50-260

April 20, 1984

MEMORANDUM FOR: John A. Olshinski, Director
Division of Engineering and Technical Programs
Region II

FROM: Darrell G. Eisenhut, Director
Division of Licensing

SUBJECT: BROWNS FERRY UNIT 2 INTEGRATED LEAK RATE TEST FAILURE

Reference is made to your memo of April 22, 1983 on the above subject. We agree with your position on the test schedule for subsequent Type A tests, on the need for locally (Type B) tests of the flange seals at each refueling outage, and on the need for including RPS instrument lines and valves in the integrated leak rate tests. TVA has committed to modify the flanges and to include the RPS instrument lines and valves in the Type A tests. A copy of our letter to TVA documenting our joint position on this issue is enclosed.

We appreciate you bringing this to our attention. If your staff has any comments or questions, contact the Browns Ferry Project Manager, Dick Clark.

Original signed by
Robert A. Purple
for/ Darrell G. Eisenhut, Director
Division of Licensing

Enclosure:
As stated

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

April 20, 1984

Docket No. 50-260

Mr. Hugh G. Parris
Manager of Power
Tennessee Valley Authority
500 Chestnut Street, Tower II
Chattanooga, Tennessee 37401

Dear Mr. Parris:

SUBJECT: BROWNS FERRY UNIT 2 INTEGRATED LEAK RATE TEST FAILURE

During the primary containment integrated leak rate (Type A) test at Browns Ferry Unit 2 on February 15 - 19, 1983, a leakage of 3 wt. % per day was observed. This exceeded the acceptance limit of 1.5 wt. % per day. The leakage path was identified as a valve flange which is not locally (Type B) testable. After torquing the valve flange bolts the integrated test was completed with a measured leakage of 0.5 wt. % per day. This event was initially described in BFRO-50-26/8505, transmitted by your letter of March 16, 1983. A summary report of the containment integrated leak rate test (CILRT) was transmitted by your letter of May 16, 1983. A supplement to your initial reportable occurrence report was submitted by your letter of December 22, 1983. The CILRT was witnessed by an inspector from Region II. The inspection was documented in inspection report 50-259/260/296-83-06 sent to you on March 30, 1983. A follow-up inspection was documented in inspection reports 50-259/260/296-83-56 sent to you by our letter dated January 17, 1984. As indicated in the inspection reports, the integrated leak rate test is considered a failed test in accordance with the requirements of Paragraph III.A.1 of Appendix J to 10 CFR 50. This is the first failed test for Browns Ferry Unit 2. Technical Specification 4.7.2 and Paragraph III.A.6 of Appendix J require that if any perodic Type A test fails to meet the applicable acceptance criteria, the test schedule for subsequent Type A tests will be reviewed and approved by the Commission.

We have evaluated the CILRT, the corrective actions you have taken and the commitments you have made for future corrective actions. Our Safety Evaluation is enclosed. In your report of December 22, 1983, you committed to modify the flange that was leaking and all similar flanges in all three Browns Ferry units to permit local leak testing (Type B) of the flange gaskets for leakage. You stated that these modifications have been completed on Unit 1 and will be completed on Unit 3 during the current outage. You further committed to complete the modifications on Unit 2 during the Cycle 5 outage, tentatively scheduled to start August 24, 1984. In view of your commitments and corrective actions, we have determined that no change in the Type A test schedule is required at this time.

As discussed in the enclosed Safety Evaluation and in the inspection reports, certain instrument lines that would be exposed to post-accident containment pressure were isolated from the CILRT and had not been included in the leak test program at Browns Ferry. Twenty-seven instrumentation valves and their associated piping, forming part of the reactor protection system at Browns Ferry Unit 2, were subsequently locally leak tested at accident pressure and exhibited leakage within acceptable limits.

Our position on this issue is that these instrument lines are considered to be an extension of the primary containment boundary and should be included in the integrated leak rate tests conducted at each of the Browns Ferry Units. On page 4 of your May 16, 1983 report, you stated that these valves and associated tubing will be included in Type A tests by aligning the valves to directly see the CILRT test pressure. Implementation of your commitments should lead to final resolution of this concern. Therefore, you are requested to either submit a change to the Technical Specifications to include these lines in Type A tests or to propose an alternative means that will ensure the instrument lines and valves are included in the Type A tests. Within 90 days of receipt of this letter, you are requested to address the approach you propose.

This request for additional information is specific to one licensee. The reporting and/or recordkeeping requirements contained in this letter effect fewer than ten respondents; therefore OMB cleareance is not required under P.L. 96-511.

Sincerely,

Domenic B. Vassallo, Chief
Operating Reactors Branch #2
Division of Licensing

Enclosure:
As stated

cc w/enclosure:
See next page

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Tennessee Valley Authority
Browns Ferry Nuclear Plant, Units 1, 2 and 3

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