



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

PDR-016

MAY 21 1985

Jerry S. McDevitt, Esquire
Kirkpatrick & Lockhart
1500 Oliver Building
Pittsburgh, PA 15222

IN RESPONSE REFER
TO FOIA-85-264 and
FOIA-85-265

Dear Mr. McDevitt:

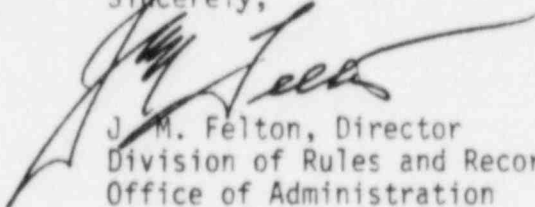
This letter partially responds to your letters dated April 9, 1985, and April 10, 1985, requesting, pursuant to the Freedom of Information Act (FOIA), documents regarding alleged deficiencies with Ruskin dampers. The April 9 letter requests four categories of documents related to these dampers, and the April 10 letter requests NRC inspection reports of any "fix" to the dampers at Palo Verde and Clinton power plants, any internal memoranda on the Ruskin damper problem, and a copy of the response to the FOIA request from the Government Accountability Project (GAP) on the same subject.

During a telephone conversation with you on April 25, 1985, Nita Beeson of our staff informed you that the response to the GAP request, identified as FOIA-85-14, available from the Washington, D.C. NRC Public Document Room, lists the Part 21 and 10 CFR 50.55(e) reports on Ruskin dampers that were available as of January 9, 1985.

Enclosed Appendix A lists, for all categories of records requested, those records available from the PDR with their accession numbers. Enclosed Appendix B lists, for all categories of records requested, those records that we are placing in PDR folder FOIA-85-264 and FOIA-85-265 under your name.

Review of additional records subject to your request has not yet been completed; however, we will notify you upon completion of this review.

Sincerely,



J. M. Felton, Director
Division of Rules and Records
Office of Administration

Enclosures: As stated

Appendix A to FOIA Requests
85-264 and 85-265

<u>Date</u>	<u>Document Description</u>	<u>Accession Number</u>	<u>No. of Pages</u>
04-04-85	Letter from Illinois Power Co. to NRC, Region III, § 50.55(e) deficiency report on Ruskin Dampers	8504180471	3
01-21-80	Letter from Ruskin Mfg. Co. to NRC, IE, Part 21 report on Ruskin Dampers	8010200773	17
01-01-80	Letter from NRC, IE, to DOE transmitting Part 21 report on Ruskin Dampers	8007080067	1

APPENDIX B TO FOIA REQUESTS
85-264 and 85-265

<u>DATE</u>	<u>Document Description</u>	<u>No. of Pages</u>
1. Undated	Listing of 10 CFR 50.55(e) Reports	3
2. 04/05/85	Letter from Arizona Nuclear Power Project (ANPP) to NRC, Reg. V-final DER 85-04 report	5
3. 03/22/85	Inspection Report of Palo Verde Units 1, 2, and 3	19
4. 03/08/85	Letter from ANPP to NRC, Reg. V-Interim DER 85-4	4
5. 03/07/85	Draft Inspection report 99900716/85-01 of Ruskin Manufacturing Company	16
6. 02/07/85	Internal Nuclear Reactor Regulation (NRR) memorandum on Ruskin manufactured fire dampers	7
7. 01/15/85	Telephone report of problem with fire dampers	6
8. 12/14/84	Internal NRR memorandum transmitting evaluation of additional input to Supplemental Safety Evaluation Report 7 and SALP input.	38
9. 12/11/84	Daily 10 CFR 50.55(e) report	1
10. 12/08/84	Letter from ANPP to NRC, Reg. V - Final DER Report 84-56	5
11. 12/04/84	Daily 10 CFR 50.55(e) report	1
12. 11/28/84	Letter from ANPP to NRC, Reg. V - Time extension request for DER Report 84-56	1

APPENDIX B TO FOIA REQUEST
85-264 and 85-265

<u>DATE</u>	<u>Document Description</u>	<u>No. of Pages</u>
13. 11/16/84	Letter from ANPP to NRC, Reg. V - Time extension request for DER Report 84-56	1
14. 10/30/84	Letter from ANPP to NRC, Reg. V - Time extension request for DER Report 84-56	1
15. 09/19/84	Letter from ANPP to NRC, Reg. V - Interim Report 84-56	5
16. 03/29/82	Inspection report of Palo Verde Units 1, 2, and 3	10
17. 09/15/80	Letter from Arizona Public Service Company (APSC) to NRC, Reg. V - final 50.55(e) report for file 80-019-026	4
18. 08/27/80	Letter from Waldinger Corporation to Bechtel Power Corporation on fire dampers (under Subcontract 10407-13-MM-598-HVAC)	3
19. 07/03/80	Letter from APSC to NRC, Reg. V - Interim 50.55(e) report for file 80-019-026	3
20. 04/04/80	Unaddressed letter from Ruskin Manufacturing Co. on vertical spring closure NIBD23 fire dampers	5



