

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

December 6, 1983

53 DEC 12 AG: 37

BLRD-50-438/83-58
BLRD-50-439/83-51

U.S. Nuclear Regulatory Commission
Region II
Attn: Mr. James P. O'Reilly, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

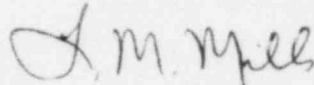
BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - CARBON STEEL DOWEL PIN FOUND IN
HIGH-PRESSURE INJECTION PUMP - BLRD-50-438/83-58, BLRD-50-439/83-51 - FIRST
INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector
Ross Butcher on November 9, 1983 in accordance with 10 CFR 50.55(e) as NCR
2515. Enclosed is our first interim report. We expect to submit our next
report by March 7, 1984.

If you have any questions, please get in touch with R. H. Shell at
FTS 858-2688.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



L. M. Mills, Manager
Nuclear Licensing

Enclosure

cc: Mr. Richard C. DeYoung, Director (Enclosure)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Records Center (Enclosure)
Institute of Nuclear Power Operations
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339

8312160125 831206
PDR ADOCK 05000438
S PDR

OFFICIAL COPY

JE27

1983-TVA 50TH ANNIVERSARY

An Equal Opportunity Employer

11

ENCLOSURE

BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2
CARBON STEEL DOWEL PIN FOUND IN HIGH-PRESSURE INJECTION PUMP -
BLRD-50-438/83-58, BLRD-50-439/83-51
NCR 2515
10 CFR 50.55(e)
FIRST INTERIM REPORT

Description of Deficiency

The makeup/high-pressure injection (MU/HPI) pumps are two-stage centrifugal pumps designed and built by Bingham-Willamette of Portland, Oregon. The pumps contain a horizontal rotating element housed in a double casing. The outer casing, which carries the discharge pressure, is a fabricated pressure vessel with removable end covers secured by a series of studs. The inner casing consists of two castings which are machined and lapped at their mating surfaces and are bolted together around the rotating element.

During a recent disassembly of one of the MU/HPI pumps, a carbon steel dowel pin was found in a tapered hole in the inner casing. The dowel pin was used to align the inner casing during assembly and should have been removed following torquing of the inner case bolts. The pin was located such that it came in contact with the pump fluid and had rusted.

The apparent cause of the deficiency was the breakdown in the manufacturer's Quality Assurance program since the pump manufacturer failed to remove the dowel pin during the initial assembly of the pump and/or failed to provide TVA with information regarding inspection/removal of the pin.

Interim Progress

TVA has forwarded this NCR to B&W for evaluation and recommended corrective actions. B&W, through its site representatives at Bellefonte, has recommended that the pin found in the MU/HPI pump be removed, the rust removed from the pump casing, and a wet-cloth test be performed to verify that no residual rust remains.

B&W has also recommended that the remaining MU/HPI pumps be inspected for the subject dowel pins. Any pins found should be removed, along with any rust, as indicated above. Additionally, if any rust is observed in a tapered hole where no pin is present, B&W recommends that the rust be removed and the surface tested. TVA is currently reviewing B&W's recommendations and will provide more information in our next report.