Dockets Nos. 50-266
and 50-301

DEC 2 9 1975

DISTRIBUTION:
NRC PDRs
Local PDR
Dockets (2)
ORB#3 Rdg
OELD
OI&E (4)
NDube
BJones (w/8 encls)
JMcGough
JSaltzman
CParrish
JWetmore
GLear
KRGoller
BScharf (15)
TJCarter
PKreutzer
PCollins
SVarga
CHebron
AESteen
DEisenhut
ACRS (16)
TBAbernathy
JRBuchanan
Gray file
extra cps (5)

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 the enclosed Amendments Nos. 13 and 17 to Facility Operating Licenses Nos. DPR-24 and DPR-27 for the Point Beach Nuclear Plant, Units Nos. 1 and 2. The amendments include Changes Nos. 18 and 23 to the Technical Specifications and are in accordance with your applications dated May 5, 1973, August 30, 1974 and July 15, 1975.

This amendment would (1) clarify the Technical Specifications regarding boric acid system flow path requirements, (2) modify the Technical Specifications to acknowledge recirculation as a means for maintaining the solubility of the boric acid in portions of the boric acid system, and (3) add boric acid system surveillance requirements to the Technical Specifications.

Copies 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. Amendments Nos. 13 and 17
2. Safety Evaluation
3. Federal Register Notice

cc: See next page

CONT

OFFICE ➤	ORB#3	ORB#3	OELD	ORB#3		
SURNAME ➤	CParrish:kmf	JWetmore	Eutelbaum	GLear		
DATE ➤	12/ 11 /75	12/ 11 /75	12/ 19 /75	12/ 29 /75		

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

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

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. 13
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 May 5, 1973, August 30, 1974 and July 15, 1975, 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 licensees shall operate the facility in accordance with the Technical Specifications, as revised by issued changes thereto through Change No. 18."

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

FOR THE NUCLEAR REGULATORY COMMISSION

George Lear

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

Attachment:
Change No. 18 to the
Technical Specifications

Date of Issuance: December 29, 1975

Wisconsin Michigan Power Company
Wisconsin Electric Power Company

cc:

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

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

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

ATTACHMENT TO LICENSE AMENDMENT NO. 13

CHANGE NO. 18 TO THE TECHNICAL SPECIFICATIONS

FACILITY OPERATING LICENSE NO. DPR-24

DOCKET NO. 50-266

Replace pages 15.3.2-1 through 15.3.2-4 and Table 15-4.1-2 (continued). Add page 15.3.2-5.

15.3.2 CHEMICAL AND VOLUME CONTROL SYSTEM

Applicability

Applies to the operational status of the chemical and volume control system.

Objective

To define those conditions of the chemical and volume control system necessary to insure safe reactor operation.

Specification

A. When fuel is in the reactor there shall be at least one flow path to the core for boric acid injection.

B. A reactor shall not be taken critical unless the following chemical and volume control system conditions are met:

1. A minimum of two charging pumps for that reactor shall be operable.
2. Two of the four boric acid transfer pumps shall be operable and at least one pump shall be lined up to supply boric acid to the applicable reactor. 18
3. At least one boric acid tank shall contain a minimum of 2,000 gallons of not less than 11.5% by weight boric acid solution of a temperature of at least 145°F. 18
4. System piping and valves shall be operable to the extent of establishing flow paths from the boric acid tank(s) and the refueling water storage tank to the reactor coolant system.
5. For the concentrated boric acid flow paths (B.4 above) two methods of heating to maintain fluidity of the boric acid shall be operable. 18

The methods shall be: (a) two independent channels of heat tracing or, (b) for those portions of the flow paths in B.4 above which can be recirculated, one channel of heat tracing operable and recirculation flow established. 18

C. A second reactor shall not be taken critical with one reactor already critical unless the following chemical and volume control system conditions are met:

1. A minimum of two charging pumps for that reactor shall be operable.
2. At least three of the four boric acid transfer pumps shall be operable, with at least one boric acid transfer pump lined up to each unit to supply boric acid to that reactor. 18
3. At least two boric acid tanks shall contain a minimum of 2,000 gallons of not less than 11.5% by weight boric acid solution at a temperature of at least 145°F.
4. System piping and valves shall be operable to the extent of establishing flow paths from the boric acid tank(s) and from the refueling water storage tank(s) to each reactor coolant system.
5. For the concentrated boric acid flow paths (C.4 above), two methods of heating to maintain fluidity of the boric acid shall be operable. The methods shall be: (a) two independent channels of heat tracing operable, or (b) for those portions of the flow paths in C.4 above which can be recirculated, one channel of heat tracing operable and recirculation flow established. 18

