

Docket Nos. 50-266  
and 50-301

AUG 20 1975

Chebron  
AESTeen  
JRBuchanan  
TBAbernathy  
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ACRS (14)

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TJCarter  
PCollins  
SVarga

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

Gentlemen:

The Commission has issued Amendments Nos. 9 and 11 to Facility Operating Licenses Nos. DPR-24 and DPR-27 for the Point Beach Nuclear Plant Units 1 and 2. The amendments also include Changes Nos. 14 and 17 to the Technical Specifications in accordance with your request dated August 30, 1974.

The amendments modify the Technical Specifications to clarify a Limiting Condition for Operation and to correct a clerical error.

Your application of August 30, 1974, also requested a change to (1) Specification 15.1.a.C - Abnormal Occurrence Definition, and (2) Specification 15.3.2 - Chemical and Volume Control System. Item (1) was superseded by your application dated February 7, 1975, and item (2) is being considered in conjunction with your request of May 5, 1973, pertaining to the boric acid system. Amendments for these two items will be issued in the future.

Copies of the related Safety Evaluation and the Federal Register Notice are also enclosed.

Sincerely,

*151*

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

Enclosures:

1. Amendments Nos. 9 and 11
2. Safety Evaluation
3. Federal Register Notice

*copy*

*u*

OFFICE >	RL:ORB-3	RL:ORB-3 <i>JW</i>	OELD <del>_____</del>	RL:ORB-3		
x7872 SURNAME >	KParrish <i>cp</i>	JWetmore <i>esp</i>	Ketchen <i>pk</i>	GLear <i>DL</i>		
DATE >	7/31/75	1/31/75	8/19/75 <i>8/19/75</i>	8/20/75		

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

AUG 20 1975

Docket Nos. 50-266  
and 50-301

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

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Sincerely,

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

Enclosures:

1. Amendments Nos. 9 and 11
2. Safety Evaluation
3. Federal Register Notice

Wisconsin Michigan and Wisconsin Electric Power Company

cc: w/enclosure

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

Mr. William F. Eich, Chairman  
Public Service Commission  
of Wisconsin  
Hill Farms State Office Building  
Madison, Wisconsin 53702

Mr. Gary Williams  
Federal Activities Branch  
Environmental Protection Agency  
Region V Office  
One North Wacker Drive - Room 822  
Chicago, Illinois 60606

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 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 9  
License No. DPR-24

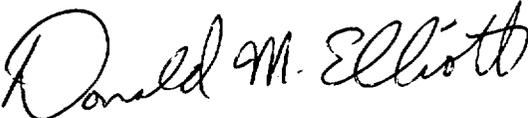
1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Wisconsin Electric Power Company and Wisconsin Michigan Power Company (the licensees) dated August 30, 1974, complies with the standards and requirements of the Atomic Energy Act of 1954, as 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; 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

*for* 

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

Attachment:  
Change No. 14 to the  
Technical Specifications

Date of Issuance: AUG 20 1975

ATTACHMENT TO LICENSE AMENDMENT NO. 9  
CHANGE NO. 14 TO THE TECHNICAL SPECIFICATIONS  
FACILITY OPERATING LICENSE NO. DPR-24  
DOCKET NO. 50-266

Replace pages 15.3.6-1 and 15.3.6-2 with the attached revised pages  
(no change made on page 15.3.6-2.)

Replace Table 15.3.5-3 with the attached revised table.

TABLE 15.3.5-3

EMERGENCY COOLING

NO.	FUNCTIONAL UNIT	1 NO. OF CHANNELS	2 NO. OF CHANNELS TO TRIP	3 MIN. OPERABLE CHANNELS	4 MIN. DEGREE OF REDUNDANCY	5 PERMISSIBLE BYPASS CONDITIONS	OPERATOR ACTION IF CONDITIONS OF COLUMN 3 OR 5 CANNOT BE MET
1	SAFETY INJECTION						
a.	Manual	2	1	1	1		Hot Shutdown***
b.	High Containment Pressure	3	2	2	1		Hot Shutdown***
c.	Steam Generator Low Steam Pressure/Loop	3	2	2	1	Primary Pressure is Less than 1800 psig	Hot Shutdown***
d.	Pressurizer Low Pressure and Low Level	3*	1*	1*	2	Primary Pressure is Less than 1800 psig	Hot Shutdown***
2	CONTAINMENT SPRAY						
a.	Manual	2	2	2	---		Hot Shutdown***
b.	Hi-Hi Containment Pressure (Containment Spray)	2 sets of 3	2 Of 3 in each set	2 per set	1/set		Hot Shutdown***

\* - Each Channel has one pressurizer pressure and one pressurizer level signal.

