

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401  
400 Chestnut Street Tower II

NRC REGION II  
ATLANTA, GEORGIA

March 9, 1983

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U.S. Nuclear Regulatory Commission  
Region II  
Attn: Mr. James P. O'Reilly, Regional Administrator  
101 Marietta Street, Suite 2900  
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - NRC-OIE REGION II INSPECTION  
REPORT 50-390/81-26, 50-391/81-24 - SUPPLEMENTAL RESPONSE ON VIOLATION  
50-390/81-26-04, 50-391/81-24-03

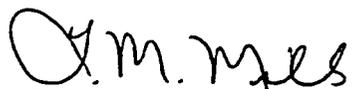
The subject inspection report dated December 23, 1981 cited TVA with four Severity Level V Violations in accordance with the provisions of 10 CFR 2.201. Our responses were submitted February 5, 1982. A revised response was submitted on April 8, 1982. Supplemental information was submitted on September 15 and November 18, 1982 and January 31, 1983. As requested by NRC-OIE Inspector P. Fredrickson on February 11, 1983, enclosed is our supplemental response on the subject violations providing clarification of TVA's corrective actions and actions to prevent recurrence.

If you have any questions, please get in touch with R. H. Shell at FTS 858-2688.

To the best of my knowledge, I declare the statements contained herein are complete and true.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

  
L. M. Mills, Manager  
Nuclear Licensing

Enclosure

cc: Mr. Richard C. DeYoung, Director (Enclosure)  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
SUPPLEMENTAL RESPONSE TO VIOLATIONS  
390/81-26-04, 391/81-24-03

Violation 390/81-26-04, 391/81-24-03

10 CFR 50, Appendix B, Criterion V, requires that activities affecting quality be prescribed by documented drawings of a type appropriate to the circumstances. The approved QA program, FSAR section 17.1A.5, commits to Safety Guide 28 which endorses ANSI Standard N45.2. Section VI of the standard contains the same requirements as does Criterion V.

Contrary to the above, as of November 23, 1981, activities affecting quality were not prescribed by drawings of a type appropriate to the circumstances in that the mechanical ductwork drawing notes (47W915 series) specified the use of General Construction Specification G-39, "Cleanliness During Fabrication of Fluid Handling Components," for cleanliness control; however, G-39 did not contain cleanliness requirements for HVAC ductwork systems.

Admission or Denial of Alleged Violation

TVA admits the violation occurred as stated.

Reasons for the Violation

The drawing note in question concerning cleanliness, in accordance with G-39, does not make reference to ductwork. It was not intended that Construction Specification G-39 have cleanliness requirements for HVAC air handling and ventilation systems. However, General Construction Specification G-37, "Testing and Balancing of HVAC Systems," referenced by system drawing 47W866-1, should have contained additional requirements for assuring air handling and ventilation system cleanliness.

Corrective Action Taken and Results Achieved

TVA issued site procedure WBNP-QCT-4.35, "Duct Cleaning" on December 8, 1982, to enable the documentation of duct cleanliness of HVAC equipment transferred to its operating division after that date.

All HVAC systems which were transferred to the operating division (instead of only those systems that had passed some stage of preoperational testing) prior to December 8, 1982, the issue date of WBNP-QCT-4.35, will have system cleanliness assessed through a joint effort by design and construction engineering personnel.

Assessment will be documented and final acceptance will be governed by the following criteria, which are derived from cleanliness acceptance criteria contained in WBNP-QCT-4.35: 1) Accessible portions of the system are free of loose or foreign material which could become airborne and collect on coils or otherwise degrade components; 2) Coils are free of dirt buildup which would impair airflow; 3) Ductwork and drain pans will be cleaned of gross residue resulting from any required cleaning operations.

TVA anticipates that system operation during construction testing and balancing, as well as any preoperational tests completed, has provided adequate system flushing. Previous coil and ductwork cleaning done in conjunction with system balancing, as well as periodic coil cleaning by the operating division as part of their maintenance program, should have prevented degradation of system components. It should be noted that no degradation of system components has been identified to date.

The appropriate drawing note referenced in the violation concerning Construction Specification G-39 has been revised to clearly state that the requirements of G-39 do not apply to air handling and ventilation systems but only to piping shown on the drawings.

#### Corrective Steps Taken to Avoid Further Violations

Construction Specification G-37 was revised February 18, 1982, by the issue of Specification Revision Notice (SRN) G-37-2 which specified measures for assuring HVAC cleanliness. Provisions of SRN-G-37-2 were incorporated into WBNP-QCT-4.35.

Construction Specification G-39 was revised November 5, 1982, to state that cleanliness requirements for air handling and ventilation systems are covered in Construction Specification G-37. This will preclude recurrence of this problem.

#### Date of Full Compliance

Assessment of cleanliness on HVAC systems transferred to the operating division will be complete by May 1, 1983.