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U. S. Nuclear Regulatory Commission
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Subject: McGuire Nuclear Station
Docket Nos. 50-369, 50-370
Relief Request 99-002

Pursuant to 10CFR50.55a(a)(3)(i) and (ii), Duke Energy Corporation requests relief from some requirements of the ASME Boiler and Pressure Vessel Code as described in the attached Relief Request 99-002.

Questions should be directed to Julius Bryant, McGuire Licensing and Compliance, at (704) 875-4162.

Sincerely,

H. B. Barron, Vice President
McGuire Nuclear Station

Attachments

AD47

FOR ADDCK 05000369

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Duke Energy Corporation

Station: McGuire Unit 1 & 2

SECOND 10-YEAR INTERVAL REQUEST FOR ALTERNATIVE NO. 99-002

Pursuant to 10CFR50.55a (a)(3) (i & ii), Duke Energy Corporation requests the use of an alternative to the ASME Boiler and Pressure Vessel Code Section XI for McGuire Units 1 and 2. Specifically, Duke Energy requests approval to use the provisions of Code Case N-323-1, "Alternative Examination for Welded Attachments to Pressure Vessels Section XI, Division 1." This Code Case has not been listed in the latest published revision (Revision 12) of NRC Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1." A copy of Code Case N-323-1 is included for your information as Attachment 1 of the Request for Alternative.

The Code Case states: (a) "for the configuration shown in Figs. 1 and 2, a surface examination from the accessible side of the attachment weld may be performed." Utilization of the above Code Case would alleviate the need to do the inside surface of the support skirt weld. The inside surface of this weld has insufficient clearance to permit the required surface examination.

I. System / Component(s) for Which the Alternative is Requested:

Safety-related ASME Section XI Code Class 1 Pressurizer Integrally Welded Attachments (Pressurizer Support Skirt to Lower Head.)

McGuire 1

Item Number	ID Number	Description
B08.020.001	1PZR-SKIRT	Pressurizer Support Skirt to Lower Head

McGuire 2

Item Number	ID Number	Description
B08.020.001	2PZR-SKIRT	Pressurizer Support Skirt to Lower Head

II. Code Requirement:

It is required by the 1989 ASME Boiler and Pressure Vessel Section XI Code (no addenda) that the surface of Class A Pressurizer Integrally Welded Attachments, Table IWB-2500-1, Examination Category B-H, Item Number B8.20 be examined per Examination Requirements IWB-2500-13, 14 and 15.

III. Code Requirement for which the Alternative is Requested:

ASME Boiler and Pressure Vessel Code Section XI, 1989 Edition (no addenda), Table IWB-2500-1 Examination Category B-H, Item No. B8.20, Figure No. IWB-2500-13. Examination Requirements Figure Number IWB-2500-13 requires a surface examination to areas (A-B) and (C-D). Note 2 states "The extent of the examination includes essentially 100% of the length of the attachment weld at each attachment subject to examination.

IV. Basis for Alternative Examination:

Duke Energy requests approval of Code Case N-323-1 and proposes to apply it as an alternative to the rules for surface examination of the Pressurizer Support Skirt to Lower Head Weld specified in Table IWB-2500-1, Examination Category B-H, Item Number B8.20. Code Case N-323-1 (a) allows " for the configuration shown in Figs. 1 and 2, a surface examination from the accessible side of the attachment weld may be performed". Figure 1 shows the surface examination areas to be (A-B) or (C-D).

V. Alternate Examination or Testing:

The OD surface (surface area A-B) of the weld will be examined by magnetic particle testing. The ID surface (surface area C-D) of the weld will not be examined.

VI. Justification for the Granting of Relief:

There is inadequate accessibility of the inside surface (surface C-D) of the Pressurizer Support Skirt Weld to perform the required surface examination.

VII. Implementation Schedule:

The weld will be scheduled in accordance with ASME Section XI requirements as shown in the McGuire Nuclear Station Inservice Inspection Plan Second Ten Year Interval for Unit 1 & Unit 2.

The following individuals contributed to the development of this RFA. Gary Underwood (Plan Manager McGuire) sections I-VII, Mark Pyne (Nuclear G.O. Engineering) review, Kevin Rhyne (Nuclear G.O. Supervising Engineer) final review.