Arizona Nuclear Power Project

P.O. BOX 52034 • PHOENIX, ARIZONA 85072-2034

April 5, 1985

ANPP-32326 -TDS/PJC

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

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

Subject: Final Report - DER 85-04
A 50.55(e) Reportable Condition Relating
to Type 'A' Fire Damper Installation
File: 85-019-026; D.4.33.2

Reference: A) Telephone Conversation between L. Miller and T. Bradish on
February 11, 1985.
B) ANPP-32094, dated March 8, 1985 (Interim Report)

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.
Executive Vice President
Project Director

EEVB/PJC/rlm
Attachment

cc: See Page Two

8504240639 (50)

Page 234

5 pp.

21

EE-21

ANPP-32326-TDS/PJC

Mr. D. F. Kirsch

DER 85-04

Page Two

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

D. B. Karner
W. E. Ide
D. B. Fasnacht
A. C. Rogers
L. A. Souza
D. E. Fowler
T. D. Shriver
C. N. Russo
B. S. Kaplan
J. R. Bynum
J. M. Allen
D. Canady
A. C. Gehr
W. J. Stubblefield
W. G. Bingham
R. L. Patterson
R. W. Welcher
H. D. Foster
D. R. Hawkinson
R. P. Zimmerman
M. L. Clyde
M. Matt
T. J. Bloom
D. N. Stover
J. D. Houchen
J. E. Kirby

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

FINAL REPORT - DER 85-04
DEFICIENCY EVALUATION 50.55(e)
ARIZONA NUCLEAR POWER PROJECT (ANPP)
PVNGS UNITS 1,2,3

I. DESCRIPTION OF DEFICIENCY

During a walkdown of the Unit 3 Type "A" fire dampers, it was discovered that the dampers were not installed in accordance with the manufacturer's installation instructions. The dampers are required to be fastened on both sides to the sleeves in which they are installed with either 1/4-20 bolts, No. 10 screws or 1/2-inch long welds. The fasteners are required to be staggered intermittently and spaced 8 inches maximum center-to-center (C-C) for three-hour rated dampers and 12 inches maximum C-C for two-hour rated dampers. These installation instructions comply with Underwriters Laboratory safety standards. Contrary to this requirement, both the three-hour and two-hour Type "A" dampers at PVNGS were fastened on only one side with 1/2-inch long welds spaced 12 inches apart.

The tag numbers of the affected dampers are as follows:

<u>Tag Number</u>	<u>Rating (hours)</u>
HAN-M28A, 28B, 300, 301	3
HAN-M29B, 30A, 130	2
HDA-M03	3
HDB-M03	3
HJA-M64, 67, 69, 70, 71, 101, 102	3
HJB-M20, 65, 67, 68, 71, 103, 105	3
HJN-M30, 32, 102	2
HJB-M17, 18, 104	2
HJN-M23, 43	3
HPN-M01, 2	3
HSN-M101	1
	(same requirements as two-hour rating)
HTN-M31, 32	2

Specification 13-MM-598 requires that the as-installed condition of these dampers be such that their UL rating is maintained. Compliance of the above Type "A" dampers with the UL requirements is indeterminate due to the installed configuration.

The subject dampers are manufactured by Ruskin Manufacturing Company and supplied and installed by The Waldinger Corporation.

EVALUATION

Although the manufacturer had submitted proper damper installation instructions (References 1 and 2), they were not used. Instead the dampers were installed in accordance with Subcontractor Change Request (SCCR) FW-121. This document specified that Type "A" dampers be welded

in place with 1/2-inch welds spaced 12 inches apart. Additionally, the SCCR was unclear as to whether or not both sides of the damper should be welded; i.e., the drawing indicated welds on both sides, but the weld symbol did not. Consequently, the dampers were welded on one side only. The root cause of this condition is attributed to Waldinger's failure to follow certified installation instructions issued by Ruskin and Bechtel's approval of the SCCR without adequate technical justification.

The dampers are required to maintain their integrity for the duration of their hourly rating to control the spread of fire. Failure to perform their intended function could result in the uncontrolled spread of fire through safety-related areas. It has not been determined whether or not the "as-built" configuration would degrade the hourly rating of the subject dampers; this would require extensive evaluation and testing. Therefore, it has been assumed that this condition would impair the safety function of the dampers.

