



Commonwealth Edison

One First National Plaza, Chicago, Illinois

Address Reply to: Post Office Box 767
Chicago, Illinois 60690

September 30, 1983

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Quad Cities Station Unit 2
IGSCC Inspection Order
List of Welds Not Being Inspected
NRC Docket Nos. 50-265

References (a): IGSCC Inspection Order Confirming
Shutdown for Quad Cities Station
Unit 2 dated August 26, 1983.

(b): Cordell Reed letter to H. R. Denton
dated September 6, 1983.

Dear Mr. Denton:

In accordance with Section III.C.2 of the referenced Order we are submitting a list of welds which will not be inspected this outage. Attachment I identifies the welds by system, location and size. Attachment II provides adequate technical justifications for not conducting these examinations.

If you have any questions on this matter, please contact this office.

One signed original and forty (40) copies of this letter and its attachments are provided for your use.

Very truly yours,

B. Rybak
Nuclear Licensing Administrator

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cc: R. Bevan
NRC Resident Inspector

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Attachment I - List of 304 s/s piping welds (≥ 4 " n.p.s.) that will not be inspected during this current outage.

System	Number of welds	Size (N.P.S.)	Location	Elevation/Azimuth	Comments
RHR - Head Spray	01	4"	Reactor cavity	660'	Inaccessible for UT (1)
RHR - A LPCI Injection	01	16"	Containment penetration X-13A	590'/85°	Inaccessible for UT (2)
	01	16"	Containment penetration X-13A	590'/85°	Inaccessible for UT (3)
RHR - B LPCI injection	01	16"	Containment penetration X-13B	591'/265°	Inaccessible for UT (2)
RHR - Shutdown cooling	01	20"	Containment penetration X-12	605'/345°	Inaccessible for UT (2)
	01	20"	Containment penetration X-12	605'/345°	Inaccessible for UT (3)
Core Spray - A loop	01	10"	Containment penetration X-16A	642'/20°	Inaccessible for UT (2)
Core Spray - B loop	01	10"	Containment penetration X-16B	642'/185°	Inaccessible for UT (2)
Reactor Water Clean-Up	01	6"	Containment penetration X-14	625'/90°	Inaccessible for UT (2)
	01	6"	Drywell - 1st grating	602'	Inaccessible for UT (4)
	08	6"	Drywell - 1st grating	610'	Piping replacement with conforming material
	07	6"	Drywell - 2nd grating	615'	Piping replacement with conforming material
Recirculation - A Suction	01	28"	Drywell - Basement	587'	Not inspectable due to material structure (5)
Recirculation - B Suction	01	28"	Drywell - Basement	585'	Not inspectable due to material structure (5)

ATTACHMENT II
TECHNICAL JUSTIFICATIONS

- (1) This weld in the RHR system is located just above the point at which the line penetrates the floor separating the reactor cavity and the drywell. The inacceptability is due to the presence of a water barrier as shown on figure 1. Relief from Inservice Inspection requirement for this weld has been granted by the NRC staff.
- (2) These Class 1 lines, due to the design of primary containment penetration assembly, have one circumferential pressure retaining weld that is inaccessible for volumetric examination. Figure 2 clearly illustrates the design constraints which make it extremely impractical to examine the subject welds by volumetric technique. Relief from Inservice Inspection requirement for these welds has been granted by the NRC staff.
- (3) These Class 1 welds in the Reactor Clean up and RHR systems are physically inaccessible for volumetric examination. They cannot be examined because of interference from a structural steel guide as shown on figure 3.
- (4) The design of this Reactor Clean up branch pipe connection weld calls for the use of reinforcement saddle. This saddle is fillet welded over the actual pressure retaining branch pipe to main pipe weld, completely incasing it as illustrated on figure 4. Relief from Inservice Inspection requirement for this weld has been granted by the NRC staff.
- (5) In the Recirculation system there are two (02) elbow to recirculation pump casing welds (suction side). The elbow and pump casing material is type CF8M cast austenitic stainless steel which has been demonstrated to be highly resistant to oxygen-assisted stress corrosion in the as-installed condition per NUREG-0313, Rev. 1. The high ultrasonic beam attenuation of the cast stainless steel base material inhibits meaningful examination of the two subject welds by ultrasonic method. The examination requirement is thus impractical for these two welds because of material structure.

