

Point Beach Nuclear Plant 6610 Nuclear Rd., Two Rivers, WI 54241

NPL 98-0777

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10 CFR 50.4

September 28, 1998

Document Control Desk U.S. NUCLEAR LATORY COMMISSION Mail Station F Washington, DC 2055

Ladies/Gentlemen:

DOCKETS 50-266 AND 50-301 SUBMITTAL OF ADDITIONAL INFORMATION GENERIC LETTER 92-01, REVISION 1, SUPPLEMENT 1, "REACTOR VESSEL STRUCTURAL INTEGRITY" POINT BEACH NUCLEAR PLANT UNITS 1 AND 2

Pursuant to Generic Letter 92-01, Revision 1, Supplement 1, Wisconsin Electric Power Company (WE) has evaluated additional weld chemistry data recently obtained from the Babcock & Wilce x Owners Group (B&WOG) and Combustion Engineering Owners Group (CEOG), to determine if the additional data affects previous reactor pressure vessel integrity analyses. Submittal of this evaluation was requested by Mr. Matthew Mitchell of the NRC staff during a June 10, 1998 conference call.

Attached is the WE evaluation for Point Beach Nuclear Plant Units 1 and 2.

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If there are any questions, please contact us.

Sincerely. MA Vito A. Kaminskas

Manager, Regulatory Services & Licensing

JRP/dms

Attachments

cc: NRC Resident Inspector NRC Regional Administrator

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ADDITIONAL INFORMATION REGARDING REACTOR PRESSURE VESSEL INTEGRITY AT POINT BEACH NUCLEAR PLANT UNITS 1 AND 2

- References: 1) CE Owners Group Report "Best Estimate Copper and Nickel Values in CE Fabricated Reactor Vessel Welds," CE NPSD-1039, Revision 2, Final Report, June 1997 (submitted to NRC by CEOG in July 1997).
 - B&W Owners Group Report "Response to Request for Additional Information Regarding Reactor Pressure Vessel Integrity," BAW-2325, May 1998 (submitted to NRC by B&WOG on May 28, 1998).
 - WE Calculation 98-0132, "Evaluation of 23.6 EFPY P-T Limit and LTOP Applicability Date, and Pressurized Thermal Shock at 32 EFPY," 9/15/98 (attached).

In accordance with the provisions of Generic Letter 92-01, Revision 1, Supplement 1, Wisconsin Electric Power Company (WE) has performed a re-evaluation of reactor pressure vessel (RPV) weld chemistry values previously submitted as part of the current licensing basis for Point Beach Nuclear Plant Units 1 and 2. Additional input information has been provided in attached Calculation 98-0132 for all beltline materials for the Point Beach Nuclear Plant Unit 1 and 2 RPVs, for ease of comparison and understanding of the adjusted reference temperature (ART) calculations.

The latest known best-estimate chemistry information has been utilized for all beltline weld materials. Reference 2 has been utilized for the B&W-fabricated welds because it contains more recent information than the Framatome Technologies Incorporated (FTI) analyses of Linde 80 welds which are documented in NRC Inspection Report 99901300/97-01 dated January 28, 1998.

All data has been evaluated by both the CEOG and B&WOG utilizing the mean-of-thesources approach to determine the best-estimate chemistry values for welds. WE believes that a mean-of-the-sources approach should be utilized in the evaluation of all chemistry data with multiple material sources. In applying this approach to a given weld wire heat, all available test results from separate and distinct test production welds were independently averaged. The resulting independent average values for separate and distinct test or production welds were subsequently averaged to obtain the best estimate value. The mean-of-the-sources approach provides the most appropriate estimate of weld chemistry, eliminating the inappropriate weighting effect which widely varying numbers of analyses performed on individual weld blocks can have. . .

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The attached Reference 3 calculation demonstrates that the current licensing basis P-T limits are conservative at 23.6 EFPY for Point Beach Nuclear Plant Unit 1. Unit 1 is not expected to reach 23.6 EFPY until after the January 1, 2001 Point Beach Technical Specifications applicability date for the current P-T curves. WE elects not to change the current licensing basis for Unit 1 at this time. As new information becomes available, WE will evaluate its impact on RPV limiting beltline materials for Point Beach Unit 1, and future P-T limit submittals will take into account the most recent best-estimate chemistry data available.

For Unit 2, as a result of small, conservative changes based on the latest understanding of initial RT_{NDT} and σ_I for limiting beltline weld SA-1484, the applicability of the current licensing basis P-T limits is reduced slightly relative to WE Calculation N94-058, Revision 2, to 23.4 EFPY. Administrative requirements to restrict operation of the Unit 2 reactor vessel to no more than 23.4 EFPY using the current licensing basis P-T limits will be established. Unit 2 is projected to only reach 22.3 EFPY by the January 1, 2001 Technical Specifications applicability date for the current P-T curves. WE elects not to change the current licensing basis for Unit 2 at this time. As new information becomes available, WE will evaluate its impact on RPV limiting beltline materials for Point Beach Unit 2, and future P-T limit submittals will take into account the most recent best-estimate chemistry data available.

The attached Reference 3 calculation results and conclusions demonstrate that the current licensing basis low temperature overpressure protection (LTOP) pressure setpoint and enable temperature for Point Beach Units 1 and 2 are unchanged through January 1, 2001.

The attached Reference 3 calculation further demonstrates that the pressurized thermal shock (PTS) screening criteria are not exceeded for Point Beach Units 1 and 2 through 32 EFPY.

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ATTACHMENT (Reference 3)

WE Calculation 98-0132, "Evaluation of 23.6 EFPY P-T Limit and LTOP Applicability Date, and Pressurized Thermal Shock at 32 EFPY," 9/15/98.