



8

Nuclear Management Company, LLC

**DOCKET NUMBER**  
**PROPOSED RULE PR 50**  
**(69FR 00879)**

March 22, 2004

DOCKETED  
USNRC

March 22, 2004 (3:26PM)

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

ATTENTION: Rulemakings and Adjudications Staff

SUBJECT: Comments on NRC Proposed Rulemaking: Industry Codes and Standards;  
Amended Requirements (68 Federal Register 879, January 7, 2004)

Nuclear Management Company (NMC), LLC\* appreciates the opportunity to comment on the proposed amended requirements for industry codes and standards. NMC commends NRC for proactively reviewing newer editions and addenda of the code. NMC's comments on the proposed rule are enclosed for your consideration.

Edward J. Weinkam  
Director, Regulatory Services  
Nuclear Management Company, LLC

Enclosure

\*NMC is the licensed operator of the Duane Arnold Energy Center, Kewaunee Nuclear Power Plant, Monticello Nuclear Generating Plant, Palisades Nuclear Plant, Point Beach Nuclear Plant Units 1 and 2, and Prairie Island Nuclear Generating Plant Units 1 and 2.

CC: Gary Park

COMMENTS ON THE PROPOSED RULES  
 FEDERAL REGISTER  
 VOL. 69, No. 4  
 DATED WEDNESDAY, JANUARY 7, 2004

NRC LIMITATIONS	COMMENTS
<p><i>Paragraph 50.55a(b)(1)(vii):</i> Disapproval of Subsection NH of the 2001 Edition and 2002 and 2003 Addenda and withdrawal of prior NRC approval of Subsection NH of the 1995 through 2000 Addenda of Section III.</p>	<p>The reason for not approving Subsection NH is "Future reactor designs may not employ the special design methodologies for high temperatures described in Subsection NH absent specific approval by NRC". It appears if the NRC would approve Subsection NH, then reactor designers would be better able to design their plants with rules in place rather than proceeding at risk. All new construction requires ASME Section III for construction, if the temperatures allowed by Subsection NB are exceeded then NH should be used.</p>
<p><i>Paragraph (b)(2)(xiv):</i> Requirement that the existing modification for Appendix VIII personnel qualification in §50.55a(b)(2)(xiv) apply to 2001 Edition through 2003 Addenda</p>	<p>There is a typographical error in the "Section by Section Analysis". Section <u>XI</u> is specified as Section <u>IX</u>.</p>
<p><i>Paragraph (b)(2)(xv):</i> Requirement that the existing modification for Appendix VIII specimen set and qualification requirements in § 50.55a(b)(2)(xv) apply to the 2001 Edition.</p>	<p>There is a typographical error in the discussion of the proposed rule -- the first reference to N-552 is mistakenly typed as N-522</p>
<p><i>Paragraph (b)(2)(xxii):</i> Prohibits the use of IWA-2220 of the 2001 Edition and the 2002 and 2003 Addenda, which allows the performance of a surface examination using an ultrasonic examination method.</p>	<p>After the word prohibited above, add: "unless the ultrasonic examination method has been demonstrated by a successful performance demonstration" and revise to state: "Surface Examinations. The use of the provisions in IWA-2220, "Surface Examination," of Section XI, 2001 Edition through the latest edition and addenda incorporated by reference in paragraph (b)(2) of this section, that allow the use of an ultrasonic examination method, is prohibited unless the ultrasonic examination method has been demonstrated by a successful performance demonstration."</p>