This condition is common to the dampers listed in Section I for Units 1, 2 and 3. The solution of this problem is to fasten the dampers in accordance with the manufacturer's instructions.

II. ANALYSIS OF SAFETY IMPLICATIONS

Based on the above, this condition is evaluated as Reportable under the requirements of 10CFR50.55(e) since, if this condition were to remain uncorrected, it could represent a significant safety condition.

The Project also has evaluated this condition as Reportable under 10CFR Part 21. This report addressed all the reporting requirements of the regulation with the exception of Subpart 10CFR21.21(b)(3)(VI) regarding the number and location of such components supplied to other facilities.

III. CORRECTIVE ACTION

The dampers will be fastened in accordance with the manufacturer's instructions; this will assure the UL certification is maintained. The dampers listed in Section I will be fastened on the side not secured to the sleeve, and the three-hour dampers will receive additional fasteners to comply with the 8-inch C-C spacing. The dampers will be fastened by either welds, bolts or screws, or a combination of the same. The work will be performed under the following documents:

Unit 1 - EER 85-HA-012

Unit 2 - NCR SM-5558

Unit 3 - NCR MJ-2569

The physical work for Unit 1 is complete. Unit 2 and 3 rework will be completed prior to Operating License for each Unit.

Attachment
ANPP-32326-TDS/PJC
Mr. D. F. Kirsch
DER 85-04
Page 3

IV. REFERENCES

1. Ruskin Fire Damper Installation Instructions
Bechtel Log No. M598-89
2. Ruskin Fire Damper Installation Instructions
Bechtel Log No. M598-2024



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION V

1450 MARIA LANE, SUITE 210
WALNUT CREEK, CALIFORNIA 94596

MAR 22 1985

Docket Nos. 50-528, 50-529 and 50-530

Arizona Public Service Company
P. O. Box 21666
Phoenix, Arizona 85036

Attention: Mr. E. E. Van Brunt Jr.
Vice President, Nuclear Production

Gentlemen:

Subject: NRC Inspection of Palo Verde Units 1, 2, and 3.

This refers to the inspection conducted by Messrs. G. H. Hernandez and J. R. Ball of this office during the period December 1, 1984 - January 31, 1985, of activities authorized by NRC License Number NPF-34 and Construction Permit Numbers CPPR 142 and 143, and to the discussion of their findings with you and members of your staff at the conclusion of the inspection.

Based on the results of this inspection, it appears that one of your activities was not conducted in full compliance with NRC requirements, as set forth in the Notice of Violation, enclosed herewith as Appendix A. This violation concerns an apparent failure of the HVAC contractor to comply with welding requirements as specified by approved drawing documents. The apparent failure of the welds to comply with procedural and code requirements brings into question whether sufficient contractor management and oversight controls existed at the HVAC contractor during the period the components were fabricated. Please provide your response to the Notice of Violation, including any additional steps or corrective action that you have taken to assure that HVAC contractor welding inspectors were properly qualified, and to assure that other components fabricated during this period complied with design requirements.

Your response to this Notice is to be submitted in accordance with the provisions of 10 CFR 2.201 as stated in Appendix A, Notice of Violation.

In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and the accompanying Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

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MAR 22 1985

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

151
D. F. Kirsch, Acting Director
Division of Reactor Safety and
Projects

Enclosure:

- A. Appendix A, Notice of Violation
- B. Inspection Report Nos: 50-528/85-01
50-529/85-01
50-530/85-01

cc w/enclosure:

J. R. Bynum, APS
S. R. Frost, APS
T. D. Shriver, APS
W. E. Ide, APS
C. N. Russo, APS
J. Morrison
L. Bernabei, GAP
A. C. Gehr, Esq. Snell & Wilmer

bcc: RSB/Document Control Desk (RIDS)
Resident Inspector
Mr. Martin

RV *[Signature]*
GHernandez:dh
3/7/85

[Signature]
GBall
3/7/85

[Signature]
LMiller
3/7/85

[Signature]
AChaffee
3/14/85

[Signature]
AJohnson
3/14/85

[Signature]
DKirsch
3/17/85

APPENDIX A

NOTICE OF VIOLATION

Arizona Public Service Company
P. O. Box 21666
Phoenix, Arizona, 85036

Docket Nos. 50-528 and 50-529
NRC License No. NPF-34 and
Construction Permit No. 142

As a result of the inspection conducted on December 1, 1984 - January 31, 1985, and in accordance with NRC Enforcement Policy, 10 CFR Part 2, Appendix C, the following violation was identified:

10 CFR 50, Appendix B, Criterion V, as implemented by Section 17 of the FSAR, states in part that, "Activities affecting quality shall be prescribed by documented instructions, procedures or drawings... and shall be accomplished in accordance with these instructions, procedures or drawings."

