NMC
Committed to Nuclear Excellence

Monticello Nuclear Generating Plant
Operated by Nuclear Management Company, LLC

March 26, 2003

L-MT-03-022
10 CFR Part 50
Section 50.55a(a)

US Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

MONTICELLO NUCLEAR GENERATING PLANT
DOCKET 50-263
LICENSE No. DPR-22

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING INSERVICE INSPECTION PROGRAM RELIEF REQUEST NUMBER NO. 7 (TAC No. MB6897)

Reference 1: NMC Letter to NRC, "Monticello Relief Request Number ISI No. 7 Use of 2001 Addenda for Repair/Replacement Program, dated December 6, 2002

Reference 2: NRC Letter to NMC, "Monticello Nuclear Generating Plant – Request for Additional Information Related To Inservice Inspection Program Relief Request No. 7 (TAC No. MB6897)", dated March 12, 2003

Reference 1 requested NRC approval of an alternative to allow the use of the 2001 Edition of the American Society of Mechanical Engineers (ASME) Section XI code for repair and replacement activities for the Fourth Ten-Year interval of the Monticello Nuclear Generating Plant (MNGP) Inservice Inspection (ISI) Program.

Reference 2 requested the NMC to provide additional information regarding the Certificate of Reconciliation portion of the subject relief request.

Attachment A to this letter contains the NMC response to the requests for additional information. Attachment B contains a revised Certificate of Reconciliation, which supercedes the Certificate of Reconciliation enclosed in Reference 1.

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This letter makes the following new commitment:

For the MNGP ASME Section XI Repair/Replacement program the NMC commits to comply with any modifications or changes incorporated into the 2001 edition of the ASME Code when the 2001 edition is incorporated into the rule. This commitment is limited to the IWA-4000 portions or related requirements of the code for the MNGP Repair/Replacement Program. The inspection portions of the MNGP ASME Section XI program will be performed in accordance with the 1995 edition with the 1996 addenda of ASME Section XI.

If you have any questions please contact John Fields (763-295-1663).

David L. Wilson
Site Vice President
Monticello Nuclear Generating Plant

cc: Regional Administrator-III, NRC
NRR Project Manager, NRC
Sr. NRC Resident Inspector, NRC
State of Minnesota Boiler Inspector
Hartford Insurance

Attachment A - NMC RESPONSES TO NRC REQUEST FOR ADDITIONAL INFORMATION
Attachment B - REVISED CERTIFICATE OF RECONCILIATION FOR THE MNGP INSERVICE INSPECTION PROGRAM RELIEF REQUEST NO. 7

Attachment A

NUCLEAR MANAGEMENT COMPANY, LLC
MONTICELLO NUCLEAR GENERATING PLANT
DOCKET 50-263

MARCH 26, 2003

NMC RESPONSES TO NRC REQUEST FOR ADDITIONAL INFORMATION

2 pages follow

Attachment A

NMC RESPONSES TO NRC REQUEST FOR ADDITIONAL INFORMATION

NRC Request #1:

The Nuclear Management Company's (NMC's) Certificate of Reconciliation references Section IWA-4230 which gives requirements for replacing internal threads in pressure-retaining items with helical coil inserts. Please modify the Certificate of Reconciliation to provide a separate section identifying the renumbered or reorganized section of the American Society of Mechanical Engineer's Boiler and Pressure Vessel Code (ASME Code).

NMC Response:

The Certificate of Reconciliation has been revised to segregate each paragraph that was changed and identifies the particular revision, renumbering, or relocation of the requirements for each paragraph. Specifically IWA-4230 is identified that this was IWA-4451 prior to the 2001 Edition and was relocated to IWA-4230 in the 2001 Edition. Please see Attachment B for the revision to the Certificate of Reconciliation.

NRC Request #2:

Section IWA-4131.1(a) gives conditions when alternative requirements of IWA-4131.2 for Class 1 piping tubing (except heat exchanger tubing, and sleeves and plugs used for heat exchanger tubing), valves, and fittings may be used. Section IWA-4713 is grouped with this section in the Certificate of Reconciliation. Section IWA-4713 gives the requirements for heat exchanger tube plugging by expansion. Please move references to Sections IWA-4711.4, IWA-4712, and IWA-4721.1 in your Certificate of Reconciliation to the heat exchanger grouping and discuss the associated changes incorporated into the 2001 ASME Code.

