



August 31, 2005

L-MT-05-096  
10 CFR Part 54

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555

Monticello Nuclear Generating Plant  
Docket 50-263  
License No. DPR-22

Additional Information in Response to Aging Management Program and Aging Management Review Audits of the Monticello License Renewal Application (TAC No. MC6440)

- References: 1) NMC letter to NRC, "Application for Renewed Operating License," dated March 16, 2005 (ADAMS Accession No. ML050880241)
- 2) NMC letter to NRC, "Documentation of Responses to Aging Management Program and Aging Management Review Audits for the Monticello License Renewal Application," dated August 11, 2005," (ADAMS Accession No. ML052280269)

Pursuant to 10 CFR 54, the Nuclear Management Company, LLC, (NMC) submitted a License Renewal Application (LRA) (Reference 1) to renew the operating license for the Monticello Nuclear Generating Plant (MNGP).

During the weeks of June 13, 2005, and July 25, 2005, members of the U.S. Nuclear Regulatory Commission (NRC) Staff conducted on-site audits of the aging management programs and the aging management reviews developed by NMC in support of Reference 1. In response to an NRC request for additional information (RAI), NMC submitted written responses to several audit questions (Reference 2).

On Monday, August 15, 2005, a telephone conference was held with the NRC to discuss the contents of Reference 2. Two additional actions were requested from NMC:

- A response to NRC Audit Item RAI 3.4-06 was inadvertently omitted from Reference 2 and should be provided.
- Detailed summaries describing changes to the LRA, with respect to NRC Audit Item B2.1.26-01, should be provided.

Enclosure 1 of this letter provides the requested response to RAI 3.4-06.

Enclosure 2 of this letter provides additional details for the Aging Management Programs (AMPs) described in Section B2.1 of the LRA that rely on elements of the MNGP American Society of Mechanical Engineers (ASME) Section XI Program for aging management. The following information is provided for each of these AMPs:

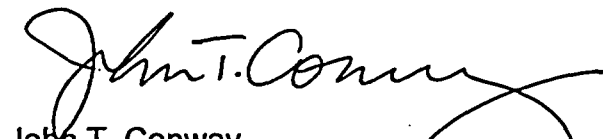
- a) Alternatives Impacting AMP – A bulleted listing of approved alternatives to Section XI and Code Cases that impact the AMP based on Tables 1 and 2 of Enclosure 1 that was provided in Reference 2.
- b) Justification for use of Alternatives – A technical justification of the acceptability of each alternative and Code Case, which impacts an AMP. This justification summarizes the "Aging Management Discussion" portion of Tables 1 and 2 from Enclosure 1 provided in Reference 2 at a level of detail equivalent to that provided in the MNGP LRA.
- c) LRA Changes – A description of LRA changes resulting from the use of approved alternatives and Code Cases in the AMP.

Enclosure 3 provides a corrected page 29 of 37 for Reference 2. This page corrects the description of Code Case N-307-2. The need for this change was identified by the NRC Staff.

This letter contains no new regulatory commitments.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 8/31/05.



John T. Conway  
Site Vice President, Monticello Nuclear Generating Plant  
Nuclear Management Company, LLC

Enclosures (3)

cc: Administrator, Region III, USNRC  
Project Manager, Monticello, USNRC  
License Renewal Project Manager, Monticello, USNRC  
Resident Inspector, Monticello, USNRC  
Minnesota Department of Commerce  
Pillsbury, Winthrop, Shaw, Pittman; LLP (David Lewis)

## ENCLOSURE 1

### NRC AUDIT QUESTION 3.4-06

#### NRC Question

Some line items in Table 1 #3.4.1-02, #3.4.1-05, and #3.4.1-08, use note 10, which says that these components do not require aging management, since the intended function is in a post-accident scenario. The Rule requires that all components that pass the screening criteria have their aging effects managed. Why are these components not included and their aging effects managed?

