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VPNPD-96-069

September 19, 1996

Document Control Desk
U.S. NUCLEAR REGULATORY COMMISSION
Mail Station P1-137
Washington, DC 20555

Dear Sir/Madame:

DOCKETS 50-266 AND 50-301
EXIGENT TECHNICAL SPECIFICATION CHANGE REQUEST 194
LOW TEMPERATURE OVERPRESSURE PROTECTION SYSTEM
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

In accordance with the requirements of 10 CFR 50.59, 50.90, and 50.91, Wisconsin Electric Power Company (WE) requests amendments to Facility Operating Licenses DPR-24 and DPR-27 for Point Beach Nuclear Plant, Units 1 and 2, respectively. The proposed amendments to the Technical Specifications provided by this submittal revise Section 15.3.15, "Overpressure Mitigating System," and Section 15.3.1, "Reactor Coolant System." The Basis for Section 15.3.15 is also being revised consistent with the subject amendments. In addition, changes are being made to the Technical Specifications nomenclature to rename the "Overpressure Mitigating System" as the "Low Temperature Overpressure Protection System (LTOP)." This change is being made to be consistent with the current nomenclature in use at Point Beach and in use by the NRC staff. Marked-up Technical Specifications pages, a safety evaluation, and a no significant hazards consideration are enclosed. Also enclosed is our Calculation No. 96-0182, Revision 1 which determined the acceptable LTOP setpoint for Point Beach.

In Licensee Event Reports 93-003-00 and 96-003-00, we reported that administrative requirements were to be imposed on operation of reactor coolant pumps and safety injection pumps, respectively, during various plant conditions where LTOP is required to be operable. While the LTOP system remains operable under these administrative controls, these controls place conditions on system operation that are more restrictive than those presently required by the Technical Specifications. Therefore, this TSCR to implement these administrative requirements in the PBNP Technical Specifications is desired prior to the cooldown of Point Beach Unit 2 for its annual maintenance and refueling outage that is scheduled to begin on October 5, 1996. We believe that this submittal is timely and could not have been avoided and thus meets the criteria of 10 CFR 50.91 for processing as an exigent change. As such, we request that this change be processed as an exigent Technical Specification Change Request and be issued before October 5, 1996.

DESCRIPTION OF CURRENT LICENSE CONDITION

Technical Specifications Section 15.3.15, "Overpressure Mitigating System," specifies the limiting conditions for operation of the overpressure mitigating system when the reactor coolant system temperature is less than the minimum temperature for performance of the inservice pressure test as defined in Technical Specifications Figure 15.3.1-1, "Heatup Limitations." Section 15.3.15 also requires that one high pressure safety injection pump be demonstrated inoperable whenever the temperature of one or both reactor coolant system cold legs is less than or equal to 275°F by verifying that the motor circuit breakers have been removed from their electrical power supply circuits or by verifying that the discharge valves from the high pressure safety injection pumps to the reactor coolant system are shut and that power is removed from their operators.

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Technical Specifications Section 15.3.1.A.5, "Reactor Coolant System," includes the requirement that when in the hot shutdown condition that the reactor coolant system temperature should be maintained greater than the minimum temperature for performance of the inservice pressure test as defined in Technical Specifications Figure 15.3.1-1. This section further states that the requirements of Specification 15.3.15 apply if the temperature is to be reduced to less than this temperature.

DESCRIPTION OF PROPOSED CHANGES

Technical Specifications Sections 15.3.1.A.5 and 15.3.15 are being revised to state that the temperature below which LTOP is required to be enabled is 355°F.

Technical Specifications Section 15.3.15.B.1 currently requires that when the temperature of one or both reactor coolant system cold legs is less than or equal to 275°F that one high pressure safety injection pump shall be demonstrated inoperable. Point Beach LER 96-003-00, dated July 19, 1996 reported that this Technical Specifications Limiting Condition for Operation (LCO) was nonconservative and that one high pressure safety injection pump should be rendered inoperable whenever the LTOP system is required to be enabled by Specification 15.3.15.A.1. Section 15.3.15.B.1 is being revised to correct this nonconservative condition by requiring one high pressure safety injection pump be rendered inoperable at RCS temperatures of less than 355°F.

