January 21, 1977

DISTRIBUTION
Docket
~~NRC PDR~~
LOCAL PDR
ORB#1 Reading
KGoller/TCarter
ASchwencer
DNeighbors
SMSheppard
OELD
OI&E (5)
ACRS (16)
BJones(4)
BScharf (15)
JMcGough

JSaltzman
AESteen
WPasciak
Deisenhut
CMiles
TBAbernathy
JRBuchanan
OT BC
VStello

Docket No. 50-305

Wisconsin Public Service Corporation
ATTN: Mr. E. W. James
Senior Vice President
Post Office Box 1200
Green Bay, Wisconsin 54305

Gentlemen:

The Commission has issued the enclosed Amendment No. 13 to Facility Operating License No. DPR-43 for the Kewaunee Nuclear Power Plant. This amendment consists of changes to the Technical Specifications in response to your request dated February 9, 1976, as supplemented May 18, 1976, and your request dated July 30, 1976.

The amendment revises the Technical Specifications to (1) allow use of other radiation monitors to monitor the activity of the steam generators, (2) remove a restriction which prohibits discharge of water containing low level activity, (3) allow discharge of very low level gaseous waste without a 45 day retention period, and (4) changes the reporting requirements of the Environmental Technical Specifications.

Copies of the Environmental Impact Appraisal and Federal Register Notice are also enclosed.

Sincerely,

/s/

A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Enclosures:
1. Amendment No. 13 to DPR-43
2. Environmental Impact Appraisal
3. Federal Register Notice

cc w/encl:
See next page

OFFICE ➤	DOR:ORB#1	DOR:OT	OELD	DOR:ORB#1		
SURNAME ➤	DNeighbors:lb	DGrimes	JLieberman	ASchwencer		
DATE ➤	12/20/76	12/23/76	12/13/76	12/21/76		

Form AEC-318 (Rev. 9-53) AECM 0240

☆ U. S. GOVERNMENT PRINTING OFFICE: 1974-526-166

cc: Steven E. Keane, Esquire
Foley, Sammond & Lardner
735 North Water Street
Milwaukee, Wisconsin 53202

Bruce W. Churchill, Esquire
Shaw, Pittman, Potts & Trowbridge
910 - 17th Street, N. W.
Washington, D. C. 20006

Kewaunee Public Library
314 Milwaukee Street
Kewaunee, Wisconsin 54216

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

Mr. Lester Huber
Chairman, Town of Carlton
Route 1
Kewaunee, Wisconsin 54216

Mr. Normal M. Clapp, Chairman
Public Service Commission of
Wisconsin
Hill Farms State Office Building
Madison, Wisconsin 53702

Chief, Energy Systems
Analyses Branch (AW-459)
Office of Radiation Programs
U.S. Environmental Protection Agency
Room 645, East Tower
401 M Street, SW.,
Washington, D.C. 20460

U.S. Environmental Protection Agency
Federal Activities Branch
Region V Office
ATTN: EIS COORDINATOR
230 South Dearborn Street
Chicago, Illinois 60604

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 POWER PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 13
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 dated February 9, 1976, as supplemented May 18, 1976, and application dated July 30, 1976, comply 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

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Attachment:
Changes to the
Technical Specifications

Date of Issuance: January 21, 1977

ATTACHMENT TO LICENSE AMENDMENT NO. 13

FACILITY OPERATING LICENSE NO. DPR-43

DOCKET NO. 50-305

Revise Appendix A as follows:

Remove Pages	Insert Pages
3.9-1	3.9-1
3.9-2	3.9-2
3.9-5	3.9-5
3.9-6	3.9-6
3.9-7	3.9-7
3.9-9	3.9-9
3.9-10	3.9-10
4.11-1	4.11-1
Table TS 4.1-2	Table TS 4.1-2

Add page TS 3.9-11

Revise Appendix B as follows:

Remove Pages	Insert Pages
ES 5.2-1	ES 5.2-1
5.4-1	5.4-1
5.4-2	5.4-2

3.9 RADIOACTIVE M RIALS

Applicability

Applies to the controlled release of radioactive liquids and gases from the facility.

Objective

To define the values and conditions for the controlled release of radioactive effluents to the environs to ensure that these releases are as low as practicable. These releases should not result in radiation exposure in unrestricted areas greater than a few percent of natural background exposures.

