

PRIORITY ATTENTION REQUIRED MORNING REPORT - REGION V FEBRUARY 19, 1993

Licensee/Facility:

Arizona Public Service Co.  
Palo Verde 3  
Wintersburg, Arizona

Notification:

MR Number: 5-93-0012  
Date: 02/19/93  
RI TELEPHONE CALL TO REGION

Dockets: 50-530  
PWR/CE80

Subject: REACTOR TRIP BREAKER UNDERVOLTAGE TRIP ASSEMBLY BINDING

Reportable Event Number: N/A

Discussion:

On February 18, 1993, the resident inspector observed Quality Control (QC) personnel inspect binding of the undervoltage trip assembly (UVTA) on a reactor trip breaker (RTB) in the electric shop. Further questioning revealed that this RTB had been removed from the "B" cubicle of Unit 3 and a spare RTB installed on February 9, 1993. During preventive maintenance bench testing of the breaker on February 16, 1993, the electricians and QC personnel noted that the UVTA armature was making sufficient contact with the mounting stud head to prevent the armature from resetting during a cold pickup test. This armature to mounting stud head contact was addressed in General Electric (GE) Service Advice 073 B SWGR OPER-300.0 dated September 26, 1985. The testing revealed that the RTB did trip on every demand. The UVTA also successfully tripped the breaker during the positive trip check, a test where the travel of the armature is restricted by a 1/32 inch shim while the UVTA actuates to

attempt to trip the breaker.

The "A" and "B" RTBs at Palo Verde are General Electric model AKR-4BE-30 breakers. The UVTA which exhibited this binding on February 16, 1993, was an older style device with a nameplate assembly number 568B309G stamped with the number 2. A newer style UVTA with the same nameplate assembly number but stamped with the number 3 is currently being used. This newer UVTA eliminates the concern addressed by the Service Advice by using studs which have been trimmed so approximately 25% of the mounting stud head nearest the travel path of the armature was removed during the manufacture of the UVTA.

The new style replacement UVTA appeared to also exhibit some rubbing of the armature against the frame. The portion of the armature which protrudes through the front slot of the UVTA was rubbing against the frame, the armature disk was rubbing against the top of the frame, and the top portion of the armature that the armature disk is affixed to was also rubbing against the armature frame. Further questions revealed that approximately one month ago, a similar UVTA was noted to exhibit rubbing between the armature and the front slot. The licensee has evaluated this rubbing and believes that since the rubbing is simply knife edge friction and not barrier interference as with the older style UVTA mounting studs, that the new style UVTAs will properly perform their safety function.

The licensee is confirming that the new style UVTA is installed in the six GE RTBs in all three units. The licensee is also confirming with GE that their method of determining the new style UVTA also verifies that these UVTAs have the modified UVTA mounting stud heads. The licensee is

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reviewing their Quality Control checklist and inspection technique to determine if it is sufficiently detailed to identify rubbing of the armature. If these checks do not confirm that new style UVTAs have been installed and adequately inspected to screen out the rubbing, then the licensee will physically remove the RTBs and inspect the UVTAs.

Regional Action:

RESIDENT AND GENERAL INSPECTORS AND MANAGEMENT CONTINUE TO MONITOR THIS SITUATION CLOSELY.

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