reactor Coolant Water Chemistry - DOC R.1

CTS 3/4.6.C.2 and 3/4.6.C.3 specifies required limits for reactor coolant water chemistry parameters during plant operations, and 3/4.6.C.4 provides the Actions if these parameters are not met. Poor coolant water chemistry contributes to the long-term degradation of system materials of construction, and thus, is not of immediate importance to the operator. Reactor coolant water chemistry is monitored for a variety of reasons, one of those being to reduce the possibility of failures in the reactor coolant system pressure boundary caused by corrosion. The chemistry monitoring activity is of a long-term preventative purpose rather than mitigative.

This change is acceptable because the reactor coolant water chemistry LCO and surveillances described in CTS 3/4.6.C.2 and 3/4.6.C.3 do not meet the 10 CFR 50.36(c)(2)(ii) criteria for inclusion into the ITSs. The 10 CFR 50.36(c)(2)(ii) Criteria Evaluation is as follows:

- Reactor coolant water chemistry is not used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary prior to a DBA. Reactor coolant water chemistry is not required to satisfy Criterion 1.

- Reactor coolant water chemistry is not a process variable, design feature, or operating restriction that is an initial condition of a DBA or transient. Reactor coolant water chemistry is not required to satisfy Criterion 2.

- Reactor coolant water chemistry is not part of a primary success path in the mitigation of a DBA or transient. Reactor coolant water chemistry is not required to satisfy Criterion 3.

- Reactor coolant water chemistry was found to be an insignificant risk contributor to CDF and offsite releases. Reactor coolant water chemistry is not required to satisfy Criterion 4.

Since the 10 CFR 50.36(c)(2)(ii) criteria have not been met, the reactor coolant water chemistry specifications may be relocated to other plant-controlled documents outside the TSs. The reactor coolant water chemistry LCO and surveillances will be relocated to the TRM. Changes to the TRM will be controlled by the provisions of 10 CFR 50.59.

E.5 CTS Tables 3.14.1 and 4.14.1, Accident Monitoring Instrumentation - DOC R.1

CTS Tables 3.14.1 and 4.14.1 provide requirements for post-accident monitoring (PAM) instrumentation channels. Each individual PAM parameter has a specific purpose; however, the general purpose for all accident monitoring instrumentation is to ensure sufficient information is available following an accident to allow an operator to verify the response of automatic safety systems, and to take preplanned manual actions to accomplish a safe shutdown of the plant.

The NRC position on application of the deterministic screening criteria to PAM instrumentation is documented in the letter from T.E. Murley to W.S. Wilgus, dated May 9, 1988 . The position taken was that the PAM instrumentation table list should contain, on a plant-specific basis, all RG 1.97 Type A instruments specified in the plant's Safety Evaluation Report (SER) on RG 1.97, and all RG 1.97 Category 1 instruments. Accordingly, this position has been applied to the Monticello RG 1.97 instruments.

Those instruments meeting these criteria will remain in TSs. The instruments not meeting this criteria will be relocated from the CTSs to plant-controlled documents. The following summarizes NMC’s position for those instruments to be retained in the MNGP TSs:

Type A Variables

1. Reactor Vessel Fuel Zone Water Level
2. Suppression Pool Temperature

Other Type, Category 1 Variables

1. Drywell Wide Range Pressure
2. Suppression Pool Wide Range Level
3. Drywell High Range Radiation

The accident monitoring instrumentation listed above will be retained in the ITSs and incorporated in ITS Sections 3.3.3.1.

A review of the MNGP USAR and the NRC RG 1.97 SE shows that the following instruments listed in Tables 3.14.1 and 4.14.1 instruments do not meet Category 1 or Type A requirements, and may be relocated out of TSs:

Function 2	Safety/Relief Valve Position
Function 7	Offgas Stack Wide Range Radiation
Function 8	Reactor Building Vent Wide Range Radiation

This change is acceptable because the instrumentation does not meet the 10 CFR 50.36(c)(2)(ii) criteria for inclusion into the ITSs. The 10 CFR 50.36(c)(2)(ii) Criteria Evaluation is as follows:

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

- The monitored parameters are not process variables, design features, or operating restrictions that are initial conditions of a DBA or transient. These instruments do not meet Criterion 2.

- These instruments are not part of a primary success path in the mitigation of a DBA or transient. These instruments do not meet Criterion 3.

- These instruments are not SSCs which operating experience or probabilistic risk assessment has shown to be significant to public health and safety. These instruments do not meet Criterion 4.

Since the 10 CFR 50.36(c)(2)(ii) criteria have not been met for those instruments that do not meet RG 1.97 Type A variable requirements or non-Type A, Category 1 variable requirements, the associated LCO and surveillances may be relocated out of the TSs. The TS requirements for these instruments will be relocated to the TRM. Changes to the TRM will be controlled by the provisions of 10 CFR 50.59.

Summary Conclusion

The specifications relocated from the CTSs discussed above are not required to be in the TSs because they do not fall within the criteria for mandatory inclusion in the TSs 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. The NRC staff concludes that appropriate controls have been established for all of the current specifications and information being moved to the TRM. These relocations are the subject of a new license condition discussed in Section 7.0 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.

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

In the ITS conversion, the licensee proposes to relocate specifications, requirements, and detailed information from the CTSs to licensee-controlled documents. This is discussed in Sections 4.D and 4.E of this SE. The facility and procedures described in the USAR and TRM can be revised in accordance with the provisions of 10 CFR 50.59, to ensure that records are maintained and appropriate controls are established over those requirements removed from the CTSs and future changes to the requirements. Other licensee-controlled documents contain provisions for making changes consistent with applicable regulatory requirements. For example, the ODCM can be changed only in accordance with ITS 5.5.1, and the administrative instructions that implement the OQAP 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 OQAP and such applicable regulations as 10 CFR 50.59.

The license condition for the relocation of requirements from the CTSs, which is discussed in Section 7.0 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.

G. Evaluation of Beyond-Scope Changes

This section evaluates TS changes identified as beyond scope changes provided in Enclosure 2 to the ITS conversion application. Beyond scope changes are those changes included in the ITS conversion submittal that are beyond the scope of the ISTSs as described in NUREG-1433, Revision 3, and also beyond the scope of the MNGP CTSs.

