



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

December 1, 2010

Mr. R. M. Krich  
Vice President, Nuclear Licensing  
Tennessee Valley Authority  
3R Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

Mr. Ashok S. Bhatnagar  
Senior Vice President  
Nuclear Generation Development  
and Construction  
6A Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

**SUBJECT: WATTS BAR NUCLEAR PLANT, UNIT 1 – REQUEST FOR ADDITIONAL INFORMATION REGARDING GENERIC LETTER 2008-01, “MANAGING GAS ACCUMULATION IN EMERGENCY CORE COOLING, DECAY HEAT REMOVAL, AND CONTAINMENT SPRAY SYSTEMS” (TAC NO. MD7895)**

Dear Mr. Krich and Mr. Bhatnagar:

By letters dated May 9, 2008 (Agencywide Document Access and Management System Accession No. ML081360101), June 6, 2008 (ML081630086), July 11, 2008 (ML081970084), October 11, 2008 (ML082890540), and January 19, 2010 (ML100250237), Tennessee Valley Authority (TVA) submitted information in response to Generic Letter 2008-01 “Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems,” for Watts Bar Nuclear Plant (WBN), Unit 1.

In order to complete its review, the U.S. Nuclear Regulatory Commission (NRC) requires additional information. Enclosed is the NRC staff’s request for additional information (RAI). Based on discussions with your staff on November 22, 2010, we understand that you plan to respond to the enclosed RAI by January 12, 2011.

Please note that any TVA response to the enclosed RAI beyond 30 days from the date of this letter has the potential to adversely impact the WBN Unit 2 operating license review.

R. Krich  
A. Bhatnager

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If you have any questions regarding this issue, please feel free to contact me at (301) 415-3100.

Sincerely,

A handwritten signature in black ink, appearing to read "John G. Lamb". The signature is fluid and cursive, with a large initial "J" and a long, sweeping underline.

John G. Lamb, Senior Project Manager  
Watts Bar Special Projects Branch  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-390

Enclosure: RAI

cc: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION  
REGARDING THE GENERIC LETTER 2008-01,  
“MANAGING GAS ACCUMULATION IN EMERGENCY CORE COOLING,  
DECAY HEAT REMOVAL, AND CONTAINMENT SPRAY SYSTEMS”  
WATTS BAR NUCLEAR PLANT, UNIT 1  
TENNESSEE VALLEY AUTHORITY  
DOCKET NO. 50-390

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In order to complete its review, the U.S. Nuclear Regulatory Commission (NRC) requires additional information. Below is the NRC staff’s request for additional information (RAI).

RAI

Guidance on Nuclear Regulatory Commission (NRC) staff expectations is provided by Reference 1, which is generally consistent with Nuclear Energy Institute (NEI) guidance provided to industry in Reference 2 as clarified in later NEI communications. The NRC staff recommends that TVA consult Reference 1 when responding to the following RAIs:

1. Please clarify the specific systems reviewed as part of the GL 2008-01 review.
2. Void acceptance criteria has been updated since TVA’s submittal of its 9-month response. How has WBN Unit 1 addressed the updated information? Note: mechanical integrity only is not considered adequate to ensure pump operability.
3. In light of updated acceptance criteria, are any piping segments susceptible to unacceptable void limits since the piping systems were previously evaluated against other criteria?
4. In TVA’s discussion of pressure pulsations, TVA states, “These criteria are usually met when the discharge pipe has been filled to the isolation valve as this prevents an abrupt stopping of flow.” What is meant by “usually”? What are the criteria and are there instances when the criteria are not met?
5. How were the system primary gas limits determined? Did the evaluation include the possibility that all gas is sent to the pump in one slug?

6. In Testing Evaluation Section 2, TVA stated that procedures are being updated to include entry into the corrective actions program (CAP) if extended gas releases are found. What defines an extended gas release and why aren't all found voids entered into the CAP?

## REFERENCES

1. Ruland, William H., "Preliminary Assessment of Responses to Generic Letter 2008-01, 'Managing Gas Accumulation in emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems,' and Future NRC Staff Review Plans," NRC letter to James H. Riley, Nuclear Energy Institute, ML091390637, May 28, 2009.
2. Riley, James H., "Generic Letter (GL) 2008-01, 'Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Contain Spray Systems' Evaluation and 3 Month Response Template," Letter to Administrative Points of Contact from Director, Engineering, Nuclear Generation Division, Nuclear Energy Institute, Enclosure 2, "Generic Letter 2008-01 Response Guidance," March 20, 2008.
3. Case, Michael J., "NRC Generic Letter 2008-01: Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems," Letter from Director, Division of Policy and Rulemaking, Office of Nuclear Regulation, NRC, ML072910759, January 11, 2008.
4. Purcell, Michael A., "Browns Ferry Nuclear Plant (BFN) Units 1, 2, and 3, Sequoyah Nuclear Plant (SQN) Units 1 and 2, and Watts Bar Nuclear Plant (WBN) Unit 1 – 9-Month Response to NRC Generic Letter (GL) 2008-01: Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems, Dated January 11, 2008," Letter to Document Control Desk, NRC, from Senior Licensing Manager, Nuclear Group, Tennessee Valley Authority, ML082890540, October 11, 2008.
5. Krich, R. M., "Nine-Month Supplemental (Post-Outage) Response to NRC Generic Letter 2008-01: Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems," Letter to Document Control Desk, NRC, from Vice President, Nuclear Licensing, Tennessee Valley Authority, ML100250237, January 19, 2010.

R. Krich  
A. Bhatnager

- 2 -

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Sincerely,  
*/ra/*

John G. Lamb, Senior Project Manager  
Watts Bar Special Projects Branch  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-390

Enclosure: RAI

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\*via memorandum

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