CTI-Nuclear Drawing No. 10407-M721B-582-4, Section 11.1, Sketch No. 31254, Revision K, calls out (in Detail No. 5) full penetration welds on stiffener connections located on the Control Room Essential Air Handling Units, and, in Section No. AA, calls for full penetration welds on the plate to plate welds of the same units.

Contrary to the above, the stiffener connections on the Air Handling Units for Units Nos. 1 and 2, did not have full penetration welds, as required. Additionally, portions of the required full penetration plate-to-plate welds on Air Handling Unit No. 2-M-HJA-F04 (Unit No. 2) were not fully welded in some areas. The plate-to-plate welds on 2-M-HJA-F04 were not fully welded for a total of 6 inches on the top north side and 4 inches on the top south side of the unit.

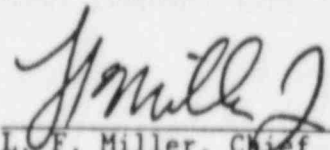
All welding identified above was inspected and accepted by Quality Control Inspectors of the Waldinger Corporation (TWC) for Unit No. 1, on October 12, 1982, and for Unit No. 2, on or before October 3, 1979.

This is a Severity Level IV Violation (Supplement II).

Pursuant to the provisions of 10 CFR 2.201, Arizona Public Service Company, is hereby required to submit to this office within thirty days of the date of this Notice, a written statement of explanation in reply, including: (1) the corrective steps which have been taken and the results achieved; (2) corrective steps which will be taken to avoid further items of noncompliance; and (3) the date when full compliance will be achieved. Consideration may be given to extending your response time for good cause shown.

MAR 22 1985

Dated


L. F. Miller, Chief
Reactor Projects Section No. 2

8504110499 (1P)

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report Nos: 50-528/85-01, 50-529/85-01, 50-530/85-01

Docket Nos: 50-528, 50-529, 50-530

License No: NPF-34

Construction Permit Nos: CPPR-142 and 143

Licensee: Arizona Public Service Company
P. O. Box 21666
Phoenix, AZ. 85036

Facility Name: Palo Verde Nuclear Generating Station Units 1,2,3

Inspection Conducted: December 1, 1984 - January 31, 1985

Inspectors:

G. H. Hernandez, Senior Resident Inspector

3-14-85
Date Signed

J. R. Ball, Resident Inspector

3-14-85
Date Signed

Approved By:

L. F. Miller, Chief
Reactor Projects Section No. 2

3-14-85
Date Signed

Summary:

Inspection from December 1, 1984 - January 31, 1985
(Report Nos. 50-528/85-01, 50-529/85-01, and 50-530/85-01)

Areas Inspected: A routine, onsite inspection by the Construction Resident Inspectors of activities related to the following:

Unit One: Review and close out of licensee-issued Deficiency Evaluation Reports (DERs), NRC open items (Notice of Violation 50-528/84-38-04, Notice of Deviation 50-529/84-08-04, and Unresolved Item 50-529/84-08-03), NRC Information Notice 84-30, and an allegation related to Unit 1 Reactor Vessel studs.

Unit Two: Examination of the Reactor Vessel installation and concrete, and containment steel liner records.

Unit Three: Observation of work related to electrical cable pulling and installation.

Independent inspection was also performed on Units 1 and 2.

50-528/85-01-1699

The inspection involved 374 inspector hours on site by two NRC Resident Inspectors.

Results: In the areas inspected, one violation was identified. The licensee failed to assure that welding on HVAC units complied with drawing requirements (see paragraph No. 8).

DETAILS

1. Persons Contacted:

a. Arizona Public Service Company (APS)

*E. E. Van Brunt, Vice President, Nuclear Production
J. R. Bynum, Plant Manager
*W. E. Ide, Corporate Quality Assurance Manager --
*D. B. Fasnacht, Nuclear Construction Manager
W. F. Quinn, Licensing Manager
*C. N. Russo, Quality Assurance Audits/Monitoring Manager
R. J. Burgess, Field Engineering Supervisor
E. C. Sterling, Configuration Control Supervisor
R. J. Kimmel, Transition Engineer
R. L. Hamilton, Quality Monitoring Supervisor
*T. S. Bloom, Licensing Engineer
W. D. Roman, Lead Operations Engineer
W. L. Bichlmeir, Operations Engineer
A. T. Ramey, Quality System Supervisor
N. C. Hallas, Quality Engineer
*J. Y. Morita, Licensing Engineer
*R. J. Kimmel, Transition Representative
*W. W. Montefour, Quality Assurance Engineer

b. Bechtel Power Corporation (Bechtel)

*W. J. Stubblefield, Project Manager
S. M. Nickell, Project Superintendent
J. Black, Chief Resident Engineer
R. Randel, Startup/Operations Resident Engineer
D. Freeland, Pipe and Pipe Support Resident Engineer
*D. R. Hawkinson, Project Quality Assurance Manager
*H. D. Foster, Project Quality Control Engineer
*T. L. Horst, Project Field Engineer
R. H. Roehn, Lead Quality Assurance Engineer

*Denotes personnel attending the NRC Exit Management Meeting conducted on February 1, 1985.