These beyond scope issues (BSIs) were either identified by NMC staff and provided in the application, or were later identified by NRC staff during the course of the review. The BSIs were included in the Notice of Consideration of Issuance of Amendment to Facility Operating License and Opportunity for Hearing published in the *Federal Register* on November 16, 2005 (70 FR 70889).

This section of the SE is divided into BSIs identified by NMC staff (Section G.1) and those identified by the NRC staff (Section G.2).

G.1 Licensee-Identified BSI Changes

G.1.1 Allowable Value (AV) Changes from Application of Current Setpoint Methodology

General

The following discussion applies to those instrumentation functions that are being reviewed and evaluated under Section G.1.1 of this SE.

The purpose of the allowable values (AVs) is to ensure instruments function as assumed in the safety analyses. The AVs are established using the GE setpoint methodology guidance, as specified in the MNGP setpoint methodology and consistent with the philosophy of GE ISTSs (NUREG-1433). The analytic limits are derived from limiting values of the process parameters obtained from the safety analysis. The AVs are derived from the analytic limit. The difference between the analytic limit and the AV allows for channel instrument accuracy, calibration accuracy, process measurement accuracy, and primary element accuracy. The margin

between the AV and the nominal trip setpoint (NTSP) allows for instrument drift that might occur during the established surveillance period. Two separate verifications are performed for the calculated NTSP. The first, a Spurious Trip Avoidance Test, evaluates the impact of the NTSP on plant availability. The second verification, an LER [licensee event report] Avoidance Test, calculates the probability of avoiding a LER (or exceeding the AV) due to instrument drift. These two verifications are statistical evaluations to provide additional assurance of the acceptability of the NTSP and may require changes to the NTSP. Use of these methods and verifications provides the assurance that if the setpoint is found conservative relative to the AV during surveillance testing, the instrumentation would have provided the required trip function by the time the process reached the analytical limit for the applicable events.

The NRC staff has generic concerns regarding the use of AVs as limits in TSs to satisfy the requirements of 10 CFR 50.36, "Technical Specifications." The NRC staff has been working with the Nuclear Energy Institute's Setpoint Methods Task Force to revise licensee TSs to address these concerns. In responding to the NRC staff's RAIs regarding the license amendment request (LAR) supporting 24-month fuel cycles at the MNGP, certain commitments were made by the licensee in a July 1, 2005, letter (ADAMS Accession No. ML051890051). These commitments were reflected in the licensee's letter dated April 25, 2006, providing the applicable portions of the ITS conversion website responses to the NRC RAIs.

The commitments are to (1) continue resetting limiting safety system setting (LSSS) setpoints within the specified tolerances (as-left criteria) until the Technical Specifications Task Force (TSTF) TS change has been approved by the NRC and assessed for applicability to Monticello, and (2) assess applicability of TSTF-493 to TS changes pertinent to instrument setpoints, when approved by the NRC, to determine whether changes to the MNGP's licensing basis are necessary.

G.1.1.a ITS 3.3.1.1, DOC L.12 (BSI 1.a)

CTS Table 3.1.1 lists the "Trip Settings" for Function 3.a (Neutron Flux IRM - High High), Function 4.a (Flow Referenced Neutron Flux APRM High High), and Function 4.c (Flow Referenced Neutron Flux APRM - High Flow Clamp). ITS 3.3.1.1, Reactor Protection System Instrumentation, lists AVs instead of trip settings formerly listed in the CTS. This changes the CTSs by requiring the reactor protection instrumentation to be set consistent with the "Allowable Value."

In the LAR dated June 29, 2005, the licensee originally indicated that the subject change was a BSI. Subsequently, the licensee concluded that the proposed changes were within the CLB and not BSIs. These trip settings are being replaced with AVs to be consistent with the format of the RPS instrumentation table in the ISTSs, and are taken from existing calculations used to establish the CTS trip settings. Accordingly, the NRC concludes that changing the parameters listed in the RPS table was not a BSI, but instead was merely tabulating different values already within the CLB.

NRC Staff Evaluation:

The Functions under BSI 1.a have been determined to be consistent with the CLB and no longer BSIs. The evaluation is incorporated into Attachment 4, Table L.

G.1.1.b ITS 3.3.4.1, DOC L.4 (BSI 1.b)

CTS Table 3.2.5 lists the "Trip Setting" for the ATWS-RPT [Anticipated Transient Without Scram - Recirc Pump Trip] High Reactor Dome Pressure Function. ITS SR 3.3.4.1.5.b, "ATWS-RPT Instrumentation" lists the AV instead of the trip setting formerly listed in the CTS. This changes the CTS by requiring the ATWS-RPT instrumentation to be set consistent with the "Allowable Value."

In the LAR dated June 29, 2005, the licensee originally indicated that the subject change was a BSI. Subsequently, the licensee concluded that the proposed change was within the CLB and not a BSI. The trip setting is being replaced with an AV consistent with the format of the instrumentation SR in the ISTSs, and the AV is taken from existing calculations used to establish the CTS trip setting.

NRC Staff Evaluation:

The Function under BSI 1.b has been determined to be consistent with the CLB and no longer a BSI. Changing the parameter in the ATWS-RPT Instrumentation SR is not a BSI, but instead merely lists a different parameter already within the CLB. The evaluation is incorporated into Attachment 4, Table L.

G.1.1.c ITS 3.3.5.1, DOC M.8 (BSI 1.c)

The CTS Table 3.2.2 specifies the "Trip Setting" for ECCS [Emergency Core Cooling System] Instrumentation Functions. The trip settings of CTS Table 3.2.2, Function C.3, have been modified to reflect new and more restrictive AVs as indicated for ITS Table 3.3.5.1-1, Functions 4.c, 4.d, 5.c, and 5.d. In addition, two Notes have been added (ITS Table 3.3.5.1-1 Notes (c) and (d)) to the CHANNEL CALIBRATION ITS SR 3.3.5.1.4) associated with ITS Table 3.3.5.1-1 Functions 4.c, 4.d, 5.c and 5.d.

This changes the CTSs by requiring the ECCS instrumentation to be set consistent with the new "Allowable Value," and adds the Notes to the CHANNEL CALIBRATION associated with ITS Table 3.3.5.1-1 Functions 4.c, 4.d, 5.c, and 5.d. This change is designated as more restrictive because more stringent AVs are being applied in the ITSs than were applied in the CTSs.

