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October 19, 1984  
ANPP-30913-TDS/TRB

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

Attention: Mr. T. W. Bishop, Director  
Division of Reactor Safety and Projects

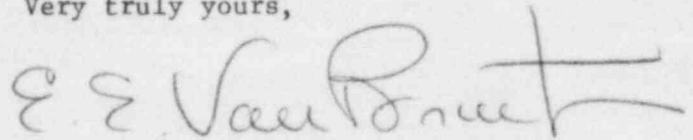
Subject: Final Report - DER 84-45  
A 50.55(e) Reportable Condition Relating To Spot Welding On  
Skid Mounted Indication And Control.  
File: 84-019-026; D.4.33.2

Reference: A) Telephone Conversation between D. Hollenbach and T. Bradish  
on July 17, 1984  
B) ANPP-30260, dated August 16, 1984 (Interim Report)  
C) ANPP-30666, dated September 26, 1984 (Time Extension)

Dear Sir:

Attached is our final written report of the deficiency referenced above,  
which has been determined to be Not Reportable under the requirements of  
10CFR50.55(e).

Very truly yours,



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

EEVB/TRB/nj  
Attachment

cc: See Page Two

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PDR ADUCK 05000528  
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Mr. T. W. Bishop  
DER 84-45  
Page Two

cc: Richard DeYoung, Director  
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U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

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FINAL REPORT - DER 84-45  
DEFICIENCY EVALUATION 50.55(e)  
ARIZONA PUBLIC SERVICE COMPANY (APS)  
PVNGS UNITS 1 & 2

I. Description of Deficiency

During static seismic testing at the supplier's facility, Kaman Instrumentation has identified a mechanical failure on the skid-mounted indication control (SMIC) units, revealing insufficient welds on some of the retaining studs. This condition may allow the SMIC to become a potential missile during a seismic event and/or cause operational failure of the radiation monitor it services.

Kaman Instrumentation has identified the following affected monitors with attached SMIC units:

Tag No's.	1JSQBRU145	1JSQNRU141	2JSQNRU141
	1JSQBRU146	1JSQNRU142	2JSQNRU142
	2JSQBRU145	1JSQNRU143	2JSQNRU143
	2JSQBRU146	1JSQNRU144	2JSQNRU144

Evaluation

SMICs attached to the radiation monitors have the tag letter designation "RE" rather than "RU" as indicated by the supplier. The RU designation is the radiation monitors' microcomputer and is remotely located. The following eight radiation monitors are not safety-related because they are located in the turbine building, a Quality Class R, Seismic Category 2 structure.

1JSQNRE141	2JSQNRE141
1JSQNRE142	2JSQNRE142
1JSQNRE143	2JSQNRE143
1JSQNRE144	2JSQNRE144

The remaining four radiation monitors are safety-related and are located in the fuel building, a Quality Class Q, Seismic Category 1 structure.

1JSQBRE145	2JSQBRE145
1JSQBRE146	2JSQBRE146

The safety-related monitors (Bechtel Dwg 13-P-ZFL-501) are located on the 185'-6-3/4" elevation of the fuel building, surrounded by safety-related HVAC ducts on three sides and the building wall on the fourth (Bechtel Dwg 13-P-ZFC-509). Failure of the retaining studs on the SMIC units during a seismic event will not result in sufficient damage to the HVAC ducts such that operation of the safety-related HVAC system would be impaired. Also, these physical constraints preclude any of the SMICs from becoming a potential missile and inflicting damage to other safety-related equipment.

The function of the SMIC is for local indication and control. Its physical loss due to a seismic event would not affect the operation of the monitor which would continue to perform its safety-related function. Primary control of the radiation monitors is from the remote indication and control, RIC, located in cabinet JSQAC01/JSQBC01 of the control building.

II. Analysis of Safety Implications

Kaman has made notification of this condition under the requirements of 10CFR Part 21. However, based on the above evaluation, this condition if left uncorrected is not safety significant as installed at PVNGS. This condition for PVNGS is therefore evaluated as not reportable under 10CFR50.55(e) and Part 21.

III. Corrective Action

The supplier, Kaman Instrumentation, has prepared a field test procedure for testing the stud welds on the SMIC units. The test will be performed and results obtained on the affected radiation monitors per an Investigative Report 1S-IR-033 and 2C-IR-033 for Units 1 and 2 respectively.

The SMIC units for Unit 3 are still with the supplier, Kaman Instrumentation, and stud welds on the Unit 3 equipment will be verified as acceptable by the supplier prior to shipment to PVNGS.

Kaman Instrumentation has made available a retaining stud retrofit kit to replace any failed stud welds during field testing.