D. During power operation the requirements of 15.3.2-B and C may be modified to allow the following components to be inoperable for a specified time. If the system is not restored to meet the requirements of 15.3.2-B or C within the time period specified, the appropriate reactor(s) except as otherwise noted, shall be placed in the hot shutdown condition. If the requirements of 15.3.2-B or C are not satisfied within an additional 48 hours, the appropriate reactor(s) shall be placed in the cold shutdown condition. 18

1. One of the two operable charging pumps associated with an operating reactor may be removed from service provided a charging pump associated with that same reactor is restored to operable status within 24 hours.
2. One of the boric acid transfer pumps designated in B.2 or C.2 may be out of service provided a pump is restored to operable status within 24 hours.
3. For the system piping and valve operability requirements (B.4 and C.4):
   a. The flow path from the boric acid tank to a reactor coolant system may be out of service provided the flow path is restored to operable status within 24 hours.
   b. The flow path from the refueling water storage tank to a reactor coolant system may be out of service provided the flow path is restored to operable status within 1 hour. If the flow path cannot be restored to operable status within 1 hour, the reactor shall be placed in cold shutdown within the next 30 hours. 18

4. Two of the three methods of heating the concentrated boric acid flow paths may be out of service for up to 48 hours provided the tank and flow path temperatures are verified to be $\geq$145°F at least once per 8 hours. For those sections of the system that have two channels of heat tracing only, one channel of heat tracing may be out of service for up to 48 hours provided the tank and flow path temperatures are verified to be $\geq$145°F at least once per 8 hours. 18

Basis

The chemical and volume control system provides control of the reactor coolant system boron inventory. This is normally accomplished by using any one of the three charging pumps in series with any one of the four boric acid pumps. The design of the two-unit plant permits the alignment of any of the four boric acid transfer pumps to either reactor. An alternate method of boration will be used of the charging pumps directly from the refueling water storage tank. A third method will be to depressurize below about 1500 psi and use the safety injection pumps. There are two sources of borated water available for injection through three different paths.

1. The boric acid transfer pumps can deliver the boric acid tank contents (11.5% by weight boric acid solution) to the suction of the charging pumps.
2. The charging pumps can take suction directly from the refueling water storage tank. (2000 ppm boron solution. Reference is made to Technical Specification 15.3.3.A).
3. The safety injection pumps can take their suctions from either the boric acid tanks or the refueling water storage tank.

The quantity of boric acid in storage from either the boric acid tanks or the refueling water storage tank is sufficient to borate the reactor coolant in order to reach cold shutdown at any time during core life. Approximately 1800 gallons of at least 11.5% solution of boric acid are required to meet cold shutdown. Thus, a minimum of 2,000 gallons in the boric acid tank is specified. In order to insure solution solubility at the boric acid concentration in the system, a minimum temperature of 145°F is required.

Three methods of heating are installed to insure fluidity in the concentrated boric acid flow paths. These methods are: two independent channels of heat tracing, and concentrated boric acid tank heating and mini-recirculation system.

Either independent channel of heat tracing or the concentrated boric acid tank heating and mini-recirculation system can maintain the fludity in the concentrated boric acid flowpaths. Not all of the piping in the concentrated boric acid flow paths has provisions for continuous circulation flow. These sections of pipe without recirculation flow utilize the two independent channels of heat tracing for the redundancy commitment. 18

TABLE 15.4.1-2 (CONTINUED)

		Test	Frequency	FSAR Section Reference
(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
(18)	Diesel Fuel Supply	Fuel inventory	Daily	8.2.3
(19)	Turbine Stop and Governor Valves	Functioning	Monthly (6)	10
(20)	Low Pressure Turbine Rotor Inspection(5)	Visual and magnetic particle or liquid penetrant	Every five years	10
(21)	Boric Acid System	Storage Tank Temperature	Daily	
(22)	Boric Acid System	Visual observation of piping temperatures (all $\geq$145°F)	Daily	
(23)	Boric Acid Piping Heat Tracing	Electrical circuit operability	Monthly	

18

(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) $\overline{E}$ determination will be started when the gross activity analysis of a filtered sample indicates $\geq$10 µc/cc and will be redetermined if the primary coolant gross radioactivity of a filtered sample increases by more than 10 µc/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. 18

(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

WISCONSIN ELECTRIC POWER COMPANY
WISCONSIN MICHIGAN POWER COMPANY

DOCKET NO. 50-301

POINT BEACH NUCLEAR PLANT, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 17
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 May 5, 1973, August 30, 1974 and July 15, 1975, 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 licensees shall operate the facility in accordance with the Technical Specifications, as revised by issued changes thereto through Change No. 23."