#### NMC Response

For both a Loss of Coolant Accident (LOCA) and a Control Rod Drop Accident (CRDA), radioactive iodine is assumed to plate-out on the internal surfaces of the main condenser. However, aging management is not required for the main condenser components that have only a plate-out and holdup intended function. It does, however, apply to those components that have a pressure boundary intended function. For those components that do have a plate-out and holdup intended function, the aging effects do not require aging management since the deposition of iodine in the main condenser is unaffected by the condenser surface condition. To maintain the intended function of plate-out and holdup of radioactive material, the main condenser and components that make up the main condenser complex, simply have to remain intact. This is confirmed in the attachment to the letter from Tae Kim, Nuclear Regulatory Commission to R. O. Anderson, Northern States Power Company, concerning the issuance of Amendment 102, dated September 16, 1998 for power uprate at MNGP that states:

For the purposes of providing a credit for iodine holdup and plate-out, the staff requires that the main steam piping (including its associated piping to the condenser) and the condenser remain structurally intact following an SSE, so that they can act as a holdup volume for fission products.

The term "structurally intact" is used in lieu of the term "pressure boundary" in the referenced letter.

Condenser structural integrity is continuously demonstrated during normal operation when the condenser is required to maintain vacuum. Following a design basis accident, when the condenser is required to perform its plate-out and holdup intended function, the main steam isolation valves will be closed and condenser vacuum will be lost. The condenser will not be required to perform a pressure boundary function since essentially atmospheric conditions will exist within the condenser.

Since normal performance considerations such as fouling and in-leakage (e.g., circulating water or air leaks) place greater requirements on condenser operation than the post-accident plate-out and holdup, as long as the condenser is intact and operational, the post-accident plate-out and holdup of radioactive material intended function will be maintained and no aging management is required.

## ENCLOSURE 1

For the purposes of clarification of plant-specific Note 410, the following is provided:

No traditional aging management of the main condenser for plate-out and holdup is required. The main condenser is required to perform a post-accident intended function of plate-out and holdup of radioactive material. This post-accident intended function does not require the main condenser to be leak tight and post-accident conditions in the main condenser would be essentially atmospheric. During normal plant operation, the main condenser structural integrity is continuously verified by maintaining condenser vacuum that is constantly monitored and provides assurance that the main condenser will perform its post-accident intended function of iodine plate-out and holdup.

## ENCLOSURE 2

### ADDITIONAL DETAILS FOR AGING MANAGEMENT PROGRAMS (AMPS) DESCRIBED IN SECTION B2.1 OF THE LRA THAT RELY ON ELEMENTS OF THE MNGP AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME) SECTION XI PROGRAM FOR AGING MANAGEMENT

#### A. NRC Request

On Monday, August 15, 2005 a telephone conference was held with the NRC. The NRC requested detailed summaries describing changes to the LRA, with respect to NRC Audit Item B2.1.26-01.

#### NMC Response

Reference: NMC letter to NRC, "Documentation of Responses to Aging Management Program and Aging Management Review Audits for the Monticello License Renewal Application (TAC No. MC6440)," dated August 11, 2005, as amended by corrected page in Enclosure 3.

#### 1. ASME Section XI In-Service Inspection, Subsections IWB, IWC, and IWD (NUREG-1801, XI.M1)

##### a. Alternatives Impacting AMP:

The following MNGP ASME Section XI Program approved alternatives impact AMP B2.1.2:

- Alternative No. 1 - Risk Informed Inservice Inspection Plan
- Alternative No. 4 - Reactor Vessel Stabilizer Brackets
- Alternative No. 7 - Use of 2001 Edition for Repair/Replacement Program
- Alternative No. 10 - Use of Code Case N-613-1
- Code Case N-307-2 - Revised Ultrasonic Examination Volume for Class 1 Bolting, Table IWB-2500-1, Examination Category B-G-1, When the Examinations Are Conducted From the End of the Bolt or Stud, or From the Center-Drilled Hole
- Code Case N-526 - Alternative Requirements for Successive Inspections of Class 1 and 2 Vessels

## ENCLOSURE 2

### b. Justification for use of Alternatives:

- Alternative No. 1 - Risk Informed Inservice Inspection Plan:

