

August 10, 2007

Mr. Michael D. Wadley  
Site Vice President  
Prairie Island Nuclear Generating Plant  
Nuclear Management Company, LLC  
1717 Wakonade Drive East  
Welch, MN 55089

SUBJECT: PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNITS 1 AND 2 -  
ISSUANCE OF AMENDMENTS RE: MISCELLANEOUS TECHNICAL  
SPECIFICATION IMPROVEMENTS (TAC NOS. MD2822 AND MD2823)

Dear Mr. Wadley:

The Commission has issued the enclosed Amendment No. 180 to Facility Operating License No. DPR-42 and Amendment No. 170 to Facility Operating License No. DPR-60 for the Prairie Island Nuclear Generating Plant (PINGP), Units 1 and 2, respectively. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated August 14, 2006, as supplemented by letter dated July 16, 2007.

The amendments make miscellaneous improvements to the TSs for PINGP, Units 1 and 2. The amendments revise TS 1.3, "Completion Times"; TS 3.1.4, "Rod Group Alignment Limits"; TS 3.3.7, "Spent Fuel Pool Special Ventilation System (SFPSVS) Actuation Instrumentation"; TS 3.7.10, "Control Room Special Ventilation System (CRSVS)"; and TS Chapter 4.0, "Design Features."

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/

Mahesh L. Chawla, Project Manager  
Plant Licensing Branch III-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-282 and 50-306

Enclosures:

1. Amendment No. 180 to DPR-42
2. Amendment No. 170 to DPR-60
3. Safety Evaluation

cc w/encls: See next page

Mr. Michael D. Wadley  
Site Vice President  
Prairie Island Nuclear Generating Plant  
Nuclear Management Company, LLC  
1717 Wakonade Drive East  
Welch, MN 55089

SUBJECT: PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNITS 1 AND 2 -  
ISSUANCE OF AMENDMENTS RE: MISCELLANEOUS TECHNICAL  
SPECIFICATION IMPROVEMENTS (TAC NOS. MD2822 AND MD2823)

Dear Mr. Wadley:

The Commission has issued the enclosed Amendment No. 180 to Facility Operating License No. DPR-42 and Amendment No. 170 to Facility Operating License No. DPR-60 for the Prairie Island Nuclear Generating Plant (PINGP), Units 1 and 2, respectively. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated August 14, 2006, as supplemented by letter dated July 16, 2007.

The amendments make miscellaneous improvements to the TSs for PINGP, Units 1 and 2. The amendments revise TS 1.3, "Completion Times"; TS 3.1.4, "Rod Group Alignment Limits"; TS 3.3.7, "Spent Fuel Pool Special Ventilation System (SFPSVS) Actuation Instrumentation"; TS 3.7.10, "Control Room Special Ventilation System (CRSVS)"; and TS Chapter 4.0, "Design Features."

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/

Mahesh L. Chawla, Project Manager  
Plant Licensing Branch III-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-282 and 50-306

Enclosures:

1. Amendment No. 180 to DPR-42
2. Amendment No. 170 to DPR-60
3. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION

PUBLIC  
RidsNrrLATHarris  
G. Hill, OIS  
RidsNrrDorlDpr

LPL3-1 r/f  
RidsOGCRp  
RidsRgn3MailCenter

RidsNrrDorlLpl3-1  
RidsAcraAcnwMailCenter

RidsNrrPMMChawla  
RidsNrrDirsltsb

**ADAMS ACCESSION NO: ML071660005 , Package ML071660002 , TS Pages ML072220040**

\*per Memo dated January 31, 2007

OFFICE	NRR/LPL3-1	NRR/LPL3-1/PM	NRR/LPL3-1/LA	NRR/ITSB	OGC	NRR/LPL3-1/(A)BC
NAME	JPoole	MChawla	THarris	TKobetz*	NLO/MPL	TTate
DATE	8/9/07	08/9/07	08/9/07	1/31/07	06/27/07	08/10/07

OFFICIAL RECORD COPY

NUCLEAR MANAGEMENT COMPANY, LLC

DOCKET NO. 50-282

PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 180  
License No. DPR-42

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Nuclear Management Company, LLC (the licensee), dated August 14, 2006, as supplemented by letter dated July 16, 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 Facility Operating License No. DPR-42 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 180, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

***/RA/***

Travis L. Tate, Acting Chief  
Plant Licensing Branch III-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility Operating License  
and Technical Specifications

