



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

September 28, 2009

Mr. Timothy J. O'Connor
Site Vice President
Monticello Nuclear Generating Plant
Northern States Power Company - Minnesota
2807 West County Road 75
Monticello, MN 55362-9637

SUBJECT: MONTICELLO NUCLEAR GENERATING PLANT (MNGP) - ISSUANCE OF
AMENDMENT REGARDING REACTOR WATER CLEANUP SYSTEM ISOLATION
(TAC NO. ME1514)

Dear Mr. O'Connor:

The Commission has issued the enclosed Amendment No. 164 to Renewed Facility Operating License No. DPR-22 for the Monticello Nuclear Generating Plant. The amendment consists of changes to the Technical Specifications in response to your application dated May 29, 2009.

The amendment changes the MNGP Technical Specifications, revising the applicability for isolation of the Reactor Water Cleanup System on a Standby Liquid Control system initiation to align with the modes stated in Specification 3.1.7.

A copy of our related safety evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

A handwritten signature in cursive script that reads "Karl D. Feintuch".

Karl D. Feintuch, Project Manager
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-263

Enclosures:

1. Amendment No. 164 to DPR-22
2. Safety Evaluation

cc w/encls: Distribution via ListServ



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

NORTHERN STATES POWER COMPANY

DOCKET NO. 50-263

MONTICELLO NUCLEAR GENERATING PLANT

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 164
License No. DPR-22

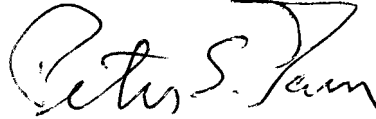
1. The U. S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Northern States Power Company - Minnesota (the licensee), dated May 29, 2009, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the 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 issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.2 of Renewed Facility Operating License No. DPR-22 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 164, are hereby incorporated in the license. NSPM shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 90 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read "Peter S. Tam". The signature is fluid and cursive, with the first name "Peter" being the most prominent.

Peter S. Tam, Acting Chief
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment: Changes to Renewed Facility Operating License
and Technical Specifications

Date of Issuance: September 28, 2009

ATTACHMENT TO LICENSE AMENDMENT NO. 164

RENEWED FACILITY OPERATING LICENSE NO. DPR-22

DOCKET NO. 50-263

Replace the following page of Renewed Facility Operating License DPR-22 with the revised page attached. The revised page is identified by amendment number and contains a marginal line indicating the area of change.

REMOVE

3

INSERT

3

Replace the following page of Appendix A, Technical Specifications, with the revised page attached. The revised page is identified by amendment number and contains a marginal line indicating the area of change.

REMOVE

3.3.6.1-7

INSERT

3.3.6.1-7

2. Pursuant to the Act and 10 CFR Part 70, NSPM to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operations, as described in the Final Safety Analysis Report, as supplemented and amended, and the licensee's filings dated August 16, 1974 (those portions dealing with handling of reactor fuel) and August 17, 1977 (those portions dealing with fuel assembly storage capacity);
 3. Pursuant to the Act and 10 CFR Parts 30, 40 and 70, NSPM to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentati and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
 4. Pursuant to the Act and 10 CFR Parts 30, 40 and 70, NSPM to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
 5. Pursuant to the Act and 10 CFR Parts 30 and 70, NSPM to possess, but not separate, such byproduct and special nuclear material as may be produced by operation of the facility.
- C. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission, now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
1. Maximum Power Level
NSPM is authorized to operate the facility at steady state reactor core power levels not in excess of 1775 megawatts (thermal).
 2. Technical Specifications
The Technical Specifications contained in Appendix A, as revised through Amendment No. 164, are hereby incorporated in the license. NSPM shall operate the facility in accordance with the Technical Specifications.
 3. Physical Protection
NSPM shall implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search

Primary Containment Isolation Instrumentation
3.3.6.1

Table 3.3.6.1-1 (page 3 of 3)
Primary Containment Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
5. RWCU System Isolation					
d. SLC System Initiation	1, 2, 3	1	H	SR 3.3.6.1.6	NA
e. Reactor Vessel Water Level - Low	1, 2, 3	2	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ -48 inches
6. Shutdown Cooling System Isolation					
a. Reactor Steam Dome Pressure - High	1, 2, 3	2	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 81.8 psig
b. Reactor Vessel Water Level - Low	3, 4, 5	2 ^(a)	I	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ 7 inches
7. Traversing Incore Probe System Isolation					
a. Reactor Vessel Water Level - Low	1, 2, 3	2	G	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ 7 inches
b. Drywell Pressure - High	1, 2, 3	2	G	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 2.0 psig

(a) Only one channel per trip system, with an isolation signal available to one shutdown cooling supply isolation valve, is required in MODES 4 and 5, provided RHR Shutdown Cooling System integrity is maintained.



