



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

July 14, 1999

Mr. J. A. Scalice  
Chief Nuclear Officer and  
Executive Vice President  
Tennessee Valley Authority  
6A Lookout Place  
1101 Market Street  
Chattanooga, Tennessee 37402-2801

SUBJECT: CLOSURE OF THE REVIEW OF THE RESPONSE TO THE GENERIC LETTER 92-01, REVISION 1, SUPPLEMENT 1, "REACTOR VESSEL STRUCTURAL INTEGRITY," FOR WATTS BAR NUCLEAR PLANT, UNIT 1 (TAC NO. M92748)

Dear Mr. Scalice:

On May 19, 1995, the U.S. Nuclear Regulatory Commission (NRC) issued Generic Letter 92-01, Revision 1, Supplement 1 (GL 92-01, Rev. 1, Supp. 1), "Reactor Vessel Structural Integrity," to holders of nuclear operating licenses. In issuing the GL the staff required addressees of the GL to:

- (1) identify, collect and report any new data pertinent to the analysis of structural integrity of the reactor pressure vessels (RPVs) at their nuclear plants, and
- (2) to assess the impact of that data on their RPV integrity analyses relative to the requirements of Sections 50.60 and 50.61 to Part 50 of Title 10 of the Code of Federal Regulations (10 CFR 50.60 and 10 CFR 50.61), and to the requirements of Appendices G and H to Part 50 of Title 10 of the Code of Federal Regulations (Appendices G and H to 10 CFR Part 50).

On August 17 and November 7, 1995, you submitted your responses to GL 92-01, Rev. 1, Supp. 1, and provided the requested information relative to the structural integrity assessments for Watts Bar Nuclear Plant, Unit 1. The staff evaluated your responses to GL 92-01, Rev. 1, Supp. 1, and provided its conclusion relative to your responses on July 26, 1996. However, since the time of the staff's closure letter, the Combustion Engineering (CE) Owners Group and the Babcock and Wilcox (B&W) Owners Group have each submitted additional data regarding the alloying chemistries of beltline welds in CE and B&W fabricated vessels. The additional alloying data were submitted in Topical Reports CE NPSD-1039, Revision 2, CE NPSD-1119, Revision 1 for CE fabricated RPV welds, and BAW-2325, Revision 1 for B&W fabricated RPV welds. In addition, Chicago Bridge and Iron (CB&I) BWR data were submitted in Topical Report BWRVIP-46. As a result of the efforts by CE and B&W, the staff determined that additional information was necessary relative to the structural integrity assessments for all operating plants.

In mid-1998, the staff issued a request for additional information (RAI) to all owners group plants in regard to the alloying chemistries of beltline welds, the assessment of surveillance data, pressure-temperature (P-T) limits, and pressurized thermal shock (PTS) assessments for their plants. In the RAI, the staff requested the licensees to reassess the alloying chemistries for the beltline welds and surveillance welds of their RPV vessels relative to the chemistries provided in the topical reports mentioned above, and provide the impact of any changes to the

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best-estimate chemistries for the RPV beltline welds on the structural integrity assessments for their vessels relative to the requirements of 10 CFR 50.60, 10 CFR 50.61, and Appendices G and H to 10 CFR Part 50, as applicable to the licensing bases for their plants. For Watts Bar Nuclear Plant, Unit 1, which is not a member of any owners groups, no RAI was issued in 1996. However, additional staff review has been conducted regarding the issues similar to those in the 1996 RAI for other plants.

As a result of the staff's review of your responses to GL 92-01, Revision 1 and GL 92-01, Rev. 1, Supp. 1, the staff has revised the information in the Reactor Vessel Integrity Database (RVID) and is releasing it as RVID Version 2.

The new database diskettes are posted on the world-wide-web at a location which is linked to the NRC home page (<http://www.nrc.gov/NRR/RVID/index.html>). We recommend that you review this information. If the staff does not receive comments by September 1, 1999, we will assume that the data entered into the RVID are acceptable for your plant. No additional information is necessary with regard to the structural integrity assessments. Future submittals on P-T limits, PTS, or upper shelf energy should reference the most current information.

The staff appreciates your efforts in regard to this matter.

Sincerely,  
Original signed by:

Robert E. Martin, Senior Project Manager, Section 2  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-390

cc: See next page

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Robert E. Martin, Senior Project Manager, Section 2  
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