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March 25, 1994

U.S. Nuclear Regulatory Commission Document Control Desk Washington, D.C. 20555

ACCEPTANCE CRITERIA FOR CONTROL ROD DRIVE MECHANISM PENETRATION INSPECTIONS POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2 DOCKETS 50-266 AND 50-301

Gentlemen:

On July 30, 1993, the proposed acceptance criteria for axial and circumferential flaws in Inconel 600 reactor vessel head penetrations were submitted to the NRC by the Nuclear Management and Resources Council (NUMARC) based on safety assessments conducted by the Babcock & Wilcox, Combustion Engineering, and Westinghouse Owners Groups. The NRC has accepted the proposed acceptance criteria for axial flaws. The NRC staff did not accept the initial proposal for circumferential flaws contained in the July 30, 1993, submittal.

On January 31, 1994, NUMARC submitted supplemental safety assessments developed by the owner's groups. Based on the information provided in the supplemental assessments, the NRC has determined that short, partial through-wall circumferential flaws are possible in the CRDM penetrations and has provided PBNP with criteria for the acceptability of flaws identified during CRDM inspections.

By your letter dated March 9, 1994, you provided Wisconsin Electric Power Company, owner and operating of Point Beach Nuclear Plant, Units 1 and 2, with your evaluation of the proposed circumferential flaw acceptance criteria for control rod drive mechanism penetration inspections.

During a telephone conference with Mr. Allen Hansen and other members of NRC staff, we discussed the acceptance criteria for circumferential flaws contained in your March 9, 1994 letter. The criteria are contained in the first paragraph on page two of your letter. During our telephone discussion with the NRC staff, it was determined that the information contained within the parentheses, "(outside diameter flaws)," was mispositioned in the paragraph. Based on our discussions, we understand the paragraph should read:

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> "Based on its review of the owners groups supplemental evaluations, the staff has concluded that short, partial through-wall circumferential flaws are possible in the CRDM penetrations. Based on the stress analyses presented in the owners groups reports and the length of time that the Point Beach plant has been in operation, a shallow circumferential flaw 10 percent of the circumference (based on the outside diameter) of the penetration could exist. Therefore, the staff has concluded that circumferential flaws whose length, including postulated crack growth during the next operating cycle, does not exceed 10 percent of the circumference, are less than 75 percent through-wall, and are in a location consistent with the finite element analysis, are acceptable. These flaws would have to be reinspected in subsequent examinations consistent with the reinspection approach of IWP-2420 of ASME Section XI."

We plan to use acceptance criteria based on the wording contained in this revised paragraph during our inspection scheduled to be conducted during our upcoming Unit 1 refueling and maintenance outage. If you have any questions, please contact us.

Sincerely,

Bob Link

Vice President Nuclear Power

cc: NRC Resident Inspector

NRC Regional Administrator, Region III