

Docket No. 50-305

MAR 9 1981

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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. 31 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 telecopy request dated January 29, 1981, as confirmed by letter dated January 29, 1981. This amendment was authorized by telephone on January 30, 1981, and was confirmed by letter of the same date.

The amendment revises the one-time extension of the test frequency interval for turbine stop and governor valves from monthly to a period of four months, said extended period to end April 30, 1981. After April 30, 1981, monthly tests will again be required.

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

Sincerely,

Original signed by:

Steven A. Varga, Chief  
Operating Reactors Branch #1  
Division of Licensing

Enclosures:

1. Amendment No. 31 to DPR-43
2. Safety Evaluation
3. Notice of Issuance

cc: w/enclosures  
See next page



*As to Form of  
and for  
notice only  
As per*

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OFFICE	ORB#1:DL	ORB#7:DL	ORB#1:DL	AD/OR:DL	D/DV	OELD
SURNAME	CParrish	RLicciardo	SVarga	TNovak	DEisenhut	Bombardieri
DATE	2/23/81	2/27/81	2/28/81	3/1/81	2/1/81	3/4/81

Docket



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

March 9, 1981

Docket No. 50-305

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Steven A. Varga, Chief  
Operating Reactors Branch #1  
Division of Licensing

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cc: w/enclosures  
See next page

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

Director, Criteria and Standards Division  
Office of Radiation Programs (ANR-460)  
U. S. Environmental Protection Agency  
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 PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 31  
License No. DPR-48

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The request for amendment by Wisconsin Public Service Corporation, Wisconsin Power and Light Company and Madison Gas and Electric Company (the licensee) dated January 29, 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 51 of the Commission's regulations and all applicable requirements have been satisfied.

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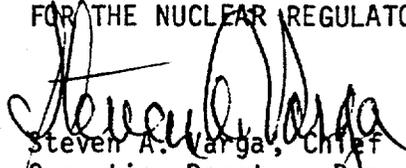
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-43 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 31, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment was effective January 30, 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Steven A. Varga, Chief  
Operating Reactors Branch #1  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: March 9, 1981

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 31 TO FACILITY OPERATING LICENSE NO. DPR-43

DOCKET NO. 50-305

Revise Appendix A as follows:

Remove Pages

Table TS 4.1-3

Insert Pages

Table TS 4.1-3

TABLE 4.1-3

## MINIMUM FREQUENCIES FOR EQUIPMENT TESTS

<u>Equipment Tests***</u>	<u>Test</u>	<u>Frequency</u>	<u>Maximum Time Between Test (Days)</u>
1. Control Rods	Rod drop times of all full length rods	Each refueling outage	N.A.
	Partial movement of all rods	Every 2 weeks	17
1a. Reactor Trip Breakers	Open trip	Monthly	37
1b. Reactor Coolant Pump Breakers-Open-Reactor Trip	Operability	Each refueling outage	N.A.
2. Pressurizer Safety Valves	Set point	One each refueling outage	N.A.
3. Main Steam Safety Valves	Set point	Two each refueling outage	N.A.
4. Containment Isolation Trip	Operability	Each refueling outage	N.A.
5. Refueling System Interlocks	Operability	Prior to each refueling outage	N.A.
6. Ventilation System	Halide, DOP and Methyl Iodide Pressure Drop Test	During each refueling outage except as specified in Note**	N.A.
a. Shield Building	Visual Inspection		
b. Auxiliary Building SV Zone			
c. Spent Fuel Pool			
7. Fire Protection Pump and Power Supply	*Operability	Monthly	37
8. Containment Leak Detect	Operability	Weekly	8
9. Diesel Fuel Supply	*Fuel inventory	Weekly	8
10. Turbine Stop and Governor Valves	Operability	Monthly (1) (2)	37 (1)(2)
11. Fuel Assemblies	Visual Inspection	Each refueling outage	N.A.
12. Guard Pipes	Visual Inspection	Each refueling outage	N.A.

NOTES:

\* See Specification 4.1.d

\*\* Tests and frequency shall be in accordance with Specifications 4.4.d and 4.12.

\*\*\* Following maintenance on the above equipment that could affect the operation of the equipment tests should be performed to verify operability.

(1) This test may be waived for end of cycle operations when boron concentrations are less than 150 ppm, due to operational limitations.

(2) A one-time extension of the frequency interval from monthly to a period of four months is granted, said extended period to end April 30, 1981. After April 30, 1981, monthly tests will again be required.

TABLE TS 4.1-3



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 31 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

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SAFETY EVALUATION REPORT  
REVISION TO TECHNICAL SPECIFICATION TABLE TS 4.1-3  
KEWAUNEE NUCLEAR POWER PLANT

Introduction

By telecon of January 22, 1981, and letter of January 29, 1981, Wisconsin Public Service Corporation, et al (the licensees), requested a temporary change to the Kewaunee Technical Specifications. This temporary change would extend the current monthly surveillance period for the turbine governor and turbine stop valves (Table T.S. 4.1-3, Item 10) up to four months (January to April 1981) to the next scheduled shutdown for refueling.

Discussion

Operability of the turbine governor and turbine stop valves is checked monthly, primarily to assure the capability to control turbine-speed in case of an unexpected loss of load. Failure of these valves could result in a failure of the turbine rotor and damage due to resultant missiles.

Inservice testing of these valves is normally by means of test circuitry that allows tests to be carried out while the plant is at power. During the last test of the turbine stop and governor valves, a failure in the test circuitry caused the full opening of one of the governor valves while the plant was operating at partial load. The unexpected load increase caused a turbine trip and reactor trip. A plant shutdown will be required to restore the normal test capabilities. These problems do not affect the normal functional capability of the valves.

Since a maintenance and refueling shutdown is planned for mid April 1981, the licensee has requested the surveillance period on these valves be extended from January 1981 through April 1981.

Evaluation

Steam admission to the turbine is controlled by two valves in series; (1) the governor valve and (2) the turbine stop valve. At this time, turbine overspeed is controlled by two independent speed sensors. The primary overspeed control is provided by an electro-hydraulic system set to produce trips at 103% of rated speed, for the governor and intercept valves. Backup speed control is furnished by a mechanical overspeed mechanism set to trip the turbine at 111% of rated speed. The electro-hydraulic control system furnishes a second backup which produces a turbine trip at 111% + 10 R.P.M. This redundancy in both valves and controls provides reasonable assurance that turbine speed control will be maintained.

The operating history of these valves includes more than 60 reactor and turbine trips, more than 100 trip signals during pre-operational and startup testing, and more than 70 monthly tests since January 1974. In all instances, the turbine stop and governor valves have operated properly. This history of trouble-free performance provides added assurance of the dependability of these valves and the control systems.

The previous surveillance test (December 1980) resulted in a reactor trip, the transient being introduced into the system due to a fault in the valve test circuitry. Any repeat of this test would likely have the same result, a transient and reactor trip.

Based on the above and the desirability of avoiding, when possible, the effects of thermal and pressure cycling of the reactor, associated with a reactor trip and restarting, we conclude the extension of the turbine governor and turbine stop valve surveillance period to April 30, 1981 is acceptable.

In addition, we suggest that the operability of the valves, including correction of the fault in the valve test circuitry, be confirmed in the cold shut down condition prior to start up after the planned refueling shutdown. After start-up, the validity of the earlier testing should be confirmed and the Operability of the turbine stop and governor valves established by performing the necessary surveillance testing to meet the requirements of Item (10) of Table 7.S. 4.1.3 of the Kewaunee Technical Specifications, at the lowest practicable power level.

#### 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: March 9, 1981

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. 31 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 was effective January 30, 1981.

The amendment was authorized by phone on January 30, 1981 and was confirmed by letter on the same date. The amendment revises the one-time extension of the test frequency interval for turbine stop and governor valves from monthly to a period of four months, said extended period to end April 30, 1981. After April 30, 1981, monthly tests will again be required. The amendment was authorized on an expedited basis to maintain the plant at a steady-state condition and avoid a shutdown transient shown by our evaluation to be unnecessary but required by Technical Specifications unless amended.

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

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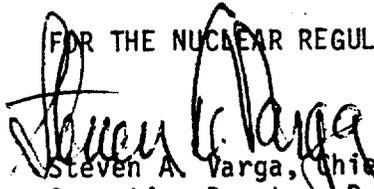
findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since this amendment does not involve a significant hazards consideration.

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) and 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 request for amendment dated January 29, 1981, (2) the Commission's letter to the licensee dated January 30, 1981, (3) Amendment No. 31 to License No. DPR-43 and (4) 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), (3) and (4) 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 9th day of March, 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Steven A. Varga, Chief  
Operating Reactors Branch #1  
Division of Licensing