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TENNESSEE VALLEY AUTHORITY

400 TENNESSEE VALLEY AVENUE, MEMPHIS, TENNESSEE 38102

January 28, 1981

Mr. Robert L. Tedesco, Assistant Director
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Tedesco:

In the Matter of the Applications)	Docket Nos. STN 50-518
of Tennessee Valley Authority)	STN 50-519
		STN 50-520
		STN 50-521
		STN 50-553
		STN 50-554

In response to your letter to H. G. Parris dated December 19, 1980, we are enclosing the schedule by which TVA anticipates submitting the results of our Ultimate Capacity Analyses for Mark III Containments. As discussed with Susie Keblusek of your staff, although we did not receive a similar letter for Hartsville Nuclear Plant, our response will apply to Hartsville and Phipps Bend.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills
L. M. Mills, Manager
Nuclear Regulation and Safety

Subscribed and sworn to before
me this 28th day of Jan. 1981.

Paulette W. White
Notary Public

My Commission Expires 9-5-84

Enclosure

8102000269

ENCLOSURE

HARTSVILLE AND PHIPPS BEND NUCLEAR PLANTS
ULTIMATE CAPACITY ANALYSES OF MARK III CONTAINMENTS
SCHEDULE OF SUBMITTALS

We received your request to H. G. Parris dated December 19, 1980, for our schedule of an analysis of the ultimate capacity of the Phipps Bend Nuclear Plant containment. Although we did not receive a similar letter pertaining to our Hartsville Nuclear Plant, our response below will apply to both plants. We estimate that a complete analysis of our Mark III plants could not be accomplished before August 1982. However, in order to facilitate your general review on hydrogen effects on containment, we plan to provide an interim response to you by August 1981 as described below.

The requested analyses are extensive and will require careful evaluation of the containment shell and a variety of containment penetrations and features. Some aspects of the Hartsville and Phipps Bend containment design are not complete at this time. Furthermore, a rigorous treatment of the containment will demand manpower with specialized training which is being used to respond to similar requests on TVA plants scheduled for startup before Hartsville and Phipps Bend.

We believe, however, that a less complete but satisfactory evaluation of the containment can be achieved by August of this year and provided as an interim response. This interim response will consist of: (1) a static analysis of the containment and membrane ultimate strengths; (2) identification of containment penetrations and features; and (3) a qualitative comparison of the preceding items to static and dynamic loads with similar penetrations and features at TVA's Sequoyah Nuclear Plant (for which we have performed analyses similar to those you have requested). While this approach will not define the ultimate capacity of the containment, we expect to demonstrate that the ultimate capacity of the Hartsville and Phipps Bend Nuclear Plant containments exceeds the capabilities of the Sequoyah Nuclear Plant containment.