

JUL 08 1975

DISTRIBUTION

Docket No. 50-263

Northern States Power Company
ATTN: Mr. L. O. Mayer
Director of Nuclear
Support Services
414 Nicollet Mall
Minneapolis, Minnesota 55401

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Gentlemen:

The Commission has issued the enclosed Amendment No. 10 to Provisional Operating License No. DPR-22 for the Monticello Nuclear Generating Plant in response to your request dated May 30, 1975.

The amendment increases the limit of uranium 235 from 2300 kilograms to 3200 kilograms to permit the receipt, possession and use of replacement fuel elements for the Monticello Plant.

Copies of our Safety Evaluation and the Federal Register Notice relating to this action also are enclosed.

Sincerely,

Original signed by
Dennis L. Ziemann

Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Division of Reactor Licensing

Enclosures:

- 1. Amendment No. 10
- 2. Safety Evaluation
- 3. Federal Register Notice

cc w/enclosures:
See next page

Q/P
License of Admin
(1)

OFFICE →	RL:ORB #2 <i>RMD</i>	RL:ORB #2 <i>BCB</i>	RL:ORB #2 <i>DLZ</i>	OELD <i>SHL</i>	RL:AD/ORS
SURNAME →	RMDiggs	BCBuckley:tc	DLZiemann	S H Lewis	KRGoller
DATE →	6/1/75	6/13/75	6/24/75	7/18/75	6/1/75

JUL 08 1975

cc w/enclosures:

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Mr. D. S. Douglas, Auditor
Wright County Board of Commissioners
Buffalo, Minnesota 55313

cc w/enclosures and cy of NSPCo's
filing dtd 5/30/75:

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Secretary & Executive Officer
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Minneapolis, Minnesota 55440

Mr. Gary Williams
Federal Activities Branch
Environmental Protection Agency
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Chicago, Illinois 60604

NORTHERN STATES POWER COMPANY

DOCKET NO. 50-263

MONTICELLO NUCLEAR GENERATING PLANT

AMENDMENT TO PROVISIONAL OPERATING LICENSE

Amendment No. 10
License No. DPR-22

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Northern States Power Company (the licensee) dated May 30, 1975, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The receipt, possession and use of the special nuclear material as authorized by this license, as amended, will be in accordance with 10 CFR Part 70, including Sections 70.23 and 70.31.
2. Accordingly, Provisional Operating License No. DPR-22, as amended, is hereby further amended by revising in its entirety paragraph 2.B. thereof to read as follows.

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"B. Pursuant to the Act and 10 CFR Part 70, "Special Nuclear Material," to receive, possess, and use at any one time up to 3200 kilograms of uranium 235 as reactor fuel assemblies, 50 grams of uranium 235 as fission chambers, and 16 grams of plutonium as contained Pu-Be neutron sources in connection with operation of the facility."

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by
Dennis L. Ziemann

Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Division of Reactor Licensing

Date of Issuance: JUL 08 1975

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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 10 TO FACILITY OPERATING LICENSE NO. DPR-22

NORTHERN STATES POWER COMPANY

MONTICELLO NUCLEAR GENERATING PLANT

DOCKET NO. 50-263

INTRODUCTION

By letter dated May 30, 1975, the Northern States Power Company requested an amendment to License No. DPR-22 for the Monticello Nuclear Generating Plant. The requested change increases the U-235 possession limit from 2300 kilograms to 3200 kilograms. The increase in the possession limit will permit the licensee to take delivery of new fuel elements which will replace irradiated fuel elements scheduled to be removed from the reactor core and stored in the spent fuel pool in October 1975.

EVALUATION

Replacement of the initial core fuel was originally scheduled for the Spring of 1976. However, due to unanticipated high activity levels in the reactor coolant and a corresponding increase of the radioactive gaseous effluent activity, the licensee plans to refuel in October 1975. The premature removal of all remaining initial core fuel elements prior to their planned burnup and replacement with new fuel will result in the licensee possessing 3200 kilograms of U-235 which exceeds the currently approved possession limit of 2300 kilograms. The net result is an increase of 900 kilograms in the inventory of un-fissioned U-235.

The licensee's planned course of action is as follows:

1. Temporarily store 150 new fuel elements in the spent fuel storage pool which presently contains 216 spent fuel elements.

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2. Temporarily store 118 new fuel elements in the new fuel storage vault. Prior to shutdown, these fuel elements would be transferred to the spent fuel storage pool. There are presently no fuel elements in the new fuel storage vault.
3. Remove from the core and store the remaining 268 initial fuel elements in the spent fuel pool. Each time a fuel element is removed from the core and stored in the spent fuel pool a new fuel element will be placed in the vacant core fuel cell to effectuate a one-to-one fuel element interchange. Strict adherence to the one-to-one fuel interchange is not required for safety since any combination of 740 fuel elements approved for use at this facility can be safely stored in the spent fuel pool.

After completion of refueling operations, there will be no new fuel elements stored in the new fuel vault or spent fuel storage pool, and there will be 484 irradiated fuel elements stored in the spent fuel pool. The spent fuel storage pool is designed to accommodate 740 fuel elements at their most reactive exposure with an attendant multiplication factor of less than 0.90 dry or in the flooded (non-borated) water condition. The new fuel storage vault is similarly designed to store 150 new fuel elements with a multiplication factor of less than 0.90 dry and less than 0.95 in the flooded (non-borated) water condition. Consequently, the proposed number of fuel elements that will be stored at a time in either storage locations will not exceed the design capacity and will not result in an increased hazard or introduce a different type of hazard not previously considered at this facility.

CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) because the change does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the change does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: JUL 08 1975

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UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-263

NORTHERN STATES POWER COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO PROVISIONAL
OPERATING LICENSE

Notice is hereby given that the U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 10 to Provisional Operating License No. DPR-22 issued to the Northern States Power Company (the licensee) for operation of the Monticello Nuclear Generating Plant (the facility) located in Wright County, Minnesota. The amendment is effective as of its date of issuance.

The amendment increases the amount of uranium 235 (from 2300 kilograms to 3200 kilograms) that the licensee may receive, possess and use in connection with operation of the facility in accordance with the licensee's application dated May 30, 1975. This amendment is required so that the licensee can receive new fuel assemblies for refueling of the reactor.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment is not required since the amendment does not involve a significant hazards consideration.

For further details with respect to this action, see (1) the application for amendment dated May 30, 1975, (2) Amendment No. 10

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to License No. DPR-22, and (3) the Commission's concurrently issued Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. and at The Environmental Conservation Library, 300 Nicollet Mall, Minneapolis, Minnesota 55414. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention, Director, Division of Reactor Licensing.

Dated at Bethesda, Maryland, this 8th day of July 1975

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed By
Dennis L. Ziemann

Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Division of Reactor Licensing

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~~the amendment increases the amount of uranium 235 (from 2300 kilograms to 3200 kilograms) that the licensee may receive, possess and use in connection with operation of the facility in accordance with the licensee's application data~~
May 30, 1975. The ~~amendment is required~~ ^{amendment is required} so that the licensee can receive ~~the~~ ^{new} fuel elements to replace some of the partially spent ~~fuel elements~~ ^{fuel elements} ~~currently in the facility~~ ^{currently in the facility} ~~for refueling of the reactor.~~