

Arizona Nuclear Power Project P.O. BOX 52034 • PHOENIX, ARIZONA 85072-2034

> December 7, 1984 ANPP-31385-TDS/TRB

U. S. Nuclear Regulatory Commission Region V 1450 Maria Lane - Suite 210 Walnut Creek, California 94596-5368

Attention: Mr. D. F. Kirsch, Acting Director Division of Reactor Safety and Projects

Subject: Final Report - DER 84-96 A 50.55(e) Reportable Condition Relating To Containment Purge Valve Closure Time. File: 84-019-026; D.4.33.2

Reference: A) Telephone Conversation between L. Miller and T. Bradish on November 16, 1984

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 Production ANPP Project Director

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EEVB/TRB/nj Attachment

cc: See Page Two

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Mr. D. F. Kirsch DER 84-96 Page Two

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, GA 30339 FINAL REPORT - DER 84-96 DEFICIENCY EVALUATION 50.55(e) ARIZONA PUBLIC SERVICE COMPANY (APS) PVNGS UNITS 1, 2, 3

### I. Description of Deficiency

10CFR Part 50, Appendix K, Section I.D.2 requires "The containment pressure used for evaluating cooling effectiveness during reflood and spray cooling shall not exceed a pressure calculated conservatively for this purpose. The calculation shall include the effects of operation of all installed pressure-reducing systems and processes." Under a loss of offsite power, the existing containment purge valve could take as long as 17 seconds to close.

## Evaluation

C-E's 10CFR Part 50, Appendix K, Section I.D.2 evaluation assumed a total time of 11.7 seconds from initiation of a postulated accident (LOCA) to containment purge valve closure. In order not to affect C-E's minimum containment pressure/ECCS performance analysis, PVNGS FSAR and CESSAR Section 6.2.1.5, the containment purge valve must close within 11.7 seconds of initiation of a LOCA. The 17 seconds for containment purge valve closure time under a loss of offsite power is unacceptable. C-E's analysis assumed 8 seconds (of the total 11.7 seconds) from the time the actuation signal is received to close the purge valve to valve closure. A design change package has been initiated to ensure the containment purge valves close within 8 seconds independent of the availability of offsite power. The root cause of this deficiency is a result of miscommunication between C-E and Bechtel.

# II. Analysis of Safety Implications

This condition is reportable under 10CFR Part 50.55(e). This condition could adversely affect the safety of operations of the plant were it to remain uncorrected and represents a significant design deficiency. Since no defect exists in a basic component, this condition is not reportable under 10CFR Part 21.

### III. Corrective Action

DCPs have been initiated for all three units; 10J-CP-023, 2SJ-CP-023 and 3CJ-CP-023, Revision 0. This DCP replaces the 4 A.C. powered actuators on the containment purge access mode isolation valves with pneumatic operators. On loss of offsite power the pneumatic actuators will fail closed. This DCP is expected to be completed prior to April 15, 1985, which is the projected date of initial criticality for Unit 1, and prior to issuance of an operating license for Units 2 and 3.

To address the root cause, valve closure times have recently been reexamined as part of the Tech Spec review process. Thus, there is assurance that this case is isolated and such a condition does not exist elsewhere.