

Licensee/Facility:

Notification:

Arizona Public Service Co.  
Palo Verde 2  
Wintersburg, Arizona

MR Number: 5-93-0025  
Date: 04/15/93  
TELEPHONE CALL TO REGION V

Dockets: 50-529  
PWR/CE80

Subject: HIGH FAILURE RATE OF HYDRAULIC PIPING SNUBBERS

Reportable Event Number: N/A

Discussion:

APS has experienced a high failure rate of Unit 2 hydraulic piping snubbers during functional testing performed during the current refueling outage. Functional testing of snubbers is required by Technical Specifications. Unit 2 has 489 snubbers, of which 37 were to be tested during the current outage. The sample size has been increased to 235 snubbers as a result of the identified failures. APS has experienced 22 testing failures in 209 tests. APS indicated that only one snubber had previously failed functional testing in unit 2.

The snubbers that have failed functional testing were manufactured by Pacific Scientific Applications (PSA). Eighteen of the 22 failures were in small snubbers, sizes PSA-1/4 and PSA-1/2. The licensee indicated that these failures were a result of the snubbers "locking up." The other four failures were in various medium and large-size PSA snubbers, and these failures were a result of high bleed rates (drag). Nine of the small s

ize

failures were attached to steam piping leading to the safety-related turbine driven auxiliary feedwater pump.

The licensee will disassemble the failed snubbers to determine the root cause of failure. The licensee has also assembled a stress analysis group to evaluate the effect of the "locked up" snubbers on the steam piping leading to the auxiliary feedwater pump.

Regional Action:

The Resident Inspectors will continue to follow the licensee's actions to determine the cause of the snubber failures. The Residents are also pursuing this issue for possible similar affects on Unit 1 and 3.

Contact: Howard Wong  
Jim Sloan

(510) 975-0296  
(602) 386-3638