

UNITED STATES NUCLEAR REGULATORY COMMISSION

NORTHERN STATES POWER COMPANY

MONTICELLO NUCLEAR GENERATING PLANT

DOCKET NO. 50-263

REQUEST FOR AMENDMENT TO
OPERATING LICENSE DPR-22

LICENSE AMENDMENT REQUEST DATED FEBRUARY 14, 1986

Northern States Power Company, a Minnesota corporation, requests authorization for changes to the Monticello Operating License as shown on the attachments labeled Exhibit A and Exhibit B. Exhibit A describes the proposed changes along with reasons for the changes. Exhibit B is a copy of the Monticello Operating License incorporating the proposed changes.

This letter contains no restricted or other defense information.

NORTHERN STATES POWER COMPANY

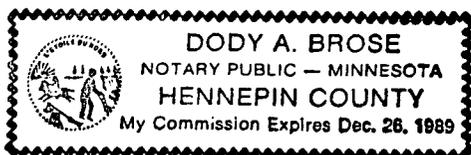
By



David Musolf

Manager-Nuclear Support Services

On this 14~~th~~ day of February, 1986 before me a notary public in and for said County, personally appeared David Musolf, Manager-Nuclear Support Services, and being first duly sworn acknowledged that he is authorized to execute this document on behalf of Northern States Power Company, that he knows the contents thereof, and that to the best of his knowledge, information, and belief the statements made in it are true and that is is not interposed for delay.



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Exhibit A

Monticello Nuclear Generating Plant

License Amendment Request Dated February 14, 1986

Description and Evaluation of Proposed
Change to Operating License DPR-22

Pursuant to 10 CFR Part 50, Section 50.90, the holders of Operating License DPR-22 hereby propose the following changes:

License Expiration Date

Change paragraph 2.G of the Facility Operating License for the Monticello Nuclear Generating Plant, Unit No. 1, License No. DPR-22, to read:

- G. This license is effective as of the date of issuance and shall expire midnight September 8, 2010.

Refer to Exhibit B for the actual page changes.

Reasons for Change

The current Operating License expiration date is 40 years from the date of issuance of the Construction Permit (June 19, 1967). Because approximately 39 months were required to construct the facility to the point of fuel loading and startup testing, the effective period of the license is only 36 years and nine months. Current NRC policy is to issue operating licenses for a 40-year period dated from the date of issuance. The requested change in expiration date of the Monticello Operating License would provide for the 40-year period of operation that the plant was initially designed for.

Northern States Power Company believes that the useful life of the Monticello Nuclear Generating Plant is significantly more than the 40 years requested in this license amendment application. We are currently involved in a Plant Life Extension Program (PLEX) pilot project at Monticello. The program is being supported by the Electric Power Research Institute (EPRI) and the US Department of Energy (DOE). The purpose of this program is to determine the optimum safe operating life of the facility and establish a program of surveillance, testing, and planned replacement/refurbishment to support this goal. We also expect that the program will help us to maintain plant availability and safety at the current high levels over the full life of the facility.

EXHIBIT A

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Determination of Significant Hazards Considerations

The proposed change to the Operating License has been evaluated to determine whether it constitutes a significant hazards consideration as required by 10 CFR Part 50, Sections 50.91 using the standards provided in Section 50.92. This analysis is provided below:

1. The proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated.

The plant was designed and constructed primarily on the basis of 40 years of plant operation. For example, the reactor vessel was designed and fabricated for a 40-year life. Analyses performed as part of the Monticello PLEX pilot program indicate a realistic service life of the reactor vessel of approximately 70 years.

The analyses contained in the Monticello Final Safety Analysis Report were performed primarily on the basis of 40 years of plant operation.

Analyses and information presented in the Monticello Environmental Report, in general, were not dependent on any specific period of plant operation.

Procedures and programs are in place to detect abnormal deterioration and aging of critical plant components. Examples include:

- a. Plant pressure retaining vessels, piping, and support systems are inspected in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and 10 CFR Part 50, Section 50.55(g). Safety related pumps and valves are included in a test program meeting the requirements of Section XI of the Code and the plant Technical Specifications.
- b. Safety related electrical equipment has been environmentally qualified in accordance with the requirements of 10 CFR Part 50, Section 50.49. Aging analyses establish required intervals for equipment replacement.

