

Arizona Public Service Company

September 6, 1984
ANPP-30445-TDS/TRB

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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 84-49
A 50.55(e) Potentially Reportable Deficiency Relating To
Auxiliary Feedwater System Experiences Hydraulic Resonance.
File: 84-019-026; D.4.33.2

Reference: Telephone Conversation between P. Narbut and T. Bradish on
August 1, 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 5, 1984, at which time a complete report will be
submitted.

Very truly yours,

EE Van Brunt / TRB

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 84-49
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
L. A. Souza
D. E. Fowler
T. D. Shriver
C. N. Russo
J. Vorees
J. R. Byrum
J. M. Allen
J. A. Brand
D. Canady
A. C. Gehr
W. J. Stubblefield
W. G. Bingham
R. L. Patterson
R. W. Welcher
H. D. Foster
D. R. Hawkinson
L. E. Vorderbrueggen
R. P. Zimmerman
S. R. Frost
L. Clyde
M. Woods
T. J. Bloom

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

INTERIM REPORT - DER 84-49
POTENTIAL REPORTABLE DEFICIENCY
ARIZONA PUBLIC SERVICE COMPANY (APS)
PVNGS UNIT 1

I. Potential Problem

During preoperational testing of the auxiliary feedwater pumps, the piping system connected to both the motor driven and turbine driven Q-Class pumps experienced hydraulic resonance when operating in the normal miniflow configuration with the first discharge block valve open and the regulating valve closed.

The piping system resonated at 7.5 Hertz due to hydraulic resonance in the intake pipe. The high vibration and the associated noise have been witnessed by visual and aural observations and documented by instrument records. Nonconformance Reports (NCR) SM-4497 and SM-4500 were issued when the deficiency was discovered. During additional testing, it was observed that this unstable condition disappears when either the miniflow is increased or the first discharge block valve is closed.

The Auxiliary Feedwater System is designed to provide emergency feedwater to the steam generators following a main steam line break, a main feedwater line break, or a tube rupture in the steam generator. Sustained pump operation is not permissible with the high vibration and noise levels observed due to the risk of damaging the pumps and other safety-related components of the system.

II. Approach To and Status Of Proposed Resolution

Bechtel Engineering is currently studying this problem 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 5, 1984.