

Arizona Public Service Company

September 6, 1984
ANPP-30449-TDS/TRB

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 84-58
A 50.55(e) Potentially Reportable Deficiency Relating to
Auxiliary Feedwater System Soleroid Valve Failed To Open In
Response To AFAS Signal.
File: 84-019-026; D.4.33.2

Reference: Telephone Conversation between J. Ball and T. Bradish on
August 8, 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 October 19, 1984, at which time a complete report will be
submitted.

Very truly yours,

E E Van Brunt

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 84-58
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cc: Richard DeYoung, Director
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U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

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INTERIM REPORT - DER 84-58
POTENTIAL REPORTABLE DEFICIENCY
ARIZONA PUBLIC SERVICE COMPANY (APS)
PVNGS UNIT 1

I. Potential Problem

Per the final safety analysis report, section 7.3.1.1.10.7, the seismic category I portion of the auxiliary feedwater system is provided to automatically initiate residual heat removal capability during emergency conditions such as a steam line rupture, loss of normal feedwater, or loss of offsite and normal onsite power.

During the performance of preoperational testing, the steam supply bypass solenoid valve (UV-138A, used in the slow starting of the auxiliary feedwater turbine) to the auxiliary pump (AFA-P01) failed to open in response to an AFAS signal as required by design. This condition would result in the tripping of the auxiliary feedwater turbine (AFA-K01) due to overspeed; consequently, the turbine driven pump (AFA-P01) would not be available to initiate residual heat removal during emergency conditions. Investigation of the valve indicated that the valve was mechanically stuck in the closed position. After disassembly of the valve by the vendor's field service representative (Target Rock Corp.) the following were found: 1) Powdery rust on the plunger and inside the bonnet assembly; 2) Parts of the soft seat were missing around the edges; and 3) Some very minor galling on the upper edge of the plunger which holds the seal ring.

II. Approach To and Status Of Proposed Resolution

The specific areas of concern resulting from these deficiencies are as follows:

1. To positively identify the powdery rust found in the valves' internals as being magnetite and evaluate its presence in this system.
2. Target Rock's evaluation of the problem after receipt and inspection of the valves in their factory.

Bachtel Engineering is currently reviewing this problem with Target Rock to determine reportability and technical justification for corrective action.

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 October 19, 1984.