

Arizona Public Service Company

50-529

April 10, 1984  
ANPP-29272-BSK/TRB

U. S. Nuclear Regulatory Commission  
Region V  
Creekside Oaks Office Park  
1450 Maria Lane - Suite 210  
Walnut Creek, CA 94596-5368

Attention: Mr. T. W. Bishop, Director  
Division of Resident  
Reactor Projects and Engineering Programs

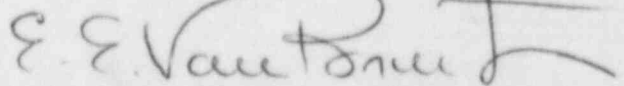
Subject: Final Report - DER 83-43  
A 50.55(e) Reportable Condition Relating To Improper Crimp  
Terminations In 12 Unit 1 Cabinets.  
File: 83-019-026; D.4.33.2

Reference: (A) Telephone Conversation between P. Narbut and R. Tucker  
on July 8, 1983  
(B) ANPP-27399, dated July 25, 1983 (Interim Report)  
(C) ANPP-27907, dated September 27, 1983 (Final Report)

Dear Sir:

Enclosed is revision one of the subject Deficiency Evaluation Report  
under the requirements of 10CFR50.55(e). This revision clarifies the  
Analysis of Safety Implications, Section II.

Very truly yours,



E. E. Van Brunt, Jr.  
APS Vice President,  
Nuclear Projects Management  
ANPP Project Director

EEVB/TRB:db

Enclosure

cc: See Attached Page 2

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Mr. T. W. Bishop  
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cc: Richard DeYoung, Director  
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FINAL REPORT - REVISION 1 - DER 83-43

DEFICIENCY EVALUATION 50.55(e)

ARIZONA PUBLIC SERVICE COMPANY (APS)

PVNGS UNIT 1

I. DESCRIPTION OF DEFICIENCY

During startup testing activities, the class 1E Auxiliary Relay Cabinets furnished by Harlo Corporation were found to have some terminations which did not conform to AMP crimping criteria. The deficiencies consist of the conductor not being visible through the barrel of the termination and the conductor interfering with the termination screw. Identification of the affected equipment in Unit 1 is as follows:

1-E-ZAA-C01	1-E-ZAB-C01
1-E-ZAA-C02	1-E-ZAB-C02
1-E-ZAA-C03	1-E-ZAB-C03
1-E-ZAA-C04	1-E-ZAB-C04
1-E-ZAA-C05	1-E-ZAB-C05
1-E-ZAA-C06	1-E-ZAB-C06

The Harlo Corporation was contacted concerning this condition. The attached letter from Harlo Corporation provides their acceptance for using Bechtel's termination criteria per specification 13-EM-306. At this time, Auxiliary Relay Cabinets for Units 2 & 3 are not inspected. An inspection of relay cabinets in Units 2 & 3 will be made at a future date and NCR's referencing this DER will issued for rework as deemed necessary.

II. ANALYSIS OF SAFETY IMPLICATIONS

This condition is evaluated as reportable. If inadequate crimped lugs were left uncorrected, potential hazards of open circuits could occur which could jeopardize the functional requirements of safety related circuits.

III. CORRECTIVE ACTION

All class 1E and Non-1E Auxiliary Relay cabinets supplied by Harlo Corporation (Units 1, 2, & 3) shall be inspected for compliance per the following criteria. The terminal lug connection to the conductor is acceptable if the conductor is visible and underneath the crimp connection (i.e.; approximately within 1/16" from the face of the barrel). In addition, the conductor extending beyond the barrel of the connector does not pose a problem unless it interferes with the termination screw, in which case it should be cut back. Any connectors which do not meet this requirement shall be removed and have a new AMP connector installed in accordance with Bechtel's termination practices established in construction specification 13-EM-306 (including proper usage and traceability of cramping tools).

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This condition in Unit 1 will be corrected by dispositioning NCR SE-1574 as "Rework". The condition in Unit 2 & 3 will be corrected via NCR's to be issued at a later date. All future NCR's generated as a result of this problem will reference this DER.

In addition to reportability under 10CFR50.55(e), Bechtel PVNGS Project considers the deficiency to be reportable under the requirements of 10CFR Part 21 by the supplier. Deficiency Evaluation Report 83-43 addresses the reporting requirements specified under 10CFR 21.21(b) (3) with the exception of sub-part (vi) which requires the number and location (customers and/or facilities) of other possible defective equipment. A copy of this report is being sent to Harlo Corporation requesting their review for reporting under 10CFR Part 21 including number and location of all components supplied.