Date of Issuance: August 10, 2007

NUCLEAR MANAGEMENT COMPANY, LLC

DOCKET NO. 50-306

PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 170

License No. DPR-60

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Nuclear Management Company, LLC (the licensee), dated August 14, 2006, as supplemented by letter dated July 16, 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 Facility Operating License No. DPR-60 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 170, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

***/RA/***

Travis L. Tate, Acting Chief  
Plant Licensing Branch III-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility Operating License  
and Technical Specifications

Date of Issuance: August 10, 2007

ATTACHMENT TO LICENSE AMENDMENT NOS. 180 AND 170

FACILITY OPERATING LICENSE NOS. DPR-42 AND DPR-60

DOCKET NOS. 50-282 AND 50-306

Replace the following pages of the Facility Operating License No. DPR-42 and DPR-60 with the attached revised pages. The changed areas are identified by a marginal line.

REMOVE

INSERT

DPR-42, License Page 3

DPR-42, License Page 3

DPR-60, License Page 3

DPR-60, License Page 3

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

REMOVE

INSERT

1.3-11

1.3-11

3.1.4-4

3.1.4-4

3.3.7-4

3.3.7-4

3.7.10-2

3.7.10-2

3.7.10-3

3.7.10-3

4.0-4

4.0-4

- (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 and equipment calibration or associated with radioactive apparatus or components;
- (5) Pursuant to the Act and 10 CFR Parts 30 and 70, NMC to possess but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility;
- (6) Pursuant to the Act and 10 CFR Parts 30 and 70, NMC to transfer byproduct materials from other job sites owned by Northern States Power Company for the purpose of volume reduction and decontamination.

C. This amended license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; 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 1650 megawatts thermal.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 180, are hereby incorporated in the license. NMC shall operate the facility in accordance with the Technical Specifications.

(3) Physical Protection

NMC shall fully 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 Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contains Safeguards Information protected under 10 CFR 73.21, is entitled: "Prairie Island Nuclear Generating Plant Security Plan, Training and Qualification Plan, Safeguards Contingency Plan, and Independent Spent Fuel Storage Installation Security Program," Revision 1, submitted by letters dated October 18, 2006, and January 10, 2007.

Unit 1

Amendment No. 180

- (5) Pursuant to the Act and 10 CFR Parts 30 and 70, NMC to possess but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility;
  - (6) Pursuant to the Act and 10 CFR Parts 30 and 70, NMC to transfer byproduct materials from other job sites owned by Northern States Power Company for the purposes of volume reduction and decontamination.
- C. This amended license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; 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 1650 megawatts thermal.
  - (2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 170, are hereby incorporated in the license. NMC shall operate the facility in accordance with the Technical Specifications.
  - (3) Physical Protection

NMC shall fully 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 Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contains Safeguards Information protected under 10 CFR 73.21, is entitled: "Prairie Island Nuclear Generating Plant Security Plan, Training and Qualification Plan, Safeguards Contingency Plan, and Independent Spent Fuel Storage Installation Security Program," Revision 1, submitted by letters dated October 18, 2006, and January 10, 2007.

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 180 TO FACILITY OPERATING LICENSE NO. DPR-42  
AND AMENDMENT NO. 170 TO FACILITY OPERATION LICENSE NO. DPR-60  
NUCLEAR MANAGEMENT COMPANY, LLC  
PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNITS 1 AND 2  
DOCKET NOS. 50-282 AND 50-306

## 1.0 INTRODUCTION

By application dated August 14, 2006 (Agency Documents Access and Management System (ADAMS) Accession No. ML062270248), as supplemented by letter dated July 16, 2007 (ADAMS Accession No. ML071980141), the Nuclear Management Company, LLC (the licensee), requested an amendment to revise the Technical Specifications (TSs) for the Prairie Island Nuclear Generating Plant (PINGP), Units 1 and 2. The amendments would revise the wording in the section headers in TS 1.3, "Completion Times"; remove a Surveillance Note in TS 3.1.4, "Rod Group Alignment Limits"; remove applicable modes in TS 3.3.7, "Spent Fuel Pool Special Ventilation System (SFPSVS) Actuation Instrumentation"; clarify TS 3.7.10, "Control Room Special Ventilation System (CRSVS)"; and update a reference in TS 4.0, "Design Features."

The licensee's supplement dated July 16, 2007, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the Nuclear Regulatory Commission (NRC) staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on November 21, 2006 (71 FR 67397).