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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 164 TO

RENEWED FACILITY OPERATING LICENSE NO. DPR-22

NORTHERN STATES POWER COMPANY - MINNESOTA

MONTICELLO NUCLEAR GENERATING PLANT

DOCKET NO. 50-263

1.0 INTRODUCTION

By letter dated May 29, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML091690575), Northern States Power Company of Minnesota (NSPM, the licensee) requested changes to the Technical Specifications (TSs) for Monticello Nuclear Generating Plant. The licensee proposed to revise the applicability for isolation of the Reactor Water Cleanup (RWCU) system on a Standby Liquid Control (SLC) system initiation (Function 5.d, in Table 3.3.6.1-1, "Primary Containment Isolation Instrumentation") to align with the modes stated in Specification 3.1.7.

2.0 BACKGROUND

On September 15, 2005, the licensee submitted an application for a full-scope alternative source term (AST) amendment (Accession No. ML052640366), which was approved by the Nuclear Regulatory Commission (NRC) staff on December 7, 2006, by Amendment No. 148 (Accession No. ML062790015). With adoption of the full-scope AST, the SLC system became credited for control of suppression pool pH to mitigate the radiological consequences of the design-basis accident loss-of-coolant accident in which fuel is damaged.

The licensee submitted a supplement to the AST full-scope License Amendment Request, dated August 21, 2006 (Accession No. ML062350046), translating the proposed AST changes from the custom Technical Specifications (CTS) format to the corresponding improved Technical Specifications (ITS) format. The applicability of the SLC system in Specification 3.1.7 was revised in this supplement to reflect the addition of Mode 3 to the previously existing modes of applicability for the SLC System, i.e., Modes 1 and 2, which had been carried over from the CTS to the ITS. However, the applicability for isolation of the (RWCU) system on a SLC system initiation (Function 5.d in Table 3.3.6.1-1) was not changed to include Mode 3.

3.0 TECHNICAL EVALUATION

The SLC System is designed to provide the capability of bringing the reactor, at any time in a fuel cycle, from full power and minimum control rod inventory (which is at the peak of the xenon transient) to a subcritical condition with the reactor in the most reactive xenon free state without taking credit for control rod movement. The SLC System satisfies the requirements of 10 CFR 50.62 on anticipated transient without scram.

The Bases for Specification 3.1.7 and Table 3.3.6.1-1 for Function 5.d state that isolation of the RWCU system on SLC system initiation is necessary to prevent dilution and removal of the boron solution by the RWCU system. In addition, Section 5.4.8 "Reactor Water Cleanup System (BWR)," of the Standard Review Plan states that design should include:

“Provisions to automatically terminate flow to the RWCS following liquid poison injection into the reactor water.”

This provision was included in the SLC system design. Later this provision was captured in the applicable TS requirements. Therefore, the proposed change merely serves to restate the system design requirements in the applicable portions of the TS.

The NRC staff agrees that the proposed change will continue to assure that the SLC system and RWCU system design requirements and assumptions of the AST analysis are met. Based on this, the NRC staff finds that the proposed change is acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Minnesota State official was notified of the proposed issuance of the amendment. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding (74 FR 37248). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

6.0 CONCLUSION

The NRC staff has concluded, on the basis of the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: Tony Nakanishi

Date: September 28, 2009

Mr. Timothy J. O'Connor
Site Vice President
Monticello Nuclear Generating Plant - Minnesota
Northern States Power Company - Minnesota
2807 West County Road 75
Monticello, MN 55362-9637

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Sincerely,

/RA/

Karl D. Feintuch, Project Manager
Plant Licensing Branch III-1
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A. Nakanishi, NRR

Accession No.: **ML092260614**

OFFICE	LPL3-1/PM	LPL3-1/LA	SRXB/BC	OGC/NLO	LPL3-1/BC(A)
NAME	KFeintuch	THarris for BTully	GCranston*	AJones	PTam
DATE	09/23/09	08/28/09	07/17/09	09/09/09	09/28/09

*Safety evaluation input transmitted by memo on date shown.

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