May 18, 1989

Docket Nos. 50-266
and 50-301

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Mr. C.W. Fay, Vice President
Nuclear Power Department
Wisconsin Electric Power Company
231 West Michigan Street, Room 308
Milwaukee, Wisconsin 53201

Dear Mr. Fay:

SUBJECT: AMENDMENT NOS. 121 AND 124 TO FACILITY OPERATING LICENSE NOS. DPR-24 AND DPR-27 (TAC NOS. 64688/64689)

The Commission has issued the enclosed Amendment Nos. 121 and 124 to Facility Operating License Nos. DPR-24 and DPR-27 for the Point Beach Nuclear Plant, Unit Nos. 1 and 2. The amendments consist of changes to the Technical Specifications in response to your application dated January 6, 1987, as clarified by your letters dated April 14 and May 15, 1987.

These amendments incorporate a change to Technical Specification Table 15.4.1-1, "Minimum Frequencies for Checks, Calibrations and Tests of Instrument Channels," clarifying the requirements for reactor coolant flow logic testing.

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

Sincerely,

/s/

Warren H. Swenson, Project Manager
Project Directorate III-3
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No. 121 to DPR-24
2. Amendment No. 124 to DPR-27
3. Safety Evaluation

cc w/ enclosures:
See next page

Office:	LA/PDIII-3	PM/PDIII-3	OGC	PD/PDIII-3
Surname:	PKreutzer	WSwenson/mr		JHannon
Date:	12/15/88	12/22/88 5/9/89	5/12/88	5/10/89
Office:	SICB			
Surname:	SNewberry			
Date:	5/10/88			

Signed 5/18/89

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CP-1

cc:
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Town Chairman
Town of Two Creeks
Route 3
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Chairman
Public Service Commission
of Wisconsin
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799 Roosevelt Road
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Resident Inspector's Office
U.S. Nuclear Regulatory Commission
6612 Nuclear Road
Two Rivers, Wisconsin 54241

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

WISCONSIN ELECTRIC POWER COMPANY

DOCKET NO. 50-266

POINT BEACH NUCLEAR PLANT, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 121
License No. DPR-24

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Wisconsin Electric Power Company (the licensee) dated January 6, 1987, as clarified by letters dated April 14 and May 15, 1987, 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.

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

WISCONSIN ELECTRIC POWER COMPANY

DOCKET NO. 50-301

POINT BEACH NUCLEAR PLANT, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 124
License No. DPR-27

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Wisconsin Electric Power Company (the licensee) dated January 6, 1987, as clarified by letters dated April 14 and May 15, 1987, 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 3.B of Facility Operating License No. DPR-27 is hereby amended to read as follows:

   B. Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 124 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective immediately upon issuance. The Technical Specifications are to be implemented within 20 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

John N. Hannon, Director
Project Directorate III-3
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 18, 1989

ATTACHMENT TO LICENSE AMENDMENT NOS. 121 AND 124

TO FACILITY OPERATING LICENSE NOS. DPR-24 AND DPR-27

DOCKET NOS. 50-266 AND 50-301

Revise Appendix A Technical Specifications by removing the page identified below and inserting the enclosed page. The revised page is identified by amendment number and contains marginal lines indicating the area of change.

REMOVE	INSERT
Table 15.4.1-1 (1 of 4)	Table 15.4.1-1 (1 of 4)

Unit 1 - Amendment No. 43,47,86,116,121
Unit 2 - Amendment No. 48,52,90,119,124

TABLE 15.4.1-1 (1 of 4)

MINIMUM FREQUENCIES FOR CHECKS, CALIBRATIONS AND TEST OF INSTRUMENT CHANNELS

No.	Channel Description	Check	Calibrate	Test	Remarks
1.	Nuclear Power Range	S(1)** M*(3)**(4)	D(1)** Q*(3)**(4)	M(2)**	(1) Heat Balance (2) Signal to ΔT; bistable action (permissive, rod stop, trips) (3) Upper and lower chambers for axial off-set (4) Compare incore to excore axial flux difference. Recalibrate if the absolute difference is greater than or equal to 3 percent.
2.	Nuclear Intermediate Range	S(1)**	N.A.	P(2)	(1) Once/shift when in service (2) Log level; bistable action (permissive, rod stop, trips)
3.	Nuclear Source Range	S(1)	N.A.	P(2)	(1) Once/shift when in service (2) Bistable action (alarm, trips)
4.	Reactor Coolant Temperature	S	R	M(1)** (2)	(1) Overtemperature-ΔT (2) Overpower - ΔT
5.	Reactor Coolant Flow	S**	R	M**(1) R(2)	(1) Analog and single loop loss-of-flow logic testing. (2) Logic channel testing for reactor trip on loss of reactor coolant flow in both loops shall be performed each refueling interval.
6.	Pressurizer Water Level	S**	R	M**	
7.	Pressurizer Pressure	S**	R	M**	
8.	4 Kv Voltage	N.A.	R	M**	Reactor protection circuits only
9.	Analog Rod Position	S(1)**	R	M**	(1) With step counters

* By means of the movable in-core detector system.