EXHIBIT A

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c. A number of special inspections and investigations have been performed by the Monticello technical staff providing additional assurance that abnormal or unanticipated degradation will not occurring in components required for safe and reliable plant operation. These inspections have included such items as pipe, valve, and fitting wall thickness measurements in steam lines subject to erosion and inspection of buried cables and piping. Additional inspections of this nature will be identified as part of the Monticello PLEX pilot study.

2. The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously analyzed.

The proposed amendment involves only a change in the expiration date of the Operating License. No safety analyses are affected. No new or different accident type is created. The accident analyses presented in the Updated Safety Analysis Report remain bounding.

3. The proposed amendment will not involve a significant reduction in the margin or safety.

The proposed amendment involves only a change in the expiration date of the Operating License. No safety margins are affected.

The licensing basis of the plant, as described in the Updated Safety Analysis Report and the Environmental report, was 40 years of plant operation.

For the reasons stated above, we have concluded that this license amendment does not involve a significant hazards consideration. It is a purely administrative change in the term of the Operating License which is permitted by the regulations of the Commission.

Review of Monticello Environmental Report

We have reviewed the Monticello Environmental Report dated November 5, 1971 as supplemented on April 4, 1972. We have concluded that the environmental impact associated with operation of the Monticello plant for a 40-year period of operation was properly considered in this report. The Environmental Report, as supplemented, does not generally use or discuss a specific period of plant operation in the evaluations presented.

Exhibit A

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In the approximately 15 years of plant operation since the Environmental Report was issued, a number of modifications have been made to the Monticello plant and surrounding site and facilities. These modifications were generally made to improve the reliability and safety of the plant or to reduce the environmental impact of plant operation. They include:

a. Facilities - Many modifications to the plant have been made since the original operating license has been issued. Significant modifications are described in the Monticello Updated Safety Analysis Report. Modifications made without prior NRC approval in accordance with the provisions of 10 CFR Part 50, Section 50.59, were reported on an annual basis to the Commission. Modifications requiring prior NRC approval were made following receipt of an NRC Safety Evaluation Report. No modification was found to affect the conclusions of the Monticello Environmental Report.

b. Land Use - Additional property surrounding the plant site, and outside of the site boundary assumed for 10 CFR Part 50, Appendix I, and 10 CFR Part 100 compliance purposes, has been purchased. This property has served as an additional buffer between the facility and development of land nearby. Additional site buildings have been constructed and existing buildings have been expanded. The actual land area occupied by site buildings has not significantly increased, however.

c. Thermal Effects - Modifications to the plant discharge canal have been made to further reduce the potential for adverse impact on aquatic life near the plant.

d. Radiological Effects and Radwaste Treatment Systems - The Monticello Offgas System was modified in 1974 to include compressed storage. Holdup times prior to release are typically several hundred hours. Computed offsite doses are typically a few percent of the 10 CFR Part 50, Appendix I, guidelines of 10 mrad/year gamma and 20 mrad/year beta air dose and 15 mrem/year organ dose.

Modifications to plant liquid radwaste system equipment and procedures have been made to eliminate the need for routine release of treated radioactive liquid wastes. With the exception of accidental releases in 1981-1982 totaling less than 0.01 Ci, no plant liquid releases have been made since 1972. Offsite dose due to liquid effluents is essentially zero.

Exhibit A

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e. Area Population - The Monticello plant site has been annexed by the City of Monticello, Minnesota and some residential development has occurred that was not discussed in the Environmental Report. The total population within the 10-mile Emergency Planning Zone remains relatively small, however, and the basic character of the surrounding land remains rural. This is not expected to change over the 40-year life of the facility.

Exhibit B

License Amendment Request Dated February 14, 1986
Docket No. 50-263 License No. DPR-22

Exhibit B consists of revised pages for the Monticello Nuclear Operating License showing the proposed changes.