

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

September 28, 1981

WBRD-50-390/81-72
WBRD-50-391/81-68

Mr. James P. O'Reilly, Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Region II - Suite 3100
101 Marietta Street
Atlanta, Georgia 30303



Dear Mr. O'Reilly:

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - DOCUMENTATION OF ELECTRICAL
TESTING - WBRD-50-390/81-72, WBRD-50-391/81-68 - FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector
R. V. Crlenjak on August 28, 1981, in accordance with 10 CFR 50.55(e) as
NCR 3575R. Enclosed is our final report.

If you have any questions concerning this matter, please get in touch
with D. L. Lambert at FTS 857-2581.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

A handwritten signature in cursive script, appearing to read "L. M. Mills".

L. M. Mills, Manager
Nuclear Regulation and Safety

Enclosure

cc: Mr. Victor Stello, Director (Enclosure)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

IE27
5
1/1

ENCLOSURE
WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
DOCUMENTATION OF ELECTRICAL TESTING
10 CFR 50.55(e)
WBRD-50-390/81-72, WBRD-50-391/81-68
FINAL REPORT

Description of Deficiency

The inspection documentation for some work performed on electrical equipment which has been transferred to Nuclear Power does not reflect the revision level of the drawing specifying the activity. A sample review of inspection documentation for transferred electrical equipment has identified a generic deficiency in this area. Some examples are as follows:

1. Inspection documentation for panel internal wiring verification does not indicate the revision level of the drawing to which the activity was performed.
2. Inspection documentation for internal wiring verification may designate only a drawing series rather than a specific drawing and revision level applicable at the time of inspection.
3. Inspection documentation has not been invalidated and regenerated to document inspections to subsequent drawing revisions.

This discrepancy occurred because the applicable procedure, WBNP-QCP-3.6, "Preliminary and Final Internal Wiring Verification," did not require that the drawing revision level be recorded on the inspection document. Revision 11 to this procedure, issued August 10, 1979, does require that a marked-up copy of the drawing used to perform the inspection be kept in the "duration of construction" file. However, it is not apparent from our review of "life of plant" documentation that the revision level to which wiring verifications were performed can be ascertained.

Safety Implications

Initial and final internal wiring verifications are prerequisites to other activities, i.e., circuit functional testing and system preoperational testing. These subsequent activities would have revealed discrepancies in internal panel wiring. Accordingly, there is little likelihood that this documentation deficiency could result in failures of safety-related systems or endanger the safe operation of the plant. However, if this deficiency had remained uncorrected, there was a good possibility that some electrical equipment in safety-related systems would not have performed its intended function, possibly affecting the safe operation of the plant.

Corrective Action

A program is underway to review documentation for electrical features installed, inspected, and documented in accordance with WBNP-QCP-3.6, and in particular, for final internal wiring verification. The documentation will be reviewed against the marked-up drawings, where available, and the drawing number and revision level entered on the document along with the reviewer's signature and the date. If marked-up drawings cannot be located, the inspection will be reperformed.

The procedure for internal wiring verification (WBNP-QCP-3.6) will be revised to assure that the drawing revision level is recorded and that subsequent drawing revisions requiring reinspection will require revision of inspection documentation.

The corrective actions specified above will be accomplished by January 4, 1982.