The MNGP has implemented a Risk Informed Inservice Inspection (RI-ISI) Program for Class 1 and Class 2 piping welds. The RI-ISI program provides an alternative to the ASME Section XI, ISI requirements with regards to (1) the number of locations, (2) the locations of inspections, and (3) the method of inspection. The RI-ISI program maintains the fundamental requirements of ASME Section XI, such as the examination technique, examination frequency, and acceptance criteria. Although the RI-ISI program reduces the number of required examination locations, it maintains an acceptable level of quality and safety pursuant to 10 CFR 50.55a(a)3, by focusing inspections on the most safety significant welds with nondestructive examination techniques that are more focused towards finding the types of expected aging effects as well as the types of flaws and degradation found during traditional inspections. The RI-ISI examinations result in improved detection of service-related degradations over those currently required by ASME Section XI. Therefore, the aging effect cracking continues to be adequately managed for the piping welds.

Reference: Justification derived from the "Aging Management Discussion" section of Table 1 of Enclosure 1 of Reference A for the "Risk Informed Inservice Inspection Plan (Rev. 0)."

- Alternative No. 4 - Reactor Vessel Stabilizer Brackets:

As an alternative to the requirements of the ASME Section XI Code, Table IWB-2500-1, Category B-K, Item B10.10, MNGP performs a surface examination on the reactor pressure vessel stabilizer brackets if local (jet reaction forces) or seismic design loads are experienced. In addition, a VT-3 visual inspection of the accessible areas of all four of the welded attachments was performed in 2005 with no reportable indications. A release from the surface examination should have no effect on aging management of the reactor pressure vessel stabilizer brackets welds. The stabilizer brackets are not subject to general corrosion or stress corrosion cracking, nor are they loaded so they are not subject to cumulative fatigue.

Reference: Justification derived from the "Aging Management Discussion" section of Table 1 of Enclosure 1 of Reference A for the "Reactor Vessel Stabilizer Brackets (Rev. 0)."

## ENCLOSURE 2

- Alternative No. 7 - Use of 2001 Edition for Repair/Replacement Program:

MNGP uses the 2001 Edition of Section XI in lieu of the 1995 Edition with the 1996 Addenda for repair/replacement activities. This alternative has already been generically reviewed and approved by the NRC staff for aging management of systems and components within the scope of license renewal.

Reference: Justification derived from the "Aging Management Discussion" section of Table 1 of Enclosure 1 of Reference A for the "Use of 2001 Edition for Repair/Replacement Program (Rev. 0)."

- Alternative No. 10 - Use of Code Case N-613-1:

The MNGP is required to perform in-service examinations of selected reactor vessel nozzle-to-vessel welds in accordance with the requirements ASME Section XI, Table IWB-2500-1, Examination Category B-D, Item No. B3.90. Figure IWB-2500-7(b) requires that a minimum volume of material, a distance of 1/2 the reactor vessel shell thickness adjacent to the weld, be examined. The required examination volume for the reactor vessel pressure retaining nozzle-to-vessel welds extends far beyond the weld into the base metal, and is unnecessarily large. The proposed alternative re-defined the examination volume boundary to 1/2 inch of base metal on each side of the widest portion of the weld, removing from examination the base metal that was extensively examined during prior inspections, and that is not in the high residual stress region associated with the weld. MNGP proposed the alternative described in the ASME Section XI Code Case N-613-1 in lieu of the ASME Section XI Table IWB-2500-1 Examination Category B3.90 requirements. This activity alters the examination volume boundary for the reactor vessel pressure retaining nozzle-to-vessel welds; however, the aging effect continues to be managed and inspected.

Reference: Justification derived from the "Aging Management Discussion" section of Table 1 of Enclosure 1 of Reference A for the "Use of Code Case N-613-1 (Rev. 0)."

