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Commonwealth Edison
One First National Plaza, Chicago, Illinois
Address Reply to: Post Office Box 767
Chicago, Illinois 60690

November 21, 1984

Mr. James G. Keppler
Regional Administrator
U.S. Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

Subject: Braidwood Station Unit 2
10 CFR 50.55(e) 30-day Report
Reactor Vessel Nozzle Indication
NRC Docket No. 50-457

Dear Mr. Keppler:

On October 22, 1984, the Commonwealth Edison Company Project Engineering Department notified Mr. Robert Lerch of your office of a potential deficiency reportable pursuant to 10 CFR 50.55(e) regarding a weld indication identified during Unit 2 Preservice Inspection at Braidwood Station. This letter fulfills the thirty (30) day reporting requirement and is considered to be an interim report. For tracking purposes, this potential deficiency was assigned Number 84-18.

DESCRIPTION OF DEFICIENCY

The preservice nondestructive examination under ASME Section XI 1977 Edition, with addenda through the Summer 1978 Addenda has resulted in one (1) rejectable indication in the Loop #2 inlet nozzle-to-vessel shell weld in the Braidwood Unit 2 reactor pressure vessel. The indication is planar and is located just below the outer diameter (O.D.) surface of the weld. The nominal plate thickness in this area is 9.69 inches. The indication was identified during ultrasonic examination.

ANALYSIS OF SAFETY IMPLICATIONS

Stresses due to cyclic operation throughout the life of the plant have the potential for causing Code rejectable weld indications to propagate and potentially result in minor leakage. In such an event, the leakage would be detected by various available Reactor Coolant Inventory Monitoring Systems preventing any adverse safety consequences. Nevertheless, the indication will be repaired as discussed in the corrective action below.

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CORRECTIVE ACTION TAKEN

After the indication was identified by the preservice inspection contractor, the examination was reviewed and discussed with Westinghouse. The data indicates that the flaw is relatively small in size and is located near the O.D. surface.

The location of the reactor nozzle is such that surveillance examinations during outages throughout the life of the plant would require removal of the reactor core barrel. Also, the performance of these examinations under the high radiation environment is undesirable.

To prevent any reactor coolant boundary degradation and to avoid repeated high dose surveillance requirements throughout the life of the plant, the indication will be removed and the weld will be repaired as necessary prior to plant startup. The repair will be performed by temperbead method and will be done to the requirements of ASME Section XI.

Please address any questions that you or your staff may have concerning this matter to this office.

Very truly yours,

David H Smith

David H. Smith
Nuclear Licensing Administrator

cc: NRC Resident Inspector - Braidwood

Director of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

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