The safety implications of these exemptions are minimal due to the fact that the safety margins in the subject welds are typical of those in all welds in the applicable systems. Since the exempted welds represent only a small fraction of the total number of welds examined per IGSCC Inspection Order (12 out of 237), the statistical significance of exempting these welds is expected to be negligible.

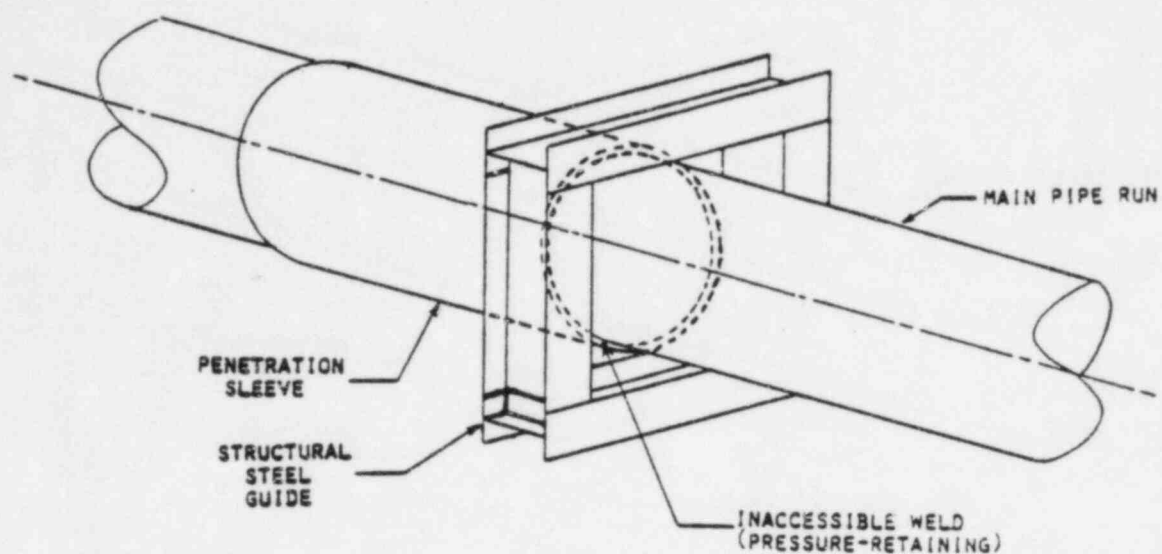


Figure 3

Weld Obstruction Details

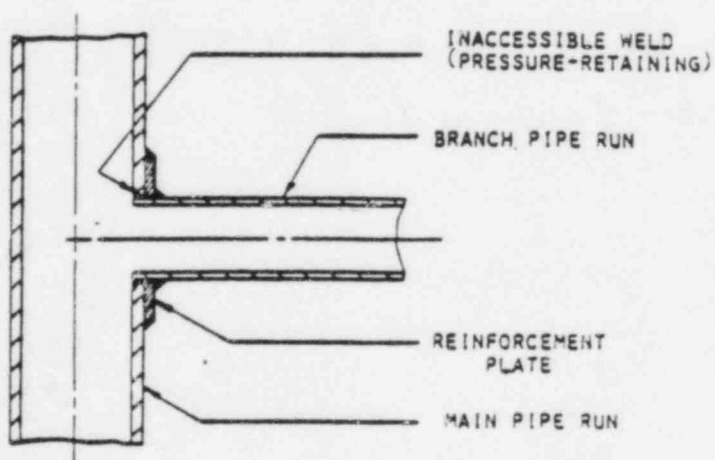


Figure 4

Reinforced Branch Pipe Connection

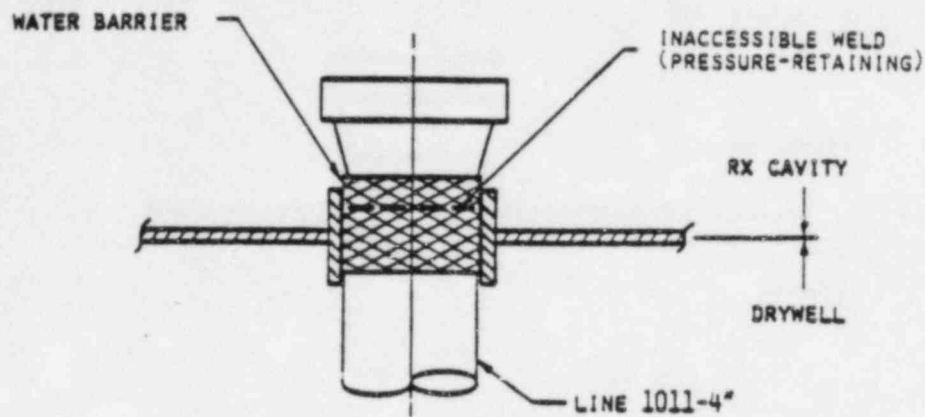


Figure 1
Weld Obstruction Details

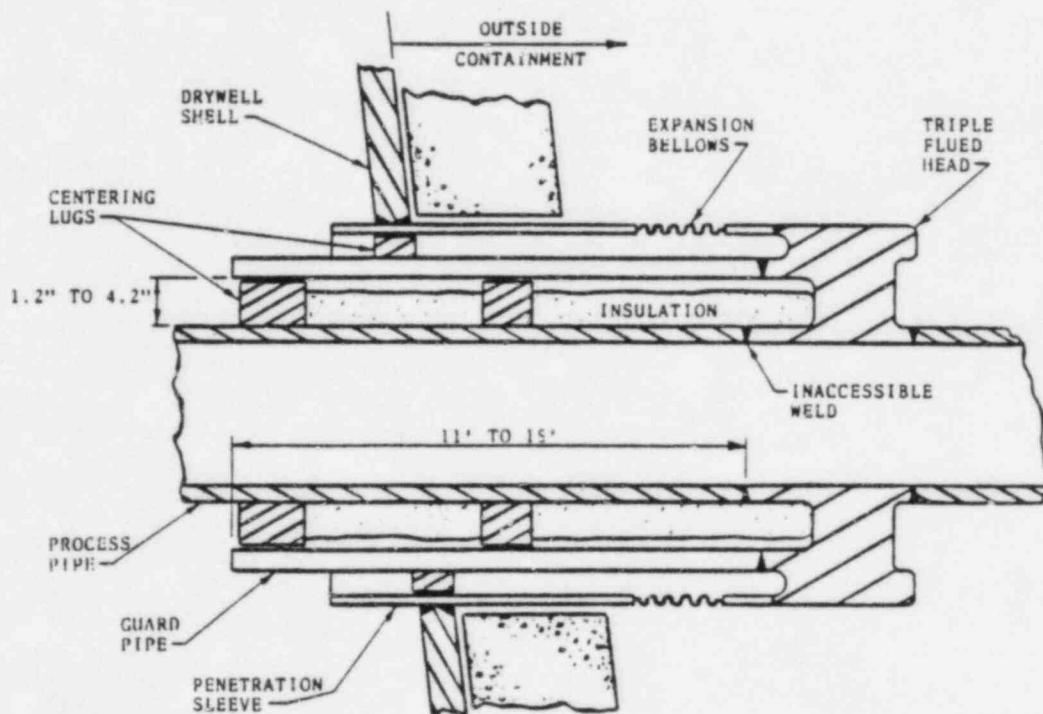


Figure 2
Typical Design of Primary Containment Penetration