



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

October 8, 1982

Mr. Paul O'Connor
Project Manager
Operating Reactors Branch No. 5
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Dresden 2
SEP Topic: III-4.B, Turbine Missiles

NRC Docket 50-237

- Reference: (a) R.F. Janecek letter to D.M. Crutchfield dated 5-11-81;
Subject: Unit 2, LP Turbine Wheel Ultrasonic
Inspection Report Findings
(b) C.W. Slusher (G.E.) letter to L.C. Bird (CECo) dated
8-13-82; Subject: Commonwealth Edison Company Nuclear
Rotor Re-evaluated Reinspection Intervals
(c) T.J. Rausch letter to P.W. O'Connor dated 8-30-82.

Dear Mr. O'Connor:

The attached reference (a) provides a summary of the findings of the wheel bore ultrasonic examination of the shrunk-on wheels from the low pressure A, B and C rotors during the 1981 outage. The wheel bore ultrasonic examination detected indication on the bore surfaces of the wheels which appeared very shallow and probably resulted from scratches on the bore and/or shaft surfaces. General Electric feels that this does not affect the structural integrity of the wheels. The key way indications varied from less than 0.03 inches to a maximum of 0.29 inches.

The results of the visual and fiber optic examinations revealed water cutting in line with the keyways on several of the wheel hubs and on the keyways. However, in performing calculations to determine the reinspection intervals for these L.P. rotors which was based on the NRC criteria which states that a disc which contains indications must be reinspected in one-half the time calculated to reach one-half the critical crack size (A_{cr}) which is the minimum reinspection interval, was calculated to be 73 months on the worst, or limiting wheel. A035

The major goals of the re-evaluation program have been to update the fracture mechanics procedure used for wheel evaluation. Reference (b) provides the recommended reinspection intervals for the low pressure A, B, and C rotors being 6, 4 1/2, and 6 years respectively. Therefore, the A and C rotor will be re-inspected in the September, 1987 outage and the B rotor in October, 1984.

In keeping with regular refueling outage turbine inspection as stated in reference (c) during the upcoming outage scheduled in January, 1983 will require inspection of one main steam control valve, one main steam stop valve, one combined intermediate valve, and 3 bypass valves are dismantled and additionally the HP rotor.

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The inspection involves complete disassemble of HP rotor including diaphragm, magnetic particle testing (MT) Bore sonic and Dye-Penetrant test (PT). Inspection of one control valve, stop valve and 3 by-pass valves and control intermediate valves involves the following:

- 1) Verify seat to disc contact
- 2) Magnetic Particle tested (MT)
- 3) Dye-penetrant test (PT), valve stem, disk and seats.
- 4) Ultrasonic test (UT) valve stem and studs for bolting.

Also UT of turbine shell flange studs and coupling studs will be done.

Please address any questions you may have concerning this matter to this office. One (1) signed original and thirty-nine (39) copies of this transmittal have been provided for your use.

Very truly yours,



Thomas J. Rausch
Nuclear Licensing Administrator
Boiling Water Reactors

SPP/ji
2372D

cc: RIII Resident Inspector, Dresden
Gregg Cwalina, SEP Integrated Assessment
Project Manager (w/attachment)



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