



May 12, 1995

U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attn: Document Control Desk

Subject: Quad Cities Nuclear Station Units 1 and 2,
Additional Information - Core Shroud Modification
NRC Docket Nos. 50-254 and 50-265

Reference: (1) R.M. Pulsifer to D.L. Farrar letter dated March 3, 1995.

(2) J.L. Schrage to USNRC letter dated March 22, 1995.

(3) Teleconference between USNRC (R. Pulsifer, et al) and ComEd (J. Schrage, et al) on April 14, 1995.

In Reference (1), the NRC staff transmitted a Request for Additional Information (RAI) to Commonwealth Edison (ComEd) related to the proposed repair and inspection plan for the Quad Cities Station, Units 1 and 2 core shrouds. ComEd provided a response to the RAI in Reference (2). During the Reference (3) teleconference, the NRC Staff requested clarification of ComEd's response to Question B.1 of the RAI. The Attachment to this letter transmits the clarification requested by the NRC staff during the Reference (3) teleconference.

To the best of my knowledge and belief, the analyses and evaluations contained in this document is true and correct. In some respects this document is not based on my personal knowledge, but on information furnished by other Commonwealth Edison employees, contractor employees, and/or consultants. Such information has been reviewed in accordance with company practice, and I believe it to be reliable.

If there are any questions concerning this matter, or need for further clarification, please contact this office.

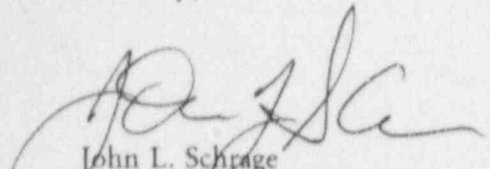
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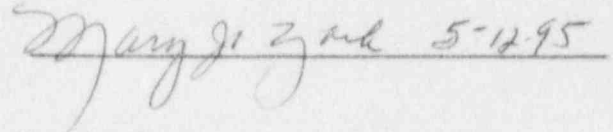
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May 12, 1995

Sincerely,


John L. Schrage
Nuclear Licensing Administrator




Mary Jo Yack 5-12-95

Attachment Clarification of ComEd Response to RAI Question B.1

cc: J. Martin, Regional Administrator - RIII
R. Pulsifer, Project Manager - NRR
C. Miller, Senior Resident Inspector - Quad Cities
Office of Nuclear Facility Safety - IDNS

ATTACHMENT

Clarification of ComEd Response to RAI Question B.1

Question:

In the March 22, 1995 RAI response to Question B.1, ComEd identified the smallest vessel-to-shroud annulus plan flow area between the H1 and H2 Weld as being at the H1 weld. In order to compare the plan footprint area of the shroud repair hardware with that of other projects, what is the flow area using this plan footprint area at the elevation where most of the shroud repair hardware is located. Also, what associated pressure drop effects would occur.

Response:

The smallest flow area between the H1 and H2 welds, making the conservative assumption that all of the shroud repair hardware is lumped at one elevation, i.e., using the plan footprint area of all of the hardware, is given below. Because almost all of the shroud repair hardware is located well below the shroud head flange, the shroud head bolts and lug sets, as well as the guide rod brackets need not be included in the flow area calculation. This leaves only the shroud repair hardware and the core spray piping to block the flow in the annulus at this lower elevation. The flow restrictions at the H1 weld elevation due to the shroud head bolts and lug sets, the guide rod brackets and the core spray line riser pipe and couplings still exist.

The flow area at the location of most of the shroud repair hardware is:

Gross as-built annulus area (252 in. Vessel ID, 220 in. shroud OD)	11862 sq. in
4 - 6.625 in. OD core spray line riser pipes and couplings	326 sq. in
Pre-repair - net annulus flow area	11536 sq. in
4 - sets shroud repair hardware	1227 sq. in
Post-repair net annulus flow area	10309 sq. in

The four added sets of shroud repair hardware will block 10.64 percent of the pre-repair minimum downcomer area. The impact of the additional flow blockage on the recirculation system loop hydraulic resistance, loop pressure drop, reactor coolant level, and the coolant flow rate is determined to be negligible.