TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

 February 18, 1982

BLRD-50-439/81-48

U.S. Nuclear Regulatory Commission
Region II
Attn: Mr. James P. O'Reilly, Regional Administrator
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

BELLEFONTE NUCLEAR PLANT UNIT 2 - GOUGES IN PRESSURIZER VESSEL - BLRD-50-439/81-48 - FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector R. V. Crlenjak on July 14, 1981 in accordance with 10 CFR 50.55(e) as NCR 1522. This was followed by our interim reports dated August 13 and October 30, 1981. Enclosed is our final report.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY

for L. M. Mills, Manager
Nuclear Regulation and Safety

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

Mr. James McFarland (Enclosure)
Senior Project Manager
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P.O. Box 1260
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ENCLOSURE
BELLEFONTE NUCLEAR PLANT UNIT 2
GOUGES IN PRESSURIZER VESSEL
BLRD-50-439/81-48
10 CFR 50.55(e)
FINAL REPORT

Description of Deficiency

During an inspection, it was noticed that there were several gouges, approximately 1/16" to 3/16" deep and 1/2" to 1-1/2" long, on the pressurizer vessel. TVA's Division of Construction (CONST) made these gouges when a grinder came in contact with the pressurizer vessel wall during the grinding of shear bar welds.

Similar deficiencies which have occurred at the site include:

1. Two reactor coolant pump cases (one per unit) which were accidently gouged, but minimum wall thickness was not violated (NCR's 1442 and 1465).

2. Arc strikes on the elbow connecting the 32-inch cold leg pipe to the steam generator outlet nozzle, which were repaired by buffing (NCR 1212).

3. Arc strikes on the head of a decay heat removal system cooler. TVA is in the process of obtaining corrective action from B&W (NCR 1538).

None of these similar deficiencies were determined to be reportable.

Safety Implications

If these gouges violate the minimum wall thickness of the vessel, then they would act as stress risers. Cracks could be initiated at these points because of thermal stresses, possibly resulting in a loss of reactor coolant.

Corrective Action

Based on preliminary wall thickness measurements, the as-ground wall thickness will not violate the minimum wall thickness. The affected areas are to be repaired by grinding the indications and blending them with the vessel surface. The minimum base metal thickness will then be verified by subjecting the ground area to an ultrasonic examination. This work is to be completed by March 1, 1982.

To prevent recurrence of this type deficiency, construction employees have been instructed to exercise greater caution when grinding welds in order not to damage plant equipment by allowing contact with the grinder.