TENNESSEE VALLEY AUTHORITY

400 Chestnut Street Tower II

February 19, 1981

SQRD-50-328/81-15

Mr. James P. O'Reilly, Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Region II - Suite 3100
101 Marietta Street
Atlanta, Georgia 10303

Dear Mr. O'Reilly:

SEQUOYAH NUCLEAR PLANT UNIT 2 - REACTOR VESSEL FIELD WELD INDICATIONS - SQRD-50-328/81-15 - FIRST INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector M. Thomas on January 20, 1981, in accordance with 10 CFR 50.55(e) as NCR's 2511 and 2547. Enclosed is our first interim report. We expect to submit our next report by April 3, 1981.

If you have any questions, please get in touch with D. L. Lambert at FTS 857-2581.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager Nuclear Regulation and Safety

Enclosure

oc: Mr. Victor Stello. Director (Enclosure)

Office of Inspection and Enforcement

U.S. Nuclear Regulatory Commission

Washington, DC 20555

30/9

## ENCLOSURE

SEQUOYAH NUCLEAR PLANT UNIT 2
REACTOR VESSEL FIELD WELD INDICATIONS
SQRD-50-328/81-15
10CFR50.55(e)
FIRST INTERIM REPORT

## Description of Deficiency

Baseline liquid penetrant inspection of Sequoyah unit 2 reactor vessel nozzles revealed several unacceptable linear indications on nozzle weld 2RC-17 and one unacceptable indication on weld 2RC-9. An examination of the documentation for field weld 2RC-17 reveals that no evidence exists that a final liquid penetrant examination had been performed as required for Class I welds. The original weld history record had been lost. Metallurgical evaluation of the indications reveals that all indications are intergranular in nature and are characteristic of either stress corrosion cracking or hot cracking. All indications lie in the 309 stainless steel weld bead closest to the ASTM A508 base material and are oriented transverse to the direction of weld travel.

## Corrective Action

The indications have been reduced to an acceptable size in accordance with ASME Section XI criteria. The cavities from which indications were reduced have been blended to a 3-to-1 taper and the nozzles are acceptable for use. All nozzles are being restored to an acceptable cleanliness level.

A review of documentation for the remaining unit 2 reactor pressure vessel nozzles reveals that documentation does exist to support the other required examinations.

TVA is continuing to investigate this deficiency.