



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

August 6, 1997

Mr. Richard R. Grigg
Chief Nuclear Officer
Wisconsin Electric Power Company
231 West Michigan Street, Room P379
Milwaukee, WI 53201

**SUBJECT: POINT BEACH NUCLEAR PLANT, UNIT NOS. 1 AND 2 - ISSUANCE OF
AMENDMENTS RE: RELOCATION OF TURBINE OVERSPEED TECHNICAL
SPECIFICATIONS (TAC NOS. M98224 AND M98225)**

Dear Mr. Grigg:

The Commission has issued the enclosed Amendment Nos. 176 and 180 to Facility Operating License Nos. DPR-24 and DPR-27 for the Point Beach Nuclear Plant, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications (TS) in response to your application dated February 12, 1997, as supplemented March 11, 1997 (TSCR 196).

These amendments relocate turbine overspeed protection specifications, limiting conditions for operation, surveillance requirements, and associated bases from TS Section 15.3.4, "Steam and Power Conversion System," and Section 15.4.1, "Operational Safety Review," to the Final Safety Analysis Report (FSAR). These changes are in accordance with Generic Letter 95-10, "Relocation of Selected Technical Specification Requirements Related to Instrumentation," and are consistent with NUREG-1431, "Standard Technical Specifications Westinghouse Plants," Revision 1.

These amendments authorize you to incorporate the above changes to the facility into the FSAR, as described in your application dated February 12, 1997, as supplemented March 11, 1997, and evaluated in the enclosed Safety Evaluation. In approving the proposed action, we have relied upon incorporating the turbine overspeed protection specifications, limiting conditions for operation, surveillance requirements, and associated bases into the FSAR by June 30, 1998.

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R. R. Grigg

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August 6, 1997

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

Sincerely,



Linda L. Gundrum, Project Manager
Project Directorate III-1
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Docket Nos. 50-266
and 50-301

Enclosures: 1. Amendment No. 176 to DPR-24
2. Amendment No. 180 to DPR-27
3. Safety Evaluation

cc w/encls: See next page

R. R. Grigg

- 2 -

August 6, 1997

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

Sincerely,

ORIGINAL SIGNED BY:

Linda L. Gundrum, Project Manager
Project Directorate III-1
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Docket Nos. 50-266
and 50-301

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Mr. Richard R. Grigg
Wisconsin Electric Power Company

Point Beach Nuclear Plant
Unit Nos. 1 and 2

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

WISCONSIN ELECTRIC POWER COMPANY

DOCKET NO. 50-266

POINT BEACH NUCLEAR PLANT, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 176
License No. DPR-24

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Wisconsin Electric Power Company (the licensee) dated February 12, 1997, as supplemented on March 11, 1997, 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, Facility Operation License No. DPR-24 is hereby amended to approve the relocation of the turbine overspeed protection specifications, limiting conditions for operation, surveillance requirements, and associated bases into the FSAR by June 30, 1998, as described in the licensee's application dated February 12, 1997, as supplemented on March 11, 1997, and evaluated in the staff's safety evaluation dated August 6, 1997. This license is also hereby 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. 176, are hereby incorporated in the license. The licensee shall operate the facility in accordance with Technical Specifications.

3. This license amendment is effective immediately upon issuance and shall be implemented by June 30, 1998. Implementation of this amendment is the relocation of the turbine overspeed protection specifications, limiting conditions for operation, surveillance requirements, and associated bases into the FSAR as described in the licensee's application dated February 12, 1997, as supplemented on March 11, 1997, and evaluated in the staff's safety evaluation dated August 6, 1997.

FOR THE NUCLEAR REGULATORY COMMISSION

Linda L. Gundrum

Linda L. Gundrum, Project Manager
Project Directorate III-1
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of issuance: **August 6, 1997**



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

WISCONSIN ELECTRIC POWER COMPANY

DOCKET NO. 50-301

POINT BEACH NUCLEAR PLANT, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 180
License No. DPR-27

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Wisconsin Electric Power Company (the licensee) dated February 12, 1997, as supplemented on March 11, 1997, 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, Facility Operation License No. DPR-27 is hereby amended to approve the relocation of the turbine overspeed protection specifications, limiting conditions for operation, surveillance requirements, and associated bases into the FSAR by June 30, 1998, as described in the licensee's application dated February 12, 1997, as supplemented on March 11, 1997, and evaluated in the staff's safety evaluation dated August 6, 1997. This license is also hereby 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. 180, are hereby incorporated in the license. The licensee shall operate the facility in accordance with Technical Specifications.