- Code Case N-307-2 - Revised Ultrasonic Examination Volume for Class 1 Bolting, Table IWB-2500-1, Examination Category B-G-1, When the Examinations Are Conducted From the End of the Bolt or Stud, or From the Center-Drilled Hole:

## ENCLOSURE 2

MNGP utilizes a revised ultrasonic examination volume for Class I bolting, Table IWB-2500-1, Examination Category B-G-1, when the examinations are conducted from the end of the bolt or stud, or from the center-drilled hole. This alternative eliminates examination of the center bore region by revising the examination volume to a cylindrical region 1/4 inch thick measured from the minor diameter of the bolt or stud as defined by Code Case N-307-2, Figure 1. The only bolts with center holes are the reactor head closure studs and reactor recirculation pump bolts. This alternative changes the portion of the bolt being evaluated but should still identify the presence of relevant aging effects.

Reference: Justification derived from the "Aging Management Discussion" section of Table 2 of Enclosure 1 of Reference A for "Code Case N-307-2."

- Code Case N-526 - Alternative Requirements for Successive Inspections of Class 1 and 2 Vessels:

MNGP utilizes alternative requirements for successive inspections required by IWB-2420 and IWC-2420, when areas of the vessel are found, by volumetric examinations, to contain subsurface flaws. The successive inspections may be waived when the flaw is found to be acceptable for continued service in accordance with IWB-3600. The vessel aging effects continue to be managed and the flaws are still required to be acceptable for continued service. Therefore, there is no impact on aging management of the vessel.

Reference: Justification derived from the "Aging Management Discussion" section of Table 2 of Enclosure 1 of Reference A for "Code Case N-526."

c. LRA Changes:

- B2.1.2 ASME Section XI In-Service Inspection, Subsections IWB, IWC, and IWD:

Each of the above alternatives and the associated justification are added to the "Exceptions to NUREG-1801" subsection of the LRA for AMP B2.1.2 and to the appropriate AMP program element discussions. Further, the statement under the "NUREG-1801 Consistency" regarding "Exceptions to ASME Code requirements that have been granted by approved Code Cases or relief requests, or modifications by 10 CFR 50.55a are not considered to be exceptions to NUREG-1801 criteria" is removed. In addition, the statement under the "Corrective Actions" regarding "and approved NRC relief requests" is removed.



## ENCLOSURE 2

### 2. Reactor Head Closure Studs (NUREG-1801, XI.M3)

#### a. Alternatives Impacting AMP:

The following MNGP ASME Section XI Program approved alternatives impact AMP B2.1.28:

- Alternative No. 7 - Use of 2001 Edition for Repair/Replacement Program
- Code Case N-307-2 - Revised Ultrasonic Examination Volume for Class 1 Bolting, Table IWB-2500-1, Examination Category B-G-1, When the Examinations Are Conducted From the End of the Bolt or Stud, or From the Center-Drilled Hole

#### b. Justification for use of Alternatives:

- Alternative No. 7 - Use of 2001 Edition for Repair/Replacement Program:

The justification is identical to the ASME Section XI In-Service Inspection, Subsections IWB, IWC, and IWD AMP.

- Code Case N-307-2 - Revised Ultrasonic Examination Volume for Class 1 Bolting, Table IWB-2500-1, Examination Category B-G-1, When the Examinations Are Conducted From the End of the Bolt or Stud, or From the Center-Drilled Hole:

The justification is identical to the ASME Section XI In-Service Inspection, Subsections IWB, IWC, and IWD AMP.

#### c. LRA Changes:

- B2.1.28 Reactor Head Closure Studs:

Each of the above alternatives and the associated justification are added to the "Exceptions to NUREG-1801" subsection of the LRA for AMP B2.1.28 and to the appropriate AMP program element discussions. Further, the statement under the "NUREG-1801 Consistency" regarding "Exceptions to ASME requirements that have been granted by approved Code Cases or relief requests are not considered to be exceptions to NUREG-1801 criteria" is removed.

- 3.X.2 Table Changes:

## ENCLOSURE 2

The Notes for the LRA 3.X.2 Tables, which reference the Reactor Head Closure Studs AMP, are changed from either Note A to Note B or Note C to Note D, to reflect the change in the status of the AMP from "AMP is consistent with NUREG-1801 AMP" to "AMP takes some exceptions to NUREG-1801 AMP."

