UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

In the Matter	)	
	)	
NORTHERN STATES POWER COMPANY	)	Docket No. 50-
	)	
(Monticello Nuclear Generating Plant)	)	

EXEMPTION

I.

The Northern States Power Company (the licensee) is the holder of Facility Operating License No. DPR-22, which authorizes operation of the Monticello Nuclear Generating Plant (the facility) at a steady-state power level not in excess of 1670 megawatts thermal. The facility is a boiling water reactor located at the licensee's site in Wright County, Minnesota. The license provides, among other things, that the facility is subject to all rules, regulations and Orders of the Nuclear Regulatory Commission (the Commission) now or hereafter in effect.

II.

Section IV.A of Appendix J states "Any major modification, replacement of a component which is part of the primary reactor containment boundary, or resealing a seal-welded door, performed after the preoperational leakage rate test shall be followed by either a Type A, Type B, or Type C test, as applicable for the area affected by the modification." In response to an application dated February 26, 1991, the licensee would be exempted from the requirement of Appendix J to 10 CFR Part 50 to the extent that a leakage rate test would not

be performed on the welds of two containment modifications being performed during the Cycle 14 refueling outage. The containment modifications involve the installation of gate valves in the High Pressure Coolant Injection (HPCI) and Reactor Core Isolation Cooling (RCIC) Systems turbine steam exhaust lines. One such exhaust line leads from each turbine to the suppression pool (torus). Each line presently contains two swing check valves which serve as containment isolation valves. The modifications consist of installing a gate valve between the swing check valve pair and the torus penetration in each turbine exhaust line. The purpose of the gate valves is to facilitate maintenance and testing. The gate valves will have drilled disks to ensure that their packing glands are included within the test boundary of local leak rate tests performed on the swing check isolation valves.

The installation of each gate valve constitutes a "containment modification" subject to the requirements of Appendix J, Section IV.A, which states "Any major modification, replacement of a component which is part of the primary reactor containment boundary, or resealing a seal-welded door, performed after the preoperational leakage rate test shall be followed by either a Type A, Type B, or Type C test, as applicable for the area affected by the modification." The two new gate valves, by virtue of their location in the steam exhaust lines between the primary containment and primary containment isolation valves, constitute part of the containment boundary. Accordingly, Appendix J requires that the new gate valves be leakage rate tested following installation. The valve bonnets, packing glands, and turbine-side butt weld pipe attachment joints will be Type C tested following installation. However, for the torus-side butt weld pipe attachment joints, Type C testing is impractical due to lack of a means to apply a test pressure. Type A testing is not practical following the

modification due to the fact that plans for such a test are not scheduled or otherwise required for the Cycle 14 outage. In lieu of a Type A, B, or C leak rate test, the licensee has proposed 100 percent radiography of the affected weld as well as dye penetrant or magnetic particle testing. This will ensure that the intent of the Appendix J requirement cited above is met.

III.

The underlying purpose of the requirements of Section IV.A of Appendix J to 10 CFR Part 50 is to ensure that primary containment integrity is not compromised when containment boundary modifications are performed. In the case of the HPCI and RCIC steam exhaust valves, this is achieved and served by the non-destructive tests.

IV.

Based on the above evaluation, the staff has reviewed the alternative weld inspection proposal and concluded that these examinations are sufficient to assure structural and leak tight integrity and meets the intent of Section IV.A of Appendix J.

Accordingly, the Commission has determined that pursuant to 10 CFR Part 50.12(a), that (1) this exemption as described in Section III is authorized by law, will not present an undue risk to the public health and safety, is consistent with the common defense and security, and (2) special circumstances are present for the exemption in that application of the regulation in this particular circumstance is not necessary to achieve the underlying purposes of Section IV.A of Appendix J to 10 CFR Part 50. Therefore, the Commission hereby grants an exemption from Section IV.A of Appendix J to 10 CFR Part 50 to

allow continued operation of the facility without leak rate testing the torus-side welds of the HPCI and RCIC exhaust line gate valves.

Pursuant to 10 CFR Part 51.32, the Commission has determined that the granting of this Exemption will have no significant impact on the environment (56 FR 13655).

For further details with respect to this action, see the request for exemption dated February 26, 1991, which is available for public inspection at the Commission's Public Document Room 2120 L Street, N.W., Washington, D.C. 20555, and at the Minneapolis Public Library, Technology and Science Department, 300 Nicollet Mall, Minneapolis, Minnesota 55401.

This Exemption is effective upon issuance and remains in effect until the next regularly scheduled Type A containment integrated leak rate test.

FOR THE NUCLEAR REGULATORY COMMISSION

Bruce Boger, Director
Division of Reactor Projects, III/IV/V
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland
this 8th day of April 1991.