

February 3, 2004

Mr. Joseph M. Solymossy  
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 REGARDING TECHNICAL  
SPECIFICATION 5.5.9, "VENTILATION FILTER TESTING PROGRAM (VFTP)"  
(TAC NOS. MB7818 AND MB7819)

Dear Mr. Solymossy:

The Commission has issued the enclosed Amendment No. 161 to Facility Operating License No. DPR-42 and Amendment No. 152 to Facility Operating License No. DPR-60 for the Prairie Island Nuclear Generating Plant, Units 1 and 2, respectively. The amendments consist of changes to the Facility Operating Licenses and Technical Specifications (TSs) in response to your application dated February 11, 2003, as supplemented July 16 and December 1, 2003, and January 13, 2004.

The amendments revise TS Section 5.5.9, "Ventilation Filter Testing Program (VFTP)," to (1) incorporate filter test face velocity limits for the control room special ventilation system, auxiliary building special ventilation system, spent fuel pool special and inservice purge ventilation system, and shield building ventilation system, and (2) make editorial changes. Additionally, as a result of the revisions to TS 5.5.9, the requirements of the additional conditions<sup>1</sup> of the Facility Operating Licenses have been fulfilled, thus, these additional conditions were deleted.

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/**

Anthony C. McMurtray, Senior Project Manager, Section 1  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-282 and 50-306

Enclosures: 1. Amendment No. 161 to DPR-42  
2. Amendment No. 152 to DPR-60  
3. Safety Evaluation

---

<sup>1</sup>These additional conditions were added by Amendment Nos. 158 and 149 to Appendix B of Facility Operating License Nos. DPR-42 and DPR-60, respectively, with an implementation date of February 23, 2003.

February 3, 2004

Mr. Joseph M. Solymossy  
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 REGARDING TECHNICAL  
SPECIFICATION 5.5.9, "VENTILATION FILTER TESTING PROGRAM (VFTP)"  
(TAC NOS. MB7818 AND MB7819)

Dear Mr. Solymossy:

The Commission has issued the enclosed Amendment No. 161 to Facility Operating License No. DPR-42 and Amendment No. 152 to Facility Operating License No. DPR-60 for the Prairie Island Nuclear Generating Plant, Units 1 and 2, respectively. The amendments consist of changes to the Facility Operating Licenses and Technical Specifications (TSs) in response to your application dated February 11, 2003, as supplemented July 16 and December 1, 2003, and January 13, 2004.

The amendments revise TS Section 5.5.9, "Ventilation Filter Testing Program (VFTP)," to (1) incorporate filter test face velocity limits for the control room special ventilation system, auxiliary building special ventilation system, spent fuel pool special and inservice purge ventilation system, and shield building ventilation system, and (2) make editorial changes. Additionally, as a result of the revisions to TS 5.5.9, the requirements of the additional conditions<sup>1</sup> of the Facility Operating Licenses have been fulfilled, thus, these additional conditions were deleted.

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/

Anthony C. McMurtray, Senior Project Manager, Section 1  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-282 and 50-306

Enclosures: 1. Amendment No. 161 to DPR-42  
2. Amendment No. 152 to DPR-60  
3. Safety Evaluation

DISTRIBUTION

PUBLIC	OGC	AMcMurtray	RBouling	
PDIII-1 Reading	ACRS	RDennig	PLouden, RGN-III	
LRaghavan	WBeckner	JLamb	GHill(4)	*Previously concurred

OFFICE	PDIII-1/PM	PDIII-1/LA	SPSB/SC*	OGC*	PDIII-1/SC
NAME	AMcMurtray	RBouling	RDennig	STurk	LRaghavan
DATE	01/30/04	01/30/04	01/14/04	01/30/04	02/02/04

ADAMS Accession No. ML032230290

<sup>1</sup>These additional conditions were added by Amendment Nos. 158 and 149 to Appendix B of Facility Operating License Nos. DPR-42 and DPR-60, respectively, with an implementation date of February 23, 2003.



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  
801 Warrenville Road  
Lisle, IL 60532-4351

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

Commissioner  
Minnesota Department of Commerce  
121 Seventh Place East  
Suite 200  
St. Paul, MN 55101-2145

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

John Paul Cowan  
Executive Vice President & Chief Nuclear  
Officer  
Nuclear Management Company, LLC  
700 First Street  
Hudson, WI 54016

Craig G. Anderson  
Senior Vice President, Group Operations  
Nuclear Management Company, LLC  
700 First Street  
Hudson, WI 54016

November 2003

NUCLEAR MANAGEMENT COMPANY, LLC

DOCKET NO. 50-282

PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 161  
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 February 11, 2003, as supplemented July 16 and December 1, 2003, and January 13, 2004, 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 Facility Operating License and 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. 161, 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 its date of its issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

L. Raghavan, Section Chief, Section 1  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Operating License and  
Technical Specifications

