

SEP 1 1977

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✓ Docket
NRC PDR
Local PDR
ORB #3
VStello
KGoller
GLear
CParrish
PWagner
Attorney, OELD
OI&E (5)
BJones (8)
BScharf (10)
JMcGough
DEisenhut
ACRS (16)
OPA (Clare Miles)
DRoss
TBAbernathy
JRBuchanan

Dockets 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

Gentlemen:

The Commission has issued the enclosed Amendments Nos. 26 and 31 to Facility Operating Licenses Nos. DPR-24 and DPR-27 for the Point Beach Nuclear Plant, Units Nos. 1 and 2. The amendments consist of changes to the Technical Specifications and are in accordance with your application dated May 31, 1977.

These amendments consist of changes in the Technical Specifications that will (1) allow one of the operable auxiliary feedwater pumps to be out of service provided a pump is restored to operable status within 24 hours; (2) revise the wording of the basis for Specification 15.3.7; (3) correct the peak clad temperature noted in the basis of Specification 15.3.10; (4) provide for the use of an optional gamma isotopic analysis of secondary coolant samples in place of a gross beta-gamma activity analysis; (5) involve the necessary approvals for temporary changes to procedures; and (6) revise Section 16.6 of Appendix B.

Copies of the related Safety Evaluation and the FEDERAL REGISTER Notice also are enclosed.

Sincerely,

Original signed by
George Lear, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Enclosures:

1. Amendment No. 26 to License DPR-24
2. Amendment No. 31 to License DPR-27
3. Safety Evaluation
4. FEDERAL REGISTER Notice

cc w/enclosures:
See page 2

OFFICE	ORB #3	ORB #3	OELD	ORB #3
cc	CParrish	PWagner:mjf	Ketcher	GLear 62
SURNAME	8/10/77	8/10/77	8/24/77	8/31/77
DATE				

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Wisconsin Electric Power Company - 2 -
Wisconsin Michigan Power Company

cc:

Mr. Bruce Churchill, Esquire
Shaw, Pittman, Potts and Trowbridge
1800 M Street, N. W.
Washington, D. C. 20036

Mr. Norman Clapp, Chairman
Public Service Commission
of Wisconsin
Hill Farms State Office Building
Madison, Wisconsin 53702

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

Wisconsin Electric Power Company
ATTN: Mr. Glen Reed
Manager, Nuclear Power Division
Point Beach Nuclear Plant
231 West Michigan Street
Milwaukee, Wisconsin 53201

Chief, Energy Systems Analysis Branch (AW-459)
Office of Radiation Programs
U. S. Environmental Protection Agency
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Washington, D. C. 20460

U. S. Environmental Protection Agency
Federal Activities Branch
Region V Office
ATTN: EIS COORDINATOR
230 S. Dearborn Street
Chicago, Illinois 60604

Walter L. Meyer
Town Chairman
Town of Two Creeks, Wisconsin
Route 3, Two Rivers, Wisconsin 54241



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. 26
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 31, 1977, 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-24 is hereby amended to read as follows:

(B) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 26, are hereby incorporated in the license. The licensees shall operate the facility in accordance with the Technical Specifications.

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 Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 1, 1977

ATTACHMENT TO LICENSE AMENDMENT NO. 26

TO THE TECHNICAL SPECIFICATIONS

FACILITY OPERATING LICENSE NO. DPR-24

DOCKET NO. 50-266

Replace the following pages of the Appendices "A" and "B" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. The corresponding overleaf page 15.3.4-1 is also provided to maintain document completeness. No changes were made on page 15.3.4-1.

Remove

15.3.4-1
15.3.4-2

15.3.7-5
15.3.10-12
Table 15.4.1-2
15.6.8-2

16.6-1 (Appendix B)

Replace

15.3.4-1
15.3.4-2
15.3.4-2a
15.3.7-5
15.3.10-12
Table 15.4.1-2
15.6.8-2
15.6.8-3
16.6-1

15.3.4 STEAM AND POWER CONVERSION SYSTEM

Applicability

Applies to the operating status of steam and power conversion system.