To assure that the releases of radioactive material to unrestricted areas meet the low as practicable concept, the following objectives apply:

For liquid wastes:

a. The annual total quantity of radioactive materials released as liquid waste excluding tritium and dissolved gases, should not exceed 5 curies.

b. The annual average concentration of radioactive materials released as liquid waste, prior to dilution in Lake Michigan, excluding tritium and dissolved gases, should not exceed 2×10^{-8} uCi/ml;

c. The annual average concentration of tritium released as liquid waste, prior to dilution in Lake Michigan should not exceed 5×10^{-6} uCi/ml.

For gaseous wastes:

The release rate of radioactive isotopes, averaged over a yearly interval, except halogens and particulate radioisotopes with half lives greater than 8 days, discharged from the plant should not exceed 1.7×10^{3} µCi/sec.

The release rate of halogens and other particulate radioisotopes with half lives longer than 8 days, averaged over a yearly interval, discharged from the plant should not exceed 9.2×10^{-4} μCi/sec.

Specification

a. Liquid Effluents

1. The instantaneous gross radioactivity release concentration in liquid effluents from the plant shall not exceed the values specified in 10 CFR Part 20, Appendix B, for unrestricted areas.

2. The release rate of radioactive liquid effluents, excluding tritium and dissolved gases, shall not exceed 10 curies during any calendar quarter.

3. The annual average concentration of tritium prior to dilution in a natural body of water shall not exceed 3×10^{-3} μCi/cc.

4. During blowdown, the steam generator activity shall be continuously monitored by the steam generator blowdown sampling monitoring system or the condenser air ejector gas monitor. Whenever neither of these monitors is performing its required function, the steam generator blowdown shall be diverted to the steam generator blowdown treatment system. A continuous record of this activity monitoring shall be maintained by a recorder or manually at 15 minute intervals when the recorder is not functioning.

5. During release of liquid radioactive wastes, the following conditions shall be met.

   a. The minimum dilution water required to satisfy 3.9.a.1 shall be met.

In addition to the limiting conditions for operation listed under Specification 3.9.a.2, the reporting requirements of Specification 3.9.a.8 in addition to the requirements of Section 6.9, delineate that the licensee shall identify the cause whenever the release rate of radioactive liquid effluents, excluding tritium and dissolved gases, exceeds 2.5 curies during any calendar quarter and describe the proposed program of action to reduce such release rate. This report must be filed within 30 days following the calendar quarter in which such release occurred.

Specification 3.9.a.3 restricts the release of tritium in radioactive liquids to the concentration values specified by 10 CFR Part 20. This concentration is considered as low as practicable on the basis of operating experience at other similar nuclear power plants.

Specification 3.9.a.4 requires the monitoring of the steam generator activity, which may be a major source of activity released to the environment, to assure operational attention to excessive releases from this source.

Specification 3.9.a.5 requires that suitable equipment to dilute and monitor the releases of radioactive materials in liquid effluents is operating during any period these releases are taking place.

Specification 3.9.a.6 requires that the licensee shall maintain and operate the equipment installed in the radwaste system to reduce the release of radioactive materials in liquid effluents to as low as practicable consistent with the requirements of 10 CFR Part 50.36a. Normal use and maintenance of installed equipment in the liquid radioactive waste treatment system is expected to result in releases of not more than about 5 curies per year, excluding tritium and dissolved gases, during normal operations. In order to keep releases of radioactive materials as low as practicable, the specification requires, as a minimum, operation of equipment whenever the rate of release exceeds 1.25 curies per quarter, excluding tritium and dissolved gases.

Specification 3.9.a.7 limits the amount of radioactivity that may be inadvertently released to the environment.

b. Airborne Effluents

1. The release rate of gross gaseous activity, except for halogens and particulates with half-lives longer than eight days, shall be limited to $3.6 \times 10^{-12} \frac{\text{sec}}{\text{cc}} \left(\Sigma \frac{Q_i}{MPC_i} \right) \leq 1$ where Q_i is the release rate in uCi/sec for isotope i, and MPC_i is the maximum permissible concentration of isotope i as defined in Appendix B, table II, Column 1, 10 CFR 20. The $3.6 \times 10^{-12} \frac{\text{sec}}{\text{cc}}$ value includes the conversion factor of m^3 to cc.

2. The release rate of halogens and particulates with half-lives greater than eight days released to the environs as part of airborne effluents, shall be controlled such that the release rate over any one hour period does not exceed 5.1×10^{-1} uCi/sec.

3. a. The release rates of gross gaseous activity shall not exceed 16 percent of the value specified in 3.9.b.1 above, when averaged over any calendar quarter.

   b. The release rates of halogens and particulates with half-lives greater than eight days shall not exceed 12 percent of the value specified in 3.9.b.2 above, when averaged over any calendar quarter.

