

JUL 21 1975

Docket No. 50-266

Wisconsin Electric Power Company  
Wisconsin Michigan Power Company  
ATTN: Mr. Sol Burstein  
Senior Vice President  
231 West Michigan Street  
Milwaukee, Wisconsin 53201

Gentlemen:

The Commission has issued the enclosed Amendment No. 7 to Facility Operating License No. DPR-24 for the Point Beach Nuclear Plant Unit 1. The amendment includes Change No. 15 to the Technical Specifications and is in response to your application dated October 17, 1972.

The amendment permits modifications to the Technical Specifications that reduces the requirements for channel checks, calibration and testing of some instrumentation during refueling shutdown and reduces the frequencies of some sampling and equipment tests during periods of refueling shutdown. As discussed and agreed to by your staff, it was necessary to modify your request to meet the Nuclear Regulatory Staff's requirements.

Your application of October 17, 1972, also included a proposed change to the Technical Specifications involving the Plant Operating Procedures. We did not consider this request since you are to submit a proposal to revise Section 6 in its entirety.

A copy of the Safety Evaluation and the Federal Register Notice are also enclosed.

Sincerely,

George Lear, Chief  
Operating Reactors Branch #3  
Division of Reactor Licensing

Enclosures:

1. Amendment No. 7
2. Safety Evaluation
3. Federal Register Notice

cc: See next page

OFFICE >	ORB#3	ORB#3	<del>ORB#3</del> ORB#3	AD:DP/ORS	OELD	ORB#3
NAME >	SATeets/dg	JWetmore/dg	GLear GL	KRGoller	Ketchen	GLear
DATE >	5/15/75	5/13/75	5/1/75	5/13/75	5/27/75	5/1/75

Wisconsin Michigan and Wisconsin Electric Power Company

cc: w/enclosure

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Mr. Arthur M. Fish  
Document Department  
University of Wisconsin - Stevens Point Library  
Stevens Point, Wisconsin 54481

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

WISCONSIN ELECTRIC POWER COMPANY  
WISCONSIN MICHIGAN POWER COMPANY

DOCKET NO. 50-266

POINT BEACH NUCLEAR PLANT UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 7  
License No. DPR-24

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Wisconsin Electric Power Company and Wisconsin Michigan Power Company (the licensees) dated October 17, 1972, complies with the standards and requirements of the Atomic Energy Act (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; and
  - 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.
2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 3.B of Facility License No. DPR-24 is hereby amended to read as follows:

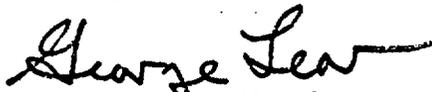
"(B) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications, as revised by issued changes thereto through Change No. 15."



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

FOR THE NUCLEAR REGULATORY COMMISSION



George Lear, Chief  
Operating Reactors Branch #3  
Division of Reactor Licensing

Attachment:  
Change No. 15 to  
Technical Specifications

Date of Issuance: **JUL 0 1 1975**

ATTACHMENT TO LICENSE AMENDMENT NO. 7  
CHANGE NO. 15 TO THE TECHNICAL SPECIFICATIONS  
FACILITY OPERATING LICENSE NO. DPR-24  
DOCKET NO. 50-266

Replace Tables 15.4.1-1 and 15.4.1-2 with the attached  
revised pages.

TABLE 15.4.1-1

MINIMUM FREQUENCIES FOR CHECKS, CALIBRATIONS AND  
TEST OF INSTRUMENT CHANNELS

<u>Channel Description</u>	<u>Check</u>	<u>Calibrate</u>	<u>Test</u>	<u>Remarks</u>
1. Nuclear Power Range	S (1)** M*(3)**	D (1)** Q*(3)**	B/W (2)**	1) Heat balance 2) Signal to ΔT; bistable action (permissive, rod stop, trips) 3) Upper and lower chambers for axial off-set
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	B/W (1)** (2)	1) Overtemperature-Delta T 2) Overpower - Delta T
5. Reactor Coolant Flow	S **	R	M **	
6. Pressurizer Water Level	S **	R	M **	
7. Pressurizer Pressure	S **	R	M **	
8. 4 Kv Voltage & Frequency	N.A.	R	M **	Reactor protection circuits only
9. Analog Rod Position	S (1)**	R	M **	1) With step counters

\* By means of the moveable 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.

