

December 15, 1982

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

Attention: Mr. R. A. Clark, Chief

Operating Reactors Branch 3

Gentlemen:

DOCKET NOS. 50-266 AND 50-301
SEISMIC QUALIFICATION OF THE AUXILIARY FEEDWATER SYSTEM
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

In your letter dated November 12, 1982 you provided a Technical Evaluation Report (TER) for the review of the information provided in Wisconsin Electric's letters dated July 16, 1981 and May 4, 1982 concerning the seismic qualifications of the auxiliary feedwater (AFW) system at the Point Beach Nuclear Plant, Units 1 and 2. We were asked to review this TER and provide comments.

The TER concludes that the Point Beach AFW system seismic design does not provide reasonable assurance that the system would perform its required safety function following an SSE. This conclusion is somewhat contrary to the conclusion in our letter dated May 4, 1982. We stated that except for the condensate storage tanks, which are the primary source of AFW, and some interconnected small diameter branch piping, the major mechanical components of the Point Beach AFW system have been designed to seismic criteria. As noted in that letter, a backup water source from a seismically-designed system is provided and, although certain branch lines connecting to the AFW system are not seismically designed, these lines can be isolated from the AFW system in the event of piping failures using the isolation valves provided.

As discussed further in these comments, in addition to the inherent redundancy in the AFW system, alternate methods of decay heat removal are available to remove decay heat in the event of a failure of a portion of the AFW system. We, therefore, believe that the recommendation stated in the TER that licensee be required to reanalyze and modify the AFW system to acquire a complete SSE level of seismic capacity constitutes an unnecessary, expensive, and time-consuming backfit that would not provide a significant safety benefit.

We have also noted a number of comments on specific items in the TER. These comments and the reference to the TER are as follows:

1. Page 3, Paragraph 1

The TER states that connections 26, 27, and 28, as identified in the attachment to our May 4 letter, were not clearly identified. These connections are all condensate returns from the steam heating condensate pump units as indicated on Figure 10.2-5 of the FSAR and the Point Beach P&ID's which have previously been provided to the NRC. The comment is also made that the licensee has not discussed the seismic capabilities of these branch lines. In our May 4 letter, we stated that this piping was not originally required to be seismically designed. Therefore, the piping was assumed to be non-seismic. As stated in that letter, these connections are protected by a check valve which was included in the IE Bulletin 79-14 program. Thus, there is no basis for requiring further evaluation of these branch connections.

2. Page 3, Paragraph 3

The TER states that the turbine building has recently been analyzed for seismic loading assuming a loaded turbine building crane located above the control building. The analysis referred to in our May 4 letter was an analysis performed by Bechtel Power Corporation during original plant design.

3. Page 4, Paragraph 3

The TER states that seismic qualification information for any alternative decay heat removal system was not provided. Although not specifically referenced in our responses, the Point Beach FSAR includes information on the Residual Heat Removal System, Safety Injection System, and Reactor Coolant System relief valves. These systems provide alternative means of removing decay heat and, as listed in Appendix A to the FSAR, these systems are all classified as Seismic Class I. Seismic design and qualification criteria for Class I equipment and structures are discussed in Appendix A. Thus, there is no need to re-analyze or modify the auxiliary feedwater system.

4. Page 5, Paragraph 1

The TER states that connections 10 through 13, as identified on the attachments to the May 4 letter, were not clearly identified. These connections are discussed on page 3 of the attachment to the May 4 letter and are clearly identified as the return connections for the AFW pump recirculation piping on Figure 3 of the attachment (FSAR Figure 10.2-5).

5. Page 5, Paragraph 1

The piping support modifications identified under the IE Bulletin 79-14 program for the auxiliary feedwater system were completed on July 1, 1982. Subsequent to these modifications, further changes to two supports were identified as being necessary. Construction drawings for these changes have been issued. We expect that these changes will be completed by the end of January 1983.

6. Page 2, Paragraph 1, and Page 5, Paragraph 2

The TER states that a walk-down of the non-seismically qualified areas of the AFW system has not been conducted. As identified in Attachment 2 to the May 4 letter, the non-seismically qualified components and structures associated with the AFW system are the branch connections, condensate storage tanks, and turbine building, auxiliary building superstructure, and containment facade structures. These items are all discussed in the Attachment 1 text. The branch connections were considered in the walk-down of the AFW piping as were the condensate storage tanks. No recommendations for obvious improvements to the seismic capability of these items were apparent. Similarly, although the nonseismically qualified structures discussed in our response were not "walked down" in detail, we are not aware of readily recognized deficiencies in seismic capability of these structures which could conveniently be corrected to significantly enhance reliability without detailed seismic analyses.

7. Page 6, Paragraph 1

This portion of the TER discusses the modifications described in Table 2 of the attachment to our May 4 letter which were based upon the results of the walk-down of the AFW system. The current status of each of these modifications is given below. We expect that all modifications can be completed by the end of January 1983, except where noted.

Main Piping

Initial support modifications under IE Bulletin 79-14 were completed on July 1, 1982. Subsequent to these modifications, further changes to two supports were identified as being necessary. Construction drawings have been issued for these changes.

Supports for the air-operated valves in the recirculation piping of each pump are currently being designed. Supports for drain lines and chemical addition pots have been designed and construction drawings will be issued shortly. Several of these lines were found not to require additional support.

Battery Room

Seismic design calculations for the battery racks are expected to be available in February 1983. Depending upon the results of these calculations, upgrading of seismic capability may not be required. The original specification for the battery racks required seismic design; however, the original calculations are not available.

Conduit supports have been designed and construction drawings have been issued.

Electrical

Conduit supports have been designed and construction drawings either have been issued or will be issued shortly.

Cable Spreading Room

Construction drawings for conduit supports will be issued shortly.

Instruments

The condensate storage tank level indicators have been replaced with seismically qualified instruments as part of TMI modifications. Conduit for these indicators is scheduled to be replaced by July 1983.

December 15, 1982 Mr. H. R. Denton -5-Auxiliary Building The four safeguards motor control centers identified in our May 4 letter as not being anchored to the floor were subsequently reinspected. This inspection revealed that the motor control centers are anchored to the floor. Thus, no modifications are required for these motor control centers. We trust these comments will be considered in your review of this TER and in preparation of your SER on this topic. Please contact us if you have any questions concerning this matter. Very truly yours, Assistant Vice President C. W. Fay Copy to NRC Resident Inspector