February 2, 1988

Docket Nos. 50-390/391

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Mr. S. A. White
Manager of Nuclear Power
Tennessee Valley Authority
6N 38A Lookout Place
1101 Market Street
Chattanooga, Tennessee 37402-2801

Dear Mr. White:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION CONCERNING RESPONSE TO IEB 85-03, "MOTOR-OPERATED VALVE COMMON MODE FAILURES DURING PLANT TRANSIENTS DUE TO IMPROPER SWITCH SETTINGS"

Re: Watts Bar Nuclear Plant, Units 1 and 2

The staff has reviewed your May 10, 1986 submittal regarding TVA's response to IEB 85-03, "Motor-Operated Valve Common Mode Failures During Plant Transients," with respect to Watts Bar Units 1 and 2. The review indicates the need for additional information to assure valve operability before the program can be approved. The specific information necessary for the completion of our review is enclosed.

Please respond to this request on the time schedule consistent with the licensing of Watts Bar, Unit 1 and advise us of your proposed response date. If you have any questions concerning this request, please contact the Project Manger, R. Auluck, at (301) 492-0759.

Sincerely,

Original signed by:
Gerald E. Gears

Gary G. Zech, Assistant Director
for Projects
TVA Projects Division
Office of Special Projects

Enclosure:
As stated

cc w/enclosure:
See next page

OSP:TVA/LA	OSP:TVA/PM	[illegible]/D
CJamerson	RAuluck:pw	GZech
2/2/88	2/2/88	2/2/88

Mr. S. A. White
Tennessee Valley Authority

Watts Bar Nuclear Plant

cc:
General Counsel
Tennessee Valley Authority
400 West Summit Hill Drive
E11 B33
Knoxville, Tennessee 37902

Mr. R. L. Gridley
Tennessee Valley Authority
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Mr. George Toto
Tennessee Valley Authority
Watts Bar Nuclear Plant
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Mr. J. A. McDonald
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Watts Bar Nuclear Plant
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Mr. D. L. Williams
Tennessee Valley Authority
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Knoxville, Tennessee 37902

Honorable Johnny Powell
County Judge
Meigs County Courthouse
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Decatur, Tennessee 37322

Tennessee Department of
Public Health
ATTN: Director, Bureau of
Environmental Health Services
Cordell Hull Building
Nashville, Tennessee 37219

Honorable Dan Wade
County Judge
Rhea County Courthouse
Dayton, Tennessee 37321

Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
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Atlanta, Georgia 30323

Resident Inspector/Watts Bar NP
c/o U.S. Nuclear Regulatory Commission
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Spring City, Tennessee 37381

Mr. Richard King
c/o U.S. GAO
1111 North Shore Drive
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Knoxville, Tennessee 37919

Dr. Henry Myers, Science Advisor
Committee on Interior
and Insular Affairs
U.S. House of Representatives
Washington, D.C. 20515

REQUEST FOR ADDITIONAL INFORMATION (RAI) RE:

Review of Responses to Action Item e of IE Bulletin 85-03

Licensee:
Tennessee Valley Authority
5N 157B Lookout Place
Chattanooga, Tennessee 37401

Unit(s): Watts Bar 1,2
Date of Response: 05-10-86
+02-24-86
+07-31-86
Respondent:
R. Gridley,
Director, Nuclear Safety
and Licensing

+ 10CFR50.55 (e) Report

The information provided in your response to Action Item e of IE Bulletin 85-03 was found to be deficient in some areas. Provide the additional information necessary to resolve the following comments and questions:

1. Has water hammer due to valve closure been considered in the determination of pressure differentials? If not, explain.

2. If MOVATS is planned for application to some MOVs which are not included in its data base, commit to and describe an alternate method for determining the extra thrust necessary to overcome pressure differentials for these valves.

3. Revise the response of 05-10-86 to include the following MOVs, or justify their exclusion. As required by Action Item a of the bulletin, assume inadvertent equipment operations.

   (a) AFW MOVs FCV-3-116A, -116B, -126A, -126B, -136A, -136B, -179A and -179B are shown normally closed and paired in series on Drawing 47W803-2 Revision S (Unit 1). They are located in suction lines which lead from the Essential Service Water System to the AFW pumps.

   (b) HPSI MOVs FCV-63-3, -4 and -175 are shown normally open in Zone D-8 of Drawing 47W811-1 Revision CC (Unit 1). They are located in miniflow lines which lead from the SI pumps to the RWST.

   (c) MOVs FCV-62-98 and -99 are shown normally open on Drawing 47W811-1 Revision CC (Unit 1). They are located in miniflow lines leading from the centrifugal charging pumps to the Seal Water HX.

4. According to Note 3 of the Attachment to Enclosure 1 of the response dated 05-10-86, valves FCV-63-39 and -40 are locked open. Similar valves HV8803A and HV-8803B are called normally closed on Page 15 of the WOG Report. Explain this difference in valve alignment and state whether power is removed from the motor in addition to the locked open position of this MOV.

5. According to Note 4 of the Attachment to Enclosure 1 of the response dated 05-10-86, Valve FCV-63-22 is locked open with power removed. Revise Drawing 47W811-1 Revision CC to agree with Note 4.

6. Clarify whether the differential pressures tabulated in the response of 05-10-86 apply to opening the valve, closing the valve or both opening and closing.

7. State the expected date for completion of Action Item f.

8. The proposed program for action items b, c and d of the bulletin is incomplete. Provide the following details as a minimum:

   (a) commitment to a training program for setting switches, maintaining valve operators, using signature testing equipment and interpreting signatures,

   (b) description of a method possibly needed to extrapolate valve stem thrust measured at less than maximum differential pressure, and

   (c) consideration of pipe break conditions as required by the bulletin.