TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401
SN 157B Lookout Place
FEB 10 1988

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

Gentlemen:

In the Matter of	)	Docket Nos. 50-327
Tennessee Valley Authority	)	50-328
		50-390
		50-391

SEQUOYAH NUCLEAR PLANT (SQN) UNITS 1 AND 2; WATTS BAR NUCLEAR PLANT (WBN) UNITS 1 AND 2 - MAIN STEAM LINE BREAK (MSLB) INSIDE ICE-CONDENSER CONTAINMENT

References: 1. John A. Zwolinski's letter to S. A. White dated August 27, 1987, "Main Steam Line Break (MSLB) Inside Ice-Condenser Containment (TAC 00199, 00200)"

2. My letter to you dated November 20, 1987, "Sequoyah Nuclear Plant (SQN) Units 1 and 2; Watts Bar Nuclear Plant (WBN) Units 1 and 2 - Main Steam Line Break (MSLB) Inside Ice-Condenser Containment"

Reference 1 requested TVA comments on the Los Alamos National Laboratory (LANL) report, "Evaluation of Revised LOTIC-3 Drain-Flow Heat-Transfer Model." Before comments could be provided, TVA requested a meeting (Reference 2) to obtain needed clarification on the LANL report. In response to this request, representatives of our staffs, Westinghouse Electric Corporation, and LANL met in Bethesda, Maryland, on November 23, 1987. The following discussions summarize the information obtained from this meeting and our overall assessment of the issue.

The LANL report identified technical issues that, in their opinion, should have been addressed by Westinghouse in their topical report on the LOTIC-3 computer code used in the MSLB analysis. The major LANL concerns involve the effect of steam environment on reactor coolant pump and steam generator film flow fractions, the impact of a reduced effective velocity on heat transfer because of entrainment of air by the ice drain flow, and the effect of droplet dispersion on droplet heat transfer. LANL performed nonrigorous, simplified calculations in order to demonstrate that these issues do have an effect; however, they did not determine if the effect was significant or not. LANL encouraged Westinghouse to perform a more detailed evaluation in order to address these issues. The subsequent technical interchange during the detailed afternoon discussions resulted in an indication of concurrence that a more rigorous evaluation would ultimately show a small effect for the issues raised by LANL.

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Based on our discussions with Westinghouse following the November 23, 1987 meeting, TVA will evaluate the LANL issues. Westinghouse is presently developing a technical proposal for TVA's review/concurrence to perform this work and issue a new/revised topical report. Assuming TVA's acceptance of the Westinghouse proposal, the Westinghouse topical report addressing the issues raised by LANL will be available for submittal to NRC no later than September 15, 1988. Closure of the LANL issues on the LOTIC-3 analyses for MSLB is part of the long-term generic resolution of the containment superheat issues (reference Volume 2 of the Nuclear Performance Plan, section III, item 6.3). As such, there are no SQN restart implications to this evaluation.

If you have any questions, please call D. L. Williams at (615) 632-7170.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

R. Gridley, Director
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cc: See page 3

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ENCLOSURE 1

COMMITMENT

Provide comments to NRC on LANL report by September 15, 1988.