

ENCLOSURE
WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
LIMIT SWITCH OPERATOR FAILURES
NCR EEB 78-3

FINAL REPORT

Description of Deficiency

On June 9, 1978, the General Electric (GE) Company notified TVA of the discovery that some of their 5- and 15-kV Vertical Lift Metalclad Switchgear was defective. The subject deficiency applied only to GE switchgear supplied to TVA before January 1978. GE found that the breaker position switch operator in this switchgear may become bent due to interference with the circuit breaker. These breakers have been found in the 6900-Volt Auxiliary Power System, which is a safety-related system. The breaker position switch provides the breaker control circuits with information on the position of the circuit breaker assembly. If the breaker position switch operator did incur damage, it could prevent the circuit breaker from closing.

Safety Implications

Circuit breakers of the type described in this deficiency supply power to such essential services as the safety injection pumps, emergency cooling water pumps, and containment spray pumps. If damage occurred to the switch operator as a result of this deficiency, the circuit breaker may not close. Failure of the breaker to close would prevent electrical power from reaching essential equipment. Thus the deficiency could adversely affect plant safety.

Corrective Action

TVA is in the process of obtaining new operator assemblies from GE. GE has designed a new switch operator which is more rigid and is protected by a guide. This new design has been incorporated into all GE Vertical Lift Metalclad Switchgear shipped since January 1978.

Corrective action will be completed before fuel loading. The switches in their present state will not interfere with the preoperational testing program.

Watts Bar is the only TVA plant affected by this deficiency.

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