4. During release of gaseous wastes, the following conditions shall be met:

   a. The gross activity monitor, the iodine activity sampler and particulate activity sampler shall be operable.

   b. Automatic isolation devices capable of terminating the gaseous release shall be operable.

c. The gross, halogen and particulate activity of all gaseous wastes released to the environment shall be monitored and recorded. For effluent streams having continuous monitoring capability, the activity and flow rate shall be monitored and recorded.

For effluent streams without continuous monitoring capability, the activity and release volume shall be monitored and recorded.

5. Radioactive gaseous wastes collected in the gas decay tanks shall be held up a minimum of 45 days, except for those gaseous wastes resulting from purge and fill operations associated with refueling and reactor startup. Releases of radioactive gaseous wastes at less than 1/100 the limits specified by 3.9.b.1 and 3.9.b.2 are permitted at any time as required for operational flexibility.

6. Reactor containment building purge shall be filtered through the purge filter (HEPA - charcoal) whenever the concentration of iodine and particulate isotopes exceeds the occupational MPC inside the reactor building.

7. The maximum activity to be contained in one gas decay tank shall not exceed 43,500 curies. (Equivalent to Xe-133).

8. Gaseous waste from the condenser air ejector shall be filtered through HEPA filters provided in the Auxiliary Building Vent System.

9. When the annual projected release rate of radioactive materials in gaseous wastes, averaged over a calendar quarter exceeds twice the annual objectives, the licensee shall notify the Director, Directorate

The I-131 and particulate release rate stated in the objectives is based on an X/Q value derived from annual average meteorological data. The dispersion factor used (3.6×10^{-6} sec/m^3) would limit the concentration in air at nearby dairy farms to less than 1/70,000 of the 10 CFR 20 levels, with credit given for cows being on pasture only six months of the year. The factor of 1/70,000 is based on the fact that 1/700 of 10 CFR 20 levels (Appendix B, Table II, Column 1) in air will yield 500 mrem per year via the air-grass-milk pathway. The additional factor of 1/100 reduces the expected dose to 5 mrem per year.

The "as low as practicable" gaseous release objectives are based on guidelines that have not been adopted as yet. The release objectives of these specifications will be reviewed at the time Appendix I becomes a regulation to assure that these specifications are based upon the guidelines contained therein.

Specification 3.9.b.1 requires the licensee to limit the concentration of radioactive materials in gaseous effluents, except for halogens and particulates with half-lives greater than eight days, from the plant to levels specified in 10 CFR Part 20, Appendix B, for unrestricted areas. The release rate will be determined by $1 \geq X/Q \ (\Sigma \ Q_i/MPC_i)$, where MPC_i is the MPC for isotope i as listed in Table II of 10 CFR Part 20, Appendix B, and X/Q is the annual average dispersion factor at the site boundary.

Specification 3.9.b.2 requires the licensee to limit the concentration of halogens and particulates with half-lives greater than eight days released from the plant to 2/700 of the levels specified in 10 CFR Part 20, Appendix B, for unrestricted areas. The release rate will be determined by $Q \leq \frac{2}{700} \frac{MPC_I}{X/Q}$ where MPC_I is the MPC for isotope I-131 as listed in Table II of 10 CFR Part 20, Appendix B, X/Q is the annual average dispersion factor at the nearest cow, and 2/700 is the air-grass-milk re-concentration factor for six months grazing.

Specification 3.9.b.3 establishes an upper limit for the release of noble gas activity at 16 percent and an upper limit for the release of halogen and particulate activity, with half-lives greater than eight days, at 12 percent of the instantaneous release limit averaged over any calendar quarter. The intent

of this specification is to permit the licensee the flexibility of operation to assuew that the public is provided a dependable source of power under unusual operating conditions which may temporarily result in higher releases than the objectives. Gaseous releases will not result in exposures in excess of a small fraction of those specified in 10 CFR Part 20.

Specification 3.9.b.4 requires that suitable equipment to monitor the radioactive gaseous releases is operating during any period these releases are taking place.

Specification 3.9.b.5 requires a 45-day holdup time for radioactive gaseous waste collected in the gas decay tanks to assure decay of most isotopes before being released. The doses at the site boundary after 45 days of holdup are calculated to result in less than 1 mrem/yr. Releases of gaseous radwaste at low levels which are less than 1/100 the limits of Specification 3.9.b.1 and 3.9.b.2 are allowed for operational flexibility.

Specification 3.9.b.6 provides limits on the radioactivity that may be released to the environment as a result of containment purge.