Point Beach LER 93-003-00, dated April 19, 1993, reported that because of the difference in pressure between the location of the reactor coolant system pressure transmitters and the reactor vessel beltline, administrative restrictions on operation at low temperatures with multiple reactor coolant pumps running were implemented to ensure that ASME Code Section XI, Appendix G safety margins are not exceeded. Section 15.3.15.B.3 is being added to implement a LCO restricting operations with more than one reactor coolant pump running to reactor coolant system cold leg temperatures of greater than 125°F.

Editorial changes to Technical Specifications Section 15.3.15 are being made to change the nomenclature to rename the "Overpressure Mitigating System" as the "Low Temperature Overpressure Protection System."

BASIS AND JUSTIFICATION

NRC Branch Technical Position RSB 5-2 provides guidance for establishing the temperature below which LTOP is required to be operable during heatup and cooldown conditions. The enclosed calculation performed by WE determined this temperature to be 355°F. Operation with LTOP enabled ensures that the margins of safety of ASME Code Section XI, Appendix G will not be exceeded when reactor coolant system temperature is less than 355°F.

The design basis of the LTOP system assumes a worst case mass input transient of one high pressure safety injection pump discharging to the reactor coolant system while the system is in a water solid condition with pressure relieved by one power operated relief valve. Hence, whenever LTOP is required to be enabled by Specifications Section 15.3.15.A.1, no more than one high pressure safety injection pump shall be operable. The temperature that LTOP is required to be enabled is 355°F, which provides a greater margin of safety with respect to ASME Code Section XI, Appendix G over the present Technical Specifications temperature requirement (275°F) for ensuring that no more than one high pressure safety injection pump is operable. Operation with one safety injection pump out of service up to this temperature does not decrease the margins of safety for any previously analyzed accident.

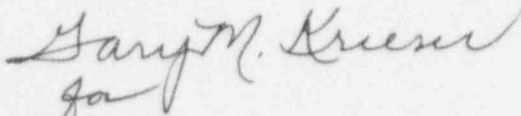
Because of the difference in pressure between the location of the reactor coolant system pressure transmitters and the reactor vessel beltline while reactor coolant pumps are running, administrative restrictions on operation at low temperatures with multiple reactor coolant pumps running were implemented in 1993 to ensure that ASME Code

Section XI, Appendix G safety margins are not exceeded. The enclosed calculation of LTOP setpoints performed by WE determined that with one reactor coolant pump running, the present LTOP setpoint of 425 psig provides acceptable margins as specified in Appendix G of the ASME Code for the Point Beach reactor vessels. Our calculation also determined that in order to maintain acceptable margins with respect to the ASME Code Appendix G, reactor coolant temperature must be greater than 125°F in order to run two reactor coolant pumps with the present LTOP setpoint of 425 psig. Therefore, Technical Specifications Section 15.3.15.B.3 is being added to implement a LCO restricting operations with more than one reactor coolant pump running to reactor coolant system temperatures of greater than 125°F.

We have determined that the proposed amendments do not involve a significant hazards consideration, authorize a significant change in the types or total amounts of any effluent release, or result in any significant increase in individual or cumulative occupational exposure. Therefore, we conclude that the proposed amendments meet the requirements of 10 CFR 51.22 (c) (9) and that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared.

Please contact us if you have any questions regarding this submittal.

Sincerely,



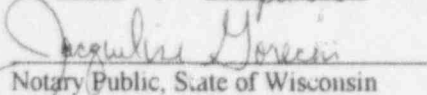
Bob Link
Vice President
Nuclear Power

JRP

Attachments

cc: NRC Regional Administrator
NRC Resident Inspector
Public Service Commission of Wisconsin

Subscribed and sworn to before me on
this 19th day of September 1996.


Notary Public, State of Wisconsin

My commission expires 10-27-96.