NRC Staff Evaluation:

The licensee will incorporate “Notes” to the following ECCS Trip Functions: CTS Table 3.2.2, Function C.3 (ITS Table 3.3.5.1-1, Functions 4.c, 4.d, 5.c, and 5.d), Automatic Depressurization System (ADS), Low Pressure Core Cooling Pumps Discharge Pressure Interlock. The notes apply to setpoint verification surveillances needed to address instrument trip setpoint AV issues. The two TS notes and the discussion of the content for the related TS Bases will satisfactorily address both NRC staff and industry concerns with instrument settings to better ensure compliance with 10 CFR 50.36, "Technical Specifications.”

An additional issue relates to the methodology for determining the nominal trip setpoint, and the as-found and as-left tolerance bands. This information is provided under ITS Table 3.3.5.1-1, Note (d), which originally specified that this information be described in a document controlled under 10 CFR 50.59. The NRC staff requested that the Note refer to the specific document under 10 CFR 50.59 control. The licensee provided an RAI response on April 10, 2006, stating that the location for the nominal trip setpoint and the methodology used to determine the as-

found tolerance and the as-left tolerance will be specified in the Technical Requirements Manual, which is a document controlled under 10 CFR 50.59.

Based on the licensee's RAI response regarding the use of the setpoint methodology, and incorporating the applicable Notes, the staff concludes that there is reasonable assurance that the instrumentation is capable of performing its specified safety function and that the proposed changes are acceptable.

G.1.1.d ITS 3.3.5.1, DOC L.5 (BSI 1.d)

The CTS Table 3.2.2 and Table 3.2.8 specify the "Trip Setting" for ECCS Instrumentation Functions. The trip settings of CTS Table 3.2.2, Functions A.1.b.i and A.2, and Table 3.2.8, Function C.1, have been modified to reflect new less restrictive AVs for ITS Table 3.3.5.1-1, Functions 1.c, 1.d, 2.c, 2.d, and 3.d. In addition, two Notes have been added (ITS Table 3.3.5.1-1 Notes (c) and (d)) to the CHANNEL CALIBRATION (ITS SR 3.3.5.1.4) associated with ITS Table 3.3.5.1-1 Functions 4.c, 4.d, 5.c, and 5.d. Note (c) states, "If the as-found channel setpoint is conservative with respect to the Allowable Value but outside its predefined as-found tolerance, then the channel shall be evaluated to verify that it is functioning as required before returning the channel to service." Note (d) states, "The instrument channel setpoint shall be reset to a value that is within the as-left tolerance of the nominal trip setpoint; otherwise, the channel shall be declared inoperable. The nominal trip setpoint and the methodology used to determine the as-found tolerance and the as-left tolerance are specified in the TRM."

In addition, the AV for ITS Table 3.3.5.1-1, Function 3.d, only specifies a single AV, which is applicable for both one tank and two tank operations. This changes the CTSs by requiring the ECCS instrumentation to be set consistent with the new "Allowable Value," and adds the Notes to the CHANNEL CALIBRATION (ITS SR 3.3.5.1.4) associated with ITS Table 3.3.5.1-1 Functions 4.c, 4.d, 5.c, and 5.d. The Notes (ITS Table 3.3.5.1-1 Notes (c) and (d)) added to the CHANNEL CALIBRATION (ITS SR 3.3.5.1.4) associated with Functions 4.c, 4.d, 5.c, and 5.d have been added per an NRC request, made during the review of the original ITS submittal. The AV for ITS Table 3.3.5.1-1, Function 3.d is acceptable for both one tank and two tank operation. This change is less restrictive because less stringent AVs are being applied in the ITSs than were applied in the CTSs.

NRC Staff Evaluation:

The purpose of the ECCS instrumentation is to initiate appropriate responses from the systems to ensure that the fuel is adequately cooled in the event of a DBA or transient. Low level in a Condensate Storage Tank (CST) indicates the unavailability of an adequate supply of makeup water from this normal source. Normally, the suction valves between the high-pressure coolant injection (HPCI) pump and the CSTs are open and, upon receiving a HPCI initiation signal, water for HPCI injection would be taken from all aligned CSTs. However, if the water level in any CST falls below a preselected level, first the suppression pool suction valves automatically open, and then the CST suction valve automatically closes. This ensures that an adequate supply of makeup water is available to the HPCI pump. This function is implicitly assumed in the accident and transient analysis (which takes credit for HPCI) since the analyses assume that the HPCI suction source is the suppression pool. This function is not specifically credited in the accident analysis, and is therefore not considered to be an LSSS as defined in 10 CFR 50.36.

Based on the licensee's RAI response regarding the use of the setpoint methodology, the staff concludes that there is reasonable assurance that the instrumentation is capable of performing its specified safety function and that the proposed changes are acceptable.

G.1.1.e ITS 3.3.5.2, DOC L.3 (BSI 1.e)

CTS Table 3.2.8 specifies the "Trip Setting" for the Condensate Storage Tank Level - Low, for two-tank and one-tank operation. The trip settings of CTS Table 3.2.8, Function C.1, have been modified to reflect a new less restrictive AV as indicated for ITS Table 3.3.5.2-1, Function 3. In addition, the AV for this Function only specifies a single AV, which is applicable for both one-tank and two-tank operation. This changes the CTSs by requiring the reactor core isolation cooling (RCIC) instrumentation to be set consistent with the new "Allowable Value." This change is less restrictive because less stringent AVs are being applied in the ITSs than were applied in the CTSs.

NRC Staff Evaluation:

The purpose of the RCIC system instrumentation is to initiate actions to ensure adequate core cooling when the reactor vessel is isolated from its primary heat sink (the main condenser) and normal coolant makeup flow from the reactor feedwater system is unavailable, such that injection by the low pressure ECCS pumps does not occur. Low level in a CST indicates the unavailability of an adequate supply of makeup water from this normal source. Normally, the suction valve between the RCIC pump and the CSTs is open and, upon receiving a RCIC initiation signal, water for RCIC injection would be taken from all aligned CSTs. However, if the water level in any CST falls below a preselected level, first the suppression pool suction valves automatically open, and then the CST suction valve automatically closes. This ensures that an adequate supply of makeup water is available to the RCIC pump.

