

**CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIALS PACKAGES**

1. a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. PACKAGE IDENTIFICATION NUMBER	d. PAGE NUMBER	e. TOTAL NUMBER PAGES
9238	0	USA/9238/A	1	2

2. PREAMBLE

- a. This certificate is issued to certify that the packaging and contents described in Item 5 below, meets the applicable safety standards set forth in Title 10, Code of Federal Regulations, Part 71, "Packaging and Transportation of Radioactive Material."
- b. This certificate does not relieve the consignor from compliance with any requirement of the regulations of the U.S. Department of Transportation or other applicable regulatory agencies, including the government of any country through or into which the package will be transported.

3. THIS CERTIFICATE IS ISSUED ON THE BASIS OF A SAFETY ANALYSIS REPORT OF THE PACKAGE DESIGN OR APPLICATION

- a. ISSUED TO (Name and Address)
- b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION

Northern States Power Company
414 Nicollet Mall
Minneapolis, MN 55401-1927

Northern States Power Company
application dated October 26, 1989,
as supplemented.

c. DOCKET NUMBER 71-9238

4. CONDITIONS

This certificate is conditional upon fulfilling the requirements of 10 CFR Part 71, as applicable, and the conditions specified below

5. (a) Packaging

- (1) Model No.: Pathfinder Reactor Vessel
- (2) Description

A carbon steel reactor vessel, containing irradiated metal components meeting the requirements of low specific activity radioactive material. The vessel has approximate dimensions of 138 inches in diameter and 408.5 inches in length. The reactor vessel wall is ASTM A 212 Grade B carbon steel approximately 3 inches thick. The reactor vessel head is bolted on the vessel with 48, 3-inch diameter studs. Steel cover plates are welded on the reactor vessel nozzles. The reactor vessel contains irradiated steel reactor internals and pea gravel, and is filled with solidified grout. A 1-3/4-inch thick steel radiation shield is welded to the outer surface of the vessel at the core region. An aluminum honeycomb impact limiter surrounds the vessel and the radiation shield. A 1/4-inch thick steel skin covers the aluminum honeycomb material. The overall dimensions of the package, including impact limiter, are approximately 158 inches in diameter and 408.5 inches in length. The weight of the package is approximately 580,000 pounds.

(3) Drawings

The package is constructed and assembled in accordance with Northern States Power Company Drawing Nos. 15377-050-S6005, Rev. B, 15377-050-S6001, Rev. 1, and 15377-050-S6002, Rev. 2, and Figures 1.1 and 1.2 of Northern States Power Company application dated October 26, 1989.

CONDITIONS (continued)

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5. (b) Contents

(1) Type and form of material

Irradiated steel reactor components meeting the requirements of low specific activity radioactive material.

(2) Maximum quantity of material per package

Greater than Type A quantity of byproduct material contained in irradiated reactor components and associated corrosion product layers.

6. The package authorized by this certificate must be transported on a motor vehicle, railroad car, inland water craft, or hold of a deck of a seagoing vessel assigned for sole use of the licensee.
7. The lifting points must be rendered inoperable for tie-down of the package.
8. In addition to the requirements of Subpart G of 10 CFR Part 71, the package must be prepared for shipment and operated in accordance with Chapter 8 of the application.
9. The package authorized by this certificate is hereby approved for use under the general license provision of 10 CFR §71.12.
10. Expiration Date: September 30, 1995.

REFERENCES

Northern States Power Company application dated October 26, 1989.

Supplements Dated: May 30, 1990, June 5, 1990, and August 20, 1990.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION



Charles E. MacDonald, Chief
Transportation Branch
Division of Safeguards
and Transportation, NMSS

Date: OCT 11 1990