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June 1, 1988

Mr. Thomas E. Murley, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Quad Cities Station Unit 2
"Spring 1988 Inspection of Piping
Susceptible to Intergranular Stress
Corrosion Cracking (IGSCC)
NRC Docket No. 50-265

Dear Mr. Murley:

Commonwealth Edison is submitting a report detailing the results of the Quad Cities Unit 2 augmented piping inspection. This report provides a description of flaws found as well as the analytical and repair actions taken during the Spring 1988 refueling outage. The following two enclosures are provided:

1) Ultrasonic Examination of IGSCC susceptible Stainless Steel Weldments, Quad Cities Unit 2-1988 Refueling Outage.

This enclosure provides a report of the ultrasonic examinations performed on IGSCC susceptible stainless steel weldments during the Quad Cities Unit 2 refuel outage and provides a discussion on the following topics:

- the "prioritization" study which was used to both select and schedule weldments for UT examinations.
- a description and UT examination history of welds which contain IGSCC-like flaw indications.
- a comparison of the current UT examination results with those of the 1986 refueling outage for the weld overlay repairs examined during the 1988 refueling outage, and
- a description of the repair activities to the end cap-to-header weld overlay repair performed last outage (02A-S10) which was evaluated as containg UT flaw indications.

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2) Design Report for Recirculation and Reactor Water Cleanup System Evaluations and Repairs Performed during the 1988 Refueling Outage at the Quad Cities Nuclear Power Plant, Unit 2, Structural Integrity Associates, Inc. Report No. SIR-88 018, Vol, Revision 1, Project No. CECo - 09Q-1, May 1988.

This report documents the disposition and repair of flaw indications found by the examinations described in enclosure 1. All flaw evaluations and weld overlay repair designs were performed by Structural Integrity Associates, Inc. in accordance with NUREG-0313, Revision 2.

The weld overlay repairs are still in progress. Volume 2 of the Structural Integrity Report will be submitted within 30 days after the end of the refuel outage and will include as-built weld overlay dimensions and the disposition of any flaw indications in weld overlays. The results of a system shrinkage stress piping analysis for the recirculation and RWCU piping, from weld overlay shrinkages, will also be documented in Volume 2. The results of this shrinkage stress analysis will be compared to the bounding shrinkage stress of 1 ksi assumed in Volume 1 for flaw evaluations in 28 inch recirculation system piping.

Please direct any questions you may have regarding this matter to this office.

Very truly yours,

I. M. Johnson
Nuclear Licensing Administrator

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cc: T. Ross - NRR
NRC Resident Inspector - Quad

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