Date of Issuance: February 3, 2004

ATTACHMENT TO LICENSE AMENDMENT NO. 161

FACILITY OPERATING LICENSE NO. DPR-42

DOCKET NO. 50-282

Replace the following page of the Operating License with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

REMOVE

B-3

INSERT

B-3

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

REMOVE

5.0-23

INSERT

5.0-23

NUCLEAR MANAGEMENT COMPANY, LLC

DOCKET NO. 50-306

PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 152

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 February 11, 2003, as supplemented July 16 and December 1, 2003, and January 13, 2004, 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 Facility Operating License and 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. 152, 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 its date of its issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

L. Raghavan, Section Chief, Section 1  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Operating License and  
Technical Specifications

Date of Issuance: February 3, 2004

ATTACHMENT TO LICENSE AMENDMENT NO. 152

FACILITY OPERATING LICENSE NO. DPR-60

DOCKET NO. 50-306

Replace the following page of the Operating License with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

REMOVE

B-3

INSERT

B-3

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

REMOVE

5.0-23

INSERT

5.0-23

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 161 TO FACILITY OPERATING LICENSE NO. DPR-42  
AND AMENDMENT NO. 152 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 February 11, 2003, as supplemented July 16 and December 1, 2003, and January 13, 2004, the Nuclear Management Company, LLC (the licensee), requested changes to the Facility Operating Licenses and the Technical Specifications (TSs) for the Prairie Island Nuclear Generating Plant, Units 1 and 2. The proposed amendments would revise TS Section 5.5.9, "Ventilation Filter Testing Program (VFTP)," to (1) incorporate filter test face velocity limits for the control room special ventilation system, auxiliary building special ventilation system, spent fuel pool special and inservice purge ventilation system, and shield building ventilation system, and (2) make editorial changes. These velocity limits apply to laboratory tests of the charcoal absorber for these systems. Additionally, as a result of the revisions to TS 5.5.9, the requirements of the additional conditions<sup>1</sup> of the Facility Operating Licenses have been fulfilled, thus, these additional conditions were deleted. These additional conditions required the licensee to complete an evaluation of the maximum test face velocity for the ventilation systems in TS 5.5.9, and submit a license amendment request for a TS amendment to specify the maximum test face velocity if the maximum actual face velocity is greater than 110 percent of 40 feet per minute. Therefore, the licensee proposed to delete these additional conditions.

In its February 11, 2003, application, the licensee initially proposed to change the penetration and system bypass limit from 0.05 percent to 0.5 percent for the ventilation systems. This proposed change was included in the *Federal Register* notice dated April 15, 2003 (68 FR 18279). However, in its July 16, 2003, supplemental letter, the licensee withdrew this proposed change. The Nuclear Regulatory Commission (NRC) staff published a new notice on August 19, 2003 (69 FR 49817), for the February 11, 2003, application, as supplemented by the letter dated July 16, 2003, to exclude this proposed change. The December 1, 2003, and January 13, 2004, supplemental letters provided additional clarifying information that was within the scope of the original application, as supplemented by the letter dated July 16, 2003. These supplemental letters did not change the NRC staff's proposed no significant hazards consideration determination included in the *Federal Register* notice dated August 19, 2003 (69 FR 49817).

---

<sup>1</sup>These additional conditions were added by Amendment Nos. 158 and 149 to Appendix B of Facility Operating License Nos. DPR-42 and DPR-60, respectively, with an implementation date of February 23, 2003.

## 2.0 REGULATORY EVALUATION

Generic Letter (GL) 99-02, "Laboratory Testing of Nuclear-Grade Activated Charcoal," dated June 3, 1999, (1) requested licensees to adopt a new test protocol, as defined in American Society for Testing and Materials (ASTM) D3803-1989, "Standard Test Method for Nuclear-Grade Activated Carbon," for measuring methyl iodide removal efficiency of charcoal filters, and (2) establishing test acceptance criteria for plants' TSs to ensure that the efficiencies assumed in accident analyses remain valid.

Safety-related air-cleaning units used in engineered safety features (ESF) ventilation systems of nuclear power plants reduce the potential onsite and offsite consequences of a radiological accident by filtering radioiodine. Analyses of design-basis accidents assume particular safety-related charcoal adsorption efficiencies when calculating offsite and control room operator doses. To ensure that the charcoal filters used in these systems will perform in a manner that is consistent with the licensing basis of a facility, TSs require licensees to periodically perform laboratory tests (in accordance with a test standard) of charcoal samples taken from these ventilation systems.

In GL 99-02, the NRC staff alerted licensees about an issue regarding testing nuclear-grade activated charcoal. Specifically, GL 99-02 informed licensees that testing nuclear-grade activated charcoal to standards other than ASTM D3803-1989 does not provide assurance for complying with current licensing bases with respect to the dose limits of General Design Criterion 19 of Appendix A to Part 50 of Title 10 of the *Code of Federal Regulations* (10 CFR) and Subpart A of 10 CFR Part 100.