Objective

To define conditions of the steam and power conversion system steam-relieving capacity. Auxiliary Feedwater System and Service Water System operation is necessary to ensure the capability to remove decay heat from the core.

Specification

- A. When the reactor coolant is heated above 350°F the reactor shall not be taken critical unless the following conditions are met:
- (1) A minimum steam-relieving capability of eight (8) main steam safety valves available, except for low power physics testing.
 - 2(a) Two unit operation - Three of the four auxiliary feedwater pumps must be operable.
 - 2(b) Single unit operation - Either the turbine driven pump associated with that unit together with one of the two motor driven pumps or both motor driven pumps must be operable.
 - (3) A minimum of 10,000 gallons of water per operating unit in the condensate storage tanks and an unlimited water supply from the lake via either leg of the plant Service Water System.

(4) System piping and valves required to function during accident conditions directly associated with the above components operable.

- B. The iodine-131 activity on the secondary side of the steam generator shall not exceed 1.2 $\mu\text{Ci/cc}$.
- C. During power operation the requirements of 15.3.4.A.2.a and b 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 15.3.4.A.2.a and b within the time period specified, the appropriate reactor(s) shall be placed in the hot shutdown condition. If the requirements of 15.3.4.A.2.a and b are not satisfied within an additional 48 hours, the appropriate reactor(s) shall be cooled down to less than 350°F.
1. Two Unit Operation. One of the three operable auxiliary feedwater pumps may be out-of-service provided a pump is restored to operable status within 24 hours.
 2. Single Unit Operation. One of the two operable auxiliary feedwater pumps may be out-of-service provided a pump is restored to operable status within 24 hours.

Basis

A reactor shutdown from power requires removal of core decay heat. Immediate decay heat removal requirements are normally satisfied by the steam by pass to the condenser. Therefore, core decay heat can be continuously dissipated via the steam bypass to the condenser as feedwater in the steam generator is converted to steam by heat absorption. Normally, the capability to return feedwater flow to the steam generators is provided by operation of the turbine cycle feedwater system.

The eight main steam safety valves have a total combined rated capability of 6,664,000 lbs/hr. The total full power steam flow is 6,620,000 lbs/hr, therefore eight (8) main steam safety valves will be able to relieve the total full-power steam flow if necessary.

In the unlikely event of complete loss of electrical power to the station, decay heat removal would continue to be assured for each unit by the availability of either the steam-driven auxiliary feedwater pump or one of the two motor-driven auxiliary steam generator feedwater pumps, and steam discharge to the atmosphere via the main steam safety valves or atmospheric relief valves. One motor-driven auxiliary feedwater pump can supply sufficient feedwater for removal of decay heat from a unit. The minimum amount of water in the condensate storage tanks is the amount needed for 25 minutes of operation/unit, which allows sufficient time for operator action.

An unlimited supply is available from the lake via either leg of the plant service water system for an indefinite time period.

If only one 345KV transmission line is in service to the plant switchyard, a temporary loss of this line would result in a reactor trip(s) if the reactor(s) power level were greater than 50%. Therefore, in order to maintain continuity of service and the possibility of self sustaining operations, if less than one 345KV transmission line is in service to any operating reactor(s), the power level of the affected reactor(s) will be limited to 50%.

If both 345/13.8KV station auxiliary transformers are out of service, only one reactor will be operated. The gas turbine will be supplying power to operate the safeguards auxiliaries of the operating reactor and acts as a backup supply for that unit's normal auxiliaries. Therefore, to prevent overloading the gas turbine in the event of a reactor trip, the maximum power level for the operating reactor will be limited to 50%. These conservative limits are set to improve transmission system reliability only and are not dictated by safety system requirements.

References

FSAR Section 8.

4. Axial power distribution control procedures, which are given in terms of flux difference control and control bank insertion limits are observed. Flux difference refers to the difference in signals between the top and bottom halves of two-section excore neutron detectors. The flux difference is a measure of the axial offset which is defined as the difference in normalized power between the top and bottom halves of the core.