### 3. BWR Vessel ID Attachment Welds (NUREG-1801, XI.M4)

#### a. Alternatives Impacting AMP

The following MNGP ASME Section XI Program approved alternatives impact AMP B2.1.11:

- Alternative No. 7 - Use of 2001 Edition for Repair/Replacement Program

#### b. Justification for use of Alternatives

- Alternative No. 7 - Use of 2001 Edition for Repair/Replacement Program:

The justification is identical to the ASME Section XI In-Service Inspection, Subsections IWB, IWC, and IWD AMP.

#### c. LRA Changes

- A2.1.11 BWR Vessel ID Attachment Welds:

The statement regarding "and approved ISI Relief Requests" is removed.

- B2.1.11 BWR Vessel ID Attachment Welds:

The above alternative and the associated justification are added to the "Exceptions to NUREG-1801" subsection of the LRA for AMP B2.1.11 and to the appropriate AMP program element discussions. Further, the statement under the "Program Description" regarding "and approved ISI Relief Requests" is removed.

### 4. BWR Feedwater Nozzle (NUREG-1801, XI.M5)

#### a. Alternatives Impacting AMP

The following MNGP ASME Section XI Program approved alternatives impact AMP B2.1.8:

## ENCLOSURE 2

- Alternative No. 7 - Use of 2001 Edition for Repair/Replacement Program

b. Justification for use of Alternatives

- Alternative No. 7 - Use of 2001 Edition for Repair/Replacement Program:

The justification is identical to the ASME Section XI In-Service Inspection, Subsections IWB, IWC, and IWD AMP.

c. LRA Changes

- B2.1.8 BWR Feedwater Nozzle:

The above alternative and the associated justification are added to the "Exceptions to NUREG-1801" subsection of the LRA for AMP B2.1.8 and to the appropriate AMP program element discussions.

- 3.X.2 Table Changes:

The Notes for the LRA 3.X.2 Tables, which reference the BWR Feedwater Nozzle AMP, are changed from either Note A to Note B or Note C to Note D, to reflect the change in the status of the AMP from "AMP is consistent with NUREG-1801 AMP" to "AMP takes some exceptions to NUREG-1801 AMP."

5. BWR Control Rod Drive Return Line Nozzle (NUREG-1801, XI.M6)

a. Alternatives Impacting AMP

The following MNGP ASME Section XI Program approved alternatives impact AMP B2.1.7:

- Alternative No. 7 - Use of 2001 Edition for Repair/Replacement Program

b. Justification for use of Alternatives

- Alternative No. 7 - Use of 2001 Edition for Repair/Replacement Program:

The justification is identical to the ASME Section XI In-Service Inspection, Subsections IWB, IWC, and IWD AMP.

## ENCLOSURE 2

### c. LRA Changes

- B2.1.7 BWR Control Rod Drive Return Line Nozzle:

The above alternative and the associated justification are added to the "Exceptions to NUREG-1801" subsection of the LRA for AMP B2.1.7 and to the appropriate AMP program element discussions.

## 6. BWR Stress Corrosion Cracking (NUREG-1801, XI.M7)

### a. Alternatives Impacting AMP

The following MNGP ASME Section XI Program approved alternatives impact AMP B2.1.10:

- Alternative No. 7 - Use of 2001 Edition for Repair/Replacement Program

### b. Justification for use of Alternatives

- Alternative No. 7 - Use of 2001 Edition for Repair/Replacement Program:

The justification is identical to the ASME Section XI In-Service Inspection, Subsections IWB, IWC, and IWD AMP.

### c. LRA Changes

- A2.1.10 BWR Stress Corrosion Cracking:

The reference to the "Risk-Informed ISI Program" is removed.

- B2.1.10 BWR Stress Corrosion Cracking:

The above alternative and the associated justification are added to the "Exceptions to NUREG-1801" subsection of the LRA for AMP B2.1.10 and to the appropriate AMP program element discussions.

The reference to the "Risk-Informed ISI Program" is removed from the "Program Description" subsection of the LRA for AMP B2.1.10.

The reference to "and RI-ISI" is removed from the "Detection of Aging Effects" subsection of the LRA for AMP B2.1.10.

The reference to "and the RI-ISI Program" is removed from the "Monitoring and Trending" subsection of the LRA for AMP B2.1.10.