NMC Response:

As indicated to the response to Question 1, each paragraph has been separated to distinctly identify the specific action that was taken for each. Paragraphs IWA-4131.1(a) was changed by removing the word "welded" now that the requirements for any mechanical tube plugging are included, the alternative rules cannot be used. IWA-4711.4, IWA-4712, and IWA-4721.1 are also separated out with the specific action identified. Please see Attachment B for the revision to the Certificate of Reconciliation.

NRC Request #3:

Please provide a statement that NMC will comply with any modifications or changes incorporated into the 2001 edition of the ASME Code when the 2001 edition is incorporated into the rule.

NMC Response:

For the MNGP ASME Section XI Repair/Replacement Program the NMC commits to comply with any modifications or changes incorporated into the 2001 edition of the ASME Code when the 2001 edition is incorporated into the rule. This commitment is limited to the IWA-4000 portions or related requirements of the code for the MNGP Repair/Replacement Program. The inspection portions of the MNGP ASME Section XI program will be performed in accordance with the 1995 edition with the 1996 addenda of ASME Section XI.

Additional Information:

Note 3 on the Certificate of Reconciliation (Attachment B) was revised from our previous submittal dated December 6, 2002. The note applies to a change to IWA-4132 that removed the requirement for pressure testing and VT-2 visual examination of relief valves rotated from stock and installed by mechanical means. The IWA-4132 code change relied on an identical change in IWA-4540, which was based on the following statement: "Owner's operation and maintenance personnel post-installation inspection are adequate without additional Code-required examination." Therefore, a statement requiring a pressure test in the MNGP ASME Section XI Repair/Replacement Program is not required.

Attachment B

NUCLEAR MANAGEMENT COMPANY, LLC
MONTICELLO NUCLEAR GENERATING PLANT
DOCKET 50-263

MARCH 26, 2003

REVISED CERTIFICATE OF RECONCILIATION FOR THE MNGP INSERVICE INSPECTION PROGRAM RELIEF REQUEST NO. 7

7 pages follow

Attachment B
ISI RELIEF REQUEST No. 7
Certificate of Reconciliation

The Certificate of Reconciliation provides the basis for revisions to the Monticello Nuclear Generating Plant's (MNGP) ASME Section XI "Repair /Replacement Program" (4AWI-09.04.03) in order to meet the 2001 Edition of ASME Section XI. On September 9, 1996, the Nuclear Regulatory Commission (NRC) issued a revision to 10 CFR 50.55a, implementing subsections IWE and IWL* of the 1992 edition, including the 1992 addenda of Section XI of the ASME Code. This required utilities to develop and implement a program for the examination of containments by September 9, 2001. Additionally, it required implementation of an IWE/IWL repair/replacement program effective September 9, 1996. The NMC is updating the MNGP Inservice Inspection (ISI) Program for the fourth ten-year interval to meet the 1995 Edition with the 1996 Addenda. Because of the hardship to maintain two separate Repair/Replacement Programs, this alternative is proposed to allow the use of the 2001 Edition of ASME Section XI. This reconciliation is completed to provide justification for allowing the use of the 2001 Edition for Class 1, 2, 3 and MC pressure retaining components and their supports.

The current revision of 10CFR50.55a requires ASME Section XI Programs to follow the 1995 Edition as amended by the 1996 Addenda of ASME Section XI for Class 1, 2, and 3 components and the 1992 Edition as amended by the 1992 Addenda for Class MC components. There are some general issues to discuss prior to delineating the specific changes that have been made to the ASME Section XI Code (2000 Addenda to 2001 Edition). By performing the reconciliation from the 1992 Addenda, the reconciliation from the 1996 Addenda is covered as well.

1) The NRC has reviewed and approved with some exceptions the 1998 Edition through 2000 Addenda of the code. This has been included in the Final Rule (dated September 26, 2002). Those specific exceptions made to the rules for repair/replacement activities are included in the implementation of the 2001 Edition.
2) The NMC ISI requirements for MNGP will be based on the 1995 Edition as amended by the 1996 Addenda.
3) The Periodic Pressure Testing requirements will be based on the 1995 Edition as amended by the 1996 Addenda. While the pressure testing requirements for repair/replacement activities will be based on the 2001 Edition.
4) The reconciliation attached addresses the changes contained within the IWA-4000 paragraphs. In addition, any significant changes identified within any related requirements are addressed.

