Arizona Public Service Company

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November 2, 1984 ANPP-31032-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: Interim Report - DER 84-76 A 50.55(e) Potentially Reportable Deficiency Relating To Diesel Generator Stator Temperatures. File: 84-019-026; D.4.33.2

Reference: Telephone Conversation between D. Hollenbach and T. Bradish on October 3, 1984

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 November 30, 1984, at which time a complete report will be submitted.

Very truly yours,

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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 84-76 Page Two

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 84-76 POTENTIAL REPORTABLE DEFICIENCY ARIZONA PUBLIC SERVICE COMPANY (APS) PVNGS UNIT 1

## I. Potential Problem

Vendor information supplied in Specification MM-018, page 5B-18, Section 5B.2.3.1 "Generator", requires that stator temperature at rated (100%) engine load not to exceed a 75°C temperature rise over a 60°C ambient temperature and stator temperature at overload (110%) not exceed an 85°C temperature rise over a 60°C ambient temperature. Also, the vendor, Cooper Energy System (CES), has stated that the generator windings are insulated with Class F insulation which has a continuous temperature rating of 155°C. Above 155°C, insulation degradation may take place. During startup testing of the "A" train diesel generator, the maximum temperature rise requirements were reached at an ambient temperature of 43°C, which is less than the specified maximum of 60°C. It is believed that the restriction of air flow to the generator: stator is causing the high temperatures.

## II. Approach To and Status Of Proposed Resolution

Temperature tests have been run on the generator with the access plates removed for greater air flow. A shroud with air deflectors was also installed to inhibit debris from entering the generator and to further increase air flow. A walkway over the diesel generator was removed in an effort to decrease any obstructions to air flow. The temperature tests reveal that, with the above modifications complete, the generator stator temperatures fall within specified limits. CES is currently reviewing the modifications for seismic stability.

Bechtel Engineering and CES are currently evaluating this deficiency to determine the reportability and technical justification for corrective action (Reference letters B/CES-E-49509, October 10, 1984 and B/CES-E-49562, October 18, 1984).

## III. Projected Completion of Corrective Action and Submittal of the rinal Report

The complete evaluation and final report are forecast to be completed by November 30, 1984.