Arizona Public Service Company

P.O. BOX 21666 • PHOENIX, ARIZONA 85036

December 7, 1982
ANPP-22459-GHD/BSK

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

Attention: Mr. D. M. Sternberg, Chief
Reactor Projects Branch 1

Subject: Final Report - DER 82-48
A 50.55(e) Reportable Condition Relating to
Dragon Valve Company Instrument Line Check Valves
Seized Open by Welding Heat
File: 82-019-026
D.4.33.2

Reference: (A) Telephone Conversation between T. Young and
G. Duckworth on September 1, 1982
(B) ANPP-21927, dated September 30, 1982 (Interim Report)

Dear Sir:

Attached, is our final written report of the reportable deficiency, under the requirements of 10CFR50.55(e).

Very truly yours,

E. E. Van Brunt

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

EEVBJr/GHD:db

Enclosure

cc: See Attached Page 2

1E27

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

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FINAL REPORT - DER 82-48
DEFICIENCY EVALUATION 50.55(e)
ARIZONA PUBLIC SERVICE COMPANY (APS)
PVNGS UNIT 1

I. DESCRIPTION OF DEFICIENCY

An installation problem has been encountered with the Excess Flow Check Valves supplied by Dragon Valve Company (PVNGS specification 13-JM-705). Thermal expansion and distortion of the valve body in the heat affected zone during welding assembly with the piping systems causes the poppet to seize in the open position.

II. ANALYSIS OF SAFETY IMPLICATION

This condition is evaluated as Reportable. The condition precludes the device from performing its intended function of preventing loss of fluid in the event of instrument tubing rupture or loss of pressure down stream of the check valve. Should the condition remain uncorrected, and in the event of a tubing rupture, the defect would result in release of radioactive fluids which could present a substantial safety hazard.

III. CORRECTIVE ACTION

The movable internal poppet for the excess flow check valve has been redesigned by the vendor to preclude binding as a result of welding the valve in place.

Nonconformance Report PX-4379 will be dispositioned to test and/or rework all the subject flow check valves delivered to the jobsite. Valves failing an operational test, or not tested, will be reworked by installing the redesigned poppet. The vendor will provide corrected valves for Units 2 and 3 to preclude recurrence of this problem at PVNGS.

In addition to reportability under 10CFR50.55(e), PVNGS Project considers the deficiency to be Reportable under the requirements of 10CFR Part 21 by the supplier. This Deficiency Evaluation Report (82-48) addresses the reporting requirements specified under 10CFR 21.21.(b) (3) with the exception of sub-part (vi) which requires the number and location (customers and/or facilities) of other possibly defective equipment. A copy of this report has been sent to Dragon Valve Company requesting their review for reporting under 10CFR Part 21, including number and location of all components supplied.