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May 4, 1982

Docket No. 50-305

Mr. Eugene R. Mathews, Vice President  
Power Supply and Engineering  
Wisconsin Public Service Corporation  
Post Office Box 1200  
Green Bay, Wisconsin 54305

Dear Mr. Mathews:

The Commission has issued the enclosed Amendment No. 44 to Facility Operating License No. DPR-43 for Kewaunee Nuclear Power Plant. The amendment consists of changes to the Technical Specifications in response to your application transmitted by letter dated February 20, 1981.

The amendment revises the Technical Specifications in relation to Environmental Monitoring of Radioactive Effluents.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

Original signed by:  
S. A. Varga

*Jr*

Robert B. A. Licciardo  
Project Manager  
Operating Reactors Branch No. 1  
Division of Licensing

Enclosures:

- 1. Amendment No. 44 to DPR-43
- 2. Safety Evaluation
- 3. Notice of Issuance

cc w/enclosures:  
See next page



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SURNAME	CParrish	RLicciardo/rs	SVarga	TNovak	DMorden		
DATE	4/12/82	4/27/82	4/28/82	4/27/82	4/29/82		

Mr. Eugene R. Mathews  
Wisconsin Public Service Corporation

cc: Steven E. Keane, Esquire  
Foley and Lardner  
777 East Wisconsin Avenue  
Milwaukee, Wisconsin 53202

Kewaunee Public Library  
822 Juneau Street  
Kewaunee, Wisconsin 54216

Stanley LaCrosse, Chairman  
Town of Carlton  
Route 1  
Kewaunee, Wisconsin 54216

Mr. Donald L. Quistroff, Chairman  
Kewaunee County Board  
Kewaunee County Courthouse  
Kewaunee, Wisconsin 54216

Chairman  
Public Service Commission of Wisconsin  
Hill Farms State Office Building  
Madison, Wisconsin 53702

Mr. Patrick Walsh  
Assistant Attorney General  
114 East, State Capitol  
Madison, Wisconsin 53702

U. S. Nuclear Regulatory Commission  
Resident Inspectors Office  
Route #1, Box 999  
Kewaunee, Wisconsin 54216

Regional Radiation Representative  
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James P. Keppler  
Regional Administrator - Region III  
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799 Roosevelt Road  
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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

WISCONSIN PUBLIC SERVICE CORPORATION  
WISCONSIN POWER AND LIGHT COMPANY  
MADISON GAS AND ELECTRIC COMPANY

DOCKET NO. 50-305

KEWAUNEE NUCLEAR PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 44  
License No. DPR-43

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Wisconsin Public Service Corporation, Wisconsin Power and Light Company and Madison Gas and Electric Company (the licensee) dated February 20, 1981, 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 50 of the Commission's regulations and all applicable requirements have been satisfied.

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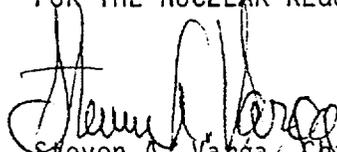
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-43 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 44, 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.

FOR THE NUCLEAR REGULATORY COMMISSION



Steven A. Varga, Chief  
Operating Reactors Branch No. 1  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: May 4, 1982

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 44 TO FACILITY OPERATING LICENSE NO. DPR-43

DOCKET NO. 50-305

Revise Appendix A as follows:

Remove Pages

TS 4.10-1  
Table TS 4.10-1  
(Page 1 of 6)  
Table TS 4.10-1  
(Page 5 of 6)  
Table TS 4.10-2  
(Page 1 of 1)

Insert Pages

TS 4.10-1  
Table TS 4.10-1  
(Page 1 of 6)  
Table TS 4.10-1  
(Page 5 of 6)  
Table TS 4.10-2  
(Page 1 of 1)

## 4.10 ENVIRONMENTAL MONITORING

### Applicability

Applies to the periodic monitoring and recording of radioactive effluents and the routine testing of plant environs.

### Objective

To verify that radioactive releases are maintained within allowable limits and that plant operations have no significant detrimental effects on the environment.

### Specification

- a. Environmental samples shall be collected and analyzed according to Table TS 4.10-1, where minor changes in descriptions of specific sampling locations may occur as necessitated by private ownership.
- b. Reports shall be submitted in accordance with Section 6.9 of the Technical Specifications.

