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50.55(e) Report

Arizona Public Service Company

P.O. BOX 21666 • PHOENIX, ARIZONA 85036

February 23, 1983
ANPP-23069-GHD/BSK

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

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

Subject: Interim Report - Revision 1 - DER 82-53
A 50.55(e) Potentially Reportable Deficiency Relating to
Failure Of Joy Fan Blade Caused 2-Inch Penetration Of Unit I
Containment Liner Plate
File: 83-019-026
D.4.33.2

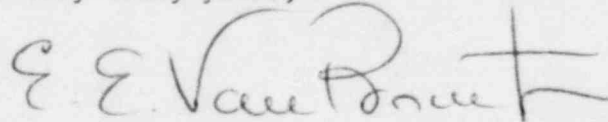
Reference: (A) Telephone Conversation between J. Eckhardt and
G. Duckworth on September 24, 1982
(B) ANPP-22092 dated October 25, 1982 (Interim Report)
(C) ANPP-22585 dated December 22, 1982 (Time Extension)
(D) Letter to APS From G. W. Knighton, USNRC-Washington, D.C.,
dated February 4, 1983.

Dear Sir:

The NRC was notified of a potentially reportable deficiency in Reference (A), an Interim Report was transmitted by Reference (B), and a Time Extension was requested by Reference (C). At that time, it was estimated that a Final Report would be available by February 25, 1983.

In response to NRC's request in Reference (D) for additional information, a revised Interim Report is attached. Due to the extensive investigation and evaluation required, it is now expected that this information will be finalized by March 31, 1983, at which time a complete report will be submitted.

Very truly yours,



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

EEVBjr/GHD:db

Enclosure

cc: See Attached Page 2

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

George W. Knighton, Chief
Licensing Branch No. 3
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Washington, D. C. 20555

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INTERIM REPORT - REVISION 1 -DER 82-53
POTENTIAL REPORTABLE DEFICIENCY
ARIZONA PUBLIC SERVICE COMPANY (APS)
PVNGS UNIT 1

I. POTENTIAL PROBLEM

A vane axial fan, Tag No. 1-M-HCN-A01B, installed in the Unit 1 Containment Building experienced blade failure after more than 1,000 hours of operation. The failure resulted in severe damage to the housing, and a blade piece penetrated the containment liner plate, causing a 2" L x 1/2 W rupture. The fan assembly was removed and returned to Joy Manufacturing for examination.

The preliminary investigation has indicated that the blade failures were a result of being loose. The fan blades are cast 17-4PH made by Valcast, the hubs are CA40, and the fasteners which secure the blades to the hub are galvanized steel.

II. APPROACH TO AND STATUS OF PROPOSED RESOLUTION

All similar fans in the Unit 1 Containment Building have been checked for torque and blade angle, and visually for cracks. The results of this investigation indicated additional fans with under-torqued blades and blade settings deviating from specification requirements. These discrepancies have been corrected. These inspections are being conducted by Bechtel's subcontractor, the Waldinger Corporation, and coordinated with a representative from Joy Manufacturing. Bechtel Engineering is coordinating the overall evaluation of this condition with Bechtel's Material and Quality Services and with Joy Manufacturing.

The containment liner plate has been repaired per the disposition of NCR CC-3698. The gouges not penetrating the liner plate were ground clean, filled with weld material and smoothed to the original configuration. To repair the cut penetrating the liner plate, some concrete behind the cut was first removed, a steel bar was fitted to provide a base for welding, and the cut was then filled with weld material and ground flush.

Currently in the process of review is SAR Change Notice 1089, which readdresses the issue of potential missile hazards. As a preliminary evaluation, missiles will now be acknowledged as able to penetrate the containment liner, but the safety of operations will not be affected since liner penetration and LOCA do not have to be considered concurrently.

III. PROJECTED COMPLETION OF CORRECTIVE ACTION
AND SUBMITTAL OF THE FINAL REPORT

The completed evaluation and Final Report are forecast to be completed by 3/31/83, pending receipt of all applicable data by Bechtel Engineering and APS.