

December 21, 1989

Docket Nos. 50-282
and 50-306

Mr. T. M. Parker, Manager
Nuclear Support Services
Northern States Power Company
414 Nicollet Mall
Minneapolis, Minnesota 55401

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Dear Mr. Parker:

SUBJECT: CORRECTION TO AMENDMENT NOS. 90 AND 83 TO FACILITY OPERATING LICENSE
NOS. DPR-42 AND DPR-60 (TAC NOS. 72972 AND 72973)

On August 28, 1989, the Commission issued Amendment Nos. 90 and 83 to Facility Operating License Nos. DPR-42 and DPR-60 for the Prairie Island Nuclear Generating Plant, Unit Nos. 1 and 2. The amendments consisted of changes to the Technical Specification (TS) by permitting the irradiation of the fuel assemblies with enrichment up to 4.25 weight percent (w/o) Uranium-235 and the storage of such assemblies prior to and subsequent to loading the assemblies in the reactors.

The following TS pages had typographical and/or editorial errors:

TS.3.8-3, Section 3.8E.1(b) stated "...three storage locations of every four by four storage rack array." The statement should read "...three storage locations of every two by two storage rack array.

TS.5.3-1, Section 5.3A.1, line 2 should read "...enriched uranium dioxide pellets. The pellets are encapsulated...."

The Reference appearing on TS page TS 5.6-3 should have a vertical line indicating the area of change.

The corrected TS pages are enclosed. Please accept our apology for any inconvenience these errors may have caused you.

Sincerely,

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|
|

Original signed

Dominic C. DiIanni, Project Manager
Project Directorate III-1
Division of Reactor Projects - III,
IV, V & Special Projects
Office of Nuclear Reactor Regulation

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Enclosure:
As stated

cc w/enclosure:
See next page

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PSHEA
12/19/89

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PM/PD31:DRSP
DDIIANNI
12/20/89

ADY
LA/PD31:DRSP
JFHOMA
12/29/89

CORRECTION LETTER

CP-1



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

December 21, 1989

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and 50-306

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Nuclear Support Services
Northern States Power Company
414 Nicollet Mall
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Sincerely,

A handwritten signature in cursive script that reads "Dominic C. DiIanni".

Dominic C. DiIanni, Project Manager
Project Directorate III-1
Division of Reactor Projects - III,
IV, V & Special Projects
Office of Nuclear Reactor Regulation

Enclosure:
As stated

cc w/enclosure:
See next page

Mr. T. M. Parker
Northern States Power Company

Prairie Island Nuclear Generating
Plant

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

D. Spent Fuel Pool Special Ventilation System

1. Except as specified in Specification 3.8.D.3 below, both trains of the Spent Fuel Pool Special Ventilation System and the diesel generators required for their operation shall be operable at all times.
2. a. The results of in-place DOP and halogenated hydrocarbon tests at design flows on HEPA filters and charcoal adsorber banks respectively shall show $\geq 99\%$ DOP removal for particles having a mean diameter of 0.7 microns and $\geq 99\%$ halogenated hydrocarbon removal.
- b. The results of laboratory carbon sample analysis shall show $\geq 90\%$ radioactive methyl iodide removal efficiency (130°C, 95% RH).
- c. The Spent Fuel Pool Special Ventilation System fans shall operate within $\pm 10\%$ of 5200 cfm per train.
3. From and after the date that one train of the Spent Fuel Pool Special Ventilation System is made or found inoperable for any reason, fuel handling operations are permissible only during the succeeding seven days (unless such train is made operable) provided that the redundant train is verified to be operable daily.
4. If the conditions for operability of the Spent Fuel Pool Special Ventilation System cannot be met, fuel handling operations in the Auxiliary Building shall be terminated immediately.

