

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

5N 157B Lookout Place

January 13, 1986

WBRD-50-390/85-49

WBRD-50-391/85-48

U.S. Nuclear Regulatory Commission
Region II

Attention: Dr. J. Nelson Grace, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

Dear Dr. Grace:

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 - FINAL REPORT

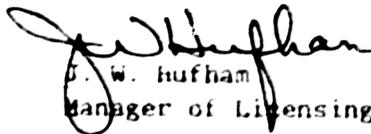
The subject deficiency was initially reported to NRC-OIE Inspector Al Ignatonis on October 7, 1985 in accordance with 10 CFR 50.55(e) as SCR WBN EEB 8544. Our interim report was submitted on November 12, 1985. Enclosed is our final report. We consider 10 CFR Part 21 applicable to this deficiency.

Delay in submittal of this report was discussed with Mr. Ignatonis on January 6, 1986.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY


J. W. Hufham
Manager of Licensing

Enclosure

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

Records Center (Enclosure)
Institute of Nuclear Power Operations
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339

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
NCR WBN EEB 8544
10 CFR 50.55(e)
FINAL REPORT

Description of Deficiency

TVA has determined that 6 switch modules purchased from Electroswitch, Weymouth, 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" by 3.08" 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" was supplied instead of the correct Southco fastener (model No. 43-1-13-1) which has a reach of 5/8".

Safety Implications

Because of the poor contact of the Southco fasteners, these 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" 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 Weymouth, Massachusetts. All the switches will be corrected and reinstalled by unit 1 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
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