

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

5B Lookout Place

DEC 18 1990

WBRD-50-390/85-49
WBRD-50-391/85-48

10 CFR 50.55(e)

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

Gentlemen:

In the Matter of the Application of)
Tennessee Valley Authority)

Docket Nos. 50-390
50-391

WATTS BAR NUCLEAR PLANT (WBN) UNITS 1 AND 2 - INAPPROPRIATE LATCHES FOR MAIN
CONTROL ROOM SWITCH MODULES - WBRD-50-390/85-49 AND WBRD-50-391/85-48 -
REVISED FINAL REPORT

The subject deficiency was initially reported to NRC Inspector Al Ignatonis on
October 7, 1985, in accordance with 10 CFR 50.55(e) as Significant Condition
Report (SCR) WBN EEB 8544. Our interim report was submitted on November 12,
1985, and our final report was submitted on July 13, 1986. Enclosed is our
revised final report. This report is necessary to clarify that Unit 2
fasteners will be corrected and reinstalled by Unit 2 fuel load, not Unit 1
fuel load. As previously reported, we consider 10 CFR Part 21 applicable to
this deficiency.

If there are any questions, please telephone P. L. Pace at (615) 365-1824.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

Mark J. Buszynski for
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Enclosure

cc: See page 2

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U.S. Nuclear Regulatory Commission

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
INAPPROPRIATE LATCHES FOR MAIN CONTROL ROOM SWITCH MODULES
WBRD-50-390/85-49, WBRD-50-391/85-48
SCR WBN EEB 8544
10 CFR 50.55(e)

REVISED FINAL REPORT

Description of Deficiency

TVA has determined that 6 switch modules purchased from Electroswitch, Wymouth, Massachusetts, and 19 switch modules purchased from Westinghouse Electric, Pittsburgh, Pennsylvania (see Table 1 attached), use a fastener which prevents the modules from being properly mounted on their main control room (MCR) panels. Each of the switch modules is designed to fit into a 5.19-inch by 3.08-inch panel cutout, and each module uses Southco fasteners to hold the modules in place once they are inserted through the cutouts. These Southco fasteners do not make enough contact with the control panels to ensure rigid mounting of the switch.

The cause of this problem was the fact that a Southco fastener (model No. 27-10-501-20) with a reach of 3/8-inch was supplied instead of the correct Southco fastener (model No. 43-1-13-1) which has a reach of 5/8-inch.

Safety Implications

Because of the poor contact of the Southco fasteners, these fasteners and switch modules are subject to being dislodged by vibration or vigorous operation action. As such, their seismic qualification cannot be maintained, and during a seismic event, the modules could come free from the panels. Because of module construction, no electrical failures of the switch itself are expected; however, the switch might become mechanically inoperable and could prevent the actuation of various safety-related devices.

Corrective Action

The incorrect Southco fasteners are being replaced by the vendors with Southco fasteners having the 5/8-inch reach. Westinghouse will be replacing the incorrect fasteners on their switch modules at the site, while Electroswitch has indicated they will correct their switches at their facility in Wymouth, Massachusetts. All Unit 1 switches have been corrected and reinstalled by implementation of Maintenance Request (MR) A-477569 and Workplan E-5084-1. All Unit 2 switches will be corrected and reinstalled by Unit 2 fuel load.

Also, Electroswitch (the current supplier of these type switch modules) has upgraded their drawings to specify the correct Southco fastener number. No further action is required to prevent recurrence of this problem.

TABLE 1
SWITCH MODULES WITH SOUTHCO FASTENERS

<u>TVA UNIQUE IDENTIFIER</u>	<u>MCR PANEL</u>	<u>VENDOR</u>
1,2-HS-27-142A	1-M-15, 2-M-15	Electroswitch
1,2-HS-27-143A	1-M-15, 2-M-15	Electroswitch
1,2-HS-27-144A	1-M-15, 2-M-15	Electroswitch
1-HS-67-478A	0-M-27A	Westinghouse
1-HS-32-80A	1-M-15	Westinghouse
1-HS-32-102A	1-M-15	Westinghouse
1-HS-32-110A	1-M-15	Westinghouse
1-HS-77-9B	1-M-15	Westinghouse
1-HS-77-10B	1-M-15	Westinghouse
1-HS-77-127B	1-M-15	Westinghouse
1-HS-77-128B	1-M-15	Westinghouse
1-HS-68-394	1-M-4	Westinghouse
1-HS-68-395	1-M-4	Westinghouse
2-HS-32-81A	2-M-15	Westinghouse
2-HS-32-103A	2-M-15	Westinghouse
2-HS-32-111A	2-M-15	Westinghouse
2-HS-77-9B	2-M-15	Westinghouse
2-HS-77-10B	2-M-15	Westinghouse
2-HS-77-127B	2-M-15	Westinghouse
2-HS-77-128B	2-M-15	Westinghouse
2-HS-68-394	2-M-4	Westinghouse
2-HS-68-395	2-M-4	Westinghouse