3. This license amendment is effective immediately upon issuance and shall be implemented by June 30, 1998. Implementation of this amendment is the relocation of the turbine overspeed protection specifications, limiting conditions for operation, surveillance requirements, and associated bases into the FSAR as described in the licensee's application dated February 12, 1997, as supplemented on March 11, 1997, and evaluated in the staff's safety evaluation dated August 6, 1997.

FOR THE NUCLEAR REGULATORY COMMISSION

Linda L. Gundrum

Linda L. Gundrum, Project Manager
Project Directorate III-1
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of issuance: **August 6, 1997**

ATTACHMENT TO LICENSE AMENDMENT NOS. 176 AND 180
TO FACILITY OPERATING LICENSE NOS. DPR-24 AND DPR-27
DOCKET NOS. 50-266 AND 50-301

Revise Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by amendment number and contain vertical lines indicating the area of change.

REMOVE

15.3.4-2a
15.3.4-2b
15.3.4-2c

INSERT

15.3.4-2a
15.3.4-2b
--

Table 15.4.1-1 (Page 4 of 6) Table 15.4.1-1 (Page 4 of 6)

Table 15.4.1-2 (Page 2 of 5) Table 15.4.1-2 (Page 2 of 5)
Table 15.4.1-2 (Page 3 of 5) Table 15.4.1-2 (Page 3 of 5)

2. Single Unit Operation - One of the three operable auxiliary feedwater pumps associated with a unit may be out-of service for the below specified times. The turbine driven auxiliary feedwater pump may be out-of-service for up to 72 hours. If the turbine driven auxiliary feedwater pump cannot be restored to service within that 72 hour time period, the reactor shall be in hot shutdown within the next 12 hours. Either one of the two motor driven auxiliary feedwater pumps may be out-of-service for up to 7 days. If the motor driven auxiliary feedwater pump cannot be restored to service within that 7 day period the operating unit shall be in hot shutdown within the next 12 hours.
- D. The main steam stop valves (MS-2017 and MS-2018) and the non-return check valves (MS-2017A and MS-2018A) shall be operable. If one main steam stop valve or non-return check valve is inoperable but open, power operation may continue provided the inoperable valve is restored to operable status within 4 hours, otherwise the reactor shall be placed in a hot shutdown condition within the following 6 hours. With one or more main steam stop valves or non-return check valves inoperable, subsequent operation in the hot shutdown condition may proceed provided the inoperable valve or valves are maintained closed. An inoperable main steam stop valve or non-return check valve may however, be opened in the hot shutdown condition to cool down the affected unit and to perform testing to confirm operability.

Basis

A reactor shutdown from power requires removal of core decay heat. Immediate decay heat removal requirements are normally satisfied by the steam bypass 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.

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Unit 2 - Amendment No. ~~157~~, ~~165~~, 180

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 ensures the ability to maintain each unit in a hot shutdown condition for at least one hour concurrent with a loss of all AC power.

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

Each of the AFW pumps possesses a low suction pressure trip that will protect it should a loss of feedwater occur. Additionally, should a steam generator tube rupture occur, the motor-operated steam admission valves for the turbine-driven AFW pumps serve as isolation boundaries for the affected steam generator.

The atmospheric steam dump lines are required to be operable because they are relied upon, following a steam generator tube rupture coincident with a loss of A.C. power, to cool down the Reactor Coolant System to RHR entry conditions. An atmospheric steam dump line is considered operable if it is capable of providing the controlled relief of main steam flow necessary to perform the RCS cooldown. Isolating an atmospheric steam dump line does not render it inoperable if the line can be unisolated and the RCS can still be cooled down to RHR entry conditions, through local or remote operation, within the time period required by the applicable FSAR accident analyses.

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TABLE 15.4.1-1 (continued)

<u>NO.</u>	<u>CHANNEL DESCRIPTION</u>	<u>CHECK</u>	<u>CALIBRATE</u>	<u>TEST</u>	<u>PLANT CONDITIONS WHEN REQUIRED</u>
36.	Radiation Monitoring System	D(7)	R(7)	M(7)	ALL
37.	Reactor Vessel Fluid Level System	M	R	-	ALL
38.	Refueling Water Storage Tank Level	-	R	-	ALL
39.	Residual Heat Removal Pump Flow	-	R	-	ALL
40.	Safety Valve Position Indicator	M	R	-	ALL
41.	Subcooling Margin Monitor	M	R	-	ALL
42.	Deleted				
43.	Volume Control Tank Level	-	R	-	ALL
44.	Reactor Protection System and Emergency Safety Feature Actuation System Logic	-	-	M(1,23)	ALL
45.	Reactor Trip System Interlocks				
	-Intermediate Range Neutron Flux, P-6	-	R(24)	R	ALL
	-Power Range Neutron Flux, P-8	-	R(24)	R	ALL
	-Power Range Neutron Flux, P-9	-	R(24)	R	ALL
	-Power Range Neutron Flux, P-10	-	R(24)	R	ALL
	-1st Stage Turbine Impulse Pressure	-	R(24)	R	ALL