Each change is categorized as:

Editorial (E) – Those changes that are of an editorial nature like typographical errors or misspelled words.
Technical Significant (TS) – Those changes that effect the technical requirements and either reduce or increase those requirements. These changes are described in more detail as to their applicability to MNGP.
Technical (T) – Technical changes that are only used for clarification of an existing requirement.
Non-significant (TN) – Those changes that are not technical in nature, but could not be classified as editorial or just a relocation of existing requirements.

*IWL "Requirements for Class CC Concrete Components of Light-Water Cooled Plants" is not applicable to the Monticello Nuclear Generating Plant

Attachment B

ISI RELIEF REQUEST NUMBER: No. 7 Certificate of Reconciliation		
2001 Edition		
IWA-4110(b)	Revised to insert the words "Thermal metal removal" to clarify that thermal metal removal activities fall within the scope of IWA-4000	TS (Note 1)
IWA-4230	This was added to relocate the requirements of IWA-4451 "Helical Coil Threaded Inserts". This relocation places these requirements in IWA-4200 "Material" which is appropriate since they deal primarily with helicoil material requirements.	TN
IWA-4400	Retitled to "Welding, Brazing, Metal Removal, and Installation". This was retitled specify that metal removal rules apply to all Section XI repair activities.	TN
IWA-4410	This was rewritten to make its contents consistent with the revised title. It is also revised to clarify that mechanical metal removal not associated with defect removal is not within the scope of IWA-4400.	T
IWA-4411	This is a new paragraph titled "Welding and Brazing". This new paragraph serves to consolidate the requirements applicable only to welding and brazing, and to clarify the distinction between when Construction Code requirements apply and when IWA-4400 requirements apply.	T
IWA-4412	This is a new paragraph titled "Defect Removal". This new paragraph serves to clarify that the requirements of IWA-4420 are mandatory for all defect removal activities, and to direct the user to these requirements.	T
IWA-4413	This is a new paragraph titled "Thermal Metal Removal". This new paragraph serves to clarify that the requirements of IWA-4461 are mandatory for all thermal metal removal activities, and to direct the user to these requirements.	T
IWA-4420	Revised title to "Defect Removal Requirements". This revision makes the title consistent with the changes described below.	TN
IWA-4421	Revised to "General Requirements" with the following specific changes: i) The second sentence of para. (a) is moved to IWA-4421. ii) The last sentence of para. (a) is dropped, since IWA-4412 now invokes requirements for defect removal and associated NDE. iii) The remainder of the text from IWA-4421(a), (b), and (c) is reorganized and moved to IWA-4411(a) and (b), except that the final sentence, "A Report of Reconciliation shall be prepared." has been deleted to make this paragraph consistent with the changes made.	TN

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ISI RELIEF REQUEST NUMBER: No. 7 Certificate of Reconciliation		
IWA-4422	Revised to "Defect Evaluation and Examination". This change makes the title consistent with the content changes described for IWA-4422.1. IWA-4421.1 was changed as follows: i) Title changed to "Defect Evaluation" ii) The first sentence of IWA-4422.1(a) is deleted. The requirement that the defect removal process comply with 4421 is unneeded, as it is redundant with the new IWA-4421 (a) through (d) iii) The third sentence of IWA-4422.1(a) is deleted. This deleted sentence stated, "The component is acceptable for continued service if the resulting section thickness created by the cavity is at least the minimum required thickness." This sentence is deleted for two reasons: 1) It is redundant with the proceeding sentence in IWA-4422.1(a) and 2) It implies that all defect removal operations involve metal removal and creation of a cavity. Several repair types do not involve metal removal or cavity creation.	TN
IWA-4430	This paragraph was deleted. Its contents were reworded and relocated to IWA-4411(f).	TN
IWA-4450	This was deleted from the Code in its entirety. Use of the ASME Code to mandate compliance with manufacturer's recommendations is considered inappropriate and constitutes the basis for deleting this requirement.	TN
IWA-4451	This was renumbered as IWA-4134 and is relocated accordingly. This relocation is consistent with the contents of IWA-4451, which address installation of helical-coil threaded inserts. The installation of helical-coil threaded inserts does not fall within the scope of IWA-4400.	TN
Table IWA-4461.1-1	This table was revised to delete reference to P-1 materials. This revision is editorial in nature, and is incorporated to make Table-4461.1 consistent with IWA-4461.1 and 4461.2. The revision for preheat of P-1 materials prior to thermal metal removal was deleted by a prior revision to IWA-4460, but Table IWA-4461.1 was not revised to reflect this revision.	E

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ISI RELIEF REQUEST NUMBER: No. 7 Certificate of Reconciliation		
IWA-4461.4	Title was revised to "Alternatives to Mechanical Processing". This change is necessary to accommodate a newly added alternative to mechanical processing after thermal metal removal, which is addressed in IWA-4461.4.2. The two alternatives are addressed in new paragraphs IWA-4461.4.1 and IWA-4461.4.2. IWA-4461.4.1 describes the qualification process whereby thermal metal removal is permitted without subsequent mechanical processing. No changes were made to these requirements other than paragraph renumbering. IWA-4461.4.2 describes the evaluation process where by thermal metal removal is permitted without subsequent mechanical processing. This alternative enables an Owner to perform a documented evaluation to determine whether elimination of mechanical processing is acceptable. A footnote was added to define the term "Mechanical Processing"	TS (Note 1)
IWA-4462	This was revised to "Mechanical Defect Removal Processes". IWA-4462(a) is replaced with wording that clarifies the applicability of this paragraph to defect removal activities only.	TN
IWA-4500	Title changed to "Examination and Testing"	TN
IWA-4520(a)	This was revised to add two specific exceptions. These exceptions are as follows: i) IWA-4521(a)(1) was revised to exempt Class 3 base material repairs from volumetric examination when full-penetration butt welds in the same location do not require volumetric examination. ii) IWA-4521(a)(2) was revised to invoke the examination requirements of IWA-4600 and 4700 in lieu of Construction Code examinations for all repairs using IWA-4600 or 4700. This exception invokes IWA-4600 NDE requirements for all IWA-4600 welding, and invokes IWA-4700 NDE requirements for IWA-4700 welding. This change clarifies that use of IWA-4600 and IWA-4700 welding alternatives and also mandates use of the associated NDE requirements.	TS (Note 1)
IWA-4600(a)	This was revised to delete the words "and nondestructive examination requirements". These words are deleted for clarification. The underwater welding alternative requirements of IWA-4660 apply in lieu of Construction Code requirements; however, IWA-4660 invokes Construction Code NDE requirements. Since IWA-4660 invokes Construction Code NDE requirements, it is incorrect to state that 4660's requirements are "in lieu of" Construction Code NDE requirements.	TN
IWA-4610	This was revised to "General Requirements for Temperbead Welding of all Materials"	TN

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IWA-4611	IWA-4611.1(a), (b) and (c) were deleted and alternative requirements were added. i) The defect removal requirements of 4611.1(a) have been moved to IWA-4421.1. The existing 4611(a), therefore is redundant and is no longer needed. ii) The IWA-4611.1(b) requirement that "the original defect shall be removed" has been revised to match what the original intent was by the words "the original defect shall be reduced in size to a level that meets the applicable Construction Code NDE acceptance criteria. The requirement for compliance with Construction Code acceptance criteria was added to IWA-4624.2, 4634.2, 4644.2 and 4654.2. iii) The IWA-4611.1(c) requirements for the Repair/Replacement Program and Plan are redundant with IWA-4150. Deletion of this paragraph eliminates this redundancy. IWA-4611.1(a), (b), and (c) additions are as follows: i) IWA-4611.1(a) now consists of a reference to IWA-4422.1. Use of this reference enables all defect removal activities to rely on a single set of defect removal requirements, eliminating redundancy and reducing complexity. ii) IWA-4611.1(b) now includes a reference to the NDE requirements applicable to each of the various repair methods authorized by IWA-4600. This reference is needed because each repair method includes its own unique NDE requirements, and these requirements are different from those used for welding and brazing activities that are not within the scope of IWA-4600. iii) IWA-4611.1(c) now includes a reference to the thermal metal removal requirements of IWA-4413. This reference is needed because the requirements for thermal metal removal apply to all IWA-4600 processes, and because thermal metal removal requirements have been consolidated into IWA-4461, which is referenced by IWA-4413. IWA-4611.2(a) was changed as follows: i) In the first line, the word "grinding" is replace with "processing". This change is necessary to acknowledge that final grinding is not always required for defect removal. ii) In the sixth line, "IWA-3000" is replaced with "IWB-3500, IWC-3500, or IWD-3000". This change adds a direct reference to the NDE acceptance criteria tables of IWB and IWC (Note: Since IWD tables are 'in course of preparation', the IWD-3000 reference invokes permission to use IWB requirements). By referencing these tables, IWA-4611.2(a) clarifies that the indication may be considered 'reduced to an acceptable level' only when the respective table's acceptance criteria has been met. iii) A new sentence states, "For supports and containment vessels, the provisions of IWA-4422.1(b) may be used." This sentence is added because ASME Section III Subsections NE and NF do not contain surface examination acceptance criteria for base materials, therefore, no criteria exist for these exams. IWA-4422.1(b) provides an evaluation alternative for these applications.	TS (Note 1)
IWA-4620	Title was revised to "Temperbead Welding of Similar Materials"	TN