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

FOR THE NUCLEAR REGULATORY COMMISSION

George Lear

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

Attachment:
Change No. 23 to the
Technical Specifications

Date of Issuance: December 29, 1975

ATTACHMENT TO LICENSE AMENDMENT NO. 17

CHANGE NO. 23 TO THE TECHNICAL SPECIFICATIONS

FACILITY OPERATING LICENSE NO. DPR-27

DOCKET NO. 50-301

Replace pages 15.3.2-1 through 15.3.2-4 and Table 15.4.1-2 (continued). Add page 15.3.2-5.

15.3.2 CHEMICAL AND VOLUME CONTROL SYSTEM

Applicability

Applies to the operational status of the chemical and volume control system.

Objective

To define those conditions of the chemical and volume control system necessary to insure safe reactor operation.

Specification

A. When fuel is in the reactor there shall be at least one flow path to the core for boric acid injection.

B. A reactor shall not be taken critical unless the following chemical and volume control system conditions are met:

1. A minimum of two charging pumps for that reactor shall be operable.
2. Two of the four boric acid transfer pumps shall be operable and at least one pump shall be lined up to supply boric acid to the applicable reactor. | 23
3. At least one boric acid tank shall contain a minimum of 2,000 gallons of not less than 11.5% by weight boric acid solution of a temperature of at least 145°F. | 23
4. System piping and valves shall be operable to the extent of establishing flow paths from the boric acid tank(s) and the refueling water storage tank to the reactor coolant system.
5. For the concentrated boric acid flow paths (B.4 above) two methods of heating to maintain fluidity of the boric acid shall be operable. | 23

The methods shall be: (a) two independent channels of heat tracing or, (b) for those portions of the flow paths in B.4 above which can be recirculated, one channel of heat tracing operable and recirculation flow established. 23

C. A second reactor shall not be taken critical with one reactor already critical unless the following chemical and volume control system conditions are met:

1. A minimum of two charging pumps for that reactor shall be operable.
2. At least three of the four boric acid transfer pumps shall be operable, with at least one boric acid transfer pump lined up to each unit to supply boric acid to that reactor. 23
3. At least two boric acid tanks shall contain a minimum of 2,000 gallons of not less than 11.5% by weight boric acid solution at a temperature of at least 145°F.
4. System piping and valves shall be operable to the extent of establishing flow paths from the boric acid tank(s) and from the refueling water storage tank(s) to each reactor coolant system.
5. For the concentrated boric acid flow paths (C.4 above), two methods of heating to maintain fluidity of the boric acid shall be operable. The methods shall be: (a) two independent channels of heat tracing operable, or (b) for those portions of the flow paths in C.4 above which can be recirculated, one channel of heat tracing operable and recirculation flow established. 23

D. During power operation the requirements of 15.3.2-B and C may be modified to allow the following components to be inoperable for a specified time. If the system is not restored to meet the requirements of 15.3.2-B or C within the time period specified, the appropriate reactor(s) except as otherwise noted, shall be placed in the hot shutdown condition. If the requirements of 15.3.2-B or C are not satisfied within an additional 48 hours, the appropriate reactor(s) shall be placed in the cold shutdown condition. 23

1. One of the two operable charging pumps associated with an operating reactor may be removed from service provided a charging pump associated with that same reactor is restored to operable status within 24 hours.
2. One of the boric acid transfer pumps designated in B.2 or C.2 may be out of service provided a pump is restored to operable status within 24 hours.
3. For the system piping and valve operability requirements (B.4 and C.4):
   a. The flow path from the boric acid tank to a reactor coolant system may be out of service provided the flow path is restored to operable status within 24 hours.
   b. The flow path from the refueling water storage tank to a reactor coolant system may be out of service provided the flow path is restored to operable status within 1 hour. If the flow path cannot be restored to operable status within 1 hour, the reactor shall be placed in cold shutdown within the next 30 hours. 23

4. Two of the three methods of heating the concentrated boric acid flow paths may be out of service for up to 48 hours provided the tank and flow path temperatures are verified to be $\geq$145°F at least once per 8 hours. For those sections of the system that have two channels of heat tracing only, one channel of heat tracing may be out of service for up to 48 hours provided the tank and flow path temperatures are verified to be $\geq$145°F at least once per 8 hours. 23

Basis

The chemical and volume control system provides control of the reactor coolant system boron inventory. This is normally accomplished by using any one of the three charging pumps in series with any one of the four boric acid pumps. The design of the two-unit plant permits the alignment of any of the four boric acid transfer pumps to either reactor. An alternate method of boration will be used of the charging pumps directly from the refueling water storage tank. A third method will be to depressurize below about 1500 psi and use the safety injection pumps. There are two sources of borated water available for injection through three different paths.

