

February 21, 2008

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

SUBJECT: MONTICELLO NUCLEAR GENERATING PLANT - ISSUANCE OF AMENDMENT  
RE: REQUEST TO REVISE TECHNICAL SPECIFICATION SURVEILLANCE  
REQUIREMENT 3.5.1.3 TO CORRECT THE ALTERNATE NITROGEN SYSTEM  
PRESSUSRE (TAC NO. MD4292)

Dear Mr. O'Connor:

The Commission has issued the enclosed Amendment No. 155 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 January 30, 2007, as supplemented by letter dated December 28, 2007.

The amendment revised Technical Specifications Surveillance Requirement 3.5.1.3.b to correctly state that the required pressure at which the Alternate Nitrogen System is determined to be operable should be greater than or equal to 410 psig, not the former stated pressure of greater than or equal to 220 psig.

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,

**/RA/**

Karl 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. 155 to DPR-22
2. Safety Evaluation

cc w/encls: See next page

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Package Accession No.: **ML080590519**

Amendment Accession No.: **ML080380638**

Tech. Spec. page Accession No.: **ML080590541**

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\*Safety evaluation transmitted by memo of 1/29/08.

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NUCLEAR MANAGEMENT COMPANY, LLC

DOCKET NO. 50-263

MONTICELLO NUCLEAR GENERATING PLANT

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 155  
License No. DPR-22

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Nuclear Management Company, LLC (the licensee), dated January 30, 2007, as supplemented by letter dated December 28, 2007, 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:

2. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 155, are hereby incorporated in the license. NMC 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 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

***/RA/***

Patrick D. Milano, 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: February 21, 2008

ATTACHMENT TO LICENSE AMENDMENT NO. 155

RENEWED FACILITY OPERATING LICENSE NO. DPR-22

DOCKET NO. 50-263

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

REMOVE

INSERT

3

3

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

REMOVE

INSERT

3.5.1-4

3.5.1-4

2. Pursuant to the Act and 10 CFR Part 70, NMC 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, NMC 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 instrumentation 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, NMC 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, NMC 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  
  
NMC 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. 155, are hereby incorporated in the license. NMC shall operate the facility in accordance with the Technical Specifications.
  3. Physical Protection  
  
NMC 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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 155 TO

RENEWED FACILITY OPERATING LICENSE NO. DPR-22

NUCLEAR MANAGEMENT COMPANY, LLC

MONTICELLO NUCLEAR GENERATING PLANT

DOCKET NO. 50-263

1.0 INTRODUCTION

By application dated January 30, 2007 (Accession No. ML070310516), as supplemented by letter dated December 28, 2007 (Accession No. ML073650180), the Nuclear Management Company, LLC (the licensee), requested changes to the Technical Specifications (TSs) for the Monticello Nuclear Generating Plant. The proposed amendment would change TS Surveillance Requirement (SR) 3.5.1.3.b to state that the required pressure for operability of the Alternate Nitrogen System (ANS) is greater than or equal to 410 psig, and not greater than or equal to 210 psig as is currently stated.

The licensee's December 28, 2007, supplement provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the NRC staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on March 27, 2007 (72 FR 14307).

The Nuclear Regulatory Commission (NRC) staff's evaluation of the licensee's application is set forth in the following sections.

2.0 REGULATORY EVALUATION

Upon discovery of an error in SR 3.5.1.3.b, the licensee implemented administrative controls to maintain ANS pressure above 410 psig, in accordance with the guidance of Nuclear Regulatory Commission Administrative Letter 98-10.

The ANS system provides automatic, safety-related, long-term, backup pneumatic supply upon loss of the non-safety-related Instrument Nitrogen System distribution. It is split into an A and B train, which services various loads, including six safety release valves (SRVs) associated with the Automatic Depressurization System (ADS), low-low setpoint, and the alternate shutdown and manual depressurization functions.

The NRC staff has reviewed the licensee's request to ensure it has no effect on the ability of the ANS system to perform its required ADS function. The NRC staff also reviewed the submitted information to ensure that the ANS system provide sufficient capacity to cycle the ADS valves five times at design pressure to satisfy Three Mile Island (TMI) action item II.K.3.28 of NUREG-0737.

### 3.0 TECHNICAL EVALUATION

Operability of the ANS is based on the capability to provide sufficient volume to its safety and required non-safety loads. The ANS is composed of an A and B train, and the loads of the B train bound those served by the A train. For that reason, the B train loads were used for calculation of the surveillance requirement pressure for ANS operability. The B train ANS loads consist of the four inboard main steam isolation valves, three SRVs, and four T-ring seals on containment purge and vent valves

The licensee stated that a pressure switch in each ANS subsystem isolates the nitrogen supply from its loads when pressure decreases to 200 psig. To determine the required nitrogen bottle pressure for operability, the volume of nitrogen required to operate the loads was added to the volume of nitrogen remaining at the minimum pressure.

The licensee stated that an instrument error was applied to the pressure switch for conservatism in the calculation of the remaining volume of nitrogen at minimum pressure. Calculations of the pressure drop in the nitrogen bottles were made using the ideal gas law with a compressibility factor for high pressures. These calculations were made at two bounding temperatures and the more conservative results were used for selecting the new TS surveillance requirement. The licensee's calculations support the proposed new pressure requirement of 410 psig for SR 3.5.1.3.

The NRC staff reviewed the licensee's calculations, and verified that the ANS B train was capable of providing fifteen SRV actuations (five actuations for each of the three SRVs supplied by ANS B train) supporting TMI action item II.K.3.28. Thus, the NRC staff concludes that the proposed change to TS surveillance requirement 3.5.1.3.b is conservative and, 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 or change the surveillance requirements. 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 (72 FR 14307). 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, based on 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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: E. Davidson

Date: February 21, 2008

Monticello Nuclear Generating Plant

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