\*\* - Must actuate 2 switches simultaneously.

\*\*\* - If minimum conditions are not met within 24 hours, steps shall be taken on the affected unit to place the unit in cold shutdown conditions.

Applicability:

Applies to the integrity of reactor containment.

Objective:

To define the operating status of the reactor containment for plant operation.

Specification:

A. Containment Integrity

- a) The containment integrity (as defined in 15.1) shall not be violated when a nuclear core is installed in the reactor unless the reactor is in the cold shutdown condition.
- b) The containment integrity shall not be violated when the reactor vessel head is removed unless the reactor is in the refueling shutdown condition.
- c) Positive reactivity changes shall not be made by rod drive motion when the containment integrity is not intact except for the testing of one rod mechanism at a time, rod drop tests and rod disconnecting and reconnecting provided the reactor is initially subcritical by at least 10%  $\Delta k/k$ .
- d) Positive reactivity changes shall not be made by boron dilution when the containment integrity is not intact unless the boron concentration in the reactor is maintained  $\geq 1800$  ppm.

B. Internal Pressure

If the internal pressure exceeds 3 psig or the internal vacuum exceeds 2.0 psig, the condition shall be corrected or the reactor rendered subcritical.

Basis:

The Reactor Coolant System conditions of cold shutdown assure that no steam will be formed and hence there would be no pressure buildup in the containment if the Reactor Coolant System ruptures.

The shutdown conditions of the reactor are selected based on the type of activities that are being carried out. When the reactor head is not to be removed, the specified cold shutdown margin of 1%  $\Delta K/K$  precludes criticality under any occurrence. During refueling the reactor is subcritical by 10%  $\Delta K/K$ . This precludes criticality under any circumstances even though fuel is being moved or control rods withdrawn. Positive reactivity addition by rod motion from an initial 10%  $\Delta K/K$  subcritical reactor condition precludes criticality because the reactor would be substantially subcritical even if all control rods were completely withdrawn. Positive reactivity changes by boron dilution may be required or small fluctuations may occur during preparation for, recovery from, or during refueling but maintaining the boron concentration greater than 1800 ppm precludes criticality under any circumstances. Should continuous dilution occur, the time intervals for this incident are discussed in Section 14.1.5 of the FFDSAR.

Regarding internal pressure limitations, the containment design pressure of 60 psig would not be exceeded if the internal pressure before a major loss-of-coolant accident were as much as 6 psig.<sup>(1)</sup> The containment is designed to withstand an internal vacuum of 2.0 psig.<sup>(2)</sup>

References

- (1) FSAR - Section 14.3.4
- (2) FSAR - Section 5.5.2

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

WISCONSIN ELECTRIC POWER COMPANY

WISCONSIN MICHIGAN POWER COMPANY

DOCKET NO. 50-301

POINT BEACH NUCLEAR PLANT UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 11  
License No. DPR-27

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 August 30, 1974, 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; 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-27 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. 17."

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. 17 to the  
Technical Specifications

Date of Issuance: **AUG 20 1975**

ATTACHMENT TO LICENSE AMENDMENT NO. 11  
CHANGE NO. 17 TO THE TECHNICAL SPECIFICATIONS  
FACILITY OPERATING LICENSE NO. DPR-27  
. DOCKET NO. 50-301

Replace pages 15.3.6-1 and 15.3.6-2 with the attached revised pages  
(no change made on page 15.3.6-2.)

Replace Table 15.3.5-3 with the attached revised table.

TABLE 15.3.5-3

EMERGENCY COOLING

NO. OF CHANNELS	NO. OF CHANNELS TO TRIP	NO. OF CHANNELS OPERABLE	MIN. DEGREE OF BYPASS	PERMISSIBLE	IF CONDITIONS OF	OPERATOR ACTION	FUNCTIONAL UNIT	NO.
1	2	3	4	5				

SAFETY INJECTION

a. Manual 2 1 1 1 Hot Shutdown\*\*\*

b. High Containment Pressure 3 2 2 1 Hot Shutdown\*\*\*

c. Steam Generator Low Steam Pressure/Loop 3 2 2 1 Hot Shutdown\*\*\*

d. Pressurizer Low Pressure and Low Level 3\* 1\* 1\* 2 Hot Shutdown\*\*\*

CONTAINMENT SPRAY

a. Manual 2 2 2 --- Hot Shutdown\*\*\*

b. Hi-Hi Containment Pressure (Containment Spray) 2 sets of 3 2 of 3 2 per sec 1/sec Hot Shutdown\*\*\*

\* - Each Channel has one pressurizer pressure and one pressurizer level signal.