No credit is taken in the safety analyses for RCIC system operation. This function does not meet the criteria for being an LSSS. Based on the licensee's RAI response regarding the use of the setpoint methodology, the staff concludes that there is reasonable assurance that the instrumentation is capable of performing its specified safety function.

G.1.1.f ITS 3.3.6.1, DOC M.9 (BSI 1.f)

CTS Table 3.2.1 specifies the "Trip Settings" for the Primary Containment Isolation Instrumentation. The "Trip Settings" of CTS Table 3.2.1, Functions 3.d (High RWCU System Flow), 4.a (HPCI High Steam Flow), 4.b (HPCI Steam Line Area High Temp.), 4.c (Low Pressure in HPCI Steam Supply Line), and 5.b (RCIC Steam Line Area), have been modified to reflect new more restrictive AVs as indicated in ITS Table 3.3.6.1-1, Functions 3.a, 3.b, 3.c, 4.c, and 5.a. This changes the CTSs by requiring the primary containment isolation functions to be set consistent with the new "Allowable Value." This change is designated as more restrictive because more stringent AVs are being applied in the ITSs than were applied in the CTSs.

NRC Staff Evaluation:

The HPCI steamline area high temperature isolation is designed to detect a leak from the associated system steam piping, and to isolate the system when a very small leak has occurred, and is diverse to the high flow instrumentation. If the small leak is allowed to continue without isolation, offsite dose limits may be reached. Specific credit for the high flow and high

temperature functions are not assumed in any USAR accident analyses, since the bounding analysis is performed for large breaks such as recirculation and main steamline breaks. The HPCI steam supply line low pressure isolation is for equipment protection and is not assumed in any transient or accident analysis in the USAR. This isolation is included in TSs because of the potential for risk due to possible failure of the instruments preventing HPCI initiation.

The RCIC steamline area high temperature isolation is provided to detect a leak from the associated system steam piping, and to isolate the system when a very small leak has occurred, and is diverse to the high flow instrumentation. If the small leak is allowed to continue without isolation, offsite dose limits may be reached. This function is not assumed in any USAR transient or accident analysis, since bounding analyses are performed for large breaks such as recirculation or main steamline breaks.

The primary containment isolation instrumentation automatically initiates closure of appropriate primary containment isolation valves, in combination with other accident mitigation systems, to limit fission product release during and following postulated DBAs. These functions do not meet the criteria in 10 CFR 50.36 for being an LSSS.

Based on the licensee's RAI response regarding the use of the setpoint methodology, the staff concludes that there is reasonable assurance that the instrumentation is capable of performing its specified safety function and that the proposed changes are acceptable.

G.1.1.g ITS 3.3.6.1, DOC L.9 (BSI 1.g)

CTS Table 3.2.1 "Instrumentation That Initiates Primary Containment Isolation Functions" specifies "Trip Settings." CTS Table 3.2.1 provides trip settings for Functions 1.b (High Flow in Main Steam Line), 1.d (Low Pressure in Main Steam Line), and 5.c (Low Pressure in RCIC Steam Supply Line). These trip settings are being replaced with AVs to be consistent with the format of the Primary Containment Isolation instrumentation table within NUREG-1433.

The licensee originally indicated that the subject changes were BSIs. The trip setting is being replaced with AV to be consistent with the format of the instrumentation SR in the ITS. The AV is taken from existing calculations used to establish the CTS trip settings. These AVs are consistent with the CLB and the setpoint methodology used to establish the trip settings. The NRC concluded that changing the parameters listed for Functions 1.b, 1.d, and 5.c did not create a BSI. Those functions will be incorporated into Attachment 4, Table L.

This BSI also addressed CTS Table 3.2.1 Functions 5.a (High Steam Flow in RCIC Steam Supply Line) and 6.a (Shutdown Cooling Supply Line Reactor Pressure Interlock). The AVs for these parameters are being changed beyond the CLB. The "Trip Settings" of CTS Table 3.2.1, Functions 5.a and 6.a are being replaced with AVs, as indicated in ITS Table 3.3.6.1-1, Functions 4.a and 6.a, to be consistent with the philosophy of the GE ISTS. The AVs were not from the same calculations as the CTS Trip Settings. This changes the CTSs by requiring the primary containment isolation instrumentation Functions to be set consistent with new AVs. The changes for ITS Table 3.3.6.1-1 Functions 4.a and 6.a are designated as less restrictive because less stringent AVs or OPERABILITY values are being applied in the ITSs than were applied in the CTSs.

NRC Staff Evaluation:

The licensee explained that the reactor pressure interlock is provided to isolate the shutdown cooling portion of the Residual Heat Removal (RHR) system. This interlock is provided only for equipment protection to prevent an intersystem LOCA scenario, and credit for the interlock is not assumed in the accident or transient analysis in the USAR. Therefore, since this function is required to ensuring the RHR system maintains OPERABILITY (which is not a safety limit), it does not meet the criteria in 10 CFR 50.36 for being an LSSS.

Based on the licensee's RAI response regarding the use of the setpoint methodology, the staff concludes that there is reasonable assurance that the instrumentation is capable of performing its specified safety function and that the proposed change is acceptable.

G.1.1.h ITS 3.3.8.1, DOC M.3 (BSI 1.h)

This BSI requires additional review by the NRC staff (TAC No. MD1267). The ITSs will be issued with ITS Table 3.3.8.1-1, Loss of Power Instrumentation, Functions 2.a (Bus Undervoltage) and 2.b (Time Delay), maintaining the CTS trip settings of $3897V and #3933V, and $8.0 seconds and #10.0 seconds, respectively.

To maintain the ITS instrumentation table format using AV settings, Table 3.3.8.1-1 is annotated to reflect the use of "Trip Settings" in lieu of "Allowable Values" for Functions 2.a and 2.b. The MNGP is currently operating with the trip settings values listed above; therefore, until the NRC staff completes its additional review, issuing the ITSs with the CTS trip setting values will continue to maintain adequate safety and is considered acceptable.

G.1.2 ITS 3.3.1.1, DOC L.14 (BSI 2)

CTS Table 4.1.1 requires a weekly functional test of the Manual Scram Function. ITS Table 3.3.1.1-1, Function 11, and ITS SR 3.3.1.1.5 requires the performance of the same test at a 31-day Frequency. This changes the CTSs by extending the Manual Scram functional test frequency from 7 days to 31 days.

