TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401
500C Chestnut Street Tower II

MAY 23 1979

Director of Nuclear Reactor Regulation
Attention: Mr. S. A. Varga, Chief
Light Water Reactors Branch No. 4
Division of Project Management
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Varga:

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

Enclosed for your review is information requested by the NRC concerning the containment sump for Watts Bar Nuclear Plant. This material provided in response to NRC questions 22.53 and 212.37 includes forty copies each of the following two TVA reports:

1. Watts Bar Nuclear Plant NPSH Calculations for the RHR and Containment Spray Pumps Operating in the Recirculation Mode, April 1979

2. Report No. WM28-1-85-101, Model Study of the Watts Bar RHR Sump, March 1979.

A report discussing the effects of jet impingement on sump performance, such as was provided for Sequoyah, was not necessary for Watts Bar since the physical location of the sump removes and protects it from the effects of steam jet and air entrainment high energy pipe breaks. The protected location of the sump is shown in Figure 8 of the Watts Bar model test report. The evaluation of pipe break effects considered all the breaks identified in Westinghouse WCAP-8172-A, "Pipe Breaks for LOCA Analysis of the Westinghouse Primary Coolant Loop," January 1975.

Because of future commitments, the sump model at Norris, Tennessee, can only be maintained until July 1, 1979, at which time it will be disassembled. Please let us know by June 15, 1979, whether any NRC representatives intend to visit the facility at Norris to observe the Watts Bar sump model.

Very truly yours,

J. E. Gilleland
Assistant Manager of Power

Enclosures

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