Operating within the activity limit of Specification 3.9.b.7 will restrict the maximum off-site dose to well below the guidelines of 10 CFR Part 100 in the event of a release to the atmosphere of all of the contents of a waste gas decay tank.

Specification 3.9.b.8 provides for proper routing of the off-gases from the condenser air ejector through a continuously monitored exhaust system.

In addition to the limiting conditions for operation listed under 3.9.b.1, 3.9.b.2, and 3.9.b.3, the reporting requirements of Specification 3.9.b.9,

4.11 RADIOACTIVE MATERIALS

Applicability

Applies to the periodic test and record requirements and sampling and monitoring methods used for facilities effluents.

Objective

To ensure that radioactive liquid and gaseous releases from the facility are maintained as low as practicable and within the limits specified by Specifications 3.9.a and 3.9.b.

Specification

a. Liquid Effluents

1. Facility records shall be maintained of the radioactive concentrations and volume before dilution of each batch of liquid effluent released, and of the average dilution flow and length of time over which each discharge occurred.

2. Prior to release of each batch of liquid effluent, a sample shall be taken from that batch and analyzed for gross radioactivity. The concentration of each significant gamma energy peak will be determined to demonstrate compliance with Specification 3.9.a using the dilution water flow rate at time of discharge.

3. Radioactive liquid waste sampling and activity analysis shall be performed in accordance with Table TS 4.11-1.

4. The liquid effluent radiation monitor shall be calibrated at least quarterly by means of a check source and annually with a known radioactive source. Each monitor, as described, shall also have an instrument channel test monthly and a sensor check daily.

TABLE TS 4.1-2

MINIMUM FREQUENCIES FOR SAMPLING TESTS

	Sampling Tests	Test	Frequency	Maximum Time Between Tests (Days)
1.	Reactor Coolant Samples	Gross Beta-Gamma activity (excluding tritium)	5/week	3
		Tritium activity	Monthly	37
		*Chemistry (Cl, F, O_2)	3/Week	4
2.	Reactor Coolant Boron	*Boron concentration	2/week	5
3.	Refueling Water Storage Tank Water Sample	Boron concentration	Monthly *****	37
4.	Boric Acid Tanks	Boron concentration	Weekly	8
5.	Accumulator	Boron concentration	Monthly	37
6.	Spent Fuel Pool	Boron concentration	Monthly **	37
7.	Secondary Coolant	Gross Beta-Gamma activity	Weekly	8
		Iodine concentration (I-131)	Weekly when gross Beta-Gamma activity $\geq 1.0\ \mu Ci/cc$	8
8.	Waste Disposal System Liquid Effluent Monitor	Gross Beta-Gamma activity	During each batch release	N.A.
9.	Circulating Water Monitor	Radioactivity	Continuous ***	N.A.
10.	Auxiliary Building Vent Monitor	Gross Beta-Gamma activity	Continuous ****	N.A.
11.	Containment Vessel Air Particulate Monitor	Fission gas particulate activity	Continuous ***	N.A.
12.	Containment Vessel Radiogas Monitor	Fission gas	Continuous ***	N.A.

Notes

* See Spec. 4.1.D
** Sample will be taken monthly when fuel is in the pool.
*** Continuous monitoring takes place when reactor is in operation.
**** Operable during refueling also.
***** And after adjusting tank contents

In addition to the requirements in Section 6.6, delineate that the licensee shall identify the cause whenever the radioactive gaseous release rate exceeds twice the annual design objective averaged over a calendar quarter, and describe the proposed program of action to reduce such release rate. The report must be filed within 30 days following the calendar quarter in which more than twice the design release rate occurred.

5.2 Actions to be Taken in the Event of Violation of the Environmental Technical Specifications

5.2.a Limiting Conditions for Operations Violations

1. Any occurrence in violation of Section 2.1 through and including Section 2.2.2 of the Environmental Technical Specifications shall be reported and promptly reviewed by the Plant Operations Review Committee. The occurrence shall be reported to the Superintendent Nuclear Power, Superintendent-Kewaunee Plant and the Staff Environmental Engineer or their designees.

2. The Plant Operations Review Committee (PORC) shall prepare a separate report for each such occurrence. This report shall include an evaluation of the cause of the occurrence and also recommendations for appropriate action to prevent or reduce the probability of a re-occurrence.

3. The Staff Environmental Engineer responsible for the program shall prepare a report of his findings.

4. Copies of all such reports shall be submitted to the Superintendent - Nuclear Power, and to the Superintendent - Steam Plants for review and approval of any recommendations.

