

Arizona Public Service Company

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April 27, 1983

ANPP-23605-BSK/RQT REGION V

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

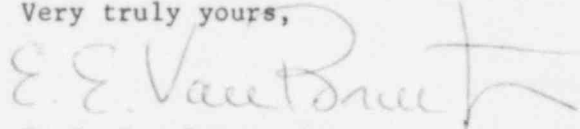
Subject: Final Report - DER 83-4
A 50.55(e) Reportable Condition Relating to
Waldinger Test Procedures For Air Handling Units
Do Not Meet ANSI N510
File: 83-019-026; D.4.33.2

Reference: A) Telephone Conversation between A. D'Angelo and
G. Duckworth on January 28, 1983
B) ANPP-23071, dated February 23, 1983 (Interim Report)

Dear Sir:

Attached is our final written report of the deficiency referenced above,
which has been determined to be Not Reportable under the requirements of
10CFR50.55(e).

Very truly yours,



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

EEVB/RQT:db

Enclosure

cc: See Page 2

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

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FINAL REPORT - DER 83-4
DEFICIENCY EVALUATION 50.55(e)
ARIZONA PUBLIC SERVICE COMPANY (APS)
PSEG UNIT 1

I. DESCRIPTION OF DEFICIENCY

A construction completion test performed by The Waldinger Corporation (TWC) for a safety related portion of the HVAC system was questioned for accuracy. TWC Procedure 10.2-2.4 was used to determine the leakage rate of the Fuel Building HVAC Filter Housing. Acceptance criteria specified for the test was an average leakage rate of not more than 12 SCFM averaged over a ten (10) minute period. However, the calibration range for the test instrumentation was 10.5 - 135 SCFM, producing zero leakage rate readings for true leakage rates between 0 and 10.5 SCFM. The calibration range of the test instrumentation could potentially be incompatible with the specified acceptance criteria.

Other items of concern regarding the subject test were: a thermometer was not used during the test per ANSI N510 (1980) paragraph 6.3.1; no visual inspection was performed per ANSI N510 (1980) paragraph 5.1; instrumentation used did not measure air flow in .05 ft³ increments per ANSI N510 (1980) paragraph 6.3.1; sealant applied to Air Handling Unit (AHU) had no QC.

This Deficiency Evaluation Report was initiated (1) to have Bechtel Project Engineering review this condition and evaluate the Fuel Building HVAC Filter Housing for adequacy and (2) to document a concern that APS would use TWC data in the preoperational test documentation required by licensing commitments.

II. ANALYSIS OF SAFETY IMPLICATIONS

Instrumentation readings of leakage rates for the performed construction completion test showed zero leakage for the entire ten (10) minute test period, indicating the average leakage rate to be something less than 10.5 SCFM. This meets the specified acceptance criteria of 12 SCFM or less (averaged over a ten (10) minute time period). Additionally, APS has completed a separate preoperational testing program. The results of this testing are acceptable. This evaluation concludes that the subject condition is not safety significant; therefore this condition is Not Reportable under the requirements of 10CFR50.55(e).

III. CORRECTIVE ACTION

1. TWC has implemented Revision 1 to procedure FWP 10.2-2.4 (Log No. M598-1888-2) which provides HVAC testing and documentation consistent with ANSI N510 (1980). This procedure has been assigned Status 1 by Bechtel Engineering. The attached ISI-ICMS Arizona Joint Venture No. 1 letter dispositions the concern regarding QC inspection of sealant applied to the AHU, completing the disposition of NCR S-123-1-M.
2. APS operations has implemented Procedure No. 91GT-OXX09, Pressure Decay Method Filter Housing Leak Test, Revision 0, which provides comprehensive testing (requiring no results of previous tests) and documentation in compliance with licensing commitments. This test will be completed for Units 1, 2 and 3.
3. The other items of concern have been investigated, and the following information has been obtained:
 - a. Based upon engineering judgement, a thermometer was not required for the specific tests that were performed. The assumption of isothermal conditions is satisfied based upon a short time period of testing and the fact that the tests were performed indoors.
 - b. A visual inspection was performed by both Bechtel and TWC but not documented.
 - c. Per the attached calibration certificate (Attachment 1), the rated instrument accuracy of one percent (1%) and the total flow for the subject test, renders instrumentation accuracy within the required $.05 \text{ ft}^3$.



Dick Munns Company

LIQUID AND GAS - FLOWMETER CALIBRATION SERVICE

Phone 596-1559

3335 Cerritos Avenue

Los Alamitos, Calif. 90720

IH-2500-017 Rev-14

Certificate

DATE 12-15-82

SUBMITTED FOR CALIBRATION BY Waldinger Corporation
 TYPE OF INSTRUMENT Turbine Meter
 SERIAL NO. ASTRO-1 $\frac{1}{2}$ -1 w/Model 522R3
 MODEL NO. 1 $\frac{1}{2}$ "
 MFGR. Fotter
 RATED ACCURACY 1%
 CALIBRATION INTERVAL 6 months

INDICATED	ACTUAL	REMARKS
C.P.S.	A.C.F.M.	
49	10.50	
60	11.20	Air @ 14.7 P.S.I.A. & 70°F.
73	12.00	
80	12.50	Note: When flow falls below
200	23.30	10.50 C.F.M., meter will indicate
300	32.50	zero flow.
600	64.50	
1260	135.00	

CALIBRATED BY COMPARISON WITH THE FOLLOWING STANDARDS _____
Test unit A-54. N.B.S. Traceability #M-2293.
As per MIL-STD-45662.

ALL INSTRUMENTS USED TO ACCOMPLISH ABOVE CALIBRATION HAVE DIRECT TRACEABILITY TO THE NATIONAL BUREAU OF STANDARDS, WASHINGTON, D. C.

CALIBRATION BY RM/DMAPPROVED BY [Signature]

ISI

INSULATION SERVICES INC.
P.O. Box 7726
Tulsa, OKLA 74105
918-749-3161
Telex 796216

INSULATION CONSULTANTS
& MANAGEMENT SERVICES, INC.
P.O. Box One
Baroda, Michigan 49101
616-422-2112

ICMS

ISI-ICMS ARIZONA JOINT VENTURE NO. 1

December 21, 1982

TO: Mike Jordan, Site Project Manager

FROM: Mark Gaipa, QA/QC Department

Dear Mr. Jordan:

On November 12, 1982, ISI/ICMS was instructed via SWR 208-99, to provide air seals on Air Handling Units HFA J01 and HFB J01 in the Unit #1 Fuel Building. At that time, we were told that the installation would not be considered a quality controlled item.

ISI/ICMS personnel were instructed to reference PWI-059 for installation procedures.


The lot numbers of the caulking material were recorded for future reference but not included in our permanent documentation.

No inspection was performed on the seals, but completion of work was verified by Quality Control.

The number of seals provided are listed below:

1. Fittings - 95
2. Bolts - 90
3. Light Fixtures - 8
4. Conduits - 4

If you need any further information, please contact me.


Mark Gaipa
QA/QC

MG:be