

September 17, 1982

CERTIFIED MAIL

Mr. H. R. Denton, Director Office of Nuclear Reactor Regulation U. S. NUCLEAR REGULATORY COMMISSION Washington, D. C. 20555

Dear Mr. Denton:

DOCKET NO. 50-266
TECHNICAL SPECIFICATION CHANGE REQUEST NO. 85
SPECIFICATION FOR REDUCED THERMAL DESIGN FLOW
POINT BEACH NUCLEAR PLANT, UNIT 1

In accordance with the requirements of 10 CFR Part 50.59, Wisconsin Electric Power Company (Licensee) hereby submits its application for an amendment to Facility Operating License DPR-24 for the Point Beach Nuclear Plant, Unit 1. The purpose of this amendment is to incorporate certain changes and revisions into the Technical Specifications.

The proposed changes to the Technical Specifications encompass additional limitations on plant operations assuming a reduced reactor coolant system (RCS) flow such as may occur if a sufficient number of steam generator tubes are plugged. The current Technical Specifications and the original safety analyses, as discussed in the Point Beach Final Safety Analysis Report (FSAR), are based on a minimum thermal design flow (TDF) of 178,000 gpm. Additional analyses have been completed for a revised minimum flow of 169,000 gpm, or 95% of the present TDF. This is the predicted RCS flow given 24% of the steam generator tubes plugged. Attachment A to this letter presents the results of the non-LOCA analyses performed to support this license amendment. These analyses have also resulted in a number of changes to the Technical Specifications. The specific changes are discussed as follows:

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1. The principal change accompanying this analysis is a new definition in Section 15.1 for the term full power. Full power is defined as 100% of rated power when the RCS total flow is greater than 178,000 gpm and 91% of rated power when the RCS total flow is less than 178,000 gpm. As defined in Specification 15.3.1.G.3, the minimum RCS total flow rate must be greater than or equal to 95% of 178,000 gpm. In various locations

September 17, 1982 -2-Mr. H. R. Denton throughout the Technical Specifications the term full power, as defined in 15.1, is used to replace the term rated power. These changes are identified by margin bars on the attached proposed Technical Specification pages. 2. Specification 15.2.1 is revised to include a new Figure 15.2.1-2, "Core DNB Safety Limits", for the situation when RCS total flow is less than 178,000 gpm. Specification 15.3.1.G is revised to specify a maximum Tavg for the condition of RCS total flow less than 178,000 gpm and to specify the revised minimum TDF of .95 x 178,000 as supported by the attached analyses. 4. Specification 15.3.10.B.1, "Power Distribution Limits", has been revised to specify the maximum hot channel factors for the conditions of RCS total flow both greater than and less than 178,000 gpm. The current LOCA analysis as filed with the NRC for Point Beach Nuclear Plant Unit 1 assumed 100% of rated power, a minimum TDF of 178,000 gpm, and up to 18% of the steam generator tubes plugged. This evaluation resulted in a peak clad temperature (PCT) of 2062°F at an Fo of 2.32. Calculations have been performed to estimate results for the plant conditions of 91% rated power, 95% of 178,000 gpm RCS total flow, and 24% of the steam generator tubes plugged. The results of these calculations indicated that the Point Beach units would have an estimated PCT of 2128°F at an Fo of 2.52 which still provides an acceptable margin to the applicable 10 CFR Part 50 Appendix K limits. The proposed operating condition of 91% rated power and 24% steam generator tubes plugged was also examined in consideration of the thermal hydraulic performance of the Point

The proposed operating condition of 91% rated power and 24% steam generator tubes plugged was also examined in consideration of the thermal hydraulic performance of the Point Beach steam generators. We concluded that these revised conditions would be acceptable for moisture carryover, primary tube erosion, and stability considerations. Furthermore, the operating experience with Westinghouse steam generators at other facilities having significant levels of tube plugging of from 15 to 30% have demonstrated no indications that plugging-related bundle flow modifications have affected the steam generator performance.

September 17, 1982 -3-Mr. H. R. Denton In accordance with the schedule of amendment approval fees for reactor facility licenses as listed in 10 CFR Part 170.22, Licensee has determined that this license amendment approval for Point Beach Unit 1 should be classified as a Class III amendment. This classification is based on the premise that this change request encompasses a single safety issue which does not involve a significant hazards consideration. Furthermore, we believe that acceptability of this issue, that is authorization for operation at a reduced RCS flow, has previously been reviewed and approved by the NRC in other dockets. Accordingly, we have enclosed a check in the amount of \$4,000 as payment for the applicable Class III license amendment approval fee. As further specified in the Commission's regulations, we enclose herewith three signed originals and 40 additional copies of this license amendment application with attachments. Please contact Licensee if you have any questions concerning this submittal. Very truly yours, CW In Assistant Vice President C. W. Fay Enclosures (Check No. 693502) Copy to NRC Resident Inspector Subscribed and sworn to before me this 20th day of September 1982. Notary Public, State of Wisconsin My Commission expires July 1/1984.