

Arizona Public Service Company

P.O. BOX 21666 • PHOENIX, ARIZONA 85036

April 19, 1983
ANPP-23545-BSK/RQT

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

Attention: Mr. D. M. Sternberg, Chief
Reactor Projects Branch 1

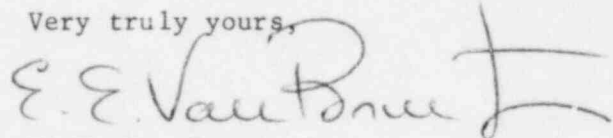
Subject: Final Report - DER 82-84
A 50.55(e) Reportable Condition Relating to
Class 1E Load Centers in Unit No. 1 Had Internals Damaged By
Space Heaters
File: 83-019-026; D.4.33.2

Reference: A) Telephone Conversation between A.D'Angelo and
G. Duckworth on January 27, 1983
B) ANPP-22925, dated February 7, 1983 (Interim Report)

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 Projects Management
ANPP Project Director

EEVB/RQT:db

Enclosure

cc: See Page 2

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S PDR

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Mr. D. M. Sternberg
ANPP-23545-RQT/BSK
April 19, 1983
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cc: Richard DeYoung, Director
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

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Records Center
Institute of Nuclear Power Operations
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339

FINAL REPORT - DER 82-84
DEFICIENCY EVALUATION 50.55(e)
ARIZONA PUBLIC SERVICE COMPANY (APS)
PVNGS UNIT 1

I. DESCRIPTION OF DEFICIENCY

This report was initiated as a result of visual observations in the 480 Volt Load Centers supplied by ITE-Gould which indicated that the design of the space heaters may not have been in compliance with specification requirements since the following was observed:

<u>Equipment Tag No.</u>	<u>Visual Defects</u>
1E-PGS-131D	Charred paint on back wall and damaged relay in cubicle L31D1.
1E-PGA-L33C	Discolored surrounding paint from strip heater which is located just under a control wiring run.
1E-PGA-L31,33, & 35	Visual inspection indicated a concern that heat from the space heaters could impact nearby relays and/or control wiring.

A subsequent field investigation has determined that the described damage is the result of improper voltage (208V AC instead of the specified 120V AC) applied to the heaters during storage in the site warehouse. NCR's E-J-492 and E-J-493 and Brown Boveri Electric, Inc., letter dated 5/10/82, (attached) indicate correction of this condition in mid-1980. Corrective action, including application of proper voltage and replacement of damaged wiring and terminal lugs, was completed in January, 1981, per dispositions of NCR's E-J-492 and 493.

II. ANALYSIS OF SAFETY IMPLICATIONS

The established NCR system provides documentation that the condition has been corrected and that no deficiency in the safety-related electrical systems currently exists. The cosmetic paint defects, resulting from a condition resolved two years ago, do not constitute a reportable condition as defined by 10CFR50.55(e) since the identified isolated storage problem does not (i) constitute a significant breakdown in the QA program, (ii) does not represent a significant deficiency in final design, (iii) does not represent a significant deficiency in construction or significant damage requiring extensive repair, and (iv) does not represent a significant deviation from performance specifications.

III. CORRECTIVE ACTION

Continued surveillance activity of electrical equipment still in storage assures that the space heaters are being supplied with the correct voltage.



Brown Boveri Electric, Inc.

Manufacturer of I-T-E Electrical Power Equipment

May 10, 1982

Bechtel / Palo Verde

Arizona Public Service Co.
c/o Bechtel Power Corporation
P. O. Box 49
Palo Verde, Arizona 85343

Attention: Mr. Bob Anderson
Electrical Section

Subject: Heater Wire Discoloration

Gentlemen:

I have discussed this problem with our Quality Control section. They advise as follows:

"This letter is in response to your questions about the space heater wire terminals being overheated resulting in the pre-insulated wire terminal insulation becoming discolored, and in some cases control wire discoloration.

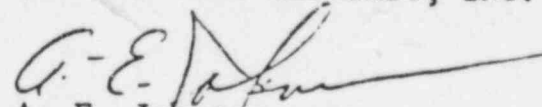
This is a common problem at jobsites wherein personnel connect the wrong temporary power to the heaters. It generally occurs in the storage or warehouse area where personnel are advised to energize the space heaters, and they do so without using the drawing. Normally, they apply 208 volt power when they should have used 120 volt.

In fact, we have a Non-Conformance Report from the Palo Verde Nuclear Generating Station (E-J-492) which indicates that they did this. We have observed the same mistake at other jobsites.

Generally what happens is the damage is done in the warehouse and then after the equipment is installed and the correct power applied, discoloration is observed and everyone wonders why."

Very truly yours,

BROWN BOVERI ELECTRIC, INC.


A. E. Johnson
District Manager

AEJ/rfw
Encl.