

REPORTABLE DEFICIENCY AND CORRECTIVE ACTION  
WPPSS NUCLEAR PROJECT NO. 2  
DEFECTIVE TERMINATIONS ON ELECTRICAL PENETRATIONS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
DOCKET NO. 50-397  
LICENSE NO. CPPR-93

Description of Deficiency

Defective terminations were found on Westinghouse supplied electrical penetrations X105 A, B, C and D. The defect consisted of inboard and outboard crimp connections using the wrong size lugs, resulting in loose connections and some lugs having fallen off. The deficiency was first noted on October 17, 1978 and documented at that time by a Nonconformance Report. On March 19, 1979, it was concluded that the deficiency was a reportable 10CFR50.55(e) condition and so reported to Region V of the NRC.

Analysis of Safety Implications

The subject penetrations carry control and indication signals for the following systems: reactor protection, low pressure core spray, high pressure core spray, automatic depressurization and residual heat removal. It is conceivable that an open or shorted circuit could have occurred, resulting in an impaired condition of one or more of the safety-related systems, e.g., failure to initiate a scram input signal from main steam isolation valves or loss of automatic depressurization valve control.

Corrective Action Taken

The penetration modules having incorrect size lugs were removed under Westinghouse direction. They were shipped to a factory for lug replacement under quality controlled conditions. The correct lugs have been installed and are presently awaiting shipment back to the site. The modules will be reinstalled under Westinghouse control.

The subject defect is specific in nature, i.e., not generic. Incorrect size lugs were installed on connections. Other facilities affected, if any, are therefore not known.

All other appropriate penetrations were inspected. One additional, non-safety related penetration had similar problems. It was corrected in the manner discussed above.

