Arizona Public Service Company
P.O. BOX 21666 • PHOENIX, ARIZONA 85036

January 3, 1984
ANPF-28528-BSK/KCP

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

Subject: Interim Report - DER 83-82
A 50.55(e) Potentially Reportable Deficiency Relating to Cables In The Unit 1 & 2 Diesel Generator Control Cabinets, And Three Cabels In The Unit 1 Diesel Generator Building, Have Too Small Of A Bend Radius.
File: 84-019-026; D.4.33.2

Reference: Telephone Conversation between P. Gage and K. C. Parrish on December 2, 1983.

Dear Sir:

The NRC was notified of a potentially reportable deficiency in the referenced telephone conversation. At that time, it was estimated that a determination of reportability would be made within thirty (30) days.

Due to the extensive investigation and evaluation required, an Interim Report is attached. It is now expected that this information will be finalized by March 1, 1984, at which time a complete report will be submitted.

Very truly yours,

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

EEVB/KCP:ru

Attachment

cc: See Page Two

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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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INTERIM REPORT - DER 83-82
POTENTIAL REPORTABLE DEFICIENCY
ARIZONA PUBLIC SERVICE (APS)
PVNGS UNITS 1, 2, & 3

I. Potential Problem

During the NRC inspection of October 31 through November 4, 1983 at the PVNGS jobsite, it was revealed that the 5kv, 500 MCM cables installed in Unit 2 between the Diesel Generator and Diesel Generator control cabinet, and the Diesel Generator control cabinet and 4.16 kv switchgear, do not meet bend radius requirements. Per Installatin Specification 13-EM-301, Rev. 8, Table 8.3, installed cables should have a minimum bend radius of 17.04 inches. In Unit 2 the installed cables between the Diesel Generator and Diesel Generator control cabinet, and the Diesel Geneator control cabinet and 4.16 kv switchgear have a bend radius of 4 to 16 inches, which is below the design requirements. The cables involved are: 2EPE01BC1CA, B and C; 2EPE01AC1CA and B; 2EPE02BC1CA, B and C; 2EPE02AC1CA, B and C; and 2EPE01AC1CC.

An inspection of Unit 1 revealed that bend radius of the installed cables listed in NCR EG-3635 was found to be from 9 to 15 inches, which is less than the design requirements per Installation Specification 13-EM-301. The cables involved are: 1EPE01AC1CA, B, and C; 1EPE01BC1CA, B, and C; 1EPE02AC1CA, B, and C; and 1EPE02B1CA, B, and C.

Also, the minimum bend radius of conduits 1EZG1ABRC01, 1EZG1ABRC02, and 1EZG1ABRC03 listed in NCR E G-3630 has been exceeded. The conduits should have a minimum of 36 inch bend radius per the EE580 raceway card. The actual installed bend radius is less than 36 inches.

A lower bending radius of the cable causes more mechanical stresses on the cable and may result in premature failure of the cable. The failure of these cables can disable the Diesel Generator from performing its safety related function.

II. Approach to and Status of Proposed Resolution

A joint field inspection of the installed cables was performed by cable manufacturer Anaconda Ericsson and Bechtel. As a result of the inspection, it was agreed that the cable 2EPE02AC1CC listed in attached NCR EG-3619 be replaced. The cable 2EPE02AC1CC has an installed minimum bending radius of 4". The installed cable 2EPE02AC1CC has been replaced with new cable. The portion of the removed cable 2EPE02AC1CC with a 4 inch bending radius is being sent to Anaconda Ericsson for testing and analysis. Based on the test results arrived at by Anaconda Ericsson, the determination for using installed cables per NCR's listed above shall be made. Anaconda Ericsson has indicated that test report on cable 2EPE02AC1CC will be complete by Janaury 15, 1983.

III. Projected Completion of Corrective Action and Submittal of the Final Report

Evaluation of this condition and submittal of the Final Report is forecast to be completed by March 1, 1984.