5. The Plant Superintendent or his designee shall notify the NRC within 24 hours; as specified in Specification 6.9, Appendix A, of the circumstances of any occurrences. A written report shall follow in accordance with the requirements of Specification 6.9 of Appendix A.

6. All such occurrences shall be reported in accordance with Plant Operating Requirements, Section 5.4.b of Appendix B.

5.2.b Monitoring Condition Non-Conformances

1. Any occurrence in violation of Sections 2.2.3, 3.1 through and including 3.2.3 of the Environmental Technical Specifications shall be reported to the Superintendent - Kewaunee Plant and reviewed by the Plant Operations Review Committee (PORC). The Superintendent- Kewaunee Plant shall document the corrective actions taken to reduce re-occurrence probability.

2. All such occurrences shall be reported in accordance with Section 5.4.c of Appendix B.

5.4 Plant Reporting Requirements

In addition to reports required by applicable regulations, Wisconsin Public Service Corporation shall provide the following information:

a. Annual Environmental Operating Report

An Annual Environmental Operating Report covering the previous twelve month's operations and surveillance monitoring shall be submitted within 60 days after January 1 of each year.

b. Reporting Requirement - 24 Hours and Subsequent Two Week Followup Report

Any occurrence as noted in Section 5.2a shall be reported to the Nuclear Regulatory Commission within 24 hours by telephone, telegraph, mailgram, or facimile transmission to the NRC Office of Inspection & Enforcement, Region III.

A written followup report shall be submitted within two weeks to the Director, Region III, Office of Inspection & Enforcement. The followup report shall describe the event, determine the cause of the violation, analyze and evaluate the implications, and prepare an outline of the corrective measures taken or planned to prevent re-occurrence. In addition, the report shall relate any violation of these specifications to any significant environmental impact.

c. Reporting Requirements - 30 Days

A written report shall be submitted within 30 days to the Director, Region III, Office of Inspection & Enforcement following any occurrence noted in Section 5.2.b. The written report shall include, as a minimum, a completed copy of a licensee event report form.

d. Changes to the Plant or Procedures

A written report should be forwarded to the Director, Office of Nuclear Reactor Regulation, USNRC, Washington, D.C. 20555 with a copy to the Director, Region III, Office of Inspection & Enforcement, in the event of:

1. Proposed changes to the plant that would result in more severe environmental impact than evaluated in the Environmental Report and the Environmental Statement should be submitted for NRC approval. These changes do not preclude making changes on short notice that are significant in terms of decreasing the adverse environmental impact.

2. Changes to environmental monitoring equipment or procedures.

3. Changes or additions to permits and certificates requested by Federal, State, Local and Regional authorities for the protection of the environment. When submittals of the changes are made to the concerned agency, the copy shall be submitted to the NRC as noted above. The report shall include an evaluation of the impact of the change.

4. Request for approval of changes in the environmental technical specifications. The request shall include an evaluation of the impact of the change.

e. General Reporting Requirements

If harmful effects or evidence of irreversible damage are detected by the monitoring programs, the licensee will provide to the NRC an analysis of the problem and plan of action to be taken to eliminate or significantly reduce the detrimental effects or damage.

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

ENVIRONMENTAL IMPACT APPRAISAL

BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 13 TO FACILITY 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 9, 1976, and supplemented May 18, 1976, Wisconsin Public Service Corporation (the licensee) requested changes to the Kewaunee Technical Specifications, Sections 3.9 and 4.11 of Appendix A. By letter dated July 30, 1976, the licensee requested changes to the Environmental Technical Specifications, Section 5 of Appendix B.

DISCUSSION

The licensee has requested the following changes to Sections 3.9 and 4.11 of Appendix A:

1. A change to allow the alternate use of other radiation monitors, (in place of steam generator blowdown monitor) to monitor the activity of the steam generators.

2. A change to remove a restriction which prohibits the discharge of water containing low level activity from the waste disposal system during a refueling outage when both circulating water pumps could be inoperable due to maintenance activities.

3. A change to allow discharge of very low level gaseous waste without the complete 45 days retention period.

4. Changes to correct and clarify these sections of Appendix A.

Since Sections 3.9 and 4.11 of Appendix A relate to the monitoring and release of radioactive plant effluents, they are evaluated in terms of both radiological safety and environmental impact.

The licensee has also requested changes to the reporting requirements for environmental monitoring data.

EVALUATION

Technical Specification 9.3.a.4

This specification would be changed to allow use of the condenser air ejector gas monitor, as an acceptable alternate to the steam generator blowdown sampling monitoring system (SGBSMS), to monitor steam generator activity. The present Specification 3.9.a.4 requires that, "The steam generator blowdown activity shall be continuously recorded and monitored by the steam generator blowdown sampling monitoring system." Since the SGBSMS is not redundant, no failure of the SGBSMS is permissible.