## ENCLOSURE 2

### 7. BWR Penetrations (NUREG-1801, XI.M8)

#### a. Alternatives Impacting AMP

The following MNGP ASME Section XI Program approved alternatives impact AMP B2.1.9:

- Alternative No. 1 - Risk Informed Inservice Inspection Plan
- Alternative No. 10 - Use of Code Case N-613-1

#### b. Justification for use of Alternatives

- Alternative No. 1 - Risk Informed Inservice Inspection Plan:

The justification is identical to the ASME Section XI In-Service Inspection, Subsections IWB, IWC, and IWD AMP.

- Alternative No. 10 - Use of Code Case N-613-1:

The justification is identical to the ASME Section XI In-Service Inspection, Subsections IWB, IWC, and IWD AMP.

#### c. LRA Changes

- A2.1.9 BWR Penetrations:

The statement regarding "with approved ISI Relief Requests" is removed.

- B2.1.9 BWR Penetrations:

Each of the above alternatives and the associated justification are added to the "Exceptions to NUREG-1801" subsection of the LRA for AMP B2.1.9 and to the appropriate AMP program element discussions. Further, the statement under the "Program Description" regarding "with approved ISI Relief Requests" is removed.

### 8. BWR Vessel Internals (NUREG-1801, XI.M9)

#### a. Alternatives Impacting AMP

- None

## ENCLOSURE 2

b. Justification for use of Alternatives

- Not Applicable

c. LRA Changes

- A2.1.12 BWR Vessel Internals:

The statement regarding "and approved ISI Relief Requests" is removed.

- B2.1.12 BWR Vessel Internals:

The statement under the "Program Description" regarding "and approved ISI Relief Requests" is removed.

9. **Thermal Aging and Neutron Irradiation Embrittlement of Cast Austenitic Stainless Steel (CASS) (NUREG-1801, XI.M13)**

a. Alternatives Impacting AMP

The following MNGP ASME Section XI Program approved alternatives impact AMP B2.1.33:

- Alternative No. 7 - Use of 2001 Edition for Repair/Replacement Program

b. Justification for use of Alternatives

- Alternative No. 7 - Use of 2001 Edition for Repair/Replacement Program:

The justification is identical to the ASME Section XI In-Service Inspection, Subsections IWB, IWC, and IWD AMP.

c. LRA Changes

- B2.1.33 Thermal Aging & Neutron Irradiation Embrittlement of Cast Austenitic Stainless Steel (CASS):

The above alternative and the associated justification are added to the "Exceptions to NUREG-1801" subsection of the LRA for AMP B2.1.33 and to the appropriate AMP program element discussions.

- 3.X.2 Table Changes:

## ENCLOSURE 2

The Notes for the LRA 3.X.2 Tables, which reference the Thermal Aging & Neutron Irradiation Embrittlement of Cast Austenitic Stainless Steel (CASS) AMP, are changed from either Note A to Note B or Note C to Note D, to reflect the change in the status of the AMP from "AMP is consistent with NUREG-1801 AMP" to "AMP takes some exceptions to NUREG-1801 AMP."

### 10. Bolting Integrity (NUREG-1801, XI.M18)

#### a. Alternatives Impacting AMP

The following MNGP ASME Section XI Program approved alternatives impact AMP B2.1.4:

- Alternative No. 7 - Use of 2001 Edition for Repair/Replacement Program

#### b. Justification for use of Alternatives

- Alternative No. 7 - Use of 2001 Edition for Repair/Replacement Program:

The justification is identical to the ASME Section XI In-Service Inspection, Subsections IWB, IWC, and IWD AMP.

#### c. LRA Changes

- B2.1.4 Bolting Integrity:

The above alternative and the associated justification are added to the "Exceptions to NUREG-1801" subsection of the LRA for AMP B2.1.4 and to the appropriate AMP program element discussions. Further, the statement under the "Detection of Aging Effects" regarding "except as allowed by code cases, relief requests, or interpretations" is removed. In addition, the statement under the "Corrective Actions" regarding "per a previously approved ISI Relief Request" is removed.