NRC Staff Evaluation:

The purpose of the Manual Scram functional test is to ensure the instrumentation is functioning properly. The Manual Scram functional test frequency was previously changed from monthly to weekly as part of the amendment request that adopted GE Topical Report NEDC-30851-P-A, "Technical Specification Improvement Analyses for BWR Reactor Protection System," dated March 1988. NEDC-30851-P-A performed an analysis to extend the CHANNEL FUNCTIONAL TEST Frequency of the automatic RPS channels from monthly to quarterly. In order to justify this extension, it was necessary to actuate the automatic logic scram relays every 7 days. Therefore, NEDC-30851-P-A also changed the CHANNEL FUNCTIONAL TEST for the Manual Scram Function from monthly to weekly since, for the four manual scram pushbutton RPS design, performing a CHANNEL FUNCTIONAL TEST of the Manual Scram Functions (i.e., the manual pushbuttons) actuates the automatic logic scram relays.

The MNGP amendment request adopting NEDC-30851-P-A included changing the Manual Scram functional test frequency from monthly to weekly, and was approved by the NRC in License Amendment No. 81, dated April 16, 1992. However, the Manual Scram pushbuttons at MNGP do not actuate the automatic logic scram relays; a separate manual scram logic channel (designated A3 and B3) for each of the two manual scram pushbuttons is provided. Therefore, NEDC-30851-P-A did not actually require a change to the Manual Scram functional test frequency. To ensure the automatic logic scram relays are tested weekly, the CTS Bases were updated on June 10, 2004, to clarify that the Manual Scram refers to a manually initiated trip of both the Manual and Auto Scram logic. This change was made to ensure the requirements of NEDC-30851-P-A, as they relate to the automatic logic scram relays, were met.

ITS SR 3.3.1.1.4 has been included to ensure the automatic logic scram relays are tested every week. The licensee states in an RAI response dated April 13, 2006, that a review of the MNGP corrective action program was performed to determine failures of the procedure used to perform the Manual Scram Functional Test. The results revealed no apparent Manual Scram functional test failures. Twenty-seven tests were reviewed by the licensee, consisting of 11 monthly tests performed immediately prior to implementing the weekly test frequency associated with Amendment No. 81; three weekly tests performed immediately following implementation of Amendment No. 81; and 13 weekly tests recently performed at the time this information was evaluated for extension of the surveillance frequency from 7 days to 31 days. The results of this review revealed no Manual Scram functional test failures. Furthermore, the Manual Scram functional test only includes switches and relays and does not rely on instrument setpoints or other calibrations that are potentially subject to drift.

Based on a review of the information provided by the licensee, including corrective action and sampling data of field experience, the staff concludes that a monthly functional test frequency for the Manual Scram and continued weekly testing of the automatic logic scram relays (to support NEDC-30851-P-A implementation) is acceptable.

G.1.3 ITS 3.3.2.1, DOC L.5 (BSI 3)

CTS 3.2.C.2.b states that the Rod Block Monitor (RBM) bypass time delay must be less than or equal to 2.0 seconds. ITS 3.3.2.1 does not require the RBM bypass time delay to be OPERABLE. This changes the CTSs by deleting the RBM bypass time delay requirements.

NRC Staff Evaluation:

The purpose of CTS 3.2.C.2.b is to ensure that the RBM bypass time delay is within the assumed limit. After the RBM upscale trip exceeds the trip setpoint, the generated control rod block is allowed to be delayed for a short time (up to 2 seconds as allowed by CTS 3.2.C.2.b) by the RBM bypass time delay, prior to sending the control rod block signal to the associated Reactor Manual Control System rod block circuit. The safety analysis does not require a time delay, but only assumes the signal is delayed for up to 2.0 seconds. The RBM includes an electronic “dip” switch that bypasses the RBM bypass time delay feature. When the switch is placed in the bypass position, the RBM bypass time delay is effectively removed from the RBM circuitry; i.e., the time delay is set to zero seconds. The licensee performed a modification to the RBM system a few years ago (as part of the APRM, RBM, and TSs modification), part of which permanently set the “dip” switch to the bypass position. Thus, there is currently no time

delay associated with RBM control rod block signal. In a conference call on April 17, 2006, the licensee identified to the NRC staff that the “dip” switch is normally inaccessible and that a work order would be needed to access the equipment housing this switch.

The staff finds that the CTS allowance to have a RBM bypass time delay (set at up to 2.0 seconds) is not needed. Based on information provided by the licensee, which includes discussion that maintaining an RBM bypass time delay of zero seconds is consistent with the safety analysis, the staff finds the proposed TS change acceptable.

G.1.4 ITS 3.3.3.1, DOC L.2 (BSI 4)

CTS 4.14 does not provide a delayed entry into associated Conditions and Required Actions if a PAM channel is inoperable solely for performance of required Surveillances. ITS SRs Note 2 has been added to allow delayed entry into associated Conditions and Required Actions for up to 6 hours if a PAM channel is placed in an inoperable status solely for performance of required Surveillances, provided that the associated Function maintains capability. This changes the CTSs by providing a delay time to enter Conditions and Required Actions for a PAM channel placed in an inoperable status solely for performance of required Surveillances.

NRC Staff Evaluation:

The 6-hour LCO allowed outage time provides sufficient time for performing and completing testing, thus reducing the risk of error. There is no significant reduction in the probability of properly monitoring post accident parameters since the other channel monitoring the variable must be OPERABLE for this allowance to be used.

The staff notes that this change is not specifically identified in NUREG-1433; however, this allowance has been granted by the NRC during the ITS conversion for other facilities. The 6-hour provision to delay entry into the required Actions will allow for testing without the burden of entering and exiting the required Actions. Based on the justifications provided by the licensee, including assurance that the other channel is operable, the staff finds the proposed addition acceptable.

G.1.5 ITS 3.3.8.2, DOC M.3 (BSI 5)

CTS 4.1.C.2 requires an instrument calibration of each RPS power monitoring channel every "Operating Cycle." ITS SR 3.3.8.2.2 requires the performance of a CHANNEL CALIBRATION of the overvoltage, undervoltage, and underfrequency setpoints every 184 days. This changes the CTSs by increasing the frequency of performing a CHANNEL CALIBRATION of the overvoltage, undervoltage, and underfrequency setpoints.