The inspectors also talked with other licensee and contractor personnel during the course of the inspection.

2. Plant Status

a. Unit One:

On December 31, 1984, Unit No. 1 was granted an operating license. Fuel loading started on January 7, 1985, and completed on January 11, 1985. At the end of the inspection the Unit was in Mode 5 while preparations were made to enter Mode 4.

Unit Two:

Unit 2 has a scheduled fuel load date of December, 1985.

Construction completion of Unit 2 was estimated at 99.5% by the licensee.

Unit Three:

- -

All major components and equipment have been installed. The major activity ongoing is the installation of electrical cable and instrumentation terminations, which is estimated at 80% complete.

Unit 3 has a scheduled fuel load date of March, 1987.

Construction completion of Unit 3 was estimated at 94.6% by the licensee.

3. Followup on NRC Notice of Violation - Unit 1

(Closed) Notice of Violation No. 50-528/84-38/04 "Failure to Comply With Training Requirements for Resident Engineers".

The inspector had previously identified that 30 out of 160 Bechtel project engineers did not have training records to substantiate compliance with training procedural requirements. The licensee's investigation determined that, based on interviews conducted with resident engineers, all but two of the engineers had previous experience on other Bechtel projects. All engineers had sufficient on-the-job familiarity with their work assignments for the inspector to conclude that the training had been completed, though not formally documented. Further, the licensee has revised engineering training procedures to ensure that any individual who has not completed the requisite training within 30 days is immediately identified to engineering management. The licensee attributed this violation to an omission in the job site Quality Assurance Schedule wherein resident engineering was not specifically identified in the audit schedule. The licensee has now modified the audit schedule to include resident engineering training, and other aspects of resident engineering which had been previously omitted.

Based on the licensee's corrective action as indicated above and the inspector's examination of the licensee's stated actions, this violation is closed.

4. Followup on NRC Notice of Deviation - Unit 2

(Closed) Deviation No. 50-529/84-08/04 "Failure to Qualify Sealant for Use as a Gasketing Material on Heating, Ventilating, and Air Conditioning (HVAC) Ducts."

The licensee's response to the Notice of Deviation was provided to the NRC by letter dated May 9, 1984. The licensee's response outlined the corrective measures taken to prevent recurrence of the discrepancy, and

the date when all action taken by the licensee was completed. Additionally, on May 10, 1984, the licensee issued a potential construction deficiency report [Deficiency Evaluation Report (DER) No. 84-37] in accordance with 10 CFR 50.55(e) on the use of unauthorized sealants which were not environmentally qualified.

Based on the inspector's examination of the licensee's corrective actions as related to DER No. 84-37 and the inspector's findings, as discussed in paragraph 7c of this report, this item is closed.

5. Followup on NRC Identified Unresolved Items - Unit 2

(Closed) Unresolved Item No. 50-529/84-08-03 "Use of Duct Sealant on a Gasketed Heating, Ventilating and Air Conditioning (HVAC) Duct Joints" Without Qualifying the Sealant for Harsh Environments

In NRC Inspection Report No. 50-529/84-08, the inspector identified the use of unauthorized sealants in HVAC ducts, including the metal to gasket seal. This NRC inspection report also contained a Notice of Deviation on the failure of the licensee to environmentally qualify sealants in accordance with FSAR commitments.

Subsequent to the issuance of the NRC inspection report, the licensee reported to the NRC a potential construction deficiency [Deficiency Evaluation Report (DER) No. 84-37] in accordance with the requirements of 10 CFR 50.55(e). This report addressed the use of unauthorized sealants which were not environmentally qualified.

Based on the inspector's examination of the licensee's corrective actions as related to DER No. 84-37, and the inspector's findings, as discussed in paragraph 7c of this report, this item is closed.

6. Licensee Action on NRC Information Notice 84-30 - Units 1, 2 and 3

(Closed) Information Notice No. 84-30, "Potential Deficiencies Related to the Construction of Safety-Related HVAC Units by the Bahnson Company"

Discussion with licensee personnel indicated they had responded to this NRC Information Notice by letter dated July 31, 1984, wherein, they indicated that six Bahnson units were received on site, that two HVAC units were currently installed in Unit 2, and four HVAC units were installed in Unit 3. Due to the potential welding deficiencies described in the Information Notice, the licensee instituted a special program to examine the six Bahnson units. The licensee's special program was in progress at the time of the inspection.

