

May 7, 1985

Docket Nos. 50-282  
and 50-306

Mr. D. M. Musolf  
Nuclear Support Services Department  
Northern States Power Company  
414 Nicollet Mall  
Midland Square - 4th Floor  
Minneapolis, Minnesota 55401

Dear Mr. Musolf:

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SUBJECT: EXEMPTION REQUEST OF DECEMBER 21, 1984 - FIRE PROTECTION  
SCHEDULAR REQUIREMENTS OF 10 CFR 50.48(c) - PRAIRIE ISLAND  
NUCLEAR GENERATING PLANT, UNITS 1 AND 2

In your letters dated December 21, 1984 and January 30, 1985, you requested further schedular relief from 10 CFR 50.48(c) in regard to the installation of one hour fire barriers in Fire Areas 31, 32, 58, 59, 73 and 74 at the Prairie Island Nuclear Generating Plant, Unit Nos. 1 and 2, as required by subsection III.G of Appendix R. Specifically, you requested that the deadline for implementation of this requirement for both Units be extended to June 1, 1985.

In your exemption request, you asked for an additional 5 month period to complete the installation of the one-hour barriers for both units and explained the circumstances that made the additional time necessary.

The Commission has granted your request as described in the enclosed Exemption. If the NRC should determine that this implementation date as granted by this Exemption is not met and no good cause can be shown for your failure to meet the date, you will be found in violation of 10 CFR 50.48(c).

A copy of the Exemption is being filed with the Office of the Federal Register for publication.

Sincerely,

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PDR ADDCK 05000282  
F PDR

Original Signed by  
Hugh L. Thompson, Director  
Division of Licensing

Enclosure:  
Exemption

cc w/enclosure  
See next page

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Mr. William Miller, Auditor  
Goodhue County Courthouse  
Red Wing, Minnesota 55066

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of	}	
NORTHERN STATES POWER COMPANY	}	Docket Nos. 50-282 and 50-306
(Prairie Island Nuclear Generating	}	
Plant Unit Nos. 1 and 2)	}	
	}	

EXEMPTION

I.

The Northern States Power Company (the licensee) is the holder of Facility Operating License Nos. DPR-42 and DPR-60 which authorize operation of the Prairie Island Nuclear Generating Plant, Unit Nos. 1 and 2. These licenses provide, among other things, that they are subject to all rules, regulations and Orders of the Commission now or hereafter in effect.

The facility comprises two pressurized water reactors at the licensee's site located in Goodhue County, Minnesota.

II.

By letters dated December 21, 1984 and January 30, 1985, the licensee requested an exemption from the schedular requirements of 10 CFR 50.48(c), which establishes deadlines for the completion of fire protection modifications required by Appendix R to 10 CFR Part 50. Specifically, the licensee requested that the current deadline of December 31, 1984 for the installation of one-hour barriers pursuant to Section III.G.2(c) and the exemption issued by letter dated April 26, 1984, be extended to June 1, 1985, for both Prairie Island units. The request applies to Fire Areas 31, 32, 58, 59, 73 and 74, in which areas certain shutdown-related cables are being wrapped to provide the requisite one-hour barrier.

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III.

The licensee states that the installation of cable wrapping in these fire areas is the only remaining Appendix R modification for the Prairie Island units. In the fire areas mentioned, all other Appendix R measures have been taken to the extent required, i.e., suppression and detection capabilities. Specifically, in Fire Areas 31 and 32 the shutdown related systems are protected by automatic fire detection and fire suppression systems. If a fire should occur in these areas, it would be detected in its initial stages and suppressed by the suppression systems to allow time for the fire brigade to attend the fire during its infancy, before significant propagation occurs. If a rapid temperature rise occurs before the arrival of the fire brigade, the fire suppression system would actuate to control the fire and protect the shutdown systems. We therefore have reasonable assurance that, pending completion of the licensee's Appendix R related modification, a fire in either of these two areas will not result in disabling the shutdown systems to the extent that the safe shutdown could not be achieved and maintained.

In the remaining areas (i.e., 58, 59, 73, and 74) that do not have a fire suppression system, the licensee committed by letter dated January 30, 1985 to implement a roving fire watch patrol in the remaining fire areas for which the scheduler relief has been requested. The fire watch will continue until all fire protection related work associated with Appendix R has been completed. The routing of the fire watch will be established so that the patrol observes each area at a frequency of about every 20 minutes to ensure that a fire could not damage redundant safe shutdown related equipment. If a fire were to occur, the control room will be immediately notified and the fire brigade response initiated. Pending the arrival of the fire

brigade, the fire watch patrol will be trained in the proper use of portable fire extinguishers in suppressing the fire before significant damage could occur. On this basis, if a fire would occur within an area provided with a fire watch, there is reasonable assurance that it will be detected in its incipient stage before significant flame or temperature rise occurs.

The licensee's efforts to complete the one-hour barrier installation have been delayed somewhat by the late delivery of wrapping material and unforeseen interface problems between environmental qualification work going on at the same time as Appendix R efforts were being planned. The delay in material delivery was due to the large influx of orders which the manufacturer received after approval of the material by the NRC staff. A design hold was placed on the associated cable wrapping in Fire Areas 31 & 32 until the potential issue of relocating the auxiliary feedwater pumps related to environmental qualification was resolved.

The only remaining activity in fire protection at the Prairie Island Nuclear Generating Plant is the installation of the cable wrapping in the affected fire areas. Moreover the staff has judged that the delays encountered by the licensee were unforeseen and could not be avoided. In addition, the interim compensatory measures committed to by the licensee for the extended period will result in maintaining an adequate level of safety that is equivalent to that intended by Appendix R.

The staff finds that the licensee has proceeded diligently to implement Appendix R at the Prairie Island units and that the fire protection measures required by Appendix R have been installed with the sole exception of the cable wrap for which the extension is requested. Under these circumstances,

the public health and safety will not be adversely affected by the extension of the deadline for a period of 5 months, especially considering that the work will be accomplished steadily throughout this period.

IV.

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12, an exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest and hereby grants the following exemption with respect to the requirements of subsection III.G. of Appendix R to 10 CFR Part 50:

Extend the implementation date in 10 CFR 50.48 (c)(2) for installation of modification in Fire Areas 31, 32, 58, 59, 73 and 74 required by Appendix R subsection III.G for both units, from December 31, 1984 to June 1, 1985.

Pursuant to 10 CFR 51.32, the Commission has determined that the issuance of the Exemption will have no significant impact on the environment (50 FR 18333).

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read "H.R. Denton", is written over the typed name.

Harold R. Denton, Director  
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland 7th day of May, 1985