

UNITED STATES NUCLEAR REGULATORY COMMISSION  
NORTHERN STATES POWER COMPANY  
MONTICELLO NUCLEAR GENERATING PLANT  
DOCKET NO. 50-263  
ENVIRONMENTAL ASSESSMENT AND  
FINDING OF NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an exemption from the requirements of 10 CFR Part 50.54(o), Appendix J to the Northern States Power Company (the Licensee) for operation of the Monticello Nuclear Generating Plant, located in Wright County, Minnesota.

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action:

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 System (HPCI) and Reactor Core Isolation Cooling (RCIC) 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 Need for the Proposed Action:

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 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.

Environmental Impacts of the Proposed Action:

The Commission has completed its evaluation of the proposed exemption. The alternative testing proposed by the licensee will assure that containment

integrity is maintained and will provide improved testing capability for other components. Therefore, the proposed exemption does not involve a significant increase in the probability or consequences of an accident, no changes are being made in the types of any effluents that may be released offsite, or significantly increase the individual or cumulative occupational radiation exposure. Accordingly, the Commission concludes that this action would result in no significant radiological environmental impact.

With regard to potential non-radiological impacts, the proposed exemption involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. It does not affect non-radiological plant effluents and has no other environmental impact. Therefore, the Commission concludes that there are no significant non-radiological environmental impacts associated with the proposed exemption.

Alternative to the Proposed Action:

The Commission has concluded that there is no measurable impact associated with the proposed exemption; any alternatives to the exemption will have either no environmental impact or greater environmental impact.

The principal alternative would be to deny the requested exemption. This would not reduce environmental impacts of plant operation and would result in significant impact to length of outage and critical path activities.

Alternative Use of Resources:

This action does not involve the use of any resources beyond the scope of resources used during normal plant operation, which have been previously considered by the Commission in the Final Environmental Statement dated November 22, 1972.

Agencies and Persons Consulted:

The NRC staff reviewed the licensee's request and did not consult with other agencies or persons.

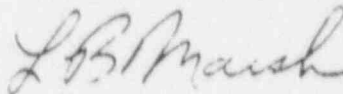
FINDING OF NO SIGNIFICANT IMPACT

Based upon the foregoing environmental assessment, the Commission concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the Commission has determined not to prepare an environmental impact statement for the proposed amendment.

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., and at the Minneapolis Public Library, Technology and Science Department, 300 Nicollet Mall, Minneapolis, Minnesota 55401.

Dated at Rockville, Maryland, this 26th day of March 1991.

FOR THE NUCLEAR REGULATORY COMMISSION



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