

WPPSS NUCLEAR PROJECT NO. 2
REPORTABLE DEFICIENCY AND CORRECTIVE ACTION
FOR DESIGN OF SMALL DIAMETER (2" and under) PIPE

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

DESCRIPTION OF DEFICIENCY

The design control of small diameter piping systems and supports have not been in compliance with ANSIN45.2, for those systems designed by the Mechanical Installation Contractor (C-215). Piping and support drawings have been released for fabrication with incomplete and unchecked design calculations and physical field design changes have been made without approval of the responsible design group. As a result, Quality Class 1 small diameter piping systems have been installed which are not in compliance with the established design criteria.

SAFETY SIGNIFICANCE

As a result of recently implemented design review of installed systems, deviations from specified design criteria have been identified which require rerouting of pipe and the modification or addition of supports for small diameter systems to assure compliance with specified criteria. If not corrected, the pipe or hanger components may be subjected to stress/load conditions in excess of allowable limits and fail, resulting in the loss of safety related system components.

CORRECTIVE ACTION

An independent engineering firm, Gilbert/Commonwealth Associates, has been contracted to finish the design of the remaining small diameter systems and to perform the design verifications of all the as-built small diameter piping systems and the associated supports which were assigned to Contract 215, except for CRD and nitrogen charging systems which were subcontracted to General Electric. The 215 Contractor will retain the responsibility for the installation and preparation of the as-built drawings. Gilbert/Commonwealth Associates is also furnishing field engineering personnel to assure that design control is maintained by their organization for necessary field changes required during construction. Gilbert/Commonwealth Associates will be on site performing the above functions by May 19, 1980.

Based on the verification results, design changes will be issued for the construction as necessary and the verification process implemented to confirm the as-built configuration satisfies design criteria. Final verified design packages will be certified and P.E. stamped by Gilbert/Commonwealth Associates as being in conformance with the A/E prepared design criteria document.