The licensee initially proposed a specification change that would simply require the steam generator activity to be continuously recorded and monitored when in the "operating" mode. Specification 1.1.j lists seven different modes (including "operating") that the reactor could be in. Only two of these modes, "Refueling" and "Cold Shutdown," would preclude significant steam generator tube to shell reactor coolant leakage. Therefore, we concluded that the "operating" mode would unduly narrow the scope of specification 3.9.a.4.

As finally worded the proposed Specification 3.9.a.4 will allow monitoring of steam generator secondary activity with the condenser air ejector gas monitor (CAEGM) as well as the SGBSMS. The CAEGM will upon receipt of a high gaseous activity signal automatically isolate and reroute steam generator blowdown in the same manner the SGBSMS does. The use of the CAEGM is acceptable since it will sense gaseous activity caused by S-G tube leaks and will duplicate the actions of the SGBSMS.

Both the SGBSMS and CAEGM will prevent concentrations in the blowdown discharge from the plant from exceeding the concentrations specified in 10 CFR Part 20 during periods of blowdown because both monitors will divert the blowdown to the blowdown treatment system upon high steam generator shell side radiation. The SGBSMS, however, cannot monitor the steam generator activity when there is no blowdown. Consequently, Specification 3.9.a.4 has been rewritten:

> "During blowdown, the steam generator activity shall be continuously monitored by the steam generator blowdown sampling monitoring system or the condenser air ejector gas monitor. A continuous record of this activity monitoring shall be maintained by a recorder or manually at 15 minute intervals when the recorder is not functioning."

We have separated the requirements to monitor and to record because the SGBSMS and CAEM do not actually record. A multipoint recorder in the control room normally records this activity. The requirement to manually record the activity has been added to allow for times when a recorder is out of service.

Since no action is presently specified for violation of Specification 3.9.a.4, the following has been added to the proposed revision of this specification:

> "Whenever neither of these monitors is performing its required function, the steam generator blowdown shall be diverted to the steam generator blowdown treatment system."

The CAEGM can monitor the steam generator activity only when there is condenser air ejector air flow. This should always be the case when the plant is in the "operating" mode. This may not be the case for the other six modes listed in Specification 1.1.j. For times when both the SGBSMS and the CAEGM are not able to continuously record and monitor the steam generator activity, the licensee can either terminate or divert blowdown flow to the SGB treatment system and still be in conformance with Specification 3.9.a.4.

Technical Specification 3.9.a.5

The proposed change to Specification 3.9.a.5.a will remove the restriction that liquid radioactive wastes can be released from the plant only when the dilution water is at least 200,000 gpm. Modifying Specification 3.9.a.5.a as proposed will not allow the licensee to discharge activity in concentrations greater than the maximum allowed (Specification 3.9.a.1) or to discharge more activity in a year than the maximum allowed (Specification 3.9.a.2). The proposed change which will allow the licensee more operational flexibility, is in agreement with the Standard Technical Specifications for pressurized water reactors. These STS's do not specify a minimum dilution water flow. Therefore, although the licensee, under the proposed change to Specification 3.9.a.5.a, could discharge activity at times when the present Specification 3.9.a.5.a do not

allow him to, continued compliance with Specification 3.9.a.1, 3.9.a.2, 3.9.a.3, and 3.9.a.6 will maintain concentrations of radioactive materials in unrestricted areas to a small fraction of that allowed in 10 CFR Part 20, Standards for Protection Against Radiation. Consequently, there will be no appreciable effect on the environment or health and safety of the public from this action.

Technical Specification 3.9.b.5

The proposed change to Specification 3.9.b.5 will allow the licensee to discharge gaseous wastes from the gas decay tanks without the 45 day retention period whenever the release rates can be shown to be no greater than 1/100 of the limits specified by 3.9.b.1 and 3.9.b.2. The proposed change will not allow the licensee to discharge at release rates greater than the maximum allowed (Specifications 3.9.b.1, 3.9.b.2, and 3.9.b.3) but will allow the licensee more operational flexibility. Although the licensee can, under the proposed change, release activity at times when the present Specification 3.9.b.5 would not permit this, compliance with Specifications 3.9.b.1, 3.9.b.2, and proposed 3.9.b.5 will maintain concentrations of radioactive materials in unrestricted areas to a small fraction of those allowed in 10 CFR Part 20, Standards for Protection Against Radiation. Operating within Specification 3.9.b.3 will adequately control releases such that there will be no appreciable effect on the environment or health and safety of the public.

For clarity, the proposed Specification 3.9.b.5 has been finalized to specify that release rates "less than" 1/100 of the limits specified by Specification 3.9.b.1 and 3.9.b.2" are acceptable.

Minor Editorial Changes

We have made minor editorial changes to clarify the bases of Specifications 3.9.b.6 and 3.9.b.7.

The changes we have made to the propcsed Technical Specifications have been discussed orally with the licensee and he has agreed with these changes.

By letter dated July 30, 1976, the licensee proposed changes to the Appendix B Technical Specifications which would revise the reporting requirements for environmental monitoring data. The licensee proposes to continue to report, promptly, violations of environmental conditions for operations which have fixed limits, but proposes to report within

30 days failure to conform to monitoring requirements. This would mean, for example, that the failure of the computer to record a reading, or a computer shutdown would not have to be reported within 24 hours, but would be reported within 30 days. We find that this change has no effect on the environment or health and safety of the public.

In the July 30, 1976, letter, the licensee also proposes to provide a written report subsequent to the 24 hour report on a two week schedule instead of the current 10 day schedule. Although Regulatory Guide 4.8 specifies a 10 day report, the two week report would be consistent with the requirements of the Appendix A Technical Specifications. We conclude that it is acceptable to have consistent reporting requirements and conclude that this change will not affect the environment or health and safety of the public.

Implementation of the proposed changes to the Technical Specifications, will not significantly increase normal radiological effluents from the plant and will allow the licensee more operational flexibility. Permitting use of other radiation monitors, besides the steam generator blowdown monitor, to monitor the steam generator activity as proposed will have no adverse effect on the normal radiological effluents from the plant. Implementation of the changes to allow discharges of low level radioactive waste, during periods not allowed by the present Technical Specification, will not significantly increase radiological effluents from the plant. The changes will not allow the licensee to discharge concentrations greater than the maximum allowed nor to discharge more activity in a year than the maximum allowed. Compliance with the present Technical Specifications will adequately control releases such that there will be no appreciable effect on the environment due to operation under these proposed changes. The proposed changes will not result in revisions to reactor power limits, will not affect the cost/benefit balance, and will not affect the normal non-radiological effluents from the plant.

CONCLUSION AND BASIS FOR NEGATIVE DECLARATION

On the basis of the foregoing analysis, it is concluded that there will be no significant environmental impact attributable to the proposed action. Having made this conclusion, the Commission has further concluded that no environmental impact statement for the proposed action need be prepared and that a negative declaration to this effect is appropriate.

Date: January 21, 1977

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-305

WISCONSIN PUBLIC SERVICE CORPORATION

WISCONSIN POWER AND LIGHT COMPANY

MADISON GAS AND ELECTRIC COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

AND NEGATIVE DECLARATION

The U.S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 13 to Facility Operating License No. DPR-43 issued to Wisconsin Public Service Corporation, Wisconsin Power and Light Company, and Madison Gas and Electric Company which revised Technical Specifications for operation of the Kewaunee Nuclear Power Plant located in Kewaunee, Wisconsin. The amendment is effective as of its date of issuance.

The amendment revises the Technical Specifications to (1) allow use of other radiation monitors to monitor the activity of the steam generators, (2) remove a restriction which prohibits discharge of water containing low level activity, (3) allow discharge of very low level gaseous waste without a 45 day retention period, and (4) changes the reporting requirements of the Environmental Technical Specifications.

The applications for the amendment comply 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 the amendment does not involve a significant hazards consideration.

The Commission has prepared an environmental impact appraisal for the revised Technical Specifications and has concluded that an environmental impact statement for this particular action is not warranted because there will be no significant environmental impact attributable to the proposed action.

For further details with respect to this action, see (1) the application for amendment dated February 9, 1976, as supplemented May 18, 1976, and application dated July 30, 1976, (2) Amendment No. 13 to Facility Operating License No. DPR-43, and (3) the Commission's related Environmental Impact Appraisal. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, NW., Washington, D.C. 20555, 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 Operating Reactors.

Dated at Bethesda, Maryland, this 21st day of January 1977.

FOR THE NUCLEAR REGULATORY COMMISSION

A. Schwencer

A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

PRELIMINARY DETERMINATION

NOTICING OF PROPOSED LICENSING AMENDMENT

LICENSEE: Kewaunee

REQUEST FOR: Request for changes to Technical Specification Section 3.9, Radioactive Materials.

