



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

CNL-15-205

September 23, 2015

10 CFR 50.90

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-001

Watts Bar Nuclear Plant, Unit 2  
Construction Permit No. CPPR-92  
NRC Docket No. 50-391

Subject: **WATTS BAR NUCLEAR PLANT (WBN) UNIT 2 - RESPONSE TO  
ADDITIONAL QUESTION REGARDING REQUEST FOR RELIEF  
WBN-2/PSI-3 FOR INACCESSIBLE STEAM GENERATOR LOWER  
SHELL-TO-CONE WELD SG-4B-5-2 (TAC No. MF6474)**

- References:
1. TVA Letter to NRC, CNL-15-119, "Watts Bar Nuclear Plant (WBN) Unit 2 - Request For Relief WBN-2/PSI-3 For Inaccessible Steam Generator Lower Shell-To-Cone Weld SG-4B-5-2," dated July 10, 2015 (ML15196A455)
  2. TVA Letter to NRC, CNL-15-179, "Watts Bar Nuclear Plant (WBN) Unit 2 - Response to Request for Additional Information Regarding Request for Relief WBN-2/PSI-3 for Inaccessible Steam Generator Lower Shell-to-Cone Weld SG-4B-5-2 (TAC No. MF6474)," dated September 4, 2015 (ML15247A565)
  3. Email from NRC to TVA, "SG Weld RAI," dated September 22, 2015

On July 10, 2015, Tennessee Valley Authority (TVA) submitted to the Nuclear Regulatory Commission (NRC) the Watts Bar Nuclear Plant (WBN), Unit 2, Request for Relief WBN-2/PSI-3 for inaccessible steam generator (SG) lower shell-to-cone weld SG-4B-5-2 (Reference 1). TVA responded on September 4, 2015 (Reference 2) to an NRC request for additional information (RAI) concerning the Request for Relief submitted in Reference 1. On September 22, 2015, the NRC submitted a clarification question by electronic mail (Reference 3) regarding TVA's response to the RAI provided in Reference 2. The purpose of this letter is to provide TVA's response to the clarification question received in Reference 3.

By Reference 3, the NRC requested the following clarification:

*"Please provide industry operating experience on steam generators of the same vintage as the WBN, Unit 2 (up to the year of their replacements) to support that there were no inservice safety issues caused by detected flaws in the subject welds."*

In response, TVA's Inspection Services Organization, Non-Destructive Examination (NDE) Level III examiner (ultrasonic examination), was consulted. Based on the Level III examiner's 40 plus years of NDE experience, there have been no known inservice failures of the SG weld joint in question. The WBN Unit 2 SGs are Westinghouse Model D3 SGs. Based on discussion with TVA's WBN Nuclear Steam Supply System vendor, the WBN Unit 2 SGs are the only Model D3 SGs remaining in the industry that have not been replaced based on the reduced longevity of the SG tubes. Due to SG replacements, there is no longer industry operating experience related to these types of SGs.

There are no new regulatory commitments made in this letter. Should you have questions regarding this submittal, please contact Gordon Arent at (423) 365-2004.

Respectfully,



J. W. Shea  
Vice President, Nuclear Licensing

cc:

NRC Regional Administrator, Region II  
NRC Project Manager - Watts Bar Nuclear Plant, Unit 2  
NRC Senior Resident Inspector - Watts Bar Nuclear Plant, Unit 2