The permitted relaxation of $F_{\Delta H}^N$ allows radial power shape changes with rod insertion to the insertion limits. It has been determined that provided the above conditions 1 through 4 are observed, these hot channel factor limits are met. In Specification 15.3.10.B.1.a, F_Q is arbitrarily limited for $p \leq 0.5$ (except for low power physics tests.)

An upper bound envelope of 2.32 times the normalized peaking factor axial dependence of figure 15.3.10-3 consistent with the Technical Specifications on power distribution control as given in section 15.3.10 was used in the LOCA analysis. The results of the analyses based on this upper bound envelope indicate a peak clad temperature of 1965°F corresponding to a 235°F margin to the 2200°F limit.

When an F_Q measurement is taken, both experimental error and manufacturing tolerance must be allowed for. Five percent is the appropriate allowance for a full core map taken with the movable incore detector flux mapping system and three percent is the appropriate allowance for manufacturing tolerance.

TABLE 15.4.1-2

MINIMUM FREQUENCIES FOR EQUIPMENT AND SAMPLING TESTS

	<u>Test</u>	<u>Frequency</u>	<u>FSAR Section Reference</u>
1. Reactor Coolant Samples	Gross Beta-gamma activity (excluding tritium)	5/week (7)	
	Tritium activity	Monthly	
	Radiochemical \bar{E} Determination (1)	Semiannually (2)	
	Chloride Concentration	5/week (8)	
	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)	
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 or gamma isotopic analysis	Weekly (6)	
	Iodine concentration	Weekly when gross Beta-gamma activity equals or exceeds 1.2 $\mu\text{Ci/cc}$ (6)	
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
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

15.6.8.3 Changes to Procedures

- A. Temporary changes to major procedures, of the categories listed in 15.6.8.1 (except 15.6.8.1.4) and 15.6.11.1, which do not change the intent of the original or subsequent approved procedure, may be made provided such changes to operating procedures are approved by the Duty Shift Supervisor and one of the Duty and Call Superintendents.
- For temporary changes to major procedures under the jurisdiction of Maintenance, Instrumentation and Control, Reactor Engineering, or Chemistry and Health Physics which do not change the intent, changes may be made upon approval of the cognizant group head and a Duty and Call Superintendent. All Temporary changes to major procedures (made by a Duty and Call Superintendent and either a cognizant group head or the Duty Shift Supervisor) shall subsequently be reviewed by the Manager's Supervisory Staff and approved by the Manager - Nuclear Power Division within 2 weeks; except that temporary changes to major procedure made to a given unit during its refueling outage may be reviewed and approved at any time prior to initial criticality of the reload core; and shall only become permanent changes after these Manager's Staff review and Manager's approval steps.
- B. All temporary or permanent changes to minor operating procedures (checkoff lists, alarm responses, data sheets, operating instructions, etc.) shall be approved by the Duty Shift Supervisor, and shall be subsequently reviewed and approved by the Operations

Superintendent. All temporary or permanent changes to other minor procedures under the jurisdiction of Maintenance, Instrumentation and Control, Reactor Engineering, or Chemistry and Health Physics, shall be approved by a supervisor of the cognizant group and shall be subsequently reviewed and approved by the group head of the cognizant group.

Specification

1. A significant fish kill will be considered a reportable occurrence and shall be reported as described in Section 15.6.9.2.B of Appendix A.
2. As part of the Semiannual Monitoring Report, described in Section 15.6.9.2.C of Appendix A, the following shall be reported:
 - a) A summary, including general results, of the Non-Radiological Environmental Surveillance Program.
 - b) All scheduled and unscheduled chemical discharges to the condenser cooling water.
 - c) A description of circulating water system operation for each unit which includes ambient temperature, intake temperature, discharge temperature, and circulating water system flow.



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. 31
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 31, 1977, 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. 31, are hereby incorporated in the license. The licensees shall operate the facility in accordance with the Technical Specifications.