** Not required during periods of refueling shutdown, but must be performed prior to starting up if it has not been performed during the previous surveillance period. Tests of permissive and low power trip bistable setpoints which cannot be done during power operations shall be conducted prior to startup if not done in the previous two weeks.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NOS. 121 AND 124 TO
FACILITY OPERATING LICENSE NOS. DPR-24 AND DPR-27

WISCONSIN ELECTRIC POWER COMPANY
POINT BEACH NUCLEAR PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-266 AND 50-301

INTRODUCTION

By letter dated January 6, 1987, Wisconsin Electric Power Company, the licensee for Point Beach Units 1 and 2 proposed a change to the plants' Technical Specification Table 15.4.1-1 to increase the period of the logic channel test of the reactor trip resulting from low reactor coolant flow being simultaneously detected in both reactor coolant loops. Specifically, the frequency of logic channel testing for this condition is changed from monthly to each (annual) refueling outage. Supplemental information related to the January 6 letter was provided in a May 15, 1987, letter from the licensee in response to a staff request for additional information. A clarification to the proposed change was made by the licensee in a letter dated April 14, 1987.

EVALUATION

To protect the core from departure from nucleate boiling (DNB) due to a loss of adequate reactor coolant flow, the Point Beach Units 1 and 2 protection systems include a reactor trip initiated by low reactor coolant flow signals in each reactor coolant loop. Low flow in both loops initiates a reactor trip when the plant is above approximately 10% power (the P-7 interlock setpoint) but less than 50% power. Above approximately 50% power (the P-8 interlock setpoint), low flow in any reactor coolant loop initiates the reactor trip. To develop the signals for the low reactor coolant flow reactor trip, three flow sensing channels are installed in each loop. Each of the instrument channels consists of a flow sensor which provides an input to a bistable. On a low flow condition, the bistable de-energizes a corresponding relay in each of the two protection logic trains. Within each logic train, contacts from the three corresponding relays are combined in two-out-of-three logic to de-energize two parallel relays. Above P-8, the reactor will trip when both parallel relays in either loop de-energize. Above P-7 but below P-8, the reactor will only trip when the parallel relays in both loops de-energize.

Currently, under Functional Unit 5 in Table 15.4.1-1 of the plants' Technical Specifications, a monthly logic channel test of the above relays/contacts which initiate the reactor trip on low reactor coolant flow is required.

The circuitry (test switches, etc.) used to perform the logic channel test of the relays/contacts was designed to only test the parallel relays associated with one loop at a time. Because of this design, a test of the contacts from the parallel relays which initiate a trip on simultaneous low flow in both loops cannot be performed unless bistables are placed in the trip conditions. Since bistable outputs are shared by both logic trains, this ultimately would lead to a reactor trip since only one reactor trip bypass breaker can be used at a time. Based on this, the licensee has requested that the surveillance interval for the channel logic associated with low flow in both loops be increased from monthly to each refueling outage. The surveillance interval for the logic channel test of the relays/contacts which initiate the trip on low reactor coolant flow in any loop will remain monthly.

Since all bistables and relay coils will still be tested monthly, the net effect of the proposed technical specification change would be to increase the risk due to the increased interval (each refueling outage versus monthly) during which operability of the specific relay contacts which initiate the trip on simultaneous low flow in both loops is not demonstrated. Although a numerical quantification of the increase in risk has not been performed, the staff concludes that it would be quite small since the event of concern would require two contact failures (one in each train) between refueling cycles and a loss of flow condition occurring while the reactor is between 10% and 50% power which is, according to the licensee, a rare occurrence. Furthermore, the most likely cause for loss of flow in both reactor coolant loops is due to electrical failure. If the reactor trip on loss of flow in both loops were to fail between 10% and 50% power, backup trips on underfrequency and undervoltage remain in effect. Simultaneous loss of flow in both loops due to broken coolant pump shafts or locked-rotor accidents are considered incredible events. Based on this, the staff concludes that a circuit modification to allow at-power testing of the relay contacts which trip the reactor on simultaneous low flow in both loops is not warranted and that the requested technical specification is acceptable.

ENVIRONMENTAL CONSIDERATION

These amendments involve a change in the installation or use of facility component located within the restricted area as defined in 10 CFR Part 20 or changes an inspection or surveillance requirement. The staff has determined that the amendments involve 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 published a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these amendments meet 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 these amendments.

CONCLUSION

The 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, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Fred Burrows

Dated: May 18, 1989