<p><i>Paragraph (b)(2)(xxiii):</i> Requirement that tests and inspections and analysis specified in IWA-4461.4.2(a)(1) through (5) be considered by an evaluation when the mechanical processing of thermally cut surfaces is eliminated in accordance with IWA-4461.4.2 of the 2001 Edition and the 2002 and 2003 Addenda.</p>	<p>IWA-4461.4.2(a) states "The evaluation <b>shall</b> consider adverse effects associated with elimination of mechanical processing, <b>including</b>: (bold added). This means in code language that the evaluation shall include all those items in (a) (1) through (5) along with other specific details. The code already requires those items that the NRC is requiring in the proposed rule. This explicit requirement in the proposed rule should be eliminated.</p>
<p><i>Paragraph (b)(2)(xxiv):</i> Prohibit the use of Appendix VIII and the Supplements to Appendix VIII and Article I-3000 of the 2002 and 2003 Addenda. Licensees would be required to implement Appendix VIII and its supplements in accordance with either the 1995 through 2001 Edition or the alternative provided in paragraph (b)(2)(xv).</p>	<p>This should be revised to eliminate Article I-3000 from the limitation. The revision should state "The use of Appendix VIII and the supplements to Appendix VIII of Section XI of the 2002 Addenda through the latest edition and addenda incorporated by reference in paragraph b(2) of this section, is prohibited." Implementation of Article I of Section XI of the ASME BPV Code, 2002 Addenda through the latest edition and addenda incorporated by reference in paragraph (b)(2) will result in other positive benefits. The examination coverage requirements are more concisely defined in Article I and will be more easily understood by licensees and their contractors. Where coverage requirements are impossible to meet due to design access conditions, licensees will be able to submit for relief from a Code requirement rather than be concerned about asking for an exemption from the Rule. It will also enable licensees to evaluate effective application of Appendix VIII qualified procedures to other components outside the scope of Appendix VIII without additional confusion over the applicable examination coverage requirements.</p>
<p><i>Paragraph (b)(2)(xxv):</i> Prohibit the use of IWA-4340 of the 2001 Edition and the 2002 and the 2003 Addenda that allows the mitigation of defects by modification.</p>	<p>IWA-4340 provides requirements that are not any different than that approved for the BWR industry issue of Intergranular Stress Corrosion Cracking (IGSCC) and performing weld overlays. There are specific items that need to be addressed that should "bound" the defect and requires the Owner to establish frequency and method of examination. This limitation should be removed.</p>

*Paragraph (b)(2)(xxvi):* Requirement that Class 1, 2, and 3 mechanical joint pressure and test provisions in IWA-4540(c) of the 1998 Edition be used when repair and replacement activities are conducted in accordance with the 2001 Edition and the 2002 and 2003 Addenda.

This paragraph would require a pressure test of class 1, 2, and 3 mechanical joints following a repair/replacement activity. This action is not warranted for several reasons:

1. The Owner's operation and maintenance personnel post-testing inspections (using their Appendix B Program) provide adequate verification of the leak tightness of the mechanical joint prior to putting the item back into service. Appendix B states under section XI "Test Control" that a test program shall be established to assure that all testing required to demonstrate that structures, systems, and components will perform satisfactorily in service is identified and performed in accordance with written procedures which incorporate the requirements and acceptance limits contained in applicable design documents. The test program shall include, as appropriate, proof tests prior to installation, preoperational tests, and operational tests during nuclear power plant or fuel reprocessing plant operation, of structures, systems, and components. Test procedures shall include provisions for assuring that all prerequisites for given tests have been met, that adequate test instrumentation is available and used, and that the test is performed under suitable environmental conditions. Test results shall be documented and evaluated to assure that test requirements have been satisfied.

2. The plants are required to have a leakage-monitoring program in place. This program requires the plant to know where leakage is occurring and sets specific limits for the total amount of leakage.

3. During a repair/replacement activity, it is always good engineering practice and a requirement of the Owner's Appendix B Program (as stated above) to look at mechanical connections during the initial system startup to ensure a leak tight connection.

4. During the plant startup, a Class 1 leakage test is required. This test is governed by IWA-5240, which gives specific guidance on how the examinations are to be performed. If leakage should occur in the class 1 system or any other system during the conduct of pressure tests, this requirement would be in effect. For those systems bolated for the purpose of controlling reactivity, the insulation is required to be removed from bolted connections to allow a direct visual examination of the bolting. If any leakage is present, the plant would be required to stop the leakage or evaluate the consequences of allowing the leakage to continue.

5. For Class 2 and 3 systems, a Section XI mandated pressure test is required once each period. Again, the plant would be looking closely at all mechanical connections for evidence of leakage. If leakage is present, then it must be corrected or evaluated.

6. Plant personnel are trained to look for leakage during normal system walkdowns. These are performed by operations and engineering personnel on a frequent basis.

This is believed to provide the necessary requirements for maintaining the leak tightness of mechanical joints. Therefore, the revision to eliminate the pressure test requirement for Mechanical Joints from Section XI was justified and this limitation should be removed from the proposed rule and allow the use of the 2001 Edition through the 2003 Addenda as published.