### Basis

The operational program of environmental monitoring described in Section 2.8 of the FSAR will have been in progress for more than two years before initial plant startup. The number and distribution of sampling locations and the various types of measurement, together with the pre-operational background data, will provide verification of the effectiveness of plant effluent control and indication of measurable changes in the activity of the environment.

TABLE TS 4.10-1 (Page 1 of 6)

## Operational Environmental Radiological Surveillance Program

Type of Sample	Location	Sampling Frequency	Type of Analysis	Frequency of Analysis	Reporting Units	Approximate Minimum Detectable Level	Comments
A. Airborne Particulates	K-1f	Weekly	Gross alpha	Weekly	pCi/m <sup>3</sup>	4 x 10 <sup>-4</sup> pCi/m <sup>3</sup> 1 x 10 <sup>-3</sup> pCi/m <sup>3</sup>	On all samples
	K-2		Gross beta	Weekly	pCi/m <sup>3</sup>		On all samples
	K-7		Gamma Scan	Quarterly	pCi/m <sup>3</sup>		Quarterly composite for each station
	K-8						
	K-15						
	K-16						
B. Airborne Iodine	Same as A	Bi-weekly	I-131	Bi-weekly	pCi/m <sup>3</sup>	1 x 10 <sup>-2</sup> pCi/m <sup>3</sup>	On all samples
C. Ambient Beta-Gamma	K-1f	Quarterly Annually	Beta-Gamma	Quarterly	mrem/Q	10 mrem	On all samples
	K-2		Beta-Gamma	Annually	mrem/A		On all samples
	K-3						
	K-4						
	K-5						
	K-6						
	K-7						
	K-8						
	K-15						
	K-16						
	TLD (5 chips in each packet)						

Amendment No.  
Change No. 3  
Amendment No. 1  
5-21-74

TABLE TS 4.10-1 (Page 5 of 6)

## Operational Environmental Radiological Surveillance Program

Type of Sample	Location	Sampling Frequency	Type of Analysis	Frequency of Analysis	Reporting Units	Approximate Minimum Detectable Level	Comments
M. Bottom Sediments	500' North of discharge (on the beach) K-1d	4 times per year	Gross alpha	4/year	pCi/g	Same as Soil	May, July, Sept., Nov.
			Gross beta	4/year	pCi/g		April or May, June August, and October
	500' South of discharge (on the beach) K-9 K-14		Sr-89	4/year	pCi/g		April or May, June, August, and October
			Sr-90	4/year	pCi/g		April or May, June August, and October
N. Deleted							
O. Periphyton (Slime) and Aquatic Plants	K-1a K-1b K-1d K-1e K-9 K-14	Semi-annually	Gross alpha	Semi-annually	pCi/g	0.11 pCi/g wet wt.	2nd and 3rd quarters if available in sufficient quantity
			Gross beta	Semi-annually	pCi/g	0.1 pCi/g wet wt.	2nd and 3rd quarters if available in sufficient quantity
			Sr-89	Semi-annually	pCi/g	0.01 pCi/g wet wt.	2nd and 3rd quarters if available in sufficient quantity
			Sr-90	Semi-annually	pCi/g	0.007 pCi/g wet wt.	2nd and 3rd quarters if available in sufficient quantity

## TABLE TS 4.10-2

(Page 1 of 1)

## Sampling Locations

<u>Code</u>	<u>Location</u>
K-1	Onsite
1a	North Creek
1b	Middle Creek
1c	North of condenser
1d	Condenser discharge
1e	South Creek
1f	Meteorological tower
1g	South Well
1h	North Well
1i	WPS Emergency Center Well
K-2	WPS Operations Building in Kewaunee
K-3	Farm - 6.2 mi N of site
K-4	Farm - 3.0 mi N of site
K-5	Farm - 3.25 mi NNW of site
K-6	Farm - 5.7 mi WSW of site
K-7	Farm - 2.6 mi SSW of site
K-8	Catholic Church - 5.0 mi WSW of site
K-9	Rostok Water Intake for Green Bay, Wisconsin, two miles north of Kewaunee
K-10	Farm - 1.2 mi NNE of site
K-11	Farm - 1.0 mi NW of site
K-12	Farm - 1.0 mi W of site
K-13	General Store - 3 mi S of site
K-14	Two Creeks Park - 2.5 miles south of site
K-15	Gas Substation - 9 mi NNW of site
K-16	WPS Division Office Building, Green Bay, Wisconsin
K-17	Farm - 4.2 mi W of site
K-18	Food Stand - 7 mi SSW of site
K-19	Farm - 1.75 mi N of site



