

Licensee/Facility:

Arizona Public Service Co.
Palo Verde 1 2 3
Wintersburg, Arizona
on
Dockets: 50-528, 50-529, 50-530
PWR/CE80, PWR/CE80, PWR/CE80

Notification:

MR Number: 4-94-0037
Date: 04/25/94
Senior Resident Inspector Telec

Subject: RAYCHEM SPLICE DEFICIENCIES

Reportable Event Number: N/A

Discussion:

On April 22, 1994, the licensee identified a potential generic problem with the environmental qualification of certain design Raychem splices used to seal 4160V electrical connections. During site training in which electrical maintenance personnel were being trained on site and vendor instructions on the installation of Raychem splices, an instructor opened a completed connection and discovered that the 2-inch wide adhesive strip applied over a joint had not fused to the outer casing. The licensee discovered that, in some instances, even when the vendor's instructions were strictly adhered to, the splices may not completely seal. Further testing demonstrated that a complete seal would occur if the outer casing was heated until the surface develops a glossy appearance. The licensee discussed the reheating technique with the vendor, who found it to be acceptable.

The licensee conducted a Plant Review Board meeting to discuss this matter. The licensee subsequently inspected all field installed splices of this size in Units 1 and 2 and reheated those which they could not positively identify as properly sealed. The licensee plans to perform similar inspections in Unit 3, which is currently defueled, prior to refueling.

Although the vendor has subjected these splices to environmental qualification testing, the licensee suspects that the splices may have self-sealed when they were exposed to the high temperatures associated with these tests. The licensee concluded that the splices may be vulnerable to high humidity, low heat environments. The vendor and licensee are evaluating Part 21 reporting requirements.

Regional Action:

The resident inspectors will be monitoring the licensee's followup activities.

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