

Arizona Public Service Company

RECEIVED
NRG

1984 MAY 10 PM 1:12

May 7, 1984

ANPP-29445-TDS/TRB

U. S. Nuclear Regulatory Commission
Region V
Creskide 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

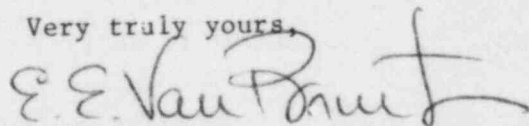
Subject: Final Report - DER 83-76
A 50.55(e) Reportable Condition Relating to Auxiliary
Feedwater Pump Turbine Logic
File: 84-019-026; D.4.33.2

Reference: A) Telephone Conversation between R. Dodds and R. Tucker on
November 2, 1983
B) ANPP-28360 dated, December 5, 1983 (Interim Report)
C) ANPP-28588 dated, January 10, 1984 (Time Extension)
D) ANPP-29140 dated, March 23, 1984 (Time Extension)

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
ANPP Project Director

EEVB/TRB:db
Attachment

cc: See Page Two

8405150110 840507
PDR ADOCK 05000528
S PDR

1E-27,11

Mr. T. W. Bishop
DER 83-76
Page Two

cc: Richard DeYoung, Director
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

T. G. Woods, Jr.
D. B. Karner
W. E. Ide
D. B. Fasnacht
A. C. Rogers
B. S. Kaplan
L. A. Souza
D. E. Fowler
J. Vorees
J. R. Bynum
J. M. Allen
P. P. Klute
A. C. Gehr
W. J. Stubblefield
W. G. Bingham
R. L. Patterson
R. W. Welcher
H. D. Foster
D. R. Hawkinson
L. E. Vorderbrueggen
G. A. Fiorelli
S. R. Frost
J. Self
D. Canady

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

FINAL REPORT - DER 83-76
DEFICIENCY EVALUATION REPORT 50.55(e)
ARIZONA PUBLIC SERVICE COMPANY
PVNGS UNITS 1, 2, 3

I. Description of Deficiency

A system review of the Logic Diagram 13-J-SGL-001, Rev. 5 has revealed that the FSAR requirement, "Steam admission valve opens from the intact Steam Generator," is not satisfied.

In the present logic for the Auxiliary Feedwater Pump Turbine (AFPT) steam supply valves, the logic actuation provides priority to Auxiliary Feedwater Actuation Signal (AFAS-1) for Steam Generator number one (SG-1) over Auxiliary Feedwater Actuation Signal (AFAS-2) for Steam Generator number two (SG-2). If both signals are simultaneously present or if AFAS-1 already exists upon the initiation of AFAS-2, the AFAS-1 signal takes preference and maintains SG-1 steam supply to the AFPT until manually reset by the operator.

In case of a small line break in SG-1, the existing logic will not allow AFAS-2 to override AFAS-1, and transfer supply steam from SG-2. Once the break in SG-1 is detected the logic must be designed to supply steam to the AFPT from the intact Steam Generator.

II. Analysis of Safety Implications

The present AFPT steam supply valve(s) logic will not allow transfer of steam supply from the ruptured SG-1 to the intact SG-2. As a result, this will prevent the system from performing its safety function by not being able to supply Auxiliary Feedwater to the intact Steam Generator.

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. The PVNGS project also evaluates this condition as reportable under the requirements of 10CFR, Part 21.

III. Corrective Action

- A. Logic diagram 13-J-SGL-001 will be revised prior to fuel load for Units 1, 2, and 3.
- B. Design Change Packages (DCPs) 1SJ-AF-052, 2SJ-AF-052 and 3CJ-AF-052 will be implemented for the required modifications prior to fuel load for Units 1, 2 and 3.
- C. SAR Change Notice 1135 has been issued to identify that AFPT steam admission valves from both Steam Generators (SG-1 and SG-2) may open on a respective AFAS-1 or AFAS-2.