Sponsored By: Gary Underwood Date 9/20/99

Approved By: K. Kevin Rhyne Date 9/20/99

CASES OF ASME BOILER AND PRESSURE VESSEL CODE

Approval Date: December 31, 1996

*See Numerical Index for expiration
and any reaffirmation dates.*

Case N-323-1

**Alternative Examination for Welded Attachments
to Pressure Vessels
Section XI, Division 1**

Inquiry: What alternative to the requirements of Examination Category B-K of the 1995 Addenda or Examination Category B-H from the Winter 1991 Addenda, through the 1995 Edition may be performed for welded attachments to pressure vessels as shown in Figs. 1 and 2 when only one side of the attachment weld is accessible for examination?

Reply: It is the opinion of the Committee that as an alternative to the requirements of Examination Category B-K of the 1995 Addenda or Examination Category B-H from Winter 1991 Addenda to the 1995 Edition:

(a) for the configuration shown in Figs. 1 and 2, a surface examination from the accessible side of the attachment weld may be performed or;

(b) for the configuration shown in Fig. 2, a volumetric examination of Volume A-B, C-D from the accessible side of the attachment weld may be performed.

CASES OF ASME BOILER AND PRESSURE VESSEL CODE

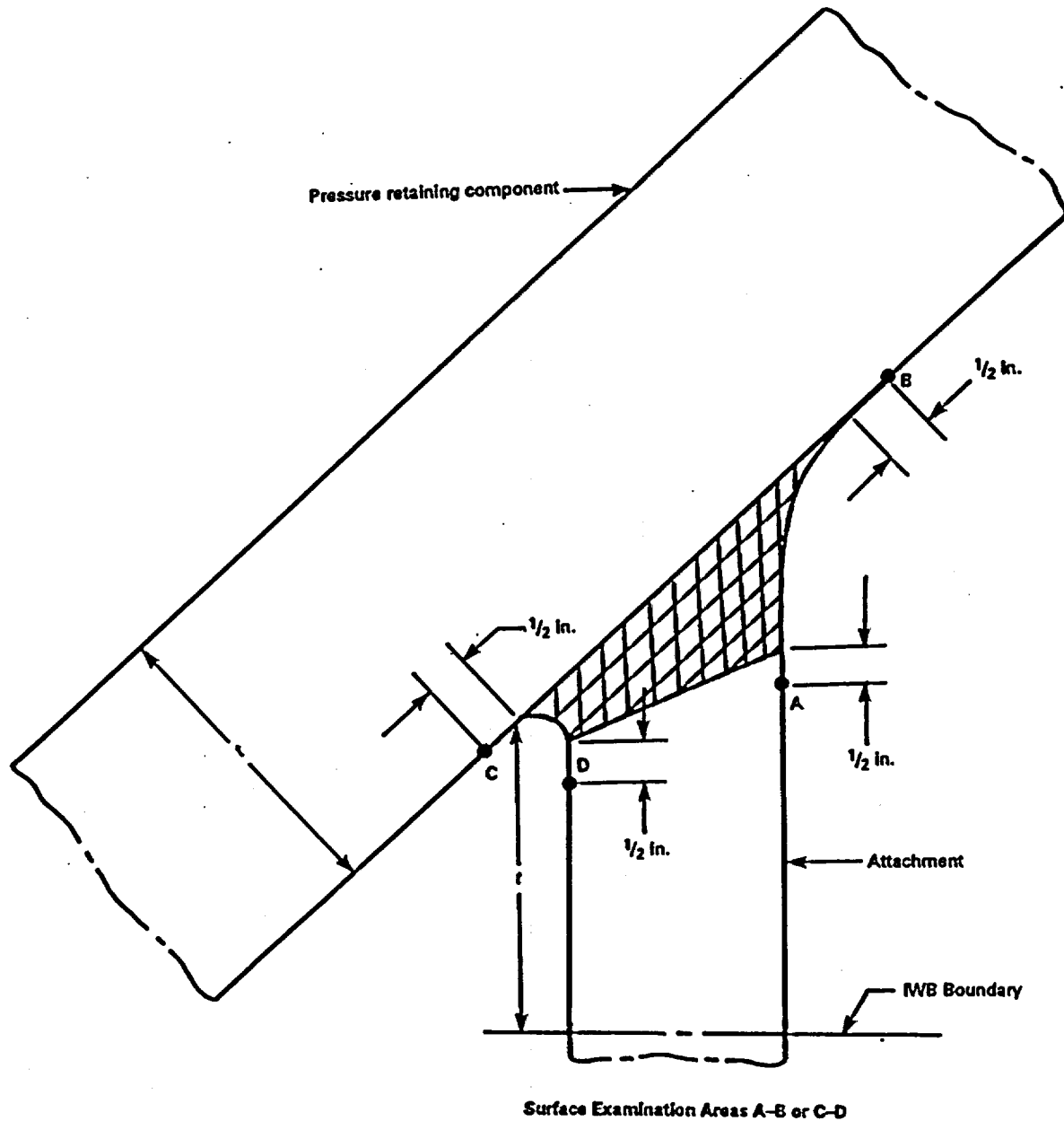
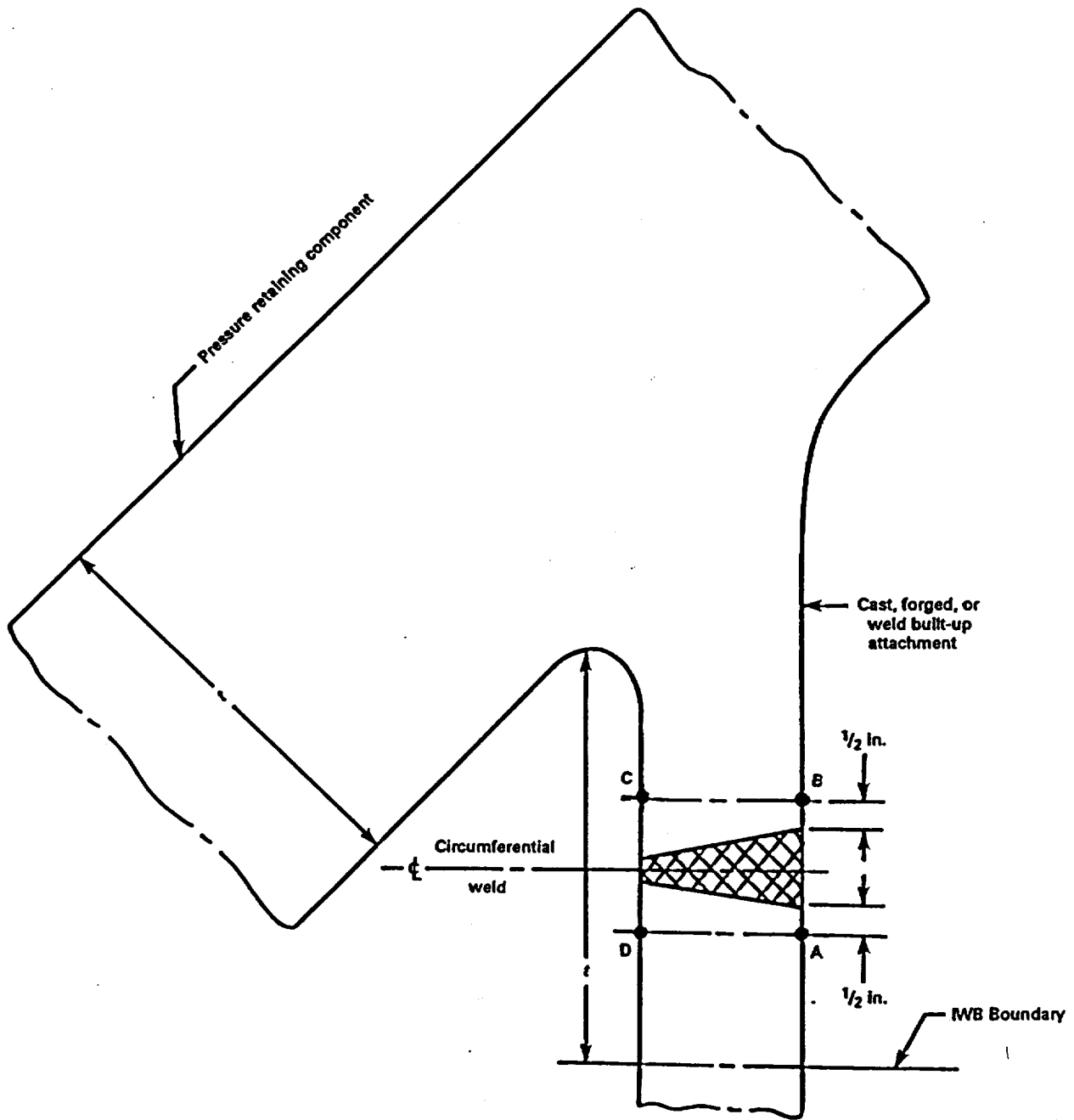


FIG. 1 WELDED ATTACHMENT

CASES OF ASME BOILER AND PRESSURE VESSEL CODE



Surface Examination Areas A-B or C-D

FIG. 2 WELDED ATTACHMENT