To assure that the other HVAC units installed in Units 1 and 2 did not have similar discrepancies, the inspector examined four HVAC units in Unit 1, and two HVAC units in Unit 2. These were manufactured by CTI-Nuclear (Bahnson Company was a subcontractor to CTI-Nuclear). The inspector found a number of welding discrepancies with these units. Subsequent investigation determined that the HVAC units were shipped in sections and then welded on site by the Waldinger Company (TWC). The

welding discrepancies identified with these units are discussed further in paragraph No. 8 of this report.

Based on the licensee's program for examining the Bahnson manufactured HVAC units, the inspector concluded that the licensee's actions were appropriate for addressing the deficiencies identified in the NRC Information Notice on Bahnson manufactured HVAC units.

This item is closed. - -

7. Licensee Action on 10 CFR 50.55(e) Construction Evaluation Reports (DERs) - Units 1, 2 and 3

The following 50.55(e) reports were reviewed by the inspector for reportability, and to determine the thoroughness of the licensee's corrective action.

a. (Closed) DER No. 84-13, "Heating, Ventilating and Air Conditioning (HVAC) Acceptance Criteria"

On March 13, 1984, the licensee reported a potential construction deficiency, in accordance with the requirements of 10 CFR 50.55(e), wherein a licensee examination of The Waldinger Corporation's (TWC) installed HVAC ducts determined that, due to insufficient detail on design drawings, and the incorrect interpretation of the drawings by TWC, a number of HVAC ducts' supports were found to not comply with the seismic acceptance criteria.

On December 12, 1984, the licensee submitted their final report on this deficiency, describing the safety implications and their corrective actions.

The inspector reviewed the documentation related to this identified discrepancy, and determined that the licensee had initiated a walkdown of all accessible safety-related, important to safety, and potentially hazardous condition duct supports (non-safety-related over safety-related duct supports). The non-accessible duct supports were defined as those supports that could not be inspected due to the covering of fire-proofing material. However, the licensee's inspection results concluded that, because of the small percentage (2.8%) of duct supports found to require rework, a high confidence existed that the non-inspected duct supports would perform as intended. Additionally, the type of rework performed tended to be very minor in nature for the rework supports.

Subsequent to this finding, the licensee revised all design drawings to ensure that sufficient details existed to prevent improper installation and misinterpretation of the drawings by the installers.

The inspector reviewed the documentation related to this deficiency, the revised drawings, and examined a number of the

reworked duct supports. The inspector found that the licensee's action appeared to properly address the safety concern, and sufficient action had been taken to prevent recurrence of the discrepancy. The licensee is following this item for Units 2 and 3, through Design Change Package Nos. 2SM-HF-014 and 3SM-HF-014, respectively.

This item is closed.

--

- b. (Closed) DER No. 84-31, "Unsealed Piping Penetrations in the Main Steam Support Structure (MSSS)".

On May 17, 1984, the licensee reported a potential construction deficiency, wherein, contrary to design requirements, 14 piping floor penetrations, in the Unit No. 1 Main Steam Support Structure (MSSS) were found to be unsealed.

On July 12, 1984, the licensee submitted their final report which described the deficiency, the safety implications, and their corrective actions.

The inspector reviewed the documentation related to this identified discrepancy. It indicated that unsealed floor penetrations at elevation 100 feet could expose the Auxiliary Feedwater (AFW) pumps to environmental conditions (flooding) for which the pumps had not been qualified, and therefore the operability of the pumps could not be assured.

At the end of the inspection, only four of the 14 penetrations had not been sealed. Work on these four penetrations had not been completed due to the unavailability of sealing material. The licensee has stated that work on these four penetrations will be completed prior to March 1, 1985. Additionally, the licensee has conducted a walkdown of other below grade penetrations to assure that a generic condition does not exist. No other penetrations were found to have a flooding potential for the AFW pumps. The licensee has issued Design Change Package Nos. 2SA-ZM-011 and 3CA-ZM-011 to insure that the required seals are installed in Unit Nos. 2 and 3.

Based on the licensee's actions with respect to the sealing of the ten floor penetrations, and the other corrective actions, as stated above, this item is closed. However, the inspector will follow the licensee's program for the sealing of the remaining four penetrations to assure compliance with the licensee's stated actions. (O/I 50-528/85-01-01)

This item is closed.