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Unit 2 - Amendment No. ~~159~~, ~~161~~, ~~180~~

TABLE 15.4.1-2 (Continued)

	<u>Test</u>	<u>Frequency</u>
7. Spent Fuel Pit	a) Boron Concentration	Monthly
	b) Water Level Verification	Weekly
8. Secondary Coolant	Gross Beta-gamma Activity or gamma isotopic analysis	Weekly ⁽⁶⁾
	Iodine concentration	Weekly when gross Beta-gamma activity equals or exceeds 1.0 $\mu\text{Ci/g}$ ⁽⁶⁾
9. Control Rods	a) Rod drop times of all full length rods ⁽³⁾	Each refueling or after maintenance that could affect proper functioning ⁽⁴⁾
	b) Rodworth measurement	Following each refueling shutdown prior to commencing power operation
10. Control Rod	Partial movement of all rods	Every 2 weeks ⁽¹⁸⁾
11. Pressurizer Safety Valves	Set point	Every five years ⁽¹¹⁾
12. Main Steam Safety Valves	Set Point	Every five years ⁽¹¹⁾
13. Containment Isolation Trip	Functioning	Each refueling shutdown
14. Refueling System Interlocks	Functioning	Each refueling shutdown
15. Service Water System	Functioning	Each refueling shutdown
16. Primary System Leakage	Evaluate	Monthly ⁽⁶⁾
17. Diesel Fuel Supply	Fuel inventory	Daily
18. Deleted		
19. Deleted		
20. Boric Acid System	Storage Tank and piping temperatures \geq temperature required by Table 15.3.2-1	Daily ⁽¹⁹⁾

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Unit 2 - Amendment No. ~~175~~, ~~177~~, 180

TABLE 15.4.1-2 (Continued)

	<u>Test</u>	<u>Frequency</u>
21. PORV Block Valves	a. Complete Valve Cycle b. Open position check	Quarterly ⁽¹³⁾ Every 72 hours ⁽¹⁴⁾
22. Integrity of Post Accident Recovery Systems Outside Containment	Evaluate	Each refueling cycle
23. Containment Purge Supply and Exhaust Isolation Valves	Verify valves are locked closed	Monthly ⁽⁹⁾
24. Reactor Trip Breakers	a. Verify independent operability of automatic shunt and undervoltage trip functions. b. Verify independent operability of manual trip to shunt and undervoltage trip functions.	Monthly ⁽⁹⁾ Each refueling shutdown
25. Reactor Trip Bypass Breakers	a. Verify operability of the undervoltage trip function. b. Verify operability of the shunt trip functions. c. Verify operability of the manual trip to undervoltage trip functions.	Prior to breaker use Each refueling shutdown Each refueling shutdown
26. 120 VAC Vital Instr. Bus Power	Verify Energized ⁽¹²⁾	Shiftly
27. Power Operated Relief Valves (PORVs), PORV Solenoid Air Control Valves, and Air System Check	Operate ⁽¹⁶⁾	Each shutdown ⁽¹⁵⁾
28. Atmospheric Steam Dumps	Complete valve cycle	Quarterly
29. Deleted		

Unit 1 - Amendment No. ~~158~~, ~~171~~ 176

Unit 2 - Amendment No. ~~162~~, ~~175~~, 180



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 176 AND 180 TO

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

WISCONSIN ELECTRIC POWER COMPANY

POINT BEACH NUCLEAR PLANT, UNIT NOS. 1 AND 2

DOCKET NOS. 50-266 AND 50-301

1.0 INTRODUCTION

By letter dated February 12, 1997, as supplemented March 11, 1997, the Wisconsin Electric Power Company (WEPCO, the licensee) requested amendments to the Technical Specifications (TSs) appended to Facility Operating License Nos. DPR-24 and DPR-27 for the Point Beach Nuclear Plant (PBNP), Unit Nos. 1 and 2. The proposed amendments would relocate turbine overspeed protection specifications, limiting conditions for operation, surveillance requirements, and associated bases from TS Section 15.3.4, "Steam and Power Conversion System," and Section 15.4.1, "Operational Safety Review," to the Final Safety Analysis Report (FSAR). These changes are in accordance with Generic Letter (GL) 95-10, "Relocation of Selected Technical Specification Requirements Related to Instrumentation," and are consistent with NUREG-1431, "Standard Technical Specifications Westinghouse Plants," Revision 1.

