

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

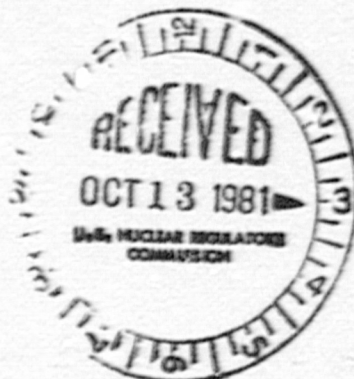
400 Chestnut Street Tower II

October 5, 1981

WBRD-50-390/81-74

WBRD-50-391/81-70

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 - REVERSED FEEDER BREAKER
SYNCHRONIZING SWITCHES - WBRD-50-390/81-74, WBRD-50-391/81-70 -
FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector
R. V. Crlenjak on September 4, 1981 in accordance with 10 CFR 50.55(e)
as NCR W-54-P. Enclosed is our final report.

If you have any questions, please get in touch with D. L. Lambert at
PTS 857-2581.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

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

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
REVERSED FEEDER BREAKER SYNCHRONIZING SWITCHES
WBRD-50-390/81-74, WBRD-50-391/81-70
10 CFR 50.55(e)
FINAL REPORT

Description of Deficiency

A design error has been found in the wiring of the 6.9 kV Shutdown Boards 1B-B and 2B-B. The synchronizing switch for the normal feeder breaker synchronized the shutdown board potential with the alternate feeder supply potential and vice versa. This appears to be an isolated occurrence of a design error which was not caught by the reviewers.

Safety Implications

Had this condition remained uncorrected, emergency loads being powered by the diesel generator during a loss-of-offsite power condition could not have been transferred back to the preferred offsite power source if either the normal or alternate feeders to the shutdown board were inoperable. Therefore, this condition could have adversely affected the plant operators' ability to recover from a design basis event and thereby adversely affect plant safety.

Corrective Action

The appropriate design drawings will be revised and the synchronizing switch interlocks will be rewired before fuel loading of unit 1.