

September 5, 2001

Mr. Mark Reddemann  
Site Vice President  
Kewaunee and Point Beach Nuclear Plants  
Nuclear Management Company, LLC  
6610 Nuclear Road  
Two Rivers, WI 54241

SUBJECT: KEWAUNEE NUCLEAR POWER PLANT - ISSUANCE OF AMENDMENT  
(TAC NO. MB1032)

Dear Mr. Reddemann:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 157 to Facility Operating License No. DPR-43 for the Kewaunee Nuclear Power Plant. This amendment revises the Technical Specifications in response to your application dated January 18, as supplemented April 20, 2001.

The amendment revises the Kewaunee Nuclear Power Plant (KNPP) Technical Specifications (TSs) 3.10.m to increase the minimum reactor coolant flow from 85,500 gallons per minute (gpm) flow per loop to 93,000 gpm flow per loop.

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next regular biweekly *Federal Register* notice.

Sincerely,

/RA/

John G. Lamb, Project Manager, Section 1  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-305

Enclosures: 1. Amendment No. 157 to  
License No. DPR-43  
2. Safety Evaluation

cc w/encls: See next page

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DISTRIBUTION:

GHill (2)	PUBLIC	WBeckner	PD3-1 Reading
ACRS	OGC	GGrant, RIII	CLiang
SBajwa	CCraig	JBamb	THarris

\*See previous concurrence

OFFICE	PDIII-1/PM	PDIII-1/LA	SRXB/SC	OGC*	PDIII-1/SC
NAME	JBamb	THarris	FAkstulewicz	RHoefling	BWetzel for CCraig
DATE	6/20/01	6/20/01	8/28/01	6/19/01	8/31/01

ACCESSION NO. ML011700459

OFFICIAL RECORD COPY

Kewaunee Nuclear Power Plant

cc:

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Plant Manager  
Kewaunee Nuclear Power Plant  
Nuclear Management Company, LLC  
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Gerald Novickis, Chairman  
Kewaunee County Board  
Kewaunee County Courthouse  
Kewaunee, WI 54216

Attorney General  
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Madison, WI 53702

U.S. Nuclear Regulatory Commission  
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Regional Administrator - Region III  
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Mr. Roy A. Anderson  
Executive Vice President and  
Chief Nuclear Officer  
Nuclear Management Company, LLC  
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Hudson, WI 54016

NUCLEAR MANAGEMENT COMPANY, LLC

DOCKET NO. 50-305

KEWAUNEE NUCLEAR POWER PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 157  
License No. DPR-43

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Nuclear Management Company, LLC (the licensee) dated January 18, 2001, as supplemented April 20, 2001, 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-43 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 157, are hereby incorporated in the license. The licensees shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance, and is to be implemented within 30 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

***/RA by Beth Wetzel for/***

Claudia M. Craig, Chief, Section 1  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: September 5, 2001

ATTACHMENT TO LICENSE AMENDMENT NO. 157

FACILITY OPERATING LICENSE NO. DPR-43

DOCKET NO. 50-305

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 a marginal line indicating the area of change.

REMOVE

TS 3.10-10

INSERT

TS 3.10-10

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATING TO AMENDMENT NO. 157 TO FACILITY OPERATING LICENSE NO. DPR-43  
NUCLEAR MANAGEMENT COMPANY, LLC  
KEWAUNEE NUCLEAR POWER PLANT  
DOCKET NO. 50-305

## 1.0 INTRODUCTION

By letter dated January 18, 2001, as supplemented April 20, 2001, Nuclear Management Company, LLC (the licensee) submitted a proposed amendment to the Kewaunee Nuclear Power Plant (KNPP) Technical Specifications (TSs) to revise TS 3.10.m to increase the minimum reactor coolant flow from 85,500 gallons per minute (gpm) flow per loop to 93,000 gpm flow per loop.

KNPP plans to replace existing Westinghouse Model 51 original steam generators (OSG) with Westinghouse Model 54F replacement steam generators (RSG) in the fall of 2001. Plugging and repair of OSG tubes in the past has reduced reactor coolant system (RCS) flow performance at KNPP. This caused changes of TS 3.10.m from time to time in the past. Since the OSGs are being replaced, it is necessary to amend TS 3.10.m again to return the minimum RCS flow to the appropriate flow rate for the new RSGs. The current TS 3.10.m requires a minimum RCS flow of 85,500 gpm per loop. The licensee proposes to change this requirement to a minimum RCS flow of 93,000 gpm per loop. This proposed value is 440 gpm greater than the original value for the OSG of 92,560 gpm per loop; a slight difference in the conservative direction at KNPP.

The April 20, 2001, supplemental information contained clarifying information and did not change the initial no significant hazards consideration determination and did not expand the scope of the original *Federal Register* notice.

## 2.0 BACKGROUND

Departure from nucleate boiling ratio (DNBR) is the ratio of critical heat flux to the actual heat flux. The critical heat flux is the heat flux at which departure from nucleate boiling occurs. The safety analyses of normal operating conditions and anticipated operational occurrences assume initial conditions within the normal steady state envelope. The limits placed on RCS pressure, temperature, and flow rate ensure that the minimum DNBR will be met for each of the transients analyzed.

### 3.0 EVALUATION

The licensee has provided the results of its reanalyses for all design-basis transients and accidents using assumptions appropriate for the RSG design and operating characteristics to support a proposed change to TS 3.10.m associated with the operation of RSGs.

The licensee's reanalyses of transients and accidents in this amendment request were performed using RETRAN 3D in 2D mode which is documented in Topical Report WPSRSEM-NP, Revision 3, "Wisconsin Public Service Corporation Reload Safety Evaluation Methods." The Nuclear Regulatory Commission (NRC) staff has reviewed and approved this topical report with restrictions. The NRC staff has approved the use of this methodology to perform all transient and accident analyses except five transients for which the required benchmark analyses for the plant-specific applications have not been demonstrated in this topical report. The five transients which were excluded from the use of this methodology are: (1) uncontrolled rod withdrawal from a subcritical condition, (2) startup of an inactive coolant loop, (3) anticipated transient without scram, (4) main steamline break, and (5) control rod ejection events. Accordingly, the licensee has used the methodology documented in this topical report for all events except the above stated five events. The licensee used DYNODE methodology for these five events which is consistent with the current analyses of record. The results of the licensee's reanalyses confirmed that the acceptance criteria are met in all cases. The NRC staff has reviewed the analyses performed by the licensee in support of this license amendment and has concluded that the analyses and the associated TS change are acceptable.

### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Wisconsin 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 installation or 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 (66 FR 11062). 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 this 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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: C. Liang

Date: September 5, 2001