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US Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

10 CFR Part 50
Section 50.55(a)

MONTICELLO NUCLEAR GENERATING PLANT
Docket No. 50-263 License No. DPR-22

Request for Authorization to Utilize ASME
Boiler & Pressure Vessel Code Case N-416-1

The purpose of this letter is to request NRC authorization to utilize ASME Boiler and Pressure Vessel Code Case N-416-1, "Alternative Pressure Test Requirement for Welded Repairs or Installation of Replacement Items by Welding, Class 1, 2, and 3, Section XI, Division 1" (attached), during the Monticello Third Ten Year Inservice Inspection Interval. Code Case N-416-1 provides increased testing flexibility to the Owner, which should considerably reduce, if not eliminate, the need for the processing of relief requests associated with post weld repair/replacement hydrostatic testing. This request is submitted pursuant to 10 CFR Part 50, Section 50.55a(a)(3) and Section 50.55a Footnote 6.

Code Case N-416-1 was approved by the ASME Code on February 15, 1994. However, because it was only recently approved by ASME, the Code Case has not yet been endorsed in Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability ASME Section XI Division 1", which was last revised in July of 1993. Until the Code Case is generically endorsed by the Regulatory Guide, specific NRC authorization is required before it can be used.

There have been several instances in recent outages where NSP has found it necessary to either defer or seek relief from ASME Section XI hydrostatic tests following repair or replacement activities. The most recent example was for the 1994 refueling outage Main Steam Isolation Valve (MSIV) replacement project (Reference: NSP Letter dated April 7, 1994 and NRC Response dated June 27, 1994). In each case, relief was necessary due to various reasons of impracticality in testing, most commonly the inability to isolate the affected component from the reactor vessel and attached piping to allow a local hydrostatic test. These situations are encountered during routine construction and maintenance activities, but can also arise unexpectedly due to problems identified during outage inspection or testing activities.

As a case in point, while performing 10 CFR Part 50 Appendix J Local Leak Rate Testing during the current 1994 refueling outage, it was determined that the inboard Main Steam Line Drain Isolation Valve (MO-2373) exhibited leakage in

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excess of the acceptance criteria (Note: this test failure will be discussed in greater detail in a pending 10 CFR Part 50.73 Licensee Event Report). Although repair of the existing valve will be attempted, there is a strong possibility that it may ultimately be necessary to cut out and replace the valve during the current outage. MO-2373 is part of the reactor coolant pressure boundary and is therefore ASME Class 1. The valve cannot be isolated from the reactor vessel, thus it would be necessary to subject reactor vessel and all attached piping out to and including the first isolation valve in each line to the full hydrostatic test pressure. Such a test is both impractical and technically unnecessary, and a relief request will be needed if valve replacement is required and authorization to utilize Code Case N-416-1 is not obtained.

10 CFR Part 50, Section 50.55(a)(3) allows the use of proposed alternatives to Code requirements provided it can be demonstrated that the proposed alternatives would provide an acceptable level of quality and safety. ASME approval of Code Case N-416-1 satisfies this requirement, and the NRC may authorize its use in accordance with 10 CFR Part 50, Section 50.55a, Footnote 6.

The 1994 refueling outage is scheduled to conclude on October 23, 1994 and a post-assembly reactor vessel leakage test is scheduled for October 12, 1994. In lieu of submitting a specific relief request for the MO-2373 repair/replacement work described above, NSP intends to use Code Case N-416-1 to define post repair pressure testing requirements for MO-2373, as well as any other emergent ASME code repairs or replacements that may be required. NRC staff review and authorization of this request is therefore needed as soon as practical, preferably before the October 12, 1994 leakage test, but no later than October 20, 1994 to support plant restart.

This letter contains no new NRC commitments. Please contact Terry Coss, Sr Licensing Engineer, at (612) 295-1449 if you require additional information.



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Director
Licensing and Management Issues

c: Regional Administrator-III, NRC
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NORTHERN STATES POWER COMPANY

State of Minnesota Boiler Inspector
Hartford Insurance

Attachment: ASME Code Case N-416-1

CODE CASE N-416-1

ALTERNATIVE PRESSURE TEST REQUIREMENT FOR WELDED REPAIRS OR INSTALLATION OF REPLACEMENT ITEMS BY WELDING

Section XI, Division 1 - Class 1, 2, and 3

INQUIRY: What alternative pressure test may be performed in lieu of the hydrostatic pressure test required by IWA-4000 for welded repairs or installation of replacement items by welding?

REPLY: It is the opinion of the Committee that in lieu of performing the hydrostatic pressure test required by IWA-4000 for welded repairs or installation of replacement items by welding, a system leakage test may be used provided the following requirements are met.

1. NDE shall be performed in accordance with the methods and acceptance criteria of the applicable Subsection of the 1992 Edition of Section III.
2. Prior to or immediately upon return to service, a VT-2 visual examination shall be performed in conjunction with a system leakage test, using the 1992 Edition of Section XI, in accordance with IWA-5000, at nominal operating pressure and temperature.
3. Use of this Case shall be documented on an NIS-2 Form.

If the previous version of this case were used to defer a Class 2 hydrostatic test, the deferred test may be eliminated when the requirements of this revision are met.

APPLICABILITY: ASME Section XI, 1974 Edition through the 1992 Edition with 1992 Addenda.