



Wisconsin
Electric
POWER COMPANY

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VPNPD-93-056
NRC-93-032

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Document Control Desk
U.S. NUCLEAR REGULATORY COMMISSION
Mail Station P1-127
Washington, DC 20555

Gentlemen:

DOCKETS 50-266 AND 50-301
ASME SECTION XI RELIEF REQUESTS RR-1-15 AND RR-2-16
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

In accordance with 10CFR50.55a(g)(5)(iv), Wisconsin Electric Power Company requests relief from Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, "Rules for Inservice Examination of Nuclear Power Plant Components," 1986 edition, no addenda. The requirements for which relief is requested apply to the third inservice inspection interval for Point Beach Nuclear Plant, Units 1 and 2.

The attached relief requests, RR-1-15 and RR-2-16, provide the information needed for the NRC to complete a review and approval as required.

Sincerely,

Bob Link for REL

Bob Link
Vice President
Nuclear Power

CP/jg

Attachment

cc: NRC Resident Inspector
NRC Regional Administrator

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PDR ADOCK 05000266
P PDR

44-1

ASME SECTION XI RELIEF REQUEST RR-1-15
POINT BEACH NUCLEAR PLANT, UNIT 1

COMPONENT

ASME Class 1, 2 and 3 Bolting

ASME SECTION XI REQUIREMENT

IWA-5250 (a)(2) Corrective Measures

- (a) The source of leakages detected during the conduct of a system pressure test shall be located and evaluated by the Owner for corrective measures as follows:
 - (2) If leakage occurs at a bolted connection, the bolting shall be removed, VT-3 visually examined for corrosion, and evaluated in accordance with IWA-3100;

ALTERNATE REQUIREMENT

- (a) The source of leakages detected during the conduct of a system pressure test shall be located and evaluated by the Owner for corrective measures as follows:
 - (2)(a) If leakage occurs at a bolted connection of boric acid systems, the evaluation shall be conducted as follows:
 - (1) If the bolting material is fabricated of a material other than an austenitic stainless steel (e.g. low alloy B-7, etc.), one bolt shall be removed, VT-1 examined, and evaluated in accordance with IWA-3100. The bolt selected shall be the one closest to the source of leakage. When the removed bolt has evidence of degradation, all remaining bolting in the connection shall be removed, VT-1 examined, and evaluated in accordance with IWA-3100. The cause of the leakage shall be corrected. An evaluation of the effect of the leakage on adjacent components and equipment shall be made.

NOTE - All removed bolting shall be subject to a surface examination when required by Wisconsin Electric's response to IE Bulletin No. 82-02.

- (2) If the bolting material is fabricated of an austenitic stainless steel material, a VT-3 examination of the bolted joint shall be performed and evaluated in accordance with IWA-3100. In addition, an examination of adjacent components and equipment will be conducted to determine the effects of the boric acid. The leakage shall be evaluated in accordance with the requirements of the Owner's limits acceptable for continued service. The evaluation shall consider the effects of the leakage on adjacent components and equipment. The cause of the leakage shall be corrected when the Owner's limits for continued service are exceeded or when practical.

- (2)(b) If the leakage occurs at a bolted connection of systems other than boric acid systems, the evaluation shall be conducted as follows:

- (1) The bolted connection shall be VT-3 examined and evaluated in accordance with the requirements of IWA-3100. The leakage will be evaluated in accordance with the requirements of the Owner's limits for continued service. The evaluation shall consider the effects of the leakage on adjacent components and equipment. The cause of the leakage shall be corrected when the Owner's limits for continued service are exceeded or when practical.

REASON FOR LIMITATION

The leakage of boric acid onto carbon and low alloy steel bolting is known to cause excessive corrosion rates. The alternate examination requirement will require evaluation of leakage from bolted connections of boric acid systems.

The bolt closest to the leakage will be the bolt that exhibits the maximum corrosion and degradation. Therefore, examination of this bolt will be a conservative representation of the remainder of the bolts in the bolted connection. If the bolt shows evidence of degradation, all remaining bolting in the connection shall be removed and examined. This is consistent with the requirements of IWA-5250 of the 1989 edition of ASME Section XI. A VT-1 examination, in lieu of the ASME Section XI requirement of a VT-3 examination, is a more accurate and qualitative examination of bolting. By removing only one bolt of a bolted connection that exhibits leakage, significant man-rem may be saved without compromising the integrity of the bolted connection or the pressure boundary.

Leakage of boric acid on austenitic stainless steel bolting does not indicate a great potential for excessive corrosion. A VT-3 examination of the bolted connection will adequately determine any degradation of the bolted connection or of the pressure boundary as a result of the leakage from that connection. Evaluation of the effects of the leakage on adjacent components and equipment is above and beyond the requirements of ASME Section XI and serves to further ensure that the leakage has no adverse effects on surrounding components.

