



**Commonwealth Edison**

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

July 2, 1984

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

Subject: Quad Cities Station Unit 1  
IGSCC Weld Inspection Results  
NRC Docket No. 50-254

Reference (a): B. Rybak letter to H. R. Denton  
dated March 19, 1984.

Dear Mr. Denton:

Ultrasonic inspection and repair of the stainless steel piping for Quad Cities Unit 1 has now been completed. Commonwealth Edison performed the inspection in accordance with our letter of March 19, 1984 (Reference (a)). The sampling plan used for Quad Cities Unit 1 was based on SECY-83-267C and in substantive agreement with Generic Letter 84-11. A meeting with your staff to present our inspection results was held on June 8. This letter contains our formal submittal summarizing our inspection results and contains additional information requested by your staff to prior, during and after our meeting. This information is submitted in support of our request for NRC concurrence to operate Quad Cities Unit 1 for the next fuel cycle.

A total of 128 welds were inspected; 18 welds were found with flaw indications. Of these 18 welds, all but one had axial indications. Consequently, 16 welds were overlaid. As for the other two welds, 02BS-S9 and 02BS-012, two different remedies were employed. For 02BS-S12, the flaws were removed by core drilling out the two axial indications and the repair completed by welding on 1-5/16 inch half-couplings. Weld 02BS-S9 has two short circumferential indications which Commonwealth Edison has dispositioned as possible crack indications. This disposition is conservative as Kraft Werke Union (KWU), who was employed to discriminate all welds having circumferential crack indications, determined that these specific reflectors were not cracks but metallurgical reflectors. Nevertheless, we had our architect-engineer, Nutech Engineers perform a flaw analysis which found the weld acceptable as found. Additionally, this weld has been IHSied.

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H. R. Denton

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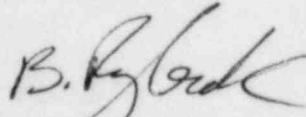
July 2, 1984

Finally, for information only, Commonwealth Edison has installed a Pipelock, as designed by O'Donnell and Associates on a twelve inch riser weld 02M-S3. This weld has an overlay which was applied during this outage.

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

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

Very truly yours,



B. Rybak

Nuclear Licensing Administrator

lm

cc: R. Bevan - NRR  
NRC Resident Inspector - Quad Cities

Attachments

8895N

ATTACHMENT A

OVERALL WELL INSPECTION SUMMARY

QUAD CITIES UNIT 1

SPRING, 1984 OUTAGE

8895N

OVERALL INSPECTION SUMMARY  
 TYPE 304 STAINLESS STEEL PIPING  
 4" AND GREATER DIAMETER  
 QUAD CITIES UNIT 1  
 SPRING 1984

<u>SYSTEMS EXAMINED</u>	<u>TOTAL WELDS</u>	<u>WELDS EXAMINED</u>	<u>CRACK INDICATIONS</u>	<u>WELDS OVERLAYED</u>
RECIRCULATION				
RISERS (12")	51	43	14	14
RINGHEADER (22")	18	12	2	2
OUTLETS (28")	34	33	2	0 <sup>1</sup>
BYPASS STUBS (4")	8	4	0	0
RESIDUAL HEAT REMOVAL				
LPCI (16")	32	9	0	0
SD COOLING (20")	17	6	0	0
HEAD SPRAY (4")	13	4	0	0
CORE SPRAY (10")	32	7	0	0
REACTOR WATER CLEANUP (6")	7	4	0	0
HEAD VENT (4")	3	3	0	0
CRD RETURN (4")	3	3	0	0
 TOTAL	 218	 128	 18	 16

<sup>1</sup> METALLURGICAL SAMPLING REMOVED THE CRACK INDICATIONS FROM ONE WELD. THE TWO LOCATIONS WERE PAIRED WITH HALF COUPLINGS. THE SECOND WELD WITH "POSSIBLE CRACKS" WAS ACCEPTABLE WITHOUT REPAIR BY FRACTURE MECHANICS EVALUATION.

ATTACHMENT B

IGSCC FLAW EVALUTION/DISPOSITION

QUAD CITIES UNIT 1

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