## 2.0 REGULATORY EVALUATION

Section 182a of the Atomic Energy Act (Act) requires applicants for nuclear power plant operating licenses to include TSs as part of the license. These TSs are derived from the plant safety analyses.

The NRC staff reviewed the proposed revisions for compliance with Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36 and agreement with the precedent as established in NUREG-1431, "Standard Technical Specifications Westinghouse Plants." In general, licensees cannot justify TS changes solely on the basis of adopting the model Standard Technical Specifications (STS). To ensure this, the NRC staff makes a determination that proposed revisions maintain adequate safety. Changes that result in relaxation (less restrictive condition) of current TS requirements require detailed justification.

### 3.0 TECHNICAL EVALUATION

The licensee's TS revision proposes to make four revisions that are editorial, administrative, or provide clarification and one revision that is more restrictive.

The licensee proposes to revise the following PINGP TSs:

#### 3.1 TS 1.3, "Completion Times"

TS 1.3 uses examples to provide guidance on the use of completion times. The discussion of Example 1.3-4 is carried over from page 1.3-10 to page 1.3-11, however, the text header on page 1.3-11 is erroneously identified as "Example 1.3-5." This proposed revision corrects the header reference to "Example 1.3-4." The NRC staff concludes that this revision is acceptable since it is an administrative change that conforms with the format guidance of NUREG-1431, and clarifies the example.

#### 3.2 TS 3.1.4, "Rod Group Alignment Limits"

The surveillance requirement (SR) 3.1.4.1 Note directs the operators to Limiting Condition for Operation (LCO) 3.1.7, "Rod Position Indication," when an Individual Rod Position Indicator (RPI) and the group demand position differ by more than 12 steps. This may lead to confusion, since the RPI is operable when the RPI and the group demand position differ by more than 12 steps, if the rod position is  $\leq 30$  or  $\geq 215$  steps. Moreover, the requirements of LCO 3.1.7 must always be met in Modes 1 and 2 when LCO 3.1.4 is applicable. The licensee proposed to remove the Note to eliminate the potential confusion. Removing the Note does not result in any technical changes since SR 3.1.4 still requires that the rod positions are verified to be within the alignment limits. The NRC staff concludes that this revision is acceptable since removing the Note does not change the TS requirements, and is also consistent with the content guidance of NUREG-1431, which does not include a Note in SR 3.1.4.1.

#### 3.3 TS 3.3.7, "Spent Fuel Pool Special Ventilation System (SFPSVS) Actuation Instrumentation"

The SFPSVS ensures that radioactive materials in the fuel pool enclosure atmosphere following a fuel-handling accident are filtered and absorbed prior to exhausting to the environment. The system is not credited for filtering post-LOCA ECCS leakage and thus, in accordance with the content guidance of NUREG-1431, MODES 1, 2, 3, and 4 should not be included in the Applicable MODES of Specified Conditions column. The system actuation instrumentation initiates the SFPSVS automatically following receipt of a high radiation signal. The licensee proposed to remove MODES 1, 2, 3, and 4 from the Applicable Modes or Specified Conditions column in Table 3.3.7-1 for the radiation monitors which actuate the SFPSVS. With this change, the SFPSVS is required to be operable during movement of irradiated fuel assemblies which encompasses all the operating conditions of the design-basis fuel-handling accident. The design-basis fuel-handling accident is independent of the plant operating Modes; therefore, removing MODES 1, 2, 3, and 4 from the Applicable Modes or Specified Conditions column does not effect the TS requirements. The NRC staff concludes that removing MODES 1, 2, 3, and 4 from the Applicable Modes or Specified Conditions column is acceptable because the TS requirements remain applicable during the required conditions (during movement of irradiated fuel assemblies in the fuel pool enclosure).

### 3.4 TS 3.7.10, "Control Room Special Ventilation System (CRSVS)"

When the Required Actions and Completion Times of Condition B are not met, TS 3.7.10 does not provide any further guidance, thus the operators are required to apply LCO 3.0.3. The licensee proposed to add "or B" to Condition C in TS 3.7.10 which provides shutdown requirements which are consistent with the guidance in NUREG-1431. Under the TS rules of use, when no guidance is provided, the operators are required to apply LC 3.0.3 which requires the plant to initiate action within 1 hour to shutdown, be in Mode 3 within 7 hours, be in Mode 4 within 13 hours and be in Mode 5 within 37 hours. The shutdown requirements of Specification 3.7.10 Condition C are more restrictive than LCO 3.0.3 in that the plant will be required to be in Mode 3 within 6 hours and in Mode 5 within 36 hours. The NRC staff concludes that adopting the shutdown requirements of Condition C is acceptable because the Condition C shutdown requirements are more restrictive than the present shutdown requirements in LCO 3.0.3.

