The following information relates to the Undervoltage Trip Devices for the Type AK-25 and AKR-30/50 Low Voltage Power Circuit Breakers used in Nuclear safety-related applications.

ADVISORY

The General Electric Company has recently encountered a limited number of instances where Undervoltage Trip Devices on Type AK and AKR Low-Voltage Power Circuit Breakers failed to properly trip the circuit breakers when power was removed from the devices. Two causes of such failures have been identified:

a) Devices made between mid-1978 and May, 1985, may have been manufactured with the mating surfaces of the armatures and pole pieces improperly painted. In such a case, it is possible that the heat discharged by the Undervoltage Release Coil may soften the paint, causing the armature to stick to the pole piece and result in a failure to trip the circuit breaker when power is removed. This condition can only occur on devices powered by an alternating current source. No failures of this type were reported prior to April, 1985.

b) Some Undervoltage Trip Devices were manufactured with insufficient clearance between the armatures and the device mounting studs. Such a defect may delay or prevent the device from tripping the circuit breaker when power is removed from the holding coil. No field problems due to this interference were reported prior to July, 1985.

ACTION

Action for the improper paint condition is required only for the following Undervoltage devices:

1. Devices used on alternating current (AC) control systems.

2. Devices identified with a 568B309G assembly number on its nameplate.

Action for the insufficient clearance condition is required for all Undervoltage devices identified with a 568B309G assembly number on its nameplate.

Using the procedure given below, inspect all applicable devices for the conditions described in the above Advisory. Include all installed devices and those stocked as renewal parts.

If any of the above conditions exist, contact the AK/AKR Product Service Engineer listed below and arrange for a no charge replacement device (s).

PROCEDURE

1.0 Inspect the mating surfaces of the armature and pole piece shown in Figure 1 for black paint.

1.1 If paint is found, the device must be replaced.

2.0 Verify that there is clearance between the armature disk and the mounting stud heads when the armature is released from the magnet. Refer to Figure 2.

2.1 If interference exists between the armature disk and stud heads, the device must be replaced.

FACTORY CONTACT

Direct any questions or replacement device requests to:

General Electric Company
Switchgear Operations
Agency Road
Burlington, IA. 52601
Attn: Gary Schulz
Phone: (319) 753-8425