



**Wisconsin
Electric**
POWER COMPANY

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

(414) 755-2321

PBL 96-0042

March 1, 1996

Document Control Desk
U. S. NUCLEAR REGULATORY COMMISSION
Mail Station P1-137
Washington, DC 20555

Gentlemen:

DOCKETS 50-266 AND 50-301
ASME SECTION XI RELIEF REQUESTS RR-1-17 AND RR-2-21
POINT BEACH NUCLEAR PLANT UNIT 1 AND UNIT 2

In accordance with 10 CFR 50.55a(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, Unit 1 and Unit 2. The third interval began in December 1990 for Unit 1 and November 1993 for Unit 2.

The attached relief requests, RR-1-17 and RR-2-21, provide the information needed for the NRC to complete a review and approval as required.

Sincerely,

G. J. Maxfield
Plant Manager

caw

Attachments

110119

9603120183 960301
PDR ADOCK 05000266
P PDR

ADK 1/1

COMPONENT

Reactor Vessel Nozzle to pipe welds

Welds: RC-32-MRCL-AIII-03

RC-32-MRCL-BIII-03

EXAM AREA

IWB-2500-8

ISOMETRIC or COMPONENT DRAWING

ISI-PRI-1120

ISI-PRI-1121

ASME SECTION XI CATEGORY

B-F

ASME SECTION XI ITEM NUMBER

B5.130

ASME SECTION XI REQUIREMENT

Volumetric and Surface

ALTERNATE REQUIREMENT

No surface exam will be performed from the outside diameter (O.D.) surface. Perform volumetric examination from bore utilizing mechanized UT techniques. The examination technique utilized will examine the required volume for volumetric examination and will be capable of detecting surface indications. The examination process (i.e. equipment and procedures) will be demonstrated capable of detecting O.D. surface connected, circumferentially oriented defects. Appropriate calibration standards will be fabricated and O.D. surface cracks induced for qualification in lieu of machined notches.

REASON FOR PROPOSED ALTERNATE REQUIREMENT

To perform surface examination of this weld from the outside diameter surface will result in excessive radiation exposure and exposure of personnel to potentially unsafe conditions. The proposed alternate examination still meets the intent of the examination area in figure IWB-2500-8 of ASME Section XI and will eliminate the radiation exposure and potentially unsafe conditions.

To perform a surface examination of these welds from the outside diameter of the weld requires removal of a refueling cavity access cover, shielding plug over weld and insulation surrounding the weld. The examination must then be performed by lowering an NDE examiner into the resultant confined space/high radiation area for the duration of the surface exam.

The radiation exposure associated with this examination is approximately 640 mrem per weld based on past examinations. The dose associated with this process is broken down as follows:

- Remove refueling cavity cover and remove shield plug - 30 mrem
- Remove insulation around weld - 100 mrem
- Perform surface examination - 380 mrem
- Reinstall insulation - 100 mrem
- Replace plug and refueling cavity cover - 30 mrem

Total 640 mrem

These examination techniques utilized radiation reduction techniques such as exiting the area and utilizing shielding during dwell times of the surface examination. The alternate examination technique would reduce the radiation exposure approximately 1250 mrem (both welds).

The personnel safety hazards associated with this examination include those hazards associated with confined spaces (poor air quality, etc.), high temperatures with the potential of heat fatigue, and general industrial safety associated with entering, exiting, and working in a confined space where lighting is poor.

The proposed alternate examination will be performed remotely and will essentially eliminate the radiation exposure and personnel safety concerns. The proposed examination technique will be performed utilizing procedures, techniques, and personnel that comply with ASME Codes and Standards and will be capable of detecting surface indications using volumetric techniques.

COMPONENT

Reactor Vessel Nozzle to pipe welds

Welds : RC-32-MRCL-AIII-03

RC-32-MRCL-BIII-03

RC-34-MRCL-AI-01

RC-34-MRCL-BI-01

EXAM AREA

IWB-2500-8

ISOMETRIC or COMPONENT DRAWING

ISI-PRI-2120

ISI-PRI-2121

ASME SECTION XI CATEGORY

B-F

ASME SECTION XI ITEM NUMBER

B5.130

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