TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

5N 157B Lookout Place

FEB 12 1990

U.S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D.C. 20555

Gentlemen:

In the Matter of Tennessee Valley Authority

Docket No. 50-328

SEQUOYAH NUCLEAR PLANT (SQN) UNIT 2 - ANALYSIS OF REACTOR VESSEL IRRADIATION CAPSULE U

Enclosed is the final report, prepared by Southwest Research Institute, on testing of the subject reactor vessel specimen that was removed during the SQN Unit 2 Cycle 3 refueling outage. The measured fluence rates for Cycle 3 are approximately 38 percent lower than the fluence rates reported for Cycles 1 and 2 because of the use of a low leakage core configuration. This report is being submitted in accordance with Technical Specification 3/4.4.9 and 10 CFR 50, Appendix H.

TVA has conducted a review of the enclosed report and determined that the projected material toughness for operating through 32 effective full power years is supported by the data. Based on the test results, the SQN Unit 2 reactor vessel can be expected to operate for its design life without exceeding material toughness criteria.

Please direct questions concerning this issue to Bruce S. Schofield at (615) 843-6172.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

Manager, Nuclear Litensing and Regulatory Affairs

Enclosure

cc: See page 2

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ENCLOSURE

REACTOR VESSEL MATERIAL SURVEILLANCE PROGRAM FOR SEQUOYAH UNIT 2: ANALYSIS OF CAPSULE U

(B25 900125 002)