2.0 EVALUATION

2.1 Proposed Changes

The licensee proposes to relocate the following specifications, limiting conditions for operation, surveillance requirements, and associated bases for the turbine overspeed system from the TSs to the FSAR:

1. TS 15.3.4.E - The crossover steam dump system shall be operable. If the crossover steam dump system is determined to be inoperable, reduce power to less than 480 MWe (gross) within 3 hours.

The licensee has evaluated a change to reduce the power level from 480 MWe to 437 MWe per the requirements of 10 CFR 50.59 in PBNP SER 95-058-01. The revised limit will be included in the relocation of this specification to the FSAR.

2. TS 15.3.4.E Basis - The crossover steam dump system is designed to prevent the turbine from exceeding 132% of rated speed following a unit trip. The system is armed at approximately 430 MWe. The system receives input from, and is actuated when the turbine auxiliary governor and/or the Independent Overspeed Protection System (IOPS) senses an overspeed

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condition. The system consists of four pilot-operated dump valves, with only three valves being necessary to achieve the required overspeed protection. However, in order to meet single failure criteria, the crossover steam dump system shall be declared inoperable if any one of the four dump valves is declared inoperable.

3. TS 15.3.4.F - During power operation, at least one of the turbine overspeed protection systems that trip the turbine stop valves or shut the turbine governor valves shall be operable. If all three systems are determined to be inoperable, isolate the turbine from the steam supply within the next six hours.
4. TS 15.3.4.F Basis - In addition to the crossover steam dump system, there are three other systems that protect the turbine from an overspeed condition. The first feature is the mechanical overspeed trip mechanism which consists of an eccentric weight located in the turbine rotor extension shaft. The second feature uses the turbine auxiliary governor to sense turbine overspeed using the auxiliary speed tachometer. The third feature is IOPS. This system monitors turbine speed electrically and consists of three independent speed channels. The actuation of two of three channels will generate a trip signal. The mechanical overspeed trip mechanism and IOPS cause the turbine stop valves to trip and the turbine governor valves to shut, while the auxiliary governor causes only the governor valves to shut. A turbine stop valve shall be declared inoperable if it does not trip shut following a valid overspeed signal. A turbine governor valve shall be declared inoperable if it does not respond properly following a valid overspeed signal.
5. TS 15.3.4.G - Should one of the turbine stop valves or governor valves be declared inoperable, restore the inoperable valve to an operable status within 72 hours. If operability cannot be restored, perform one of the following actions: 1. Shut the affected valve within the next six hours; 2. Isolate the turbine from the steam supply within the next six hours.
6. TS Table 15.4.1-1, Item 42. Calibration (refueling frequency) and test (monthly frequency) for turbine overspeed trip.
7. TS Table 15.4.1-2, Item 18 - Turbine stop and governor valves annual test.
8. TS Table 15.4.1-2, Item 19 - Low pressure turbine rotor five-year visual and magnetic particle or liquid penetrant inspection.
9. TS Table 15.4.1-2, Item 29 - Crossover steam dump system quarterly steam dump valve operability verification.

2.2 Background

Section 182a of the Atomic Energy Act (the "Act") requires applicants for nuclear power plant operating licenses to include TSs as part of the license. The Commission's regulatory requirements related to the content of TSs are set

forth in 10 CFR 50.36. That regulation requires that the TSs include items in five specific categories, including (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls. However, the regulation does not specify the particular requirements to be included in a plant's TSs.

The Commission has provided guidance for the contents of TSs in its "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" ("Final Policy Statement") (July 22, 1993, 58 FR 39132) in which the Commission indicated that compliance with the Final Policy Statement satisfies Section 182a of the Act. In particular, the Commission indicated that certain items could be relocated from the TSs to licensee-controlled documents, consistent with the standard enunciated in *Portland General Electric Co.* (Trojan Nuclear Plant), ALAB-531, 9 NRC 263, 273 (1979). In that case, the Atomic Safety and Licensing Appeal Board indicated that "technical specifications are to be reserved for those matters as to which the imposition of rigid conditions or limitations upon reactor operation is deemed necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety." The criteria set forth in the policy statement have been incorporated into 10 CFR 50.36 (60 FR 36953):

The regulations in 10 CFR 50.36, as amended, identify four criteria to be used in determining whether a particular matter is required to be included in the TS, as follows:

1. Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary;
2. a process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier;
3. a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; and
4. a structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety.¹

¹In amending 10 CFR 50.36, the Commission indicated that reactor core isolation cooling, isolation condenser, residual heat removal, standby liquid control, and recirculation pump trip systems are included in the TSs under Criterion 4, although it recognized that other structures, systems, and components could also meet this criterion. (60 FR 36956)

As a result, existing TS requirements that fall within or satisfy any of the criteria in this regulation must be retained in the TSs, while those TS requirements that do not fall within or satisfy these criteria may be relocated to other, licensee-controlled documents.