The reference to the "risk-informed methodology" is removed from the "Monitoring and Trending" subsection of the LRA for AMP B2.1.4.

- 3.X.2 Table Changes:

## ENCLOSURE 2

The Notes for the LRA 3.X.2 Tables, which reference the Bolting Integrity AMP, are changed from either Note A to Note B or Note C to Note D, to reflect the change in the status of the AMP from "AMP is consistent with NUREG-1801 AMP" to "AMP takes some exceptions to NUREG-1801 AMP."

### 11. Primary Containment In-Service Inspection Program (NUREG-1801, XI.S1)

#### a. Alternatives Impacting AMP

- None

#### b. Justification for use of Alternatives

- Not Applicable

#### c. LRA Changes

- B2.1.26 Primary Containment In-Service Inspection Program:

The statement under the "NUREG-1801 Consistency" regarding "Exceptions to ASME Code requirements that have been granted by approved Code Cases or relief requests are not considered to be exceptions to NUREG-1801 criteria." is removed. The statement is not required. ASME Section XI, Subsection IWE alternatives expire prior to the period of extended operation.

The statement under the "Scope of Program" regarding "These are not considered exceptions since the MNGP program has been reviewed by the NRC and is in accordance with 10 CFR 50.55a with NRC approved relief requests." is removed. The statement is not required. ASME Section XI, Subsection IWE alternatives expire prior to the period of extended operation.

The statement under the "Parameters Monitored or Inspected" regarding "These are not considered exceptions since the MNGP program has been reviewed by the NRC and is in accordance with 10 CFR 50.55a with NRC approved relief requests." is removed. The statement is not required. ASME Section XI, Subsection IWE alternatives expire prior to the period of extended operation.

The statement under the "Detection of Aging Effects" regarding "This is not considered an exception since the MNGP program has been reviewed by the NRC and is in accordance with 10 CFR 50.55a with NRC approved relief requests." is removed. The



## ENCLOSURE 2

statement is not required. ASME Section XI, Subsection IWE alternatives expire prior to the period of extended operation.

The statement under the "Monitoring and Trending" regarding "This is not considered an exception since the MNGP program has been reviewed by the NRC and is in accordance with 10 CFR 50.55a with NRC approved relief requests." is removed. The statement is not required. ASME Section XI, Subsection IWE alternatives expire prior to the period of extended operation.

The statement under the "Corrective Actions" regarding "This is not considered an exception since the MNGP program has been reviewed by the NRC and is in accordance with 10 CFR 50.55a with NRC approved relief requests." is removed. The statement is not required. ASME Section XI, Subsection IWE alternatives expire prior to the period of extended operation.

The statement under the "Confirmation Process" regarding "This is not considered an exception since the MNGP program has been reviewed by the NRC and is in accordance with 10 CFR 50.55a with NRC approved relief requests." is removed. The statement is not required. ASME Section XI, Subsection IWE alternatives expire prior to the period of extended operation.

### 12. ASME Section XI, Subsection IWF (NUREG-1801, XI.S3)

#### a. Alternatives Impacting AMP

The following MNGP ASME Section XI Program approved alternatives impact AMP B2.1.3:

- Code Case N-491-2 – Rules for Examination of Class 1, 2, 3, and MC Component Supports of Light-Water Cooled Power Plants

#### b. Justification for use of Alternatives

- Code Case N-491-2 - Rules for Examination of Class 1, 2, 3, and MC Component Supports of Light-Water Cooled Power Plants:

MNGP allows corrective measures to be performed on a component support to return the support to its design condition after acceptance by evaluation or test, without requiring additional examinations. This alternative involves corrective actions of component supports and has no impact on the aging management of the supports.

## ENCLOSURE 2

Reference: Justification is derived from the "Aging Management Discussion" section of Table 2 of Enclosure 1 of Reference A for the "Code Case N-491-2."

c. LRA Changes

- B2.1.3 ASME Section XI, Subsection IWF:

The above alternative and the associated justification is added to the "Exceptions to NUREG-1801" subsection of the LRA for AMP B2.1.3 and to the appropriate AMP program element discussions.

