

PRIORITY ATTENTION REQUIRED MORNING REPORT - REGION IV OCTOBER 10, 2000

Licensee/Facility:

Nebraska Public Power District
Cooper 1
Brownville, Nebraska
Dockets: 50-298
BWR/GE-4

Notification:

MR Number: **4-00-0017**
Date: 10/10/00
RESIDENT INSPECTORS

Subject: FAILURE OF MAGNA-BLAST BREAKER FOLLOWING MODIFICATION

Reportable Event Number: N/A

Discussion:

On October 3, 2000, the Service Water Pump D breaker failed to close during a Technical Specification surveillance. Operators removed the General Electric Type AMH circuit breaker from service and declared the pump to be inoperable. Cooper Nuclear Station personnel noted that the prop spring bracket, part of the trip-free mechanism, had shifted position causing the breaker to trip free following closure. The breaker was replaced with a spare, and the failed breaker was sent, accompanied by licensee engineers, to a General Electric facility in Atlanta, Georgia for evaluation.

Since 1997, Cooper has modified the trip-free mechanism of 13 safety-related Magna-Blast breakers, including the subject breaker, in accordance with General Electric specifications. Subsequent to the modification, General Electric proliferated a revised (increased) torque specification for the prop spring bracket bolts. On October 6, General Electric personnel determined that the failure of the breaker was directly attributable to the lower torque values used during modification. The lower torques permitted rotation of the prop spring bracket, affecting the breaker's capability to reliably close and latch upon demand. General Electric stated in a letter to the licensee that this was the first failure ever reported caused by the rotation of the prop spring bracket. Licensee personnel have stated that General Electric considers this to be a potential Part 21 issue. An estimated 200-250 breakers nationwide were modified using the lower torque specification.

General Electric recommended checks and adjustments for each of the remaining breakers. Over the holiday weekend, plant maintenance technicians inspected 2 of the remaining 12 breakers. Neither prop spring bracket was found to have shifted. Additionally, only one bolt was found to be under the new torque specification, and technicians stated that the bolt was tight, as found. As a result of these findings, licensee management decided that the remaining breakers could be inspected and retorqued via routine planned maintenance practices.

Regional Action:

The Cooper resident inspectors will follow licensee actions to ensure that the corrective measures are appropriate, timely and comprehensive.

Contact: David Loveless (817)860-8161; Wayne Sifre (817)860-8193