



**Tennessee Valley Authority**, Post Office Box 2000, Spring City, Tennessee 37381-2000

JAN 15 2002

10 CFR 50.90

WBN-TS-99-014

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

Gentlemen:

In the Matter of ) Docket No.50-390  
Tennessee Valley Authority )

WATTS BAR NUCLEAR PLANT (WBN) UNIT 1 - TECHNICAL SPECIFICATION  
CHANGE NO. WBN-TS-99-014 - STEAM GENERATOR ALTERNATE REPAIR  
CRITERIA FOR AXIAL OUTSIDE DIAMETER STRESS CORROSION CRACKING -  
CLARIFICATION AND SUPPLEMENTAL INFORMATION (TAC NO. MA8635)

The purpose of this letter is to provide clarification concerning TVA's proposed inspection plan for hot leg dented tube support plate and to provide supplemental information concerning the TVA Meteorological Program.

Enclosure 1 provides the clarification for the dented tube inspection criteria. This criteria was discussed by electronic mail (e-mail) on January 11, 2002. Enclosure 2 provides supplemental information concerning the Meteorological Program. This supplemental information was requested in a teleconference call with NRC on January 9, 2002 and discussed in an e-mail on January 10, 2002.

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TVA considers this response to resolve NRC's concerns. No new regulatory commitments are identified. If you have any questions concerning this response, please contact me at (423) 365-1824.

Sincerely,



P. A. Pace  
Manager, Site Licensing  
and Industry Affairs

Subscribed and sworn to before me  
on this 15th day of January 2002

E. Jeannette Long  
Notary Public

My Commission Expires May 21, 2005

cc: NRC Resident Inspector  
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ENCLOSURE 1

WATTS BAR NUCLEAR PLANT (WBN) UNIT 1  
STEAM GENERATOR ALTERNATE REPAIR CRITERIA  
TECHNICAL SPECIFICATION CHANGE WBN-TS-99-014

DENTED TUBE INSPECTION CRITERIA

In TVA's August 22, 2001, response to NRC's request for additional information (RAI), TVA described the inspection plan for dented tube support plates. NRC requested further clarification in a letter dated October 9, 2001. TVA responded with the following statement:

*"TVA plans to inspect hot leg dented intersections greater than or equal to 2 volts using a +Point probe. If circumferential cracking is identified at a dent of magnitude between 2.0 and 5.0 volts, then the +Point inspection is expanded to hot leg dented intersections greater than or equal to 1 volt."*

In an electronic-mail (e-mail) from the NRC Project Manager on November 21, 2001, NRC requested that (1) TVA provide the same assurance [for WBN as for Sequoyah Nuclear Plant] that an expansion plan will be developed for Watts Bar if circumferential indications are detected between 1 volt and 2 volts dented tube support intersections and that the NRC staff will be informed of the expansion scope. (2) In the TVA's responses to Question 1 in the August 22, 2001, letter, TVA needs to revise the last sentence of the response to "...If circumferential cracking is identified at WBN in a dented tube support plate intersection that is greater than or equal to 2 volts, the inspection plan expands to hot leg dented intersections greater than or equal to 1.0 volt..."

In a January 2, 2002, e-mail from NRC, the staff expanded the request to "TVA provide the same assurance that an expansion plan will be developed to inspect **below** 1 volt dented intersections at Watts Bar if circumferential indication is detected between 1 volt and 2 volts dented tube support intersections and that the NRC staff will be informed of the expansion scope."

Therefore, as discussed with the NRC staff on January 11, 2002, TVA is revising the response to Question 1 in the August 22, and November 8, 2001, letters concerning the dented tube inspection issue as requested by NRC with the following response:

*"TVA plans to inspect hot leg dented intersections greater than or equal to 2 volts using a +Point probe. If circumferential cracking is identified at a dent of magnitude between 2.0 and 5.0 volts, then the +Point inspection is expanded to hot leg dented intersections greater than or equal*

ENCLOSURE 1

WATTS BAR NUCLEAR PLANT (WBN) UNIT 1  
STEAM GENERATOR ALTERNATE REPAIR CRITERIA  
TECHNICAL SPECIFICATION CHANGE WBN-TS-99-014

DENTED TUBE INSPECTION CRITERIA

*to 1 volt. If circumferential cracking is identified in a hot leg dented tube support plate intersection with bobbin voltage between 1 and 2 volts, and the operational assessment is challenged by structural or leakage concerns, TVA will develop an expansion plan for less than 1 volt dented intersections. NRC staff will be notified of this expansion plan."*

TVA considers this revised response to satisfy the NRC's concerns on dented tube inspections.

## ENCLOSURE 2

### WATTS BAR NUCLEAR PLANT (WBN) UNIT 1 STEAM GENERATOR ALTERNATE REPAIR CRITERIA TECHNICAL SPECIFICATION CHANGE WBN-TS-99-014

#### SUPPLEMENTAL INFORMATION ON METEOROLOGY PROGRAM

This enclosure provides additional information requested by NRC in a teleconference call on January 9, 2002, concerning the TVA WBN Meteorological Program. This additional information is related to the August 22, 2001, letter from TVA to NRC concerning the WBN steam generator alternate repair criteria amendment request for outside diameter stress corrosion cracking (ODSCC). TVA's meteorology program for WBN is discussed in the Updated Final Safety Analysis Report (UFSAR) Section 2.3.3, "Onsite Meteorological Measurements Program." The information from the meteorological program provides data for wind speed and direction and temperature for the atmospheric dispersion values required for the dose calculations. The information requested from NRC in the teleconference call is provided below.

Calibrations: WBN wind and temperature sensors are calibrated on a six-month of service interval. This involves replacing the sensor with a laboratory calibrated sensor. The data loggers are field-calibrated on a six-month interval. The WBN meteorological program is conducted based on Regulatory Guide 1.23, "Onsite Meteorological Program," Revision 0 and American Nuclear Society's ANSI/ANS-3.11-2000, "Determining Meteorological Information at Nuclear Facilities," guidance.

Data Format: The meteorological data for the atmospheric dispersion calculation was provided by TVA in the ARCON96 format to Stone & Webster Engineering Corporation (SWEC). SWEC provided the resulting draft atmospheric dispersion calculation to TVA Engineering for review. TVA reviewed and compared SWEC's draft calculation to TVA's atmospheric dispersion computations, which also used ARCON96 methodology. The results were comparable. This provided an independent verification of the calculation.

Measurement Site: The exposure and ground cover for the measurement site are inspected by a TVA staff meteorologist annually to ensure that representative measurements are made. Any necessary site maintenance (e.g., tree-trimming to maintain a 10 to 1 distance to height ratio) identified in the annual inspection, is performed by the site.

Data Validation: A TVA staff meteorologist performs data review, validation, processing before archival of the WBN meteorological data. The archived data base is spot-checked annually to ensure that the data integrity is maintained.