- c. (Open) DER No. 84-37, "Unqualified Heating, Ventilating and Air Conditioning (HVAC) Sealant"

On May 10, 1984, the licensee reported a potential construction deficiency, wherein unqualified sealants were found to have been

used by the HVAC contractor to reduce leakage in HVAC ducts. The licensee identified 21 different types of sealants which were available for use by the HVAC contractor, and over one-hundred locations in Units 1, 2, and 3 where unauthorized sealants were used.

The licensee submitted their final report on December 17, 1984, describing the deficiency, the safety implications, and their corrective actions.

The inspector reviewed the documentation related to this identified discrepancy, and determined that the licensee has submitted the 21 sealants to an environmental qualification program consisting of aging, elasticity, leakage tests, and radiation exposure analysis. A testing laboratory was in the process of qualifying all 21 sealants to a 40 year life. All sealants had been previously qualified to a 5 year life.

This item will remain open until the inspector can review the laboratory report on the qualification of the sealants for 40 years.

d. (Closed) DER No. 84-56, "Fire Dampers Fail to Close Consistently"

On May 10, 1984, the licensee reported a potential construction deficiency wherein a number of vertically and horizontally mounted fire dampers would not fully close in accordance with design requirements.

On December 8, 1984, the licensee submitted their final report, describing the deficiency, the safety implications and their corrective actions.

The inspector reviewed the documentation related to the identified discrepancy. It indicated that the two primary causes for the failures were the interference of the electrothermal link (ETL) conduit for horizontal and vertical dampers, and a weak "negator" spring for horizontal dampers. The electrothermal link is the fusible link in the damper which melts upon a signal from the Fire Control Panel. The licensee issued Design Change Packages to modify the dampers. These included removing the ETL conduits from horizontal and vertical dampers, and the addition of a stronger negator spring for the horizontal dampers. On December 20, 1984, the licensee tested the dampers, but one damper failed to close as required. At the end of the inspection, the licensee had corrected the problem with the damper (interference with the ETL conduit), and planned to retest the damper during the first week of February.

Based on the licensee's corrective actions as stated above, this item is closed.

- e. (Closed) DER No. 84-93 "Missing Seismic Rails in Control Panel No. B05"

On November 9, 1984, the licensee reported a potential construction deficiency, wherein, contrary to design requirements, the CPC/CEAC operator modules on main control panel No. B05 were found to have no support rails installed.

On December 8, 1984, the licensee submitted their final report which described the deficiency, the safety implications and their corrective actions.

The inspector reviewed the documentation related to the identified discrepancy and determined that the panel vendor (Comsip-Customline) failed to incorporate the required support rails in panel No. B05 for Units 1, 2 and 3. All other panels had the required support rails. On December 19, 1984, the inspector examined panel No. B05 in Unit No. 1 and found that the support rails were installed, as stated by the licensee in their final report on this subject, dated December 8, 1984. The licensee has issued Design Change Package Nos. 2SJ-RM-800 and 3CJ-RM-800 to install the support rails in Unit Nos. 2 and 3.

This item is closed.

- f. (Closed) DER No. 84-99, "Improper Mounting of Regenerative Heat Exchanger"

On November 30, 1984, the licensee reported a potential construction deficiency, wherein the upper support bracket bolt holes for the Regenerative Heat Exchanger had been modified such that the design thermal expansion of the heat exchanger had been precluded. This condition was determined by the licensee to possibly induce stresses beyond design allowables.

The licensee submitted their final report on December 14, 1984, which described the deficiency, the safety implications, and their corrective actions.

The inspector reviewed the documentation related to the identified discrepancy, and determined that on December 10, 1984, the mounting brackets had been reworked to comply with design requirements. On December 20, 1984, the inspector verified the licensee's corrective actions. The inspector determined that this condition was unique to the Unit 1 Regenerative Heat Exchanger upper mounting brackets.

Based on the licensee's actions as described above, this item is closed.

- g. (Closed) DER No. 103, "Diesel Generator Building Roof Hatches".

On December 13, 1984, the licensee reported a potential construction deficiency, wherein Diesel Generator Building roof

hatches were determined to have the potential for lifting off and possibly damaging safety-related equipment during postulated high winds or tornados.

The licensee submitted their final report on December 14, 1984, describing the deficiency, the safety implications, and their corrective actions.

Discussions with licensee representatives determined that due to the heavy weight of the roof hatch covers (approximately 11,000 pounds each), the original engineering design omitted the consideration of the roof hatches lifting during high winds and tornado conditions. Subsequent calculations indicated the possibility exists that the roof hatches could lift during postulated conditions. The inspector reviewed the documentation related to the identified discrepancy, and determined that on December 20, 1984, the roof hatches were provided with restraints to prevent uplift during postulated situations. The inspector examined the welding, bolting, and the configuration of the restraints, and verified conformance with the design package. The licensee has issued Design Change Package Nos. 2CC-ZG-800 and 3CC-ZG-800 to install the restraints in Unit Nos. 2 and 3.