1. The boric acid transfer pumps can deliver the boric acid tank contents (11.5% by weight boric acid solution) to the suction of the charging pumps.
2. The charging pumps can take suction directly from the refueling water storage tank. (2000 ppm boron solution. Reference is made to Technical Specification 15.3.3.A).
3. The safety injection pumps can take their suctions from either the boric acid tanks or the refueling water storage tank.

The quantity of boric acid in storage from either the boric acid tanks or the refueling water storage tank is sufficient to borate the reactor coolant in order to reach cold shutdown at any time during core life. Approximately 1800 gallons of at least 11.5% solution of boric acid are required to meet cold shutdown. Thus, a minimum of 2,000 gallons in the boric acid tank is specified. In order to insure solution solubility at the boric acid concentration in the system, a minimum temperature of 145°F is required.

Three methods of heating are installed to insure fluidity in the concentrated boric acid flow paths. These methods are: two independent channels of heat tracing, and concentrated boric acid tank heating and mini-recirculation system.

Either independent channel of heat tracing or the concentrated boric acid tank heating and mini-recirculation system can maintain the fludity in the concentrated boric acid flowpaths. Not all of the piping in the concentrated boric acid flow paths has provisions for continuous circulation flow. These sections of pipe without recirculation flow utilize the two independent channels of heat tracing for the redundancy commitment. 23

TABLE 15.4.1-2 (CONTINUED)

		Test	Frequency	FSAR Section Reference
(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
(18)	Diesel Fuel Supply	Fuel inventory	Daily	8.2.3
(19)	Turbine Stop and Governor Valves	Functioning	Monthly (6)	10
(20)	Low Pressure Turbine Rotor Inspection(5)	Visual and magnetic particle or liquid penetrant	Every five years	10
(21)	Boric Acid System	Storage Tank Temperature	Daily	
(22)	Boric Acid System	Visual observation of piping temperatures (all $\geq$145°F)	Daily	23
(23)	Boric Acid Piping Heat Tracing	Electrical circuit operability	Monthly	

(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) $\overline{E}$ determination will be started when the gross activity analysis of a filtered sample indicates $\geq$10 µc/cc and will be redetermined if the primary coolant gross radioactivity of a filtered sample increases by more than 10 µc/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. 23

(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 OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENTS NOS. 13 AND 17 TO LICENSES DPR-24 AND DPR-27

(CHANGES NOS. 18 AND 23 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 letters dated May 5, 1973, August 30, 1974, and July 15, 1975, Wisconsin Electric Power Company (WEPCO) requested changes to the Technical Specifications appended to Facility Licenses DPR-24 and DPR-27 for Point Beach Nuclear Plant, Units 1 and 2. The requested changes would: (1) clarify the Technical Specifications regarding boric acid system flow path requirements, (2) modify the Technical Specifications to acknowledge recirculation as a means for maintaining the solubility of the boric acid in portions of the boric acid system, and (3) add boric acid system surveillance requirements to the Technical Specifications.

Discussion

The function of the boric acid system is to supply concentrated boric acid (11.5% by weight) on demand (1) to the reactor coolant system through the boric acid blender and charging pumps for reactivity control, or (2) directly to the safety injection pumps for direct pumping into the reactor coolant system in the event of a safety injection system actuation. The concentrated boric acid provides negative reactivity by virtue of the high neutron absorbtion coefficient of boron.

The principal components of the boric acid system, which are pertinent to the proposed changes, are the boric acid tanks (BAT's), the boric acid transfer pumps and associated piping. One BAT is normally lined up to each reactor through one of two redundant transfer pumps for each plant (four boric acid transfer pumps total), with a third BAT in standby.

Evaluation

(1) Proposed changes to Technical Specifications 15.3.2.B, C, and D regarding boric acid flow paths:

The existing Technical Specifications do not specifically require that flow paths be established from the boric acid tanks (BAT's) through the appropriate boric acid transfer pump(s) to each reactor when operating

both units; nor are they clear about the number of flow paths which must be available. The proposed changes would clarify the Technical Specifications in this area by explicitly requiring that at least one boric acid transfer pump be lined up to each unit to supply boric acid to that reactor. Moreover, the proposed changes to Technical Specification 15.3.2.D.3 would specify the operational actions which would be required if the boric acid system flow path operability is not maintained.

Our review of the proposed changes indicated that some modification of the language was desirable to improve clarity. In addition, it is our position that if the flow path from the refueling water storage tank (RWST) to the reactor coolant system cannot be restored to operable status within one hour, the reactor should be placed in cold shutdown within 30 hours. The proposed changes did not include this requirement, and therefore, with the licensee's concurrence, we have modified the proposed changes to incorporate this requirement.

Based on our review of the proposed changes, as modified by the staff and concurred in by the licensee, we have concluded that they would contribute to an increase in reactor safety by clarifying the existing Technical Specifications and by adding explicit requirements relative to boric acid flow path operability; and therefore, are acceptable.

(2) Proposed changes to Technical Specifications 15.3.2.B, C and D regarding the methods for heating the boric acid flow paths to maintain solubility of the boric acid:

The boric acid system contains concentrated boric acid (11.5% by weight), which is used as a source of negative reactivity. For the concentration of boric acid in this system, a temperature of 145°F or greater is considered necessary to provide a sufficient margin to ensure solubility of the boric acid. Therefore, to maintain the fluid at a temperature above 145°F, two full capacity electric immersion heaters are provided in the BAT's, and two redundant channels of electrical heat tracing are provided for all associated piping. In addition, the licensee has installed a recirculation pump to continuously recirculate the concentrated boric acid from its point of heat input, the BAT, through portions of the system piping and back to the BAT. The recirculation pump provides additional assurance that the solubility of the boric acid will be maintained.

The existing Technical Specifications require that two redundant channels of heat tracing be operable. This requirement was incorporated into the license before the installation of the recirculation pump and thus it does not reflect the current system design. The proposed changes would be reflective of the current design by acknowledging recirculation as a third redundant means for maintaining the boric solubility, in those portions of the piping system that are recirculated. Thus the proposed change would require that two of the three methods of heating the concentrated boric acid flow paths (i.e., the three methods are recirculation plus

two channels of heat tracing) be operable.

The licensee has provided temperature data relating to actual system operation and has performed calculations, with which we agree, and which show that a boric acid fluid temperature of atleast 145°F would be maintained by recirculation. Our review of the proposed changes indicated that modification of the language was desirable to clarify the Technical Specifications; and the licensee concurred with these modifications. In addition, it is the staff's position that when only one of the three methods of heating the concentrated boric acid flow path is available, the BAT and flow path temperatures should be verified to be greater than or equal to 145°F at least once per 8 hours. Verification of BAT and flow path temperatures during this operational mode would provide additional assurance of maintaining the solubility of the boric acid. Accordingly, and with the licensee's concurrence, we have modified Technical Specification 15.3.2.D.4 to incorporate this requirement.

Based on our review of the proposed changes, as modified by the staff and concurred in by the licensee, we have concluded that they would provide adequate assurance that the solubility of the concentrated boric acid would be maintained; and therefore, are acceptable.

(3) Proposed addition of Technical Specifications 15.4.1.B, Table 15.4.1-2, items 21, 22, and 23, relating to boric acid system surveillance requirements:

The existing Technical Specifications do not contain boric acid system surveillance requirements. The proposed addition of boric acid system surveillance requirements to the Technical Specifications would require (1) checking BAT and piping temperatures daily, and (2) checking heat tracing circuit operability monthly.

Based on our review of these proposed additional surveillance requirements, we have concluded that they would provide increased assurance that the boric acid solubility would be maintained; and therefore, 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: December 29, 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 AMENDMENT TO FACILITY OPERATING LICENSE

Notice is hereby given that the U.S. Nuclear Regulatory Commission (the Commission) has issued Amendments Nos. 13 and 17 to Facility Operating Licenses Nos. DPR-24 and DPR-27 issued to Wisconsin Electric Power Company and Wisconsin Michigan Power Company, which revised Technical Specifications for operation of the Point Beach Nuclear Plant Units Nos. 1 and 2, located in the town of Two Creeks, Manitowoc County, Wisconsin.

The amendment will (1) clarify the Technical Specifications regarding boric acid system flow path requirements, (2) modify the Technical Specifications to acknowledge recirculation as a means for maintaining the solubility of the boric acid in portions of the boric acid system, and (3) add boric acid system surveillance requirements to the Technical Specifications.

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 applications for amendment dated May 5, 1973, August 30, 1974 and July 15, 1975, (2) Amendments Nos. 13 and 17 to License Nos. DPR-24 and DPR-27, with Changes Nos. 18 and 23, 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 29th day of December, 1975.

FOR THE NUCLEAR REGULATORY COMMISSION

George Lear

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