

FINAL REPORT ON  
PIPE SUPPORT FILLET WELD DESIGN DEFICIENCIES

San Onofre Nuclear Generating Station  
Units 2 and 3

INTRODUCTION

By letter dated September 1, 1978, Southern California Edison confirmed notification to the NRC concerning a reportable condition in design of fillet welds for pipe supports designed in accordance with the ASME B&PV Code, Section III. An interim report, submitted pursuant to 10CFR50.55(e) by letter dated September 29, 1978, discussed the cause of the deficiency, the analysis of safety implications and measures provided to correct the deficiencies noted. This final report describes the actions taken with regard to installed pipe supports with undersize fillet welds.

DISCUSSION

A review of the project pipe support assembly drawings has identified 377 assemblies which have fillet welds which are undersized based on the requirements of the ASME B&PV Code, Section III, Table XVII-2452.1-1. for Linear Component Supports. Of these 377 assemblies, 304 have not been installed. The drawings for these 304 assemblies have been revised and the assemblies will be constructed to conform with the fillet weld design requirements of Table XVII-2452.1-1.

The 73 remaining assemblies have been installed. Thirteen (13) of these assemblies will be reworked to conform with fillet weld design requirements of Table XVII-2452.1-1. The other 60 assemblies have fillet welds which are not accessible for rework. These 60 assemblies will be accepted with the existing fillet welds. This acceptance is based on a redesignation of these assemblies from a Linear Support category to a Plate and Shell Support category. This redesignation combined with a change in Code requirements (which are reflected in the Winter 1978 Addendum to the 1977 Edition of ASME B&PV Code, Section III) will allow the fillet weld design of these 60

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assemblies to be controlled safely by analysis techniques without the further minimum fillet weld size restrictions imposed by previous Code requirements. Analysis will be provided to demonstrate conformance with the above Code requirements and to assure the adequacy of these assemblies to perform their safety function.

CONCLUSION

All affected pipe supports have been reviewed and action has been identified to assure that the fillet weld design for these supports conforms with the pertinent ASME Code, Section III requirements.