NRC Staff Evaluation:

This SR is performed to ensure the RPS power monitoring channels function as required to support the safety analyses. Increasing the frequency of testing provides additional assurance that the OPERABILITY of the RPS power monitoring channels will be maintained. This change is more conservative, and consistent with setpoint calculations and current practice. The staff finds this change acceptable.

G.1.6 ITS 3.4.1, DOC M.1 (BSI 6)

CTS 4.5.F.1 provides a cross reference to the SRs in CTS 4.6.G. These surveillances, however, are jet pump surveillances and do not address stability monitoring issues. ITS SR 3.4.1.2 requires verification that either operation is in the Normal Region of the power-to-flow map every 24 hours, or operation is in the Stability Buffer Region of the power-to-flow map and the power distribution controls specified in the COLR are in effect every 24 hours. This changes the CTSs by deleting the cross references to the SRs in CTS 4.6.G and adds a new SR, providing additional assurance that these requirements are met.

NRC Staff Evaluation:

The stability monitoring system is designed to meet the requirements specified in Criterion 10, 12, and 13 of 10 CFR Part 50 Appendix A. The regulatory requirements that the NRC staff considered in its review are in 10 CFR 50.36, “Technical Specifications,” which states that the TSs include SRs to assure LCOs are met. The proposal for ITSs to incorporate the stability monitoring system surveillance meets these requirements.

NRC staff reviewed the proposed change and concludes that adding ITS SR 3.4.1.2 is acceptable because: 1) an allowed region of the power-to-flow map is determined by NRC-approved methodologies; and 2) the stability monitoring system, SIMULATE-3K (S3K), automatically performs a three-dimensional time domain calculation of reactor neutronic and therma-hydraulic response to determine both global and regional stability decay ratios for the licensed operator to evaluate whether reactor operation is within the allowed area of the Monticello stability decay ratio map. The NRC staff, therefore, considers the proposed addition of ITS SR 3.4.1.2 acceptable.

G.1.7 ITS 5.5, DOC L.4 (BSI 7)

CTS 6.8.B includes the Primary Coolant Sources Outside Containment program requirements. The combustible gas control system (CGCS) is included in this program. ITS 5.5.2 includes the same program requirements for the Primary Coolant Sources Outside Containment Program, except the CGCS is excluded. This changes the CTSs by deleting the program requirement for the CGCS in the Primary Coolant Sources Outside Containment Program.

NRC Staff Evaluation:

The licensee stated in the LAR submittal of June 29, 2005, that the operability requirements for the CGCS were removed from the MNGP TSs as documented in License Amendment No. 138, dated May 21, 2004 (ADAMS Accession No. ML041180612). Amendment No. 138, however, did not remove the CGCS from the program requirements of CTS 6.8.B at that time, since the RHR system cooling water supply was still available to the CGCS (i.e., the potential for coolant leakage that could be highly radioactive during a transient or accident still existed). The licensee stated that a plant modification has been completed that removes all communication between the CGCS and the containment, and that it has eliminated the RHR system cooling water supply lines to the CGCS.

The NRC staff agreed that Amendment No. 138 eliminated requirements for the hydrogen recombiners and relocated the requirements for hydrogen and oxygen monitors to a

Commitment Tracking Program. Although the hydrogen recombiners are part of the CGCS, the aforementioned amendment did not specifically eliminate the CGCS as stated in the application. NRC staff requested additional information and discussed this issue with NMC staff during a conference call on November 2, 2005, to further clarify and confirm that the CGCS in its entirety (including the ancillary RHR system cooling water supply) no longer communicated with containment.

The licensee responded to the RAI on November 8, 2005, and provided further clarification indicating that a plant modification was performed during refueling outage RF022 and documented under licensee Modification Procedure 03Q145. The CGCS inlet and return line piping was cut and capped on the containment side of the Containment Atmosphere Monitoring System sample connection points. The RHR system cooling water supply lines were cut on the CGCS side of valves CGC-1-1 and CGC-1-2. A high point vent connection was added to the RHR system downstream of CGC-1-1 and CGC-1-2, and two vent valves were added with the vent connection capped.

The plant modification eliminated any communication between primary containment and the CGCS, including the RHR system cooling water supply. Therefore, the potential for the CGCS to contain highly radioactive fluid no longer exists. The program controls for this system in CTS 6.8.B are no longer required. Therefore, eliminating the CGCS from ITS Section 5.5 program controls for Primary Coolant Sources Outside Containment is acceptable.

G.1.8 ITS 5.5, DOC L.5 (BSI 8)

The CTS 6.8.B.2 specifies that the integrated leak test requirements for each system outside containment that could contain highly radioactive fluids during a serious transient or accident must be performed at a refueling cycle interval or less. CTS 6.8.B also states that CTS 4.0.B is applicable (i.e., a 25 percent grace period is allowed). ITS 5.5.2.b specifies that the same test must be performed at least once per 24 months and ITS 5.5.2 states that the provisions of ITS SR 3.0.2 are applicable. This changes the CTSs by extending the surveillance frequency from 18 months (i.e., the current MNGP frequency for this test, based on the previous refueling outage interval) to 24 months (i.e., a maximum of 30 months accounting for the allowable grace period specified in ITS SR 3.0.2).

NRC Staff Evaluation:

The licensee stated in the LAR submittal dated June 29, 2005, that this change was evaluated in accordance with the guidance provided in NRC GL 91-04, “Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle,” dated April 2, 1991. Reviews of historical surveillance data and maintenance data sufficient to determine failure modes have shown that these tests normally pass their surveillance at the current frequency. An evaluation has been performed using this data, and it has been determined that the effect on safety due to the extended surveillance frequency will be minimal.

Further justification for test interval extension was based upon the fact that most of the systems included in this program are visually walked down by either plant operators or system engineers during normal plant operation and/or testing. Routine housekeeping and safety walkdowns also serve to detect gross leakage, and observed leakage from these systems will be repaired. Plant radiological surveys will identify any potential sources of leakage. Visual walkdowns and

surveys provide system monitoring at frequencies greater than once per refueling cycle, and support the conclusion that the impact, if any, on safety is minimal as a result of the proposed change. Based on inherent system and component reliability, and testing performed during the operating cycle, any impact from this change is minimal. A review of historical surveillance data also demonstrates that there are no failures that would invalidate this conclusion. In addition, the proposed 24-month surveillance frequency, if performed at the maximum interval (30 months) allowed by ITS SR 3.0.2, does not invalidate any assumptions in the plant licensing basis.

Guidance provided in NRC GL 91-04 states that licensees should evaluate the effect on safety of an increase in surveillance frequency to accommodate a 24-month fuel cycle. The evaluation should support a conclusion that the effect on safety is small. Licensees should confirm that historical plant maintenance and surveillance data support this conclusion. Here, the licensee states that these components have normally passed this surveillance when performed at the current 18-month interval, and that there are no identified failures that would invalidate this conclusion. In addition, these systems are routinely inspected during normal operations and/or testing, such that any system degradation should be apparent and corrective actions implemented.

The NRC staff, therefore, concludes that the proposed change does not have a significant effect on safety and follows the guidance of NRC GL 91-04. Therefore, the proposed change to extend the surveillance interval for ITS Section 5.5.2.b to 24 months, including a 25 percent grace period, is acceptable.

G.1.9 ITS 3.3.2.1, DOC L.6 (BSI 9)

CTS Table 3.2.3 specifies the "Trip Settings" for the RBM instrumentation. The value of CTS Table 3.2.3, Function 4.b, RBM Downscale, has been modified to reflect a new AV as indicated in ITS Table 3.3.2.1-1, Function 1.e. This changes the CTS by requiring the RBM downscale instrumentation to be set consistent with the new "Allowable Value." In the LAR dated June 29, 2005, the licensee indicated that the subject change was a BSI. Subsequently, the licensee concluded that the change was not a BSI, and was within the CLB. This trip setting is being replaced with an AV to be consistent with the format of the Control Rod Block instrumentation table within NUREG-1433. Therefore, this AV is consistent with the CLB and the setpoint methodology used to establish the trip settings.

NRC Staff Evaluation:

BSI 9 has been determined to be consistent with the CLB and no longer a BSI. The NRC staff concludes that changing the parameter listed in the RBM instrumentation is not a BSI, but instead merely lists a different value already within the CLB. This section will be incorporated into Table L.

G.2 Additional BSI Changes Identified by the NRC Staff

No additional BSI changes were identified by the NRC staff.

H. License Amendments Approved Since Original ITS Application Submittal

Since the licensee's original ITS application submittal on June 29, 2005, a number of amendments to the MNGP operating license have been approved. The table below summarizes the amendments, including the amendment number and date of issuance; the letters and dates of the amendment requests; and a brief description of the change.

Amendment No. and Date of Issuance	NMC Letter No. and Submittal Date	Description of Change
143 September 30, 2005	L-MT-04-036 June 30, 2004	License Amendment Request to Support 24-Month Fuel Cycles (Implementation of 24-Month Fuel Cycles)
144 January 12, 2006	L-MT-04-036 June 30, 2004	License Amendment Request to Support 24-Month Fuel Cycles (Surveillance Test Intervals for Various Instrumentation)
145 April 24, 2006	L-MT-04-023 April 29, 2004 L-MT-05-013 April 12, 2005	Alternate Source Term Methodology to Re-Evaluate the Fuel Handling Accident

The licensee has incorporated these amendments into the original June 29, 2005, ITS application submittal.

5.0 RELOCATED LICENSE CONDITIONS

No license conditions in the MNGP CTSs will be relocated or deleted.

6.0 COMMITMENTS RELIED UPON

In reviewing the proposed MNGP ITS conversion, the NRC staff relied upon the licensee to relocate certain requirements from the CTSs to licensee-controlled documents as described in Table LA, "Removed Details" (Attachment 5 to this SE) and Table R, "Relocated Specifications" (Attachment 6 to this SE). These tables, and Section 5.0 of this SE, as applicable, reflect the relocations described in the licensee's conversion submittal. The NRC staff requested, and the licensee submitted, a set of license conditions to make these commitments enforceable (see Section 7.0 of this SE). Such commitments from the licensee are important to the ITS conversion, because the acceptability of removing or relocating certain requirements from the TSs is based on those requirements being relocated to licensee-controlled documents where further changes will be controlled by applicable regulations or other requirements.

7.0 LICENSE CONDITIONS

In its letter dated April 25, 2006, the licensee agreed to license conditions which describe 1) the relocation of certain CTS requirements and license conditions, as applicable, to other license-controlled documents prior to ITS implementation, and 2) a schedule to begin performing new and revised SRs after ITS implementation. The following license conditions are included in the Facility Operating Licenses:

1. This amendment authorizes the relocation of certain technical specification and operating license conditions, as applicable, to other licensee-controlled documents. Implementation of License Amendment No. 146 shall include relocation of these requirements to the specified documents, as described in (1) Table LA of Removed Details and Table R of Relocated Specifications attached to the NRC staff's SE, as discussed in Sections D and E of the SE, and (2) Section 5.0 of the NRC staff's SE, as applicable.

2. The schedule for performing the new or revised SRs in License Amendment No. 146 shall be as follows:

   For SRs that are new in this amendment, the first performance is due at the end of the first surveillance interval, which 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 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 NRC staff has reviewed the above schedule for the licensee to begin performing the new and revised SRs and concludes that it is acceptable. The licensee states that its implementation date for the new ITSs will be no later than September 30, 2006. This implementation date is acceptable.

Because the commitments discussed in Section 6.0 of this SE are being relied upon for the amendment, a license condition is included in the amendment that will enforce the relocation of requirements from the CTSs to licensee-controlled documents. The relocations are described in Table LA and Table R, which are Attachments 5 and 6 to this SE. The license condition states that implementation of this amendment shall include relocation of these requirements to the specified documents. The relocation of these requirements to the specified documents is to be completed no later than September 30, 2006. This implementation date is acceptable.

8.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Wisconsin State official was notified of the proposed issuance of the amendment. The State official had no comments.

9.0 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 June 5, 2006 (71 FR 32376), for the proposed conversion of the CTSs to ITSs for MNGP. Accordingly, the Commission has determined that issuance of this amendment will not result in any significant environmental impacts beyond those evaluated in the Final Environmental Statement for MNGP dated November 1974. The Commission also issued a Notice of Consideration of Issuance of Amendment to Facility Operating Licenses and Opportunity for a Hearing on November 23, 2005 (70 FR 70889).

10.0 CONCLUSION

The MNGP ITSs provide clearer, more readily understandable requirements to ensure safer operation of the unit. Based on the considerations discussed above, the NRC staff concludes that the MNGP ITSs satisfy the Commission's Final Policy Statement and 10 CFR 50.36. Based on these conclusions, the NRC staff further concludes that the proposed ITSs for the MNGP as documented in the licensee's application and supplemental letters are acceptable.

The Commission has also 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 and Abbreviations
2. Table A - Administrative Changes
3. Table M - More Restrictive Changes
4. Table L - Less Restrictive Changes
5. Table LA - Removed Details
6. Table R - Relocated Specifications

Principal Contributors: R. Clark, R. Tjader, V. Goel, S. Mazumdar, T. Beltz, P. Hearn, C. Harbuck, T. Huang, D. Roth

Date: June 5, 2006

ATTACHMENT 1

List of Acronyms and Abbreviations

LIST OF ACRONYMS AND ABBREVIATIONS

ADAMS	Agencywide Documents Access and Management System
ADS	Automatic Depressurization System
APLHGR	Average Planar Linear Heat Generation Rate
APRM	Average Power Range Monitor
ASME	American Society of Mechanical Engineers
ATWS-RPT	Anticipated Transient Without Scram - Recirculation Pump Trip
AV	Allowable Value
BSI	Beyond-Scope Issue
BWR	Boiling Water Reactor
CDF	Core Damage Frequency
CFR	Code of Federal Regulations
CGCS	Combustible Gas Control System
CLB	Current Licensing Basis
COLR	Core Operating Limits Report
CRD	Control Rod Drive
CREF	Control Room Emergency Filtration
CST	Condensate Storage Tank
CTS	Current Technical Specification
DBA	Design-Basis Accident
DOC	Discussion of Change (from the CTS)
ECCS	Emergency Core Cooling System
EDG	Emergency Diesel Generator
EDG-ESW	Emergency Diesel Generator - Emergency Service Water
EOP	Emergency Operating Procedure
ESW	Emergency Service Water
FR	Federal Register
GE	General Electric
GL	Generic Letter
HPCI	High Pressure Coolant Injection
IIP	Inservice Inspection Program
IRM	Intermediate Range Monitor
IST	Inservice Testing
ISTS	Improved Standard Technical Specifications, NUREG-1433, Revision 3
ITS	Improved Technical Specification
LAR	License Amendment Request
LCO	Limiting Condition for Operation
LER	Licensee Event Report
LLS	Low-Low Set (Safety Relief Valves)
LOCA	Loss-of-Coolant Accident
LPRM	Local Power Range Monitor
LSSS	Limiting Safety System Setting

MCPR	Minimum Critical Power Ratio
MNGP	Monticello Nuclear Generating Plant
MSIV	Main Steam Isolation Valve
NMC	Nuclear Management Company
NRC	Nuclear Regulatory Commission
NSSS	Nuclear Steam Supply System
NTSP	Nominal Trip Setpoint
ODCM	Offsite Dose Calculation Manual
OPDRV	Operations with the Potential for Draining the Reactor Vessel
OQAP	Operational Quality Assurance Program
PAM	Post-Accident Monitoring
PCIV	Primary Containment Isolation Valve
PRA	Probabilistic Risk Assessment
QA	Quality Assurance
QATR	Quality Assurance Topical Report
RAI	Request for Additional Information
RBM	Rod Block Monitor
RCIC	Reactor Core Isolation Cooling
RCS	Reactor Coolant System
RG	Regulatory Guide
RHR	Residual Heat Removal
RHRSW	Residual Heat Removal Service Water
RPS	Reactor Protection System
RPV	Reactor Pressure Vessel
RTP	Rated Thermal Power
RWCU	Reactor Water Cleanup
SCIV	Secondary Containment Isolation Valve
SDV	Scram Discharge Volume
SE	Safety Evaluation
SER	Safety Evaluation Report
SFDP	Safety Functions Determination Program
SGT	Standby Gas Treatment
SLC	Standby Liquid Control
SR	Surveillance Requirement
S/RV	Safety Relief Valve
SRM	Source Range Monitor
SSCs	Structures, Systems, and Components
STI	Surveillance Test Interval
TIP	Transversing Incore Probe
TRM	Technical Requirements Manual
TS	Technical Specification
TSTF	Technical Specifications Task Force
UHS	Ultimate Heat Sink
USAR	Updated Safety Analysis Report

ATTACHMENT 2

Table A - Administrative Changes

ATTACHMENT 3

Table M - More Restrictive Changes

ATTACHMENT 4

Table L - Less Restrictive Changes

ATTACHMENT 5

Table LA - Removed Details

ATTACHMENT 6

Table R - Relocated Specifications

Monticello Nuclear Generating Plant

cc:

Jonathan Rogoff, Esquire
Vice President, Counsel & Secretary
Nuclear Management Company, LLC
700 First Street
Hudson, WI 54016

U.S. Nuclear Regulatory Commission
Resident Inspector's Office
2807 W. County Road 75
Monticello, MN 55362

Manager, Regulatory Affairs
Monticello Nuclear Generating Plant
Nuclear Management Company, LLC
2807 West County Road 75
Monticello, MN 55362-9637

Robert Nelson, President
Minnesota Environmental Control
Citizens Association (MECCA)
1051 South McKnight Road
St. Paul, MN 55119

Commissioner
Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155-4194

Regional Administrator, Region III
U.S. Nuclear Regulatory Commission
Suite 210
2443 Warrenville Road
Lisle, IL 60532-4351

Commissioner
Minnesota Department of Health
717 Delaware Street, S. E.
Minneapolis, MN 55440

Douglas M. Gruber, Auditor/Treasurer
Wright County Government Center
10 NW Second Street
Buffalo, MN 55313

Commissioner
Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul, MN 55101-2198

Manager - Environmental Protection Division
Minnesota Attorney General's Office
445 Minnesota St., Suite 900
St. Paul, MN 55101-2127

Michael B. Sellman
President and Chief Executive Officer
Nuclear Management Company, LLC
700 First Street
Hudson, MI 54016

Nuclear Asset Manager
Xcel Energy, Inc.
414 Nicollet Mall, R.S. 8
Minneapolis, MN 55401