



Northern States Power Company  
Prairie Island Nuclear Generating Plant  
1717 Wakonade Dr. East  
Welch, Minnesota 55089

November 1, 1995

10 CFR Part 50  
Section 50.55(a)

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

PRAIRIE ISLAND NUCLEAR GENERATING PLANT  
Docket Nos. 50-282 License Nos. DPR-42  
50-306 DPR-60

Request for Authorization to Utilize ASME  
Boiler & Pressure Vessel Code Case N-521

The purpose of this letter is to request NRC authorization to utilize ASME Boiler and Pressure Vessel Code Case N-521, "Alternative Rules for Deferral of Inspections of Nozzle-to-Vessel Welds, Inside Radius Sections, and Nozzle-to-Safe End Welds of a Pressurized Water Reactor (PWR) Vessel, Section XI, Division 1" (attached), during the Prairie Island Third Ten Year Inservice Inspection Interval for both Units 1 and 2. Code Case N-521 provides for deferral of the inspection of the mentioned welds to the end of the inspection interval provided specified conditions are satisfied, rather than performing the inspections in the first and third periods of the inspection interval. This request is submitted pursuant to 10 CFR Part 50, Section 50.55a(a)(3) and Section 50.55a Footnote 6.

Code Case N-521 was approved by the ASME Code on August 9, 1993. 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". Until the Code Case is generically endorsed by the Regulatory Guide, specific NRC authorization is required before it can be used.

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ASME Code Section XI requires that at least 25% but not more than 50% of the Nozzle-to-Vessel, Inside Radius Sections, and Nozzle-to-Safe End welds be examined in the first period of the ten year interval.

During the Prairie Island Unit 1, 1996 (Unit 2, 1997) refueling outage, which is the last refueling outage of the first inspection period, two of the reactor vessel outlet nozzle inside radius sections would need to be scheduled for examination in order to meet the 25 percent minimum requirement of Section XI under the present ten-year ISI program. To do these inspections equipment is required to be placed in the reactor vessel. In addition, outlet nozzle safe ends would be required to be inspected; however, we can perform these inspections without placing special tooling inside the reactor vessel.

We believe that the significant additional cost for each unit to perform the examinations of the reactor vessel outlet nozzle inside radius sections, in separate outages from the other examinations, is not a practical expenditure of resources in light of the following points:

1. Ten of the twelve reactor vessel nozzle-to-vessel welds and their associated inside radius sections were last examined in 1994 (Unit 2, 1993), per ASME Section XI, 1980 Edition, Winter 1981 Addenda, with no observed indications. We consider the results of these past examinations to be representative of the present reactor vessel nozzle conditions at Prairie Island;
2. Although the scheduled welds and inside radius sections are to be examined with automated equipment, some personnel radiation exposure will occur. As part of our overall ALARA program, any amount of personnel radiation exposure that can be saved is important. In addition, radioactive waste will be reduced;
3. It makes good sense to combine all reactor vessel examinations into one automated effort from both ALARA and cost considerations. Using the same vendor, equipment, personnel, and procedures to examine all the welds at the same time will enhance the quality of the examination results and produce a much smaller possibility of error.
4. It would provide increased safety to move the equipment into and out of the vessel only once in the interval.

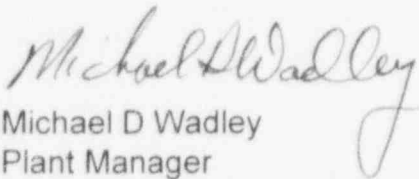
Code Case N-521 allows deferral of the inspections of Nozzle-to-Vessel Welds, Inside Radius Sections, and Nozzle-to-Safe End Welds of a PWR vessel to the end of the inspection interval if the following conditions are met:

- a) No inservice repairs or replacements by welding have ever been performed on any of the Nozzle-to-Vessel Welds, Inside Radius Sections, and Nozzle-to-Safe End Welds.
- b) None of the Nozzle-to-Vessel Welds, Inside Radius Sections, and Nozzle-to-Safe End Welds contains identified flaws or relevant conditions that currently require successive inspections in accordance with IWB-2420-(b).
- c) The unit is not in the first inspection interval.

Both Prairie Island units meet the provisions outlined in the Code Case and therefore requests authorization to use the Code Case to defer the first period inspections of at least 25% to the end of the 3rd inspection interval.

In this letter we have made no new Nuclear Regulatory Commission commitments.

Please contact Jack Leveille (612-388-1121, Ext. 4662) if you have any questions related to this letter.



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