- 3.X.2 Table Changes:

The Notes for the LRA 3.X.2 Tables, which reference the ASME Section XI, Subsection IWF AMP, are changed from either Note A to Note B or Note C to Note D, to reflect the change in the status of the AMP from "AMP is consistent with NUREG-1801 AMP" to "AMP takes some exceptions to NUREG-1801 AMP."

**ENCLOSURE 3**

**NMC letter to NRC, "Documentation of Responses to Aging  
Management Program and Aging Management Review Audits for the  
Monticello License Renewal Application," dated August 11, 2005,"  
Corrected Page 29 of 37**

**1 Page Follows**

## ENCLOSURE 1

**Table 2 - NRC Audit Item B2.1.26-01: ASME Section XI, ISI Program, Regulatory Guide 1.147 Code Case Impact on Aging Management**

The ASME Section XI Inservice Inspection, Subsections IWB, IWC, and IWD, and ASME Section XI, Subsection IWF code cases discussed below will only be used during the fourth inspection interval, which ends May 31, 2012. The fourth inspection interval will end twenty-one months after entering the period of extended operation.

The code cases of ASME Section XI, Subsections IWE Inservice Inspection Program and related code cases will only be used during the first inspection interval, which ends prior to the period of extended operation on September 8, 2008. Therefore, none of the code cases involving the ASME Section XI, Subsections IWE Inservice Inspection Program are considered to be aging management related or exceptions to NUREG-1801 that need to be justified from an aging management point of view, in accordance with 10 CFR 54.

The following listed Code Cases are permissible for use at Monticello during the fourth Interval per Regulatory Guide 1.147, Revision 13. The codes were evaluated for their potential impact on aging management.

| <b>Code Case</b> | <b><u>Discussion</u></b>   | <b><u>Impact to AMP</u></b>           | <b><u>Aging Management Discussion</u></b>  |
|------------------|--|---------------------------------------|--|
| N-307-2          | Revised Ultrasonic Examination Volume for Class I Bolting, Table IWB-2500-1, Examination Category B-G-1, When the examinations are conducted from the end of the bolt or stud, or from the center-drilled hole | XI.M01-Yes<br>XI.M03-Yes<br>XI.M18-No | <p>This Case eliminates examination of the center bore region by revising the examination volume to a cylindrical region 1/4 inch thick measured from the minor diameter of the bolt or stud as defined by Code Case N-307-2, Figure 1. The provisions of this Case were added to Table IWB-2500-1, Fig. IWB-2500-12, and Appendix VIII Supplement 8 1.1(c) in the 2000 Addenda. The only bolts with center holes are the reactor head closure studs and reactor recirc pump bolts. This Code case changes the portion of the bolt being evaluated but still would identify the presence of the relevant aging effect. Therefore, there is no impact on aging management.</p> <p>Table IWB-2500-1, Examination Category B-G-1 is referenced in NUREG-1801, XI.M01, ASME Section XI Inservice Inspection, Subsections IWB, IWC, and IWD and XI.M03 Reactor Head Closure Studs and is therefore this alternative is considered an exception to NUREG-1801.</p> |
| N-460            | Alternative examination coverage for Class 1 and Class 2 welds, Section XI, Division 1   | XI.M01-No                             | <p>This Case provides alternative rules for reduced examination of Class 1 and 2 welds when the entire examination volume or area cannot be examined due to interference from another component or part. (Reduction is limited to 10% or 90% coverage).</p> <p>ASME Section XI - 1995 Edition through 1996 Addenda, Examination Category B-A, Item B1.40, requires volumetric and surface examination, as defined by Figure IWB-2500-5, of essentially 100 percent of the weld length of the reactor pressure vessel (RPV) closure head-to-flange weld. "Essentially 100 percent," as clarified by ASME Code Case N-460, is greater than 90 percent coverage of the examination volume, or surface area, as applicable.</p> <p>The welds continue to be inspected, and therefore there is no impact on aging management. ASME Section XI, ISI, Examination Category B-A is not referenced in NUREG-1801; therefore this is not considered an</p>             |