E. Storage of Low Burnup Fuel

1. The following restrictions shall apply whenever fuel with an average assembly burnup less than 5,000 MWD/MTU is stored in the spent fuel pool (except as specified in 3.8.E.2 and 3.8.E.3 below):
 - a. The boron concentration in the spent fuel pool shall be maintained greater than or equal to 500 ppm, and
 - b. Fuel with an average assembly burnup less than 5,000 MWD/MTU shall not be stored in more than three storage locations of every two by two storage rack array.
2. If the conditions in 3.8.E.1.a above are not met, verify that the spent fuel pool storage configuration meets the requirements of specification 3.8.E.1.b and suspend all actions involving the movement of fuel in the spent fuel pool until the boron concentration is increased to 500 ppm or greater.
3. If the conditions in 3.8.E.1.b above are not met, suspend all actions involving movement of fuel in the spent fuel pool, verify the spent fuel pool boron concentration to be greater than or equal to 500 ppm and initiate corrective actions. Mis-positioned fuel assemblies shall be moved to acceptable locations prior to the resumption of other fuel movement in the spent fuel pool.

Prairie Island Unit 1 - Amendment No. 17, 28, 73, 74, 90
 Prairie Island Unit 2 - Amendment No. 11, 19, 66, 67, 83

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5.3 REACTOR

A. Reactor Core

1. The reactor core contains uranium in the form of slightly enriched uranium dioxide pellets. The pellets are encapsulated in Zircaloy-4 tubing to form fuel rods. The reactor core is made up of 121 fuel assemblies. Each fuel assembly contains 179 fuel rods (Reference 1).
2. The maximum enrichment will be 4.25 weight percent U-235.
3. In the reactor core, there are 29 full-length RCC assemblies that contain a 142-inch length of silver-indium-cadmium alloy clad with stainless steel (Reference 2).

B. Reactor Coolant System

1. The design of the reactor coolant system complies with all applicable code requirements (Reference 3).
2. All high pressure piping, components of the reactor coolant system and their supporting structures are designed to Class I requirements, and have been designed to withstand:
 - a. The design seismic ground acceleration, 0.06g acting in the horizontal and 0.04g acting in the vertical planes simultaneously, with stresses maintained within code allowable working stresses.
 - b. The maximum potential seismic ground acceleration, 0.12g, acting in the horizontal and 0.08g acting in the vertical planes simultaneously with no loss of function.
3. The nominal liquid volume of the reactor coolant system, at rated operating conditions, is 6100 cubic feet.

C. Protection Systems

The protection systems for the reactor and engineered safety features are designed to applicable codes, including IEEE-279, dated 1968. The design includes a reactor trip for a high negative rate of change of neutron flux as measured by the excore nuclear instruments (Reference 4). The system is intended to trip the reactor upon the abnormal dropping of more than one control rod (Reference 4). If only one control rod is dropped, the core can be operated at full power for a short time, as permitted by Specification 3.10.

References

- | | |
|------------------------|-----------------------|
| 1. USAR, Section 3.4.2 | 3. USAR, Table 4.1-11 |
| 2. USAR, Section 3.5.2 | 4. USAR, Section 7.1 |

Prairie Island Unit 1 - Amendment No. 33, 48, 80, 90
 Prairie Island Unit 2 - Amendment No. 29, 42, 73, 83

The spent fuel cask will be lowered 66 feet from the auxiliary building to the railroad car for offsite transportation. Specification 3.8 will limit this loading operation so that if the cask drops 66 feet, there will not be a significant release of fission products from the fuel in the cask.

D. Spent Fuel Storage Capacity

The spent fuel storage facility is a two-compartment pool that, if completely filled with fuel storage racks, provides up to 1582 storage locations. The southeast corner of the small pool (pool no. 1) also serves as the cask lay down area. During times when the cask is being used, four racks are removed from the small pool. With the four storage racks in the southeast corner of pool 1 removed, a total of 1386 storage locations are provided. To allow insertion of a shipping cask, total storage is limited to 1386 assemblies, not including those assemblies which can be returned to the reactor.

Reference

1. USAR, Section 10.2