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	<u>Channel Description</u>	<u>Check</u>	<u>Calibrate</u>	<u>Test</u>	<u>Remarks</u>	
10.	Rod Position Bank Counters	S (1)**	N.A.	N.A.	1) With analog rod position	
11.	Steam Generator Level	S **	R	M**		15
12.	Steam Generator Flow Mismatch	S **	R	M**		
13.	Charging Flow	N.A.	R	N.A.		
14.	Residual heat Removal Pump Flow	N.A.	R	N.A.		
15.	Boric Acid Tank Level	D	R	N.A.		
16.	Refueling Water Storage Tank Level	N.A.	R	N.A.		
17.	Volume Control Tank Level	N.A.	R	N.A.		
18.	Reactor Containment Pressure	D	R	B/W (1)**	1) Isolation Valve signal	15
19.	Radiation Monitoring System	D	R	M		
20.	Boric Acid Control	N.A.	R	N.A.		
21.	Containment Sump Level	N.A.	R	N.A.		
22.	Turbine Overspeed Trip*	N.A.	R	M (1)**	1) Block trip	15
23.	Accumulator Level and Pressure	S	R	N.A.		

\* Overspeed Trip Mechanism, and Independent Turbine Speed Detection and Valve Trip 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. 15

TABLE 15.4.1-1 (CONTINUED)

<u>Channel Description</u>	<u>Check</u>	<u>Calibrate</u>	<u>Test</u>	<u>Remarks</u>
24. Containment Pressure	S	R	M**	Narrow range containment pressure (-3.0, +3 psig excluded)
25. Steam Generator Pressure	S***	R	M***	
26. Turbine First Stage Pressure	S**	R	M**	
27. Emergency Plan Radiation Instruments	M	R	M	
28. Environmental Monitors	M	N.A.	N.A.	

S - Each Shift

M - Monthly

D - Daily

P - Prior to each startup if not done previous week

W - Weekly

R - Each Refueling Shutdown (But not to exceed 20 months, except for first core cycle)

B/W - Biweekly

NA - Not applicable

\*\* 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.

\*\*\* Not required during periods of refueling shutdown if steam generator vessel temperature is greater than 70°F.

TABLE 15.4.1-2

MINIMUM FREQUENCIES FOR EQUIPMENT AND SAMPLING TESTS

	<u>Test</u>	<u>Frequency</u>	<u>FSAR Section Referenc</u>
1.	Reactor Coolant Samples	Gross Beta-gamma activity (excluding tritium)	5/week (7)   15
		Tritium activity	Monthly
		Radiochemical E Determination (1)	Semiannually (2)
		Chloride Concentration	5/week (8)   15
		Diss. Oxygen Conc.	5/week (6)
		Fluoride Conc.	Weekly
2.	Reactor Coolant Boron	Boron concentration	Twice/week
3.	Refueling Water Storage Tank Water Sample	Boron concentration	Weekly (6)   15
4.	Boric Acid Tanks	Boron concentration	Twice/week
5.	Spray Additive Tank	NaOH concentration	Monthly 6
6.	Accumulator	Boron concentration	Monthly 6
7.	Spent Fuel Pit	Boron concentration	Monthly 9.5.5
8.	Secondary Coolant	Gross Beta-gamma activity	Weekly (6)   15
		Iodine concentration	Weekly when gross Beta-gamma activity equals or exceeds 1.2µCi/cc (6)   15
9.	Control Rods	Rod drop times of all full length rods (3)	Each refueling or after maintenance that could affect proper functioning (4) 7
10.	Control Rod	Partial movement of all rods	Every 2 weeks (6) 7   15
11.	Pressurizer Safety Valves	Set point	Each refueling shutdown 4
12.	Main Steam Safety Valves	Set point	Each refueling shutdown 10
13.	Containment Isolation Trip	Functioning	Each refueling shutdown 9.4.5

TABLE 15.4.1-2 (CONTINUED)

	<u>Test</u>	<u>Frequency</u>	<u>FSAR Section Reference</u>
(14)	Refueling System Interlocks	Functioning	Each refueling shutdown 9.4.5
(15)	Service Water System	Functioning	Each refueling shutdown 9.5.5
(16)	Fire Protection Pump and Power Supply	Functioning	Monthly 9.5.5
(17)	Primary System Leakage	Evaluate	Monthly (6) 4   15
(18)	Diesel Fuel Supply	Fuel inventory	Daily 8.2.3
(19)	Turbine Stop and Governor Valves	Functioning	Monthly (6) 10   15
(20)	Low Pressure Turbine Rotor Inspection <sup>(5)</sup>	Visual and magnetic particle or liquid penetrant	Every five years 10

- (1) A radiochemical analysis for this purpose shall consist of a quantitative measurement of each radionuclide with half life of >30 minutes such that at least 95% of total activity of primary coolant is accounted for.
- (2) E determination will be started when the gross activity analysis of a filtered sample indicates  $\geq 10$   $\mu\text{c}/\text{cc}$  and will be redetermined if the primary coolant gross radioactivity of a filtered sample increases by more than 10  $\mu\text{c}/\text{cc}$ .
- (3) Drop tests shall be conducted at rated reactor coolant flow. Rods shall be dropped under both cold and hot conditions, but cold drop tests need not be timed.
- (4) Drop tests will be conducted in the hot condition for rods on which maintenance was performed.
- (5) As accessible without disassembly of rotor.
- (6) Not required during periods of refueling shutdown.
- (7) At least once per week during periods of refueling shutdown.
- (8) At least three times per week (with maximum time of 72 hours between samples) during periods of refueling shutdown.

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

SAFETY EVALUATION BY THE DIVISION OF REACTOR LICENSING

SUPPORTING AMENDMENT NO. 7 TO LICENSE NO. DPR-24

(CHANGE NO. 15 TO THE TECHNICAL SPECIFICATIONS)

WISCONSIN ELECTRIC POWER COMPANY  
WISCONSIN MICHIGAN POWER COMPANY

DOCKET NO. 50-266

Introduction

By letter dated October 17, 1972 Wisconsin Electric Power Company (WEPCO) requested changes to the Technical Specifications appended to Facility Operating License No. DPR-24 for Point Beach Nuclear Plant Unit 1. The proposed changes involve: (1) waiving of requirements for channel checks, calibration and testing of some instrumentation during refueling shutdown, and (2) reduction in frequency or waiving of some sampling and equipment tests during periods of refueling shutdown.

Discussion:

The first change proposed by the licensee would waive the requirements for periodic checking, testing and calibration of instruments during periods in which these instruments are not required to be operable.

The second proposed change would waive the requirement to test some equipment which is not required to be operable during periods of refueling, and it would waive or reduce the frequency of some sample tests, commensurate with safety requirements, during periods of refueling shutdown.

Evaluation

Our evaluation of the proposed changes follows:

- (1) Proposed Changes to Technical Specifications Table 15.4.1-1  
MINIMUM FREQUENCIES FOR CHECKS, CALIBRATIONS AND TESTS OF  
INSTRUMENT CHANNELS:

Different reactor operating modes dictate different requirements with respect to the operability of instrumentation. In evaluation of the proposed changes, we concluded that it was not necessary to require that an item of instrumentation be maintained in an operable condition during periods when it does not perform a safety related function. The proposed



changes eliminate surveillance requirements on instrumentation which is not required to be operable during periods of refueling shutdown. Thus, with the exception of steam generator pressure instrumentation (Item 25 of Table 15.4.1-1) we conclude that the proposed change would be consistent with the safety provisions of the Technical Specifications provided that all applicable channel checks, calibrations, and tests be performed prior to startup if they have not been performed during the previous surveillance period. The footnote to Table 15.4.1-1 of the Technical Specifications has been appropriately modified to reflect this provision. This modification has been discussed with the licensee and he has concurred in this modification.

With regard to surveillance requirements for steam generator pressure instrumentation, it is noted that existing Technical Specification 15.3.1.B.2 limits the steam generator pressure to 200 psig when the temperature of the steam generator vessel shell is below 70°F. For this reason surveillance of steam generator pressure instrumentation is still required to provide indication of an overpressure condition whenever steam generator vessel shell temperature is below 70°F. Therefore Table 15.4.1-1 of the Technical Specifications has been modified to include this requirement. Discussion with WEPCO of this NRC modification has resulted in WEPCO recognition and concurrence in the modifications.

In summary, we have concluded that the proposed change as modified by the Nuclear Regulatory Commission (NRC) staff, does not modify the original scope of the surveillance requirements.

(2) Proposed Changes to Technical Specifications Table 15.4.1-2  
MINIMUM FREQUENCIES FOR EQUIPMENT AND SAMPLING TESTS:

The request for a reduction in frequency or elimination of some sampling and equipment tests during periods of refueling shutdown involves several changes which have different bases. Therefore, the evaluation of these changes is presented on a case-by-case basis below:

(a) Reactor Coolant Samples (Item 1 of Table 15.4.1-2)

- (i) Gross Beta-gamma Activity (excluding tritium): The proposed change would reduce the frequency of this test from five times per week to once per week during periods of refueling shutdown. During normal operation this sample would detect "crud bursts" in the reactor coolant system. During refueling, crud bursts would increase the radiation levels and thus exposure of personnel in containment.

In the refueling mode, monitoring of radiation levels in containment provides virtually instantaneous indication to personnel of increased radiation levels. This monitoring provides personnel protection from all radiation sources including "crud bursts". On the other hand, sampling for gross beta-gamma activity involves an inherent time delay both in the analysis of the sample and in the interval between samples. For these reasons measurement of gross beta-gamma activity does not afford personnel radiation protection during refueling, and thus is not required for that purpose. However, measurement of gross beta-gamma activity once per week is considered to be good practice to provide indication of the degassed radioactivity of the primary coolant.

For these reasons, the proposed change to require measurement of gross beta-gamma activity on a once per week basis during refueling is considered acceptable.

- (ii) Chloride Concentration: The licensee's proposed change would reduce the frequency of this test from five times per week to once per week during refueling. Monitoring of chloride concentration is required to minimize the potential for chloride stress corrosion. Concentration of chlorides is considered to have the potential for adverse effects on the reactor coolant system during all modes of reactor operation, including refueling. Although the potential for chloride stress corrosion is generally considered to be less during refueling, sampling for chlorides three times per week is considered appropriate to provide a sufficient level of assurance that increased concentration will not go undetected. Therefore, the sample frequency specified in Table 15.4.1-2 has been modified accordingly, and is considered acceptable as modified. Discussion with WEPCO of our suggested modification mentioned above resulted in their concurrence in this frequency of three times per week.
- (iii) Oxygen Concentration: During normal operations the oxygen concentration is maintained at low levels to minimize corrosion. The proposed change would waive the requirement for this sample test during refueling. Since the reactor coolant system would be cooled down and open to the atmosphere during refueling operations, saturated oxygen conditions would exist in the water coolant. Therefore, control of oxygen concentration is not feasible and thus is not required when the reactor coolant system is in this depressurized and low temperature condition; hence, this test would not perform any safety related function in the refueling mode. For this reason the proposed change is acceptable.

- (iv) **Fluoride Concentration:** Fluoride concentration is maintained at low levels to minimize corrosion. This sample test was not proposed by the licensee but its omission from the Technical Specifications was discovered during the review of the proposed changes. Specification 15.3.1.E.2 of the existing Technical Specifications specifies that fluoride concentration shall not exceed 0.15 ppm but no surveillance requirement was previously listed in table 15.4.1-2. Consequently, Table 15.4.1-2 has been modified to include the requirement for a fluoride concentration sample weekly. This sample test is required during all reactor operational modes, including refueling. Discussion with WEPCO has resulted in their concurrence with this modification.
- (b) **Refueling Water Storage Tank (RWST) Water Sample (Item 3 of Table 15.4.1-2):** The proposed change would eliminate this sample for boron concentration during periods of refueling shutdown. During reactor operation this sample is required to demonstrate, in part, the operability of the RWST, which is a component of the Emergency Core Cooling System. During refueling the RWST does not perform an engineered safeguards function. Consequently, sampling of this tank is not required and thus the proposed change is acceptable.
- (c) **Secondary Coolant (Item 8 of Table 15.4.1-2), Gross Beta-gamma Activity and Iodine Concentration:** The proposed change would waive the requirement for these tests during refueling. These samples are required during normal operation to limit activity levels below values which assure that site boundary dose limits will not be exceeded during a postulated main steam line break event with an assumed and specified primary to secondary leak rate. During refueling the reactor coolant primary system is cooled down and depressurized; thus, the potential for a primary to secondary leak is minimal to nonexistent and a steam line break is not considered to be credible. Therefore, secondary coolant samples are not required during these periods and thus the proposed change is acceptable.
- (d) **Control Rods (Item 10 of Table 15.4.1-2) and Turbine Stop and Governor Valves (Item 19 of Table 15.4.1-2):** The proposed change would waive the requirement for tests of these items during refueling. Since the operability of this equipment is not required during refueling, neither of these tests would serve any safety related function. Therefore, the proposed change is acceptable.
- (e) **Primary System Leakage (Item 17 of Table 15.4.1-2):** The proposed change would eliminate the monthly evaluation of leakage during periods of refueling shutdown. During refueling the primary system is cooled down and depressurized,

and primary system water inventory is monitored by observing water level in the refueling cavity, as part of the normal refueling procedure. This method of monitoring leakage is considered adequate when the plant is in this condition. Thus, the monthly evaluation test is not required and for this reason we conclude that the proposed change is acceptable.

#### Summary

We have concluded that the proposed changes, as modified by the NRC staff and concurred in by the licensee: (a) do not alter the safety provisions of the Technical Specifications, (b) constitute only clarification of the original surveillance requirements, and (c) are acceptable.

#### Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the change 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 change 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.

Dated: JUL 0 1 1975

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-266

WISCONSIN ELECTRIC POWER COMPANY  
WISCONSIN MICHIGAN POWER COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY  
OPERATING LICENSE

Notice is hereby given that the U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 7 to Facility Operating License No. DPR-24 issued to Wisconsin Electric Power Company and Wisconsin Michigan Power Company which revised Technical Specifications for operation of the Point Beach Nuclear Plant Unit 1, located in the Town of Two Creeks, Manitowoc County, Wisconsin. The amendment is effective as of its date of issuance.

The amendment permits modification of the Technical Specifications to reduce requirements for channel checks, calibration and testing of some instrumentation during refueling shutdown and reduces some sampling and equipment tests during periods of refueling shutdown.

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 is not required since the amendment does not involve a significant hazards consideration.

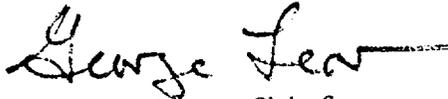
For further details with respect to this action, see (1) the application for amendment dated October 17, 1972, (2) Amendment No. 7 to License No. DPR-24, with Change No. 15 and (3) the Commission's

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 Document Department, University of Wisconsin - Stevens Point Library, Stevens Point, Wisconsin 54481.

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 Reactor Licensing.

Dated at Bethesda, Maryland, this 1st day of July 1975.

FOR THE NUCLEAR REGULATORY COMMISSION



George Lear, Chief  
Operating Reactors Branch #3  
Division of Reactor Licensing