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ANPP-30782-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 Resident
Reactor Projects and Engineering Programs

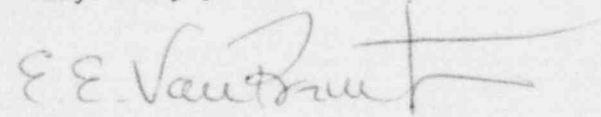
Subject: Final Report - DER 84-59
A 50.55(e) Reportable Condition Relating To MCC Cables Damaged
By Fire Stops.
File: 84-019-026; D.4.33.2

Reference: A) Telephone Conversation between J. Ball and T. Bradish on
August 22, 1984
B) ANPP-30598, dated September 21, 1984 (Interim Report)

Dear Sir:

Attached is our final written report of the Reportable Deficiency under
10CFR50.55(e), referenced above.

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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Mr. T. W. Bishop
DER 84-59
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FINAL REPORT - DER 84-59
DEFICIENCY EVALUATION 50.55(e)
ARIZONA PUBLIC SERVICE COMPANY (APS)
PVNGS UNITS 1, 2, 3

I. Description of Deficiency

During startup testing activities it was discovered that some electrical cabinet moisture seals may have caused damage to the associated cables' insulation and jacket by contact with the metal edge of the seal. The affected seals are above Motor Control Center (MCC) cubicles 2E-PKB-M4205, 2E-PKC-M4205, and 2E-PKD-M4413 for Unit 2.

Further investigation revealed that the associated wiring with seals above MCC cubicles 2E-PKC-M4307, and 2E-PKD-M4413 were not damaged.

Evaluation

Damage to the one cable above E-PKB-M4205 is attributed to one of two possibilities; (1) the seal edge vibrating against the cable, or (2) the seal was used as a step. The root cause is the lack of a specification/design requirement for edge protection similar to that used with cable trays.

A walkdown was done on all the remaining seals in Unit 2. No other cables were found damaged. However, for cases where the cable enters the seal at an extreme angle, there exists a possibility that the seal edge can contact and damage the cable insulation and jacket. To preclude any future problem, electrical tray metal edge protectors will be installed on an "as required" basis to provide protection to the associated cables. Cable installation inspection has indicated no bend radius problems.

II. Analysis of Safety Implications

The cutting of the cable could potentially short out the related circuit. This condition could prevent Class-1E equipment from performing its intended safety function.

Based on the above, this condition is evaluated as reportable under the requirements of 10CFR50.55(e); since, if this condition were to remain uncorrected, it would represent a significant safety condition. This condition is evaluated as not reportable under 10CFR Part 21, since the affected sub-systems had not been delivered to operations.

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III. Corrective Action

1. SWA-8941 was issued to replace the damaged cable above MCC 2E-PKB-M4205. NCR SM-4857 was issued to reposition the cables in the new seal; also, to install metal edge protectors if the cables are still in contact with the seal's metal edge.
2. NCRs SE-4884 and SM-4857 were issued to inspect all the fire/moisture penetrations in Units 1 and 2 respectively and install edge protectors wherever cable jackets are in contact with the metal edge.
3. For Unit 3 installations, metal edge protectors will be installed on any seal that has the potential of damaging the cable. At this time the seals have not been installed.
4. DCN 25 to Drawing 13-A-ZYD-096 was issued to add the requirement for sheet metal dam edge protectors in moisture seals.