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 44 TO FACILITY OPERATING LICENSE NO. DPR-43

WISCONSIN PUBLIC SERVICE CORPORATION

WISCONSIN POWER AND LIGHT COMPANY

MADISON GAS AND ELECTRIC COMPANY

KEWAUNEE NUCLEAR POWER PLANT

DOCKET NO. 50-305

Introduction

By letter dated February 20, 1981, Wisconsin Public Service Corporation (the licensee) submitted their proposed Amendment No. 45 to the Technical Specifications for the Kewaunee Nuclear Power Plant. The proposal requested changes in respect of Environmental Monitoring for radioactive effluents and the routine testing of plant environs.

Each of these requested changes has been evaluated to establish the particular features, and related safety and environmental impacts, and the necessary safety conclusions have been drawn. The results are presented below:

Evaluation

The staff has reviewed the proposed changes to the Technical Specifications requested for the Kewaunee Nuclear Power Plant and finds the submitted information to be acceptable.

The justifications for this recommendation follow:

1. Change Section 4.10.b to read:

"Reports shall be submitted in accordance with Section 6.9 of the Technical Specifications."

RIS has verified that the present reference to Section 6.6.d is incorrect and should be changed as indicated.

2. Delete ion chamber measurements for ambient Beta-gamma radiation in Section C.1 of Table 4.10-1.

Only TLD's are required by the Radiological Assessment Branch Technical Position on Radiological Environmental Monitoring. Consequently, the change is consistent with our requirement.

3. Delete Section N of Table 4.10-1 which requires the collection of bottom organisms from Lake Michigan for radiological analysis.

Due to their scarcity, these organisms contribute negligibly to the food pathway. Therefore, this change is consistent with the requirements of RAB's Branch Technical Position.

4. Change Table 4.10-2, Relocation of dairy sampling station Location K-6 to "Farm - 6.7 miles WSW of site."

The original farm at 6.0 mi WSW of site no longer exists and a new location needs to be established. This change is also consistent with the Branch Technical Position.

The above proposed changes will not reduce the overall effectiveness of the Operational Environmental Radiological Surveillance Program of the Kewaunee Nuclear Power Plant.

#### Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

#### Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: May 6, 1982

Principal Contributors:

W. Pasciak

T. Mo

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-305WISCONSIN PUBLIC SERVICE CORPORATIONWISCONSIN POWER AND LIGHT COMPANYMADISON GAS AND ELECTRIC COMPANYNOTICE OF ISSUANCE OF AMENDMENT TO FACILITY  
OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 44 to Facility Operating License No. DPR-43, issued to Wisconsin Public Service Corporation, Wisconsin Power and Light Company, and Madison Gas and Electric Company (the licensees), which revised Technical Specifications for operation of the Kewaunee Nuclear Plant (the facility) located in Kewaunee, Wisconsin. The amendment is effective as of the date of issuance.

The amendment revises the Technical Specification in relation to Environmental Monitoring of Radioactive Effluents.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since this amendment does not involve a significant hazards consideration.

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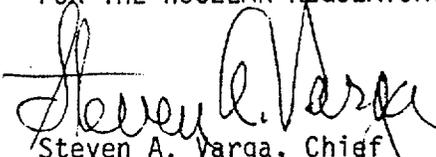
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The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated February 20, 1981, (2) Amendment No. 44 to License No. DPR-43 and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D. C. and at the Kewaunee Public Library, 314 Milwaukee Street, Kewaunee, Wisconsin 54216. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555: Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 4th day of May 1982.

FOR THE NUCLEAR REGULATORY COMMISSION



Steven A. Varga, Chief  
Operating Reactors Branch No. 1  
Division of Licensing