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 Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 1, 1977

ATTACHMENT TO LICENSE AMENDMENT NO. 31

TO THE TECHNICAL SPECIFICATIONS

FACILITY OPERATING LICENSE NO. DPR-27

DOCKET NO. 50-301

Replace the following pages of the Appendices "A" and "B" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. The corresponding overleaf page 15.3.4-1 is also provided to maintain document completeness. No changes were made on page 15.3.4-1.

Remove

15.3.4-1
15.3.4-2

15.3.7-5
15.3.10-12
Table 15.4.1-2
15.6.8-2

16.6-1 (Appendix B)

Replace

15.3.4-1
15.3.4-2
15.3.4-2a
15.3.7-5
15.3.10-12
Table 15.4.1-2
15.6.8-2
15.6.8-3
16.6-1

15.3.4 STEAM AND POWER CONVERSION SYSTEM

Applicability

Applies to the operating status of steam and power conversion system.

Objective

To define conditions of the steam and power conversion system steam-relieving capacity. Auxiliary Feedwater System and Service Water System operation is necessary to ensure the capability to remove decay heat from the core.

Specification

- A. When the reactor coolant is heated above 350°F the reactor shall not be taken critical unless the following conditions are met:
- (1) A minimum steam-relieving capability of eight (8) main steam safety valves available, except for low power physics testing.
 - 2(a) Two unit operation - Three of the four auxiliary feedwater pumps must be operable.
 - 2(b) Single unit operation - Either the turbine driven pump associated with that unit together with one of the two motor driven pumps or both motor driven pumps must be operable.
 - (3) A minimum of 10,000 gallons of water per operating unit in the condensate storage tanks and an unlimited water supply from the lake via either leg of the plant Service Water System.

(4) System piping and valves require to function during accident conditions directly associated with the above components operable.

- B. The iodine-131 activity on the secondary side of the steam generator shall not exceed 1.2 $\mu\text{Ci/cc}$.
- C. During power operation the requirements of 15.3.4.A.2.a and b 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 15.3.4.A.2.a and b within the time period specified, the appropriate reactor(s) shall be placed in the hot shutdown condition. If the requirements of 15.3.4.A.2.a and b are not satisfied within an additional 48 hours, the appropriate reactor(s) shall be cooled down to less than 350°F.
1. Two Unit Operation. One of the three operable auxiliary feedwater pumps may be out-of-service provided a pump is restored to operable status within 24 hours.
 2. Single Unit Operation. One of the two operable auxiliary feedwater pumps may be out-of-service provided a pump is restored to operable status within 24 hours.

Basis

A reactor shutdown from power requires removal of core decay heat. Immediate decay heat removal requirements are normally satisfied by the steam by pass to the condenser. Therefore, core decay heat can be continuously dissipated via the steam bypass to the condenser as feedwater in the steam generator is converted to steam by heat absorption. Normally, the capability to return feedwater flow to the steam generators is provided by operation of the turbine cycle feedwater system.

The eight main steam safety valves have a total combined rated capability of 6,664,000 lbs/hr. The total full power steam flow is 6,620,000 lbs/hr, therefore eight (8) main steam safety valves will be able to relieve the total full-power steam flow if necessary.

In the unlikely event of complete loss of electrical power to the station, decay heat removal would continue to be assured for each unit by the availability of either the steam-driven auxiliary feedwater pump or one of the two motor-driven auxiliary steam generator feedwater pumps, and steam discharge to the atmosphere via the main steam safety valves or atmospheric relief valves. One motor-driven auxiliary feedwater pump can supply sufficient feedwater for removal of decay heat from a unit. The minimum amount of water in the condensate storage tanks is the amount needed for 25 minutes of operation/unit, which allows sufficient time for operator action.

An unlimited supply is available from the lake via either leg of the plant service water system for an indefinite time period.

If only one 345KV transmission line is in service to the plant switchyard, a temporary loss of this line would result in a reactor trip(s) if the reactor(s) power level were greater than 50%. Therefore, in order to maintain continuity of service and the possibility of self sustaining operations, if less than one 345KV transmission line is in service to any operating reactor(s), the power level of the affected reactor(s) will be limited to 50%.

If both 345/13.8KV station auxiliary transformers are out of service, only one reactor will be operated. The gas turbine will be supplying power to operate the safeguards auxiliaries of the operating reactor and acts as a backup supply for that unit's normal auxiliaries. Therefore, to prevent overloading the gas turbine in the event of a reactor trip, the maximum power level for the operating reactor will be limited to 50%. These conservative limits are set to improve transmission system reliability only and are not dictated by safety system requirements.

References

FSAR Section 8.

4. Axial power distribution control procedures, which are given in terms of flux difference control and control bank insertion limits are observed. Flux difference refers to the difference in signals between the top and bottom halves of two-section excore neutron detectors. The flux difference is a measure of the axial offset which is defined as the difference in normalized power between the top and bottom halves of the core.

The permitted relaxation of F_{AH}^N allows radial power shape changes with rod insertion to the insertion limits. It has been determined that provided the above conditions 1 through 4 are observed, these hot channel factor limits are met. In Specification 15.3.10.B.1.a, F_Q is arbitrarily limited for $p \leq 0.5$ (except for low power physics tests.)

An upper bound envelope of 2.32 times the normalized peaking factor axial dependence of figure 15.3.10-3 consistent with the Technical Specifications on power distribution control as given in section 15.3.10 was used in the LOCA analysis. The results of the analyses based on this upper bound envelope indicate a peak clad temperature of 1965°F corresponding to a 235°F margin to the 2200°F limit.

When an F_Q measurement is taken, both experimental error and manufacturing tolerance must be allowed for. Five percent is the appropriate allowance for a full core map taken with the movable incore detector flux mapping system and three percent is the appropriate allowance for manufacturing tolerance.

TABLE 15.4.1-2

MINIMUM FREQUENCIES FOR EQUIPMENT AND SAMPLING TESTS

	<u>Test</u>	<u>Frequency</u>	<u>FSAR Section Reference</u>
1. Reactor Coolant Samples	Gross Beta-gamma activity (excluding tritium)	5/week (7)	
	Tritium activity	Monthly	
	Radiochemical \bar{E} Determination (1)	Semiannually (2)	
	Chloride Concentration	5/week (8)	
	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)	
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 or gamma isotopic analysis	Weekly (6)	
	Iodine concentration	Weekly when gross Beta-gamma activity equals or exceeds 1.2 $\mu\text{Ci/cc}$ (6)	
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
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

15.6.8.3 Changes to Procedures

- A. Temporary changes to major procedures, of the categories listed in 15.6.8.1 (except 15.6.8.1.4) and 15.6.11.1, which do not change the intent of the original or subsequent approved procedure, may be made provided such changes to operating procedures are approved by the Duty Shift Supervisor and one of the Duty and Call Superintendents.
- For temporary changes to major procedures under the jurisdiction of Maintenance, Instrumentation and Control, Reactor Engineering, or Chemistry and Health Physics which do not change the intent, changes may be made upon approval of the cognizant group head and a Duty and Call Superintendent. All Temporary changes to major procedures (made by a Duty and Call Superintendent and either a cognizant group head or the Duty Shift Supervisor) shall subsequently be reviewed by the Manager's Supervisory Staff and approved by the Manager - Nuclear Power Division within 2 weeks; except that temporary changes to major procedure made to a given unit during its refueling outage may be reviewed and approved at any time prior to initial criticality of the reload core; and shall only become permanent changes after these Manager's Staff review and Manager's approval steps.
- B. All temporary or permanent changes to minor operating procedures (checkoff lists, alarm responses, data sheets, operating instructions, etc.) shall be approved by the Duty Shift Supervisor, and shall be subsequently reviewed and approved by the Operations

Superintendent. All temporary or permanent changes to other minor procedures under the jurisdiction of Maintenance, Instrumentation and Control, Reactor Engineering, or Chemistry and Health Physics, shall be approved by a supervisor of the cognizant group and shall be subsequently reviewed and approved by the group head of the cognizant group.

Specification

1. A significant fish kill will be considered a reportable occurrence and shall be reported as described in Section 15.6.9.2.B of Appendix A.
2. As part of the Semiannual Monitoring Report, described in Section 15.6.9.2.C of Appendix A, the following shall be reported:
 - a) A summary, including general results, of the Non-Radiological Environmental Surveillance Program.
 - b) All scheduled and unscheduled chemical discharges to the condenser cooling water.
 - c) A description of circulating water system operation for each unit which includes ambient temperature, intake temperature, discharge temperature, and circulating water system flow.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENTS NOS. 26 AND 31 TO FACILITY LICENSES DPR-24 AND DPR-27

WISCONSIN ELECTRIC POWER COMPANY

WISCONSIN MICHIGAN POWER COMPANY

POINT BEACH UNITS NOS. 1 AND 2

DOCKETS NOS. 50-266 AND 50-301

Introduction

By letter dated May 31, 1977, Wisconsin Electric Power Company (WEPCO) requested changes to the Technical Specifications appended to Facility Operating Licenses DPR-24 and DPR-27 for Point Beach Units Nos. 1 and 2. The requested changes involve a number of areas as discussed below.

Discussion

The change request submitted by WEPCO on May 31, 1977 consists of six separate proposed changes. The areas covered in these proposals include: Auxiliary Feedwater Pump availability, Auxiliary Electrical System availability, Power Distribution Limits, Secondary Coolant Sampling, Temporary Procedure change approval, and environmental data reporting.

Evaluation

We have evaluated the proposed changes and find the following:

1. The first proposed change adds a specification for the minimum number of operable auxiliary feedwater pumps required during power operation. The present specification gives, for one and also two unit operation, the required number of auxiliary feedwater pumps which must be operable before the reactor can be taken critical. This proposed change will allow for one of the operable auxiliary feedwater pumps to be out of service during power operation provided a pump is restored to operable status within 24 hours. The necessity of this change was pointed out in the NRC letter to the licensee dated October 19, 1976, which transmitted OI&E Inspection Report No. 050-266/76-11.

The auxiliary feedwater system for Point Beach Unit Nos. 1 and 2 has two steam turbine driven and two electric motor driven pumps. Each unit has a separate steam turbine driven pump which supplies both the A and B steam generators. One motor driven pump supplies auxiliary feedwater to the A steam generators in both Units Nos. 1 and 2, and

the other supplies auxiliary feedwater to the B steam generators in both Units. The motor driven auxiliary feedwater pumps are energized from separate vital power supplies and can be manually cross connected to provide even greater redundancy.

The auxiliary feedwater system is a backup to the main feedwater system. These systems supply water to the secondary side of the Steam Generators. The steam generators and the main feedwater system provide the normal heat removal capability for the reactor while the auxiliary feedwater system is only called upon to operate when the main feedwater system is not available. The auxiliary feedwater system will start automatically following failure of the main system.

The accident analysis performed for an assumed loss of the main feedwater system for one reactor utilized worst-case conditions: only one motor-driven auxiliary feedwater pump was assumed to be available to operate. The results of this analysis showed that the capacity of only one motor-driven pump was sufficient for removal of decay heat from a unit. The capacity of a turbine driven auxiliary feedwater pump is twice that of a motor-driven pump; thus, the steam driven pump is also adequate for support of a unit's requirement for makeup water.

The proposed change to allow one of the operable pumps to be out of service for a short period of time (24 hours) is consistent with the requirements imposed on similar plants and on other systems at the Point Beach Plants. This short outage period allows time to correct small deficiencies that are detected during equipment testing, while restricting operation for long periods with a lower degree of redundancy.

This proposed change does not increase the likelihood of the occurrence of the assumed accident, i. e., loss of main feedwater system, since the auxiliary feedwater system is redundant and operationally separable from the main system. The consequences of the assumed accident are not increased by the change because it has been shown that only one auxiliary feedwater pump is adequate to provide make-up water to the secondary side of the steam generators. Moreover, for this latter reason, an outage of only 24 hours for one pump is not a significant reduction in the capability of the auxiliary feedwater system for replenishment of feedwater to the secondary side of the steam generator. Thus, we find the proposed change to be acceptable.

2. The second change would revise the wording of the basis for specification 15.3.7. Since no specification is altered and the revised wording clarifies the intent of the present specification, we find this change to be acceptable.

3. A recent review of the Point Beach Technical Specifications by the NSSS vendor showed an error in the basis for Specification 15.3.10. The peak clad temperature currently stated on page 15.3.10-12 is 1996°F. The ECCS reanalysis submitted by the licensee on October 27, 1976 in response to a staff question for the Unit 1, Cycle 5 Reload Safety Evaluation, however, showed the peak clad temperature to be 1965°F. Correction is needed and since this third proposed change does modify the basis of specification 15.3.10 to reflect the correct values, we conclude that it is acceptable.
4. The fourth proposed change concerns the use of an optional gamma isotopic analysis of secondary coolant samples in place of a gross beta-gamma activity analysis. The secondary coolant activity specification remains the same, only the means of detection is allowed to change by providing for the use of a more sophisticated analysis. The use of gamma isotopic analysis will provide more accurate indication of secondary coolant activities than does the present gross analysis method. Since the intent of the specification is unchanged and more accuracy can be obtained, we find this change is acceptable.
5. The fifth proposed change involves the necessary approvals for temporary changes to plant procedures. Present specifications require review of all temporary changes to major procedures by the Manager's Supervisory Staff and approval by the Manager-Nuclear Power Division within two weeks. The requested change would allow the time period for review and approval of temporary changes to major procedures to be extended during refueling outages in order to ease the burden of accounting for the passing of time for approval action, provided the review and approval are completed prior to initial criticality of the reload core. Temporary changes to major procedures cannot change the intent of the originally approved procedure. Approval for such temporary changes is authorized only to designated plant management personnel. Since the intent of this specification has not been changed and adequate prior approval is provided, we find this proposed change to be acceptable.
6. The final requested change involves revisions to Section 16.6 of Appendix B. The term "abnormal occurrence" has been replaced by "reportable occurrence" and the referenced section number of Appendix A has been corrected. The reporting requirements in 16.6.2 have also been corrected to show the report being part of the Semiannual Monitoring Report with the applicable Appendix A section referenced. Since this change consists of only administrative corrections, we conclude that it is acceptable.

Summary

We have evaluated each item of the proposed amendment separately and found each to be acceptable. We, therefore, find the proposed amendments to be acceptable.

Environmental Consideration

We have determined that the amendments do not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendments involve an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not involve a significant increase in the probability or consequences or accidents previously considered and do not involve a significant decrease in a safety margin, the amendments 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 the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: September 1, 1977

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

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendments Nos. 26 and 31 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 amendments are effective as of the date of issuance.

These amendments consist of changes to the Technical Specifications that will (1) allow one of the operable auxiliary feedwater pumps to be out of service provided a pump is restored to operable status within 24 hours; (2) revise the wording of the basis for Specification 15.3.7; (3) correct the peak clad temperature noted in the basis of Specification 15.3.10; (4) provide for the use of an optional gamma isotopic analysis of secondary coolant samples in place of a gross beta-gamma activity analysis; (5) involve the necessary approvals for temporary changes to procedures; and (6) revise Section 16.6 of Appendix B.

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 amendments. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.

The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of these amendments.

For further details with respect to this action, see (1) the application for amendment dated May 31, 1977, (2) Amendment No. 26 to License No. DPR-24, (3) Amendment No. 31 to License No. DPR-27, and (4) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. and at the University of Wisconsin - Stevens Point Library, ATTN: Mr. Arthur M. Fish, Stevens Point, Wisconsin 54481. A copy of items (2), (3) and (4) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland this 1st day of September 1977.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in dark ink, appearing to read "George Lear", with a stylized flourish at the end.

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