TECHNICAL SPECIFICATIONS CHANGE REQUEST 194

SAFETY EVALUATION

INTRODUCTION

Wisconsin Electric Power Company (Licensee) is applying for amendments to Facility Operating Licenses DPR-24 and DPP-27 for Point Beach Nuclear Plant, Units 1 and 2. The proposed changes impose more stringent limiting conditions for operation of the Low Temperature Overpressure Protection System in Technical Specifications Section 15.3.15. Technical Specifications Section 15.3.1.A.5 is also being revised, consistent with the revised Section 15.3.15.

EVALUATION

NRC Branch Technical Position RSB 5-2 provides guidance for establishing the temperature below which LTOP is required to be operable during heatup and cooldown conditions. We have determined this temperature to be 355°F for Point Beach. Operation with LTOP enabled ensures that the margins of safety of the ASME Code Section XI, Appendix G will not be exceeded during low temperature operation.

The design basis of the LTOP system assumes a worst case mass input transient of one high pressure safety injection pump discharging to the reactor coolant system while the system is in a water solid condition with pressure relieved by one power operated relief valve. Hence, whenever LTOP is required to be enabled by Specifications Section 15.3.15.A.1, no more than one high pressure safety injection pump shall be operable. When the reactor coolant system is not cooled and vented to the atmosphere, the temperature below which LTOP is required to be enabled is 355°F, which provides a greater margin of safety with respect to Appendix G of the ASME Code Section XI over the present Technical Specifications temperature requirement (275°F) for ensuring that no more than one high pressure safety injection pump is operable. Operation with one safety injection pump out of service up to this temperature does not decrease the margins of safety for any previously analyzed accident.

It has been determined that with one reactor coolant pump running, the present LTOP setpoint of 425 psig provides acceptable margins as specified in Appendix G of the ASME Code Section XI for the Point Beach reactor vessels. It has also been determined that in order to maintain acceptable margins with respect to the ASME Code Appendix G, reactor coolant temperature must be greater than 125°F in order to run two reactor coolant pumps with the present LTOP setpoint of 425 psig. Therefore, Technical Specifications Section 15.3.15.B.3 is being added to implement a LCO restricting operations with more than one reactor coolant pump running to reactor coolant system temperatures of greater than 125°F. This provides acceptable ASME Section XI, Appendix G safety margins for the Point Beach reactor vessels and greater margins of safety over the present Technical Specifications.

CONCLUSIONS

The proposed revisions provide the same or greater margins of safety over the present Technical Specifications and ensure the safe and reliable operation of Point Beach Nuclear Plant.

TECHNICAL SPECIFICATIONS CHANGE REQUEST 194
NO SIGNIFICANT HAZARDS CONSIDERATION

We have evaluated these proposed amendments in accordance with the requirements of 10 CFR 50.91(a), against the standards of 10 CFR 50.92, and have determined that these modifications will not result in a significant hazards consideration. A proposed amendment will not involve a significant hazards consideration if it does not (I) involve a significant increase in the probability or consequences of an accident previously evaluated, (II) create the possibility of a new or different kind of accident from any accident previously evaluated, or (III) involve a significant reduction in a margin of safety.

- I. The proposed changes will explicitly define the temperature at which LTOP is required to be enabled in accordance with NRC guidance, increase the safety margin of the LTOP system by raising the temperature at which one high pressure safety injection pump is required to be rendered inoperable, and ensure that required safety margins are maintained by imposing a restriction on the operation of multiple reactor coolant pumps at low temperatures. The consequences or probability of a previously evaluated accident will, therefore, not significantly be increased.
- II. The underlying purpose of the LTOP system is to prevent the pressure of the reactor vessel from exceeding the allowable limits as defined by ASME Code Section XI, Appendix G at any given reactor coolant system temperature. Since this purpose remains unchanged, a new or different kind of accident cannot be created.
- III. The proposed changes implement administrative controls that are more restrictive than those required by the present Technical Specifications in order ensure that the margins of safety previously evaluated for the LTOP system are maintained. It has been determined that the proposed changes will provide acceptable margins as specified in Appendix G of the ASME Code Section XI. Therefore, these changes do not involve a significant reduction in a margin of safety.