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ISI RELIEF REQUEST NUMBER: No. 7 Certificate of Reconciliation		
IWA-4624	A) IWA-4624.1(a) was added to invoke IWA-4611.2(a), which mandates surface examination prior to welding for all temperbead repairs. This paragraph is added to assure that Section XI, IWA-3000 acceptance criteria is used for NDE of existing metal. B) IWA-4624.2 invokes Construction Code or Section III NDE acceptance criteria on in-processing welding and on the final weld. This assures that all newly installed weld metal complies with Construction Code requirements during installation and at the time of weld completion.	TS (Note 1)
IWA-4630	Title was revised to "Temperbead Welding of Dissimilar Materials"	TN
IWA-4634	This was revised similar to that discussed in IWA-4624 above.	TS (Note 1)
IWA-4644	This was revised similar to that discussed in IWA-4624 above.	TS (Note 1)
IWA-4654	This was revised similar to that discussed in IWA-4624 above.	TS (Note 1)
IWA-4666	This was revised to impose Construction Code NDE requirements on completed underwater welds. This paragraph also provides an alternative to these NDE requirements when the underwater environment renders normal NDE practical.	TS (Note 1)
IWA-4711.4	This was revised to clarify the final visual examination was to be a VT-1 examination.	TS (Note 1)
IWA-4712	This was revised to make its wording consistent with IWA-4711. This change states that use of these requirements is mandatory for Class 1 applications, but use of these requirements in Class 2 and Class 3 applications is also acceptable.	TN
IWA-4721.1	This was revised to make its wording consistent with IWA-4711. This change states that use of these requirements is mandatory for Class 1 applications, but use of these requirements in Class 2 and Class 3 applications is also acceptable.	TN
IWA-4131.1(a)	The change deleted the word "welded" located in before the reference to plugs.	TS (Note 2)
IWA-4713	This revision adds new requirements for qualification of Class 1 mechanical tube plugs. These requirements represent a compilation of the standards and methods that have been used for twenty years to design, qualify, and install steam generator tube plugs. They have proven to provide safe installation and service for mechanical steam generator tube plugs. These requirements include development and qualification of the plug design and of a Plugging Procedure Specification (PPS), and performance qualification for individuals who install the tube plugs	TS (Note 2)

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ISI RELIEF REQUEST NUMBER: No. 7 Certificate of Reconciliation		
IWA-4132	This revision deletes the requirement for pressure testing and VT-2 visual examination of relief valves rotated from stock and installed by mechanical means. In the 1999 Addenda, the requirement to pressure test mechanical joints made in installation of pressure retaining items was deleted from IWA-4540, because Owner's operation and maintenance personnel post-installation inspections are adequate without an additional Code-required examination. With the deletion of pressure tests for mechanical connections, a similar exemption is warranted for installation of relief valves by mechanical means. The revision also clarifies that no other IWA-4000 requirements apply to rotation of snubber and relief valves, except those of IWA-4132, and clarifies that use of an ANII is not required. This revision incorporates the provisions of Case N-508-2, "Rotation of Serviced Snubbers and Pressure Relief Valves for the Purpose of Testing, Section XI, Division 1."	TS (Note 3)

NOTE 1. It is important to apply the correct acceptance criteria to each repair/replacement activity completed. As reflected in the Final Rule, the NRC recognizes the difference between the NDE of the Construction Codes and ASME Section XI. The other changes were made to clarify the rules as they apply to the mechanical removal process and of a non-technical nature with reordering of paragraphs or moving of requirements to different paragraphs. The MNGP Repair/Replacement Program incorporates these requirements.

NOTE 2. NMC has determined that it is important to have all special processes qualified and/or demonstrated to verify the application. Because of the elimination of the word "welded," the alternative requirements provided in IWA-4131.1 are no longer applicable to any tube plugging (mechanical or welded). The MNGP Repair/Replacement Program incorporates these provisions.

NOTE 3. Since the code no longer requires a VT-2 Examination on installation of mechanical joints, the NMC has determined that the installation of relief valves rotated from MNGP stock and installed by mechanical means would not require a VT-2 examination.