REQUEST DATE: February 9, 1976

PROPOSED ACTION:
( ) Pre-notice Recommended
(X) Post-notice Recommended
( ) Determination delayed pending completion of Safety Evaluation

BASIS FOR DECISION: The subject technical specification pertains to controlled releases of radioactive liquids and gases from the facility to the environment. Changes to the technical specifications apply to the holdup time for gaseous wastes and the dilution of liquid wastes. Minor changes are also made to clarify parts of the technical specifications.

The licensee requests removal of the requirement for maintaining a minimum of 200,000 gpm dilution water when discharging radioactive liquids. Existing technical specifications on allowable concentrations and total annual release would be unchanged. Therefore, deletion of the requirement to maintain 200,000 gpm dilution would not increase the amount of radioactive liquids that can be released from the plant. There is no increased risk to public health and safety associated with the proposed change.

The licensee also requests permission to discharge very low level gaseous wastes without a 45-day retention period. The release of radioactive gaseous wastes would be permitted at any time at 1/100 of the rate which would keep concentrations of radioactive material below the maximum permissible concentration allowed by 10 CFR 20. This relaxation does not change the existing technical specification requirement that off-site doses must remain below 10 CFR 20.

The changes will not result in significant increases in the amount of radioactive material released. The total amount of radioactive material releases would be within the limits specified by the present technical specifica-

tions. We conclude that the changes do not involve a significant increase in the probability or consequences of an accident, do not involve a significant decrease in a safety margin and therefore do not involve a significant hazards consideration.

PROPOSED NEPA ACTION:
( ) EIS Required

(X) Negative Declaration (ND) and Environmental Impact Appraisal (EIA) Required

( ) No EIS, ND or EIA Required

( ) Determination delayed pending completion of EIA

BASIS FOR DECISION: This change involves the deletion of minimum dilution water for radioactive liquid effluents and the deletion of a 45-day retention period for very low level gaseous wastes. An environmental impact statement is not required because this amendment will not authorize a significant change in the types or a significant increase in the amounts of effluents or a significant increase in the authorized power level.

*See previous PD for concurrences

CONCURRENCES: DATE:

1. * D. Neighbors 5/5/76
2. * R. Purple
3. * K. Goller
4. OELD 5/5/76

tions. We conclude that the changes do not involve a significant increase in the probability or consequences of an accident, do not involve a significant decrease in a safety margin and therefore do not involve a significant hazards consideration.

PROPOSED NEPA ACTION: ( ) EIS Required

(XX) Negative Declaration (ND) and Environmental Impact Appraisal (EIA) Required

( ) No EIS, ND or EIA Required

( ) Determination delayed pending completion of EIA

Basis for Decision: This change involves the deletion of minimum dilution water for radioactive liquid effluents and the deletion of a 45-day retention period for very low level gaseous wastes. These changes could result in higher levels of ~~radioactive~~ releases but which will still be below levels specified in 10 CFR Part 20.

CONCURRENCES: DATE:

1. D. Neighbors — 4/13/76
   D. Neighbors
2. R. Purple — 4/15/76
   R. Purple
3. for George Lear — 4/16/76
   K. Goller
4. _____
   OELD

This is not an acceptable format for the environmental determination.

4/21/76

PCNL / Neighbors

March 4, 1976

NOTE TO: Karl R. Goller

RE: Findings for Routine Radiological Release Tech Spec Changes

P. D. 97 is indicative of a growing misunderstanding by some of your staff with respect to the routine radiological release technical specifications. Although our analysis of routine radiological releases is usually carried out in connection with environmental reviews and the technical specifications governing such releases are usually contained in the environmental technical specifications, the Commission's regulatory authority over radioactive materials derives from the Atomic Energy Act. For this reason, proposed technical specification changes which change radiological release requirements, whether those requirements are contained in Appendix A technical specifications or Appendix B environmental technical specifications, require a radiological health and safety conclusion on the part of the staff. Specifically, there must be a finding as to whether the change entails a "significant hazards consideration" within the meaning of 50.58, 50.91 and the statute. It is not an adequate basis to conclude that there are no significant hazards considerations merely because the technical specification involved happens to be in Appendix B or happens to be assessed in an environmental impact statement rather than in a safety evaluation. A change in a radiological release requirement (or a monitoring specification which relates to radiological releases) must be assessed as to significance of the change from the standpoint of radiological impact of the change.

Since such changes also may have an environmental effect within the terms of 10 CFR Part 51, a specific conclusion with respect to the need for an environmental impact statement is also required.

Joseph Scinto
Acting Special Assistant to
Chief Hearing Counsel

cc: All attorneys