The licensee proposed to revise SR 3.7.10.4 to state, "Verify each CRSVS train in the Emergency Mode delivers 3600 to 4400 cfm through the associated CRSVS filter." Currently, SR 3.7.10.4 requires verification that "the CRSVS fan for each train delivers" the specified flow. The system design does not include any fan that is designated as "the CRSVS fan." Furthermore, the system design is complex in that no single system fan by itself provides the specified flow. Upon discussion with the NRC staff, the licensee submitted the supplement letter dated July 16, 2007, to revise the word "filter" to "filters" in order to more accurately describe the system design since each CRSVS train consists of a prefilter, high efficiency particulate air filter, and an activated charcoal adsorber section. The NRC staff concludes that this revision is acceptable since it is administrative and does not modify any requirements for system performance; it clarifies the requirements to be technically accurate.

### 3.5 TS 4.0 DESIGN FEATURES

The licensee proposed to replace Reference 1 of TS 4.0 with the reference to an updated document which supersedes the current reference. The current TS 4.0 Reference 1 is a Westinghouse Calculation Note which supports the approved spent fuel pool criticality analyses and fuel storage configuration. The licensee proposes to replace the current reference with a reference to WCAP-16517-NP, Revision 0, "Prairie Island Units 1 and 2 Spent Fuel Pool Criticality Analysis," dated November 2005 (WCAP-16517), which superseded the Calculation Note. The NRC staff concludes that this revision is acceptable because it is administrative and improves the accuracy of the TS.

### 4.0 SUMMARY

The licensee's proposed revisions in this license amendment request reflect the current configuration of the plant and do not change the TS requirements. The NRC staff finds the proposed revisions are technically justified, comply with 10 CFR 50.36, and are consistent with the STS. On this basis, the NRC staff concludes that the proposed revisions to the TSs of PINGP, Units 1 and 2 are acceptable.

As part of the application for amendment, the licensee provided draft TS Bases pages which the licensee will incorporate into the licensee-controlled TS Bases document. The NRC reviewed these pages and found the changes consistent with the TS changes evaluated above.

## 5.0 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.

## 6.0 ENVIRONMENTAL CONSIDERATION

The amendments change the requirements with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 or change the SRs. The NRC staff has determined that the amendments involve 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 amendments involve no significant hazards consideration and there has been no public comment on such finding (71 FR 67397). Accordingly, the amendments meet 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 amendments.

## 7.0 CONCLUSION

The Commission 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: Pete Hearn

Date: August 10, 2007

Prairie Island Nuclear Generating Plant,  
Units 1 and 2

cc:

Jonathan Rogoff, Esquire  
Vice President, Counsel & Secretary  
Nuclear Management Company, LLC  
700 First Street  
Hudson, WI 54016

Manager, Regulatory Affairs  
Prairie Island Nuclear Generating Plant  
Nuclear Management Company, LLC  
1717 Wakonade Drive East  
Welch, MN 55089

Manager - Environmental Protection Division  
Minnesota Attorney General's Office  
445 Minnesota St., Suite 900  
St. Paul, MN 55101-2127

U.S. Nuclear Regulatory Commission  
Resident Inspector's Office  
1719 Wakonade Drive East  
Welch, MN 55089-9642

Regional Administrator, Region III  
U.S. Nuclear Regulatory Commission  
Suite 210  
2443 Warrenville Road  
Lisle, IL 60532-4351

Administrator  
Goodhue County Courthouse  
Box 408  
Red Wing, MN 55066-0408

Commissioner  
Minnesota Department of Commerce  
85 7th Place East, Suite 500  
St. Paul, MN 55101-2198

Tribal Council  
Prairie Island Indian Community  
ATTN: Environmental Department  
5636 Sturgeon Lake Road  
Welch, MN 55089

Nuclear Asset Manager  
Xcel Energy, Inc.  
414 Nicollet Mall, R.S. 8  
Minneapolis, MN 55401

Michael B. Sellman  
President and Chief Executive Officer  
Nuclear Management Company, LLC  
700 First Street  
Hudson, MI 54016

Douglas E. Cooper  
Senior Vice President and Chief  
Nuclear Officer  
Nuclear Management Company, LLC  
700 First Street  
Hudson, WI 54016

July 2006