GL 99-02 also requested that all licensees determine whether their TSs reference ASTM D3803-1989 for charcoal filter laboratory testing. Licensees whose TSs did not reference ASTM D3803-1989 were requested to either (1) request an amendment to their TSs to reference ASTM D3803-1989 or (2) propose an alternative test protocol.

## 3.0 TECHNICAL EVALUATION

### 3.1 Administrative Changes to TSs

#### 3.1.1 TS 5.5.9 - Introductory Paragraphs

The licensee proposed to change the first paragraph of TS 5.5.9 to define the abbreviations for each of the following systems:

- control room special ventilation system (CRSVS)
- auxiliary building special ventilation system (ABSVS)
- spent fuel pool special and inservice purge ventilation system (SFPSIPVS)
- shield building ventilation system (SBVS)

The licensee proposed to change the second paragraph of TS 5.5.9 to replace the name of each ventilation system with its abbreviation.

The NRC staff has reviewed these changes and finds them administrative in nature and therefore acceptable.

### 3.1.2 TS 5.5.9.b

The licensee proposed to change TS 5.5.9.b to delete the parenthetical statement, “(for DOP [dioctyl phthalate], particles having a mean diameter of 0.7 microns),” because it does not apply to the halogenated hydrocarbon test. This parenthetical statement was erroneously placed in TS 5.5.9.b when this TS was created during the conversion to improved TSs (Unit 1 License Amendment No. 158 and Unit 2 License Amendment No. 149). The NRC staff has reviewed this change and finds it administrative in nature and therefore acceptable.

### 3.1.3 TS 5.5.9.c

The licensee proposed to change TS 5.5.9.c to replace the name of each ventilation system with its abbreviation and delete the connective “and” from the end of the paragraph. The NRC staff has reviewed these changes and finds them administrative in nature and therefore acceptable.

### 3.1.4 TS 5.5.9.d

The licensee proposed to change TS 5.5.9.d to replace the period at the end of the sentence with a semicolon and add the connective “and” to the end of the sentence. These changes are proposed as a result of the addition of new TS 5.5.9.e.

The NRC staff has reviewed these changes and finds them administrative in nature and therefore acceptable.

### 3.1.5 TS 5.5.9.e

The licensee proposed to add a new TS 5.5.9.e to include minimum filter test face velocities in the TSs for the following systems during laboratory testing of a sample of the charcoal absorbers:

- control room special ventilation system
- auxiliary building special ventilation system
- spent fuel pool special and inservice purge ventilation system
- shield building ventilation system.

The licensee proposed to add TS 5.5.9.e to fulfill the additional conditions in Appendix B of the Operating Licenses, added by License Amendment Nos. 158 and 149 for Prairie Island, Units 1 and 2, respectively, and to comply with the guidance of GL 99-02. License Amendment Nos. 158 and 149 imposed the following conditions on each of the licenses related to GL 99-02:

The licensee will complete evaluation of the maximum test face velocity for the ventilation systems included in TS Section 5.5.9 by February 28, 2003. The licensee will also submit a license amendment request for TS amendment by February 28, 2003, to specify the maximum test face velocity if the maximum actual face velocity is greater than 110 percent of 40 fpm based on the licensee’s evaluation.

In the February 11, 2003, application, the licensee stated that the filter face velocity shall be greater than or equal to the following values for each system in TS 5.5.9.e: (1) 54 feet per minute (fpm) for the control room special ventilation system, (2) 72 fpm for the auxiliary building special ventilation system, (3) 47 fpm for the spent fuel pool special and inservice purge ventilation system, and (4) 47 fpm for the shield building ventilation system. In the December 1,

2003, supplement, the licensee provided clarification in TS 5.5.9.e that these filter test face velocity were for the laboratory test of a sample of the charcoal absorber. Since the face velocities are greater than 110% of 40 fpm, the licensee included the proposed test face velocities of 54 fpm, 72 fpm, 47 fpm, and 47 fpm in the TSs for the control room special ventilation system, auxiliary building special ventilation system, spent fuel pool special and inservice purge ventilation system, and shield building ventilation system. The NRC staff finds these values acceptable because they ensure that the testing will be consistent with the operation of ventilation systems described above during accident conditions. The NRC staff also finds that the addition of new TS 5.5.9.e to specify the minimum filter test face velocities is consistent with the August 23, 1999, errata to GL 99-02, and is therefore acceptable.

### 3.2 Operating Licenses

The licensee fulfilled the additional condition of each unit's Operating License to complete an evaluation of the maximum test face velocity for the ventilation systems included in TS Section 5.5.9 by February 28, 2003. The licensee also fulfilled the additional condition of each unit's Operating License to submit a license amendment request by February 28, 2003, to specify the maximum test face velocity if the maximum actual face velocity is greater than 110 percent of 40 fpm based on the licensee's evaluation. Since the licensee fulfilled the additional conditions related to GL 99-02, the NRC staff finds the deletion of these additional conditions 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 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 surveillance requirements. The 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 (68 FR 49817). 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 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: J. Lamb

Date: February 3, 2004