Based on the licensee's actions as stated above, this item is closed.

8. Independent Inspection - Units 1 and 2

- a. During the inspection related to Information Notice 84-30 (see paragraph No. 6), the inspector found that HVAC units installed in Unit Nos. 1 and 2 did not conform to welding requirements as specified by code and drawing requirements. The inspector found the HVAC units had been shipped in sections and welded together on site by the HVAC contractor. The HVAC contractor was the Waldinger Corporation (TWC).

On December 18, 1984, the inspector found that contrary to drawing No. 10407-M721B-582-4, Section 11.1, Sketch 31254, Revision K, and the AWS code, the Unit 1 Control Room Essential Air Handling Units Nos. 1-M-HJA-F04 and 1-M-HJB-F04 had 16 areas where partial penetration welds had been installed, instead of the required full penetration welds. The full penetration welds are required at stiffener to stiffener connection, the plate-to-plate connection and the intersection between these connections. Subsequent to this finding, the licensee issued an Engineering Evaluation Request (EER) No. 84-HJ-010, to address the identified discrepancies. On January 3, 1985, the licensee's engineering evaluation determined that based on calculation No. 13-CC-ZJ-086, the welds could be accepted-as-is, and the welds would perform their intended function.

On January 29, 1985, the inspector examined the Unit 2 Control Room Essential Air Handling Units Nos. 2-M-HJA-F04 and 2-M-HJB-F04. The inspector found that for Air Handling Unit No.

2-M-HJA-F04, the stiffener to stiffener connections and the plate-to-plate connections beneath the stiffener to stiffener connections did not have full penetration welds as required. The plate-to-plate welds were not fully welded for a total of six inches on the top north side of the unit and four inches on the top south side of the unit. Stiffener to stiffener connections on Air Handling Unit No. 2-M-HJB-F04 were also found not to have full penetration welds as required. These welds were inspected and accepted by Quality Control Inspectors of the Waldinger Corporation (TWC) for Unit 1 on October 12, 1982, and for Unit 2, on or before October 3, 1979.

The inspector did not examine the four Air Handling Units in Unit 3 and the other two Air Handling Units in Unit 2 because these units were manufactured by the Bahnson Company and as stated in paragraph 6, the licensee had established a program to identify and correct any deficiencies in these units.

Although the licensee had been made aware of the inspector's findings with the Air Handling Units in Unit 1, the licensee failed to promptly ensure that similar discrepancies did not exist in the other units, apparently because of a problem in transmitting EER No. 84-HJ-010 to Bechtel. This problem is discussed further in item b.

The failure to assure that welding for safety-related Air Handling Units comply with code and drawing requirements is considered a violation of NRC requirements. (NRC Violation No. 50-528/50-529/85-01-02)

- b. Discussion with licensee personnel determined that, although EER No. 84-HJ-010 indicated similar discrepancies might exist in Unit Nos. 2 and 3, the EER was never transmitted to Bechtel for their resolution. The inspector determined that because the licensee's method of transmitting EERs to Bechtel lacked a positive acknowledgement system, the EER coordinator failed to ensure that Bechtel had received the EER and that Bechtel was working on assuring that no similar discrepancies existed in Units 2 and 3. The licensee stated that the EER procedure would be modified to include a positive acknowledgement system for EERs transmitted to other parties.

The inspector will examine changes to the EER procedure during a future inspection to assure that the licensee has complied with their stated intentions. (Follow up Item No. 50-528/85-01-03)

9. Follow-up to Allegation No. RV-85-A-005 - Unit 1

Characterization: The Unit No. 1 Reactor Vessel Head Closure Studs Were Alleged to be Either "Too Soft" or "Too Hard"

On January 22, 1985, John Staggs, a reporter for the Arizona Republic called the NRC resident inspector's office concerning information received from an anonymous source, that indicated that eight to twelve

of the Unit 1 Reactor Vessel closure head studs were either "too soft" or "too hard". The reporter stated that he had also called Arizona Public Service (APS) on this matter and APS was currently investigating this allegation.

Implied Safety Significance to Plant Design, Construction, or Operations:

The failure of the Reactor Vessel closure head studs could result in placing the Reactor in an unanalyzed accident condition.

Assessment of Safety Significance:

The inspector, in order to resolve this allegation examined all drawings, material certifications, NDE records, nonconformance reports, and the applicable code requirements related to the Reactor Vessel head closure studs. The inspector found that all fifty-four closure studs met the physical, chemical and hardness requirements, as required by the 1971 Edition of the ASME Code Section II and III, with addenda through Winter 1973.

Staff Position

The allegation was not substantiated and is closed.

10. Electrