

WPPSS NUCLEAR PROJECT NO. 2

Reportable Deficiency and Corrective Action
For Defective Welds Found In
Pipe Whip Restraint Brackets

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
DOCKET No. 50-397
License No. CPPR-93

Nature of Deficiency

Pipe whip restraint brackets used in supporting the Residual Heat Removal (RHR), Reactor Feed Water (RFW) and the Main Steam Piping System, inside containment, were found to have numerous weld defects in the electroslog welds. These defects consisted of slag inclusions and porosity, and have been documented on IR-78-1192 (215), NCR 215-03410 and PED 215-CS-0117. The weld deficiencies could only be a result of a departure from the approved electroslog weld procedure.

Safety Implications

If the welds were left uncorrected and were subjected to loads, as a result of a pipe rupture, the weld defects could propagate causing the welds to crack and the pipe whip support brackets to fail. The failure of the pipe whip supports would therefore not restrain pipe whip which could cause damage to surrounding components and equipment, thus adversely affecting the safety of the Nuclear Power Plant.

Corrective Action Taken

Forty-five (45) pipe whip restraint brackets were fabricated using the Leckenby electroslog process. These bracket welds were evaluated using the radiographic and/or ultrasonic technique. Twenty (20) brackets were completely refabricated, fourteen (14) which obtained lesser defects were repaired and eleven (11) were found to be acceptable. At this time all brackets have been installed in the plant.

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