\*\* - Must actuate 2 switches simultaneously.

\*\*\* - If minimum conditions are not met within 24 hours, steps shall be taken on the affected unit to place the unit in cold shutdown conditions.

OPERATOR ACTION  
IF CONDITIONS OF  
COLUMN 3 OR 5  
CANNOT BE MET

### 15.3.6 CONTAINMENT SYSTEM

#### Applicability:

Applies to the integrity of reactor containment.

#### Objective:

To define the operating status of the reactor containment for plant operation.

#### Specification:

##### A. Containment Integrity

- a) The containment integrity (as defined in 15.1) shall not be violated when a nuclear core is installed in the reactor unless the reactor is in the cold shutdown condition.
- b) The containment integrity shall not be violated when the reactor vessel head is removed unless the reactor is in the refueling shutdown condition.
- c) Positive reactivity changes shall not be made by rod drive motion when the containment integrity is not intact except for the testing of one rod mechanism at a time, rod drop tests and rod disconnecting and reconnecting provided the reactor is initially subcritical by at least 10%  $\Delta k/k$ .
- d) Positive reactivity changes shall not be made by boron dilution when the containment integrity is not intact unless the boron concentration in the reactor is maintained  $\geq 1800$  ppm.

##### B. Internal Pressure

If the internal pressure exceeds 3 psig or the internal vacuum exceeds 2.0 psig, the condition shall be corrected or the reactor rendered subcritical.

### Analysis:

The Reactor Coolant System conditions of cold shutdown assure that no steam will be formed and hence there would be no pressure buildup in the containment if the Reactor Coolant System ruptures.

The shutdown conditions of the reactor are selected based on the type of activities that are being carried out. When the reactor head is not to be removed, the specified cold shutdown margin of 1%  $\Delta K/K$  precludes criticality under any occurrence. During refueling the reactor is subcritical by 10%  $\Delta K/K$ . This precludes criticality under any circumstances even though fuel is being moved or control rods withdrawn. Positive reactivity addition by rod motion from an initial 10%  $\Delta K/K$  subcritical reactor condition precludes criticality because the reactor would be substantially subcritical even if all control rods were completely withdrawn. Positive reactivity changes by boron dilution may be required or small fluctuations may occur during preparation for, recovery from, or during refueling but maintaining the boron concentration greater than 1800 ppm precludes criticality under any circumstances. Should continuous dilution occur, the time intervals for this incident are discussed in Section 14.1.5 of the FFDSAR.

Regarding internal pressure limitations, the containment design pressure of 60 psig would not be exceeded if the internal pressure before a major loss-of-coolant accident were as much as 6 psig.<sup>(1)</sup> The containment is designed to withstand an internal vacuum of 2.0 psig.<sup>(2)</sup>

### References

- (1) FSAR - Section 14.3.4
- (2) FSAR - Section 5.5.2

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENTS NOS. 9 AND 11 TO LICENSES DPR-24 AND DPR-27  
(CHANGE NOS. 14 AND 17 TO THE TECHNICAL SPECIFICATIONS)

WISCONSIN ELECTRIC POWER COMPANY

WISCONSIN MICHIGAN POWER COMPANY

POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

DOCKETS NOS. 50-266 AND 50-301

INTRODUCTION

By letter dated August 30, 1974 Wisconsin Electric Power Company (WEPCo) requested changes to the Technical Specifications appended to Facility Operating Licenses DPR-24 and DPR-27 for Point Beach Nuclear Plant Units 1 and 2. The proposed changes pertain to (i) the correction of clerical errors in Table 15.3.5-3 and (ii) clarification of Limiting Condition for Operation (LCO) 15.3.6.A.c.

DISCUSSION AND EVALUATION:

1. Proposed Change to Technical Specification 15.3.5.3:

The requested change would correct a clerical error in Column 5 of Table 15.3.5-3. The entries in Column 5 relate to the "permissible bypass conditions" for a variety of electrical circuits used for actuation of emergency functions of plant equipment. The correction would delete the permissible bypass condition for Manual Safety Injection (item 1.a), and would add the specification, in Column 5, that the permissible bypass condition for Safety Injection circuits associated with "Steam Generator Low Steam Pressure/Loop" (item 1.c) and "Pressurizer Low Pressure and Low Level" (item 1.d) is that condition for which "Primary Pressure is less than 1800 psig". This proposed change would properly reflect operational requirements in the Technical Specifications and would constitute only an editorial correction and thus is acceptable.

2. Proposed Change to Technical Specification 15.3.6.A.c:

The existing Technical Specification 15.3.6.A.c allows the performance of rod drop tests and rod disconnecting and reconnecting without establishing containment integrity, provided the reactor is initially subcritical by at least 10%  $\Delta k/k$ . The performance of rod drop tests involves the full withdrawal and dropping of one control rod at a time. These tests result in localized, small positive reactivity additions. However, when the reactor is in the specified condition of at least 10%  $\Delta k/k$  subcritical, criticality is precluded under any circumstances, including the movement of fuel or the complete withdrawal of all control rods from the core. Criticality is precluded in this condition because of the negative reactivity afforded by the high concentration of boron (>1,800 ppm) in the reactor coolant. The existing Technical Specification does not require the establishment of containment integrity during the performance of rod drop tests, provided the reactor is initially subcritical by at least 10%  $\Delta k/k$ , because it is recognized that the small positive reactivity additions associated with these tests cannot cause reactor criticality and thus do not present a safety hazard.

The proposed change would add a provision to specifically allow control rod mechanism testing (as well as rod drop tests and rod disconnecting and reconnecting) without establishing containment integrity, provided the reactor is initially subcritical by at least 10%  $\Delta k/k$ . Control rod mechanism testing is performed to verify the operability of the control rod drive mechanisms and involves the partial withdrawal and insertion of one control rod at a time. Similar to the rod drop tests which are performed under the existing Technical Specification, the rod mechanism testing results in small positive reactivity additions. However, since the rod mechanism testing involves only the partial withdrawal of one control rod at a time, rather than the complete withdrawal of one control rod at a time which is associated with rod drop testing, the resulting positive reactivity addition is even less than that associated with rod drop testing. Consequently, the testing of one rod mechanism at a time, when the reactor is initially subcritical by a least 10%  $\Delta k/k$ , cannot result in core criticality. Thus, the performance of these tests without establishing containment integrity does not present a safety hazard. Accordingly, and with the licensee's concurrence, the staff has modified the wording of the proposed change to explicitly specify that only one rod mechanism may be tested at one time. Therefore, the proposed change, as modified, is acceptable.

CONCLUSION

We have concluded, based on the considerations discussed above, that:  
(1) because the changes do not involve a significant increase in the probability or consequences of accidents previously considered and do

not involve a significant decrease in a safety margin, the changes do 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: AUG 20 1975

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKETS NOS. 50-266 AND 50-301

WISCONSIN ELECTRIC POWER COMPANY

WISCONSIN MICHIGAN POWER COMPANY

NOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY  
OPERATING LICENSES

Notice is hereby given that the U. S. Nuclear Regulatory Commission (the Commission) has issued Amendments Nos. 9 and 11 to Facility Operating Licenses Nos. DPR-24 and DPR-27, respectively, issued to Wisconsin Electric Power Company and Wisconsin Michigan Power Company which revised Technical Specifications for operation of the Point Beach Nuclear Plant, Units 1 and 2, located in the Town of Two Creeks, Manitowoc County, Wisconsin. The amendment is effective as of its date of issuance.

The amendments modify the Technical Specifications to clarify a Limiting Condition for Operation and to correct a clerical error.

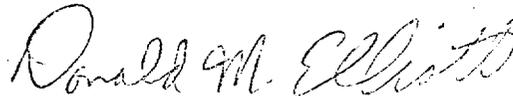
The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR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

For further details with respect to this action, see (1) the application for amendments dated August 30, 1974, (2) Amendments Nos. 9 and 11 to Licenses Nos. DPR-24 and DPR-27 with Changes Nos. 14 and 17, 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 Manitowoc Public Library, 808 Hamilton Street, Manitowoc, Wisconsin 54220.

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 *20<sup>th</sup>* day of *August*, 1975,

FOR THE NUCLEAR REGULATORY COMMISSION



Donald M. Elliott, Acting Chief  
Operating Reactors Branch #3  
Division of Reactor Licensing