Technical Specification requirements have been established to permit acceptable limits of leakage. Leakage at a bolted connection does not indicate failure of a pressure boundary. If leakage occurs at an austenitic stainless steel bolted connection that does not exceed these requirements, then continued operation shall be permitted provided the leakage does not affect adjacent components or equipment and that the integrity of the pressure boundary is not affected.

For those systems that do not contain boric acid, leakage at a bolted connection does not indicate a great potential for excessive corrosion of the bolting as a result of the leakage. By conducting a VT-3 examination of the bolted connection, evidence of any corrosion/degradation of the bolting or bolted connection can be adequately made to ensure the integrity of the pressure boundary.

ASME SECTION XI RELIEF REQUEST RR-2-16
POINT BEACH NUCLEAR PLANT, UNIT 2

COMPONENT

ASME Class 1, 2 and 3 Bolting

ASME SECTION XI REQUIREMENT

IWA-5250 (a)(2) Corrective Measures

- (a) The source of leakages detected during the conduct of a system pressure test shall be located and evaluated by the Owner for corrective measures as follows:
 - (2) If leakage occurs at a bolted connection, the bolting shall be removed, VT-3 visually examined for corrosion, and evaluated in accordance with IWA-3100;

ALTERNATE REQUIREMENT

- (a) The source of leakages detected during the conduct of a system pressure test shall be located and evaluated by the Owner for corrective measures as follows:
 - (2)(a) If leakage occurs at a bolted connection of boric acid systems, the evaluation shall be conducted as follows:
 - (1) If the bolting material is fabricated of a material other than an austenitic stainless steel (e.g. low alloy B-7, etc.), one bolt shall be removed, VT-1 examined, and evaluated in accordance with IWA-3100. The bolt selected shall be the one closest to the source of leakage. When the removed bolt has evidence of degradation, all remaining bolting in the connection shall be removed, VT-1 examined, and evaluated in accordance with IWA-3100. The cause of the leakage shall be corrected. An evaluation of the effect of the leakage on adjacent components and equipment shall be made.

NOTE - All removed bolting shall be subject to a surface examination when required by Wisconsin Electric's response to IE Bulletin No. 82-02.

- (2) If the bolting material is fabricated of an austenitic stainless steel material, a VT-3 examination of the bolted joint shall be performed and evaluated in accordance with IWA-3100. In addition, an examination of adjacent components and equipment will be conducted to determine the effects of the boric acid. The leakage shall be evaluated in accordance with the requirements of the Owner's limits acceptable for continued service. The evaluation shall consider the effects of the leakage on adjacent components and equipment. The cause of the leakage shall be corrected when the Owner's limits for continued service are exceeded or when practical.

- (2)(b) If the leakage occurs at a bolted connection of systems other than boric acid systems, the evaluation shall be conducted as follows:

- (1) The bolted connection shall be VT-3 examined and evaluated in accordance with the requirements of IWA-3100. The leakage will be evaluated in accordance with the requirements of the Owner's limits for continued service. The evaluation shall consider the effects of the leakage on adjacent components and equipment. The cause of the leakage shall be corrected when the Owner's limits for continued service are exceeded or when practical.

REASON FOR LIMITATION

The leakage of boric acid onto carbon and low alloy steel bolting is known to cause excessive corrosion rates. The alternate examination requirement will require evaluation of leakage from bolted connections of boric acid systems.

The bolt closest to the leakage will be the bolt that exhibits the maximum corrosion and degradation. Therefore, examination of this bolt will be a conservative representation of the remainder of the bolts in the bolted connection. If the bolt shows evidence of degradation, all remaining bolting in the connection shall be removed and examined. This is consistent with the requirements of IWA-5250 of the 1989 edition of ASME Section XI. A VT-1 examination, in lieu of the ASME Section XI requirement of a VT-3 examination, is a more accurate and qualitative examination of bolting. By removing only one bolt of a bolted connection that exhibits leakage, significant man-rem may be saved without compromising the integrity of the bolted connection or the pressure boundary.

Leakage of boric acid on austenitic stainless steel bolting does not indicate a great potential for excessive corrosion. A VT-3 examination of the bolted connection will adequately determine any degradation of the bolted connection or of the pressure boundary as a result of the leakage from that connection. Evaluation of the effects of the leakage on adjacent components and equipment is above and beyond the requirements of ASME Section XI and serves to further ensure that the leakage has no adverse effects on surrounding components.

Technical Specification requirements have been established to permit acceptable limits of leakage. Leakage at a bolted connection does not indicate failure of a pressure boundary. If leakage occurs at an austenitic stainless steel bolted connection that does not exceed these requirements, then continued operation shall be permitted provided the leakage does not affect adjacent components or equipment and that the integrity of the pressure boundary is not affected.

For those systems that do not contain boric acid, leakage at a bolted connection does not indicate a great potential for excessive corrosion of the bolting as a result of the leakage. By conducting a VT-3 examination of the bolted connection, evidence of any corrosion/degradation of the bolting or bolted connection can be adequately made to ensure the integrity of the pressure boundary.