The Commission's Final Policy Statement and documentation related to the revision of 10 CFR 50.36 acknowledged that implementation of these criteria may cause some requirements presently in TSs to be moved out of existing TSs to documents and programs controlled by licensees. The staff evaluation for removal of turbine overspeed protection requirements from the TSs is included in GL 95-10. This generic letter addresses the relocation of selected TS requirements related to instrumentation to certain licensee-controlled documents as a result of applying the 10 CFR 50.36 criteria. The staff also concluded that the instrumentation addressed by these specifications are not related to dominant contributors to plant risk.

2.3 Relocation of Turbine Overspeed Protection from the TSs

PBNP TSs include limiting conditions for operation and surveillance requirements for the turbine overspeed protection system. The turbine is equipped with control valves and stop valves that control turbine speed during normal plant operation and protect it from overspeed during abnormal conditions. In addition, PBNP has a crossover steam dump system designed to prevent the turbine from exceeding 132 percent of rated speed following a unit trip. The crossover steam dump system receives input from, and is actuated when, the turbine auxiliary governor and/or the Independent Overspeed System (IOPS) senses an overspeed condition. The PBNP turbine overspeed protection system consists of separate mechanical and electrical sensing mechanisms that are capable of initiating fast closure of the control and stop valves. Current PBNP TSs require particular operability and surveillance requirements for the steam control valves, stop valves, and crossover steam dump system to minimize the potential for fragment missiles generated by a turbine overspeed event. General Design Criterion 4 of Appendix A to 10 CFR Part 50 requires that structures, systems, and components important to safety be appropriately protected from the effects of missiles that may result from equipment failures. Application of the design criterion to turbine missiles is described in Standard Review Plan Section 10.2 and in subsequent safety evaluations related to probabilities of turbine failures, turbine orientations, and surveillance requirements for turbine overspeed protection systems. In NUREG-1366, "Improvements to Technical Specifications Surveillance Requirement," the staff discusses the benefits, resultant costs, and the safety impact of performing turbine overspeed protection surveillances.

Although the design-basis accidents and transients include a variety of system failures and conditions that might result from turbine overspeed events and potential missiles striking various plant systems and equipment, the system failures and plant conditions are much more likely to be caused by events other than turbine failures. In view of the low likelihood of turbine missiles, assumptions related to the turbine overspeed protection system are not part of an initial condition of a design-basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a

fission product barrier. The turbine overspeed protection system is not relied upon in the design-basis accident or transient analyses as a primary success path to mitigate such events.

Probabilistic safety assessments and operating experience have demonstrated that proper maintenance of the turbine overspeed control valves is important to minimize the potential for overspeed events and turbine damage; however, that experience has also demonstrated that there is low likelihood of significant risk to public health and safety because of turbine overspeed events. Further, the potential for and consequences of turbine overspeed events are diminished by factors such as the orientation of the turbine relative to plant structures and equipment, licensee inservice testing programs, which must comply with 10 CFR 50.55(a), and surveillance programs for the turbine control and stop valves derived from the manufacturer's recommendations.

2.4. Summary

Accordingly, the staff concludes that the turbine overspeed protection system, including the crossover steam dump system and the requirement to periodically perform visual and magnetic particle or liquid penetrant examination of the low pressure turbine rotor, does not meet the 10 CFR 50.36 criteria. The licensee has committed to relocate the TSs as described in Section 2.1 of this safety evaluation to the FSAR and control changes to these provisions in accordance with 10 CFR 50.59.

On this basis, the staff concludes that these requirements are not required to be in the TSs under 10 CFR 50.36 or Section 182a of the Atomic Energy Act, and are not required in order to provide adequate protection to the health and safety of the public. In addition, the NRC staff finds that sufficient regulatory controls exist under 10 CFR 50.59 to ensure that future changes to these requirements are acceptable. Accordingly, the staff has concluded that these requirements may be relocated from the TSs to the FSAR.

The NRC staff has no objection to the deletion of the Bases associated with TS 15.3.4.E. and F.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Wisconsin State official was notified of the proposed issuance of the amendments. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

These amendments change requirements with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and change surveillance requirements. The staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluent that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously published a proposed

finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding (62 FR 19838). Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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Date: **August 6, 1997**