ENCLOSURE

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2
WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
CONTROL ROD DROP EVENTS YIELD LESS CONSERVATIVE
DNBR'S THAN STATED IN FSAR

Description

This condition was discovered by Westinghouse during a generic review of the dropped rod accident analysis methodology and was reported by Westinghouse to NRC-OIE (T. M. Anderson's letter to J. G. Davis dated November 15, 1979).

The potential problems, as identified by Westinghouse, which comprise this deficiency are (1) plant response to an assumed malfunction in the rod controller circuits, (2) error allowances for the positive and negative high flux rate trip protection systems, and (3) power distribution and reactivity insertion profiles for dropped rod sequences used to define the negative rate trip setpoints. The Westinghouse review has revealed that these problems affected the dropped rod accident analyses in the nonconservative direction.

Extensive evaluation will be required to establish suitable analytical safety margins for dropped rod accidents.

Sequoyah Nuclear Plant and Watts Bar Nuclear Plant are the only two of TVA's nuclear plants affected by this deficiency.

Corrective Actions

Westinghouse is continuing their investigation of this condition on a generic basis. The results of their investigation and their recommendations for corrective actions will be reported to NRC in a generic report on this subject.

Because this deficiency only occurs at power levels greater than 50 percent, it will have no affect on Sequoyah in the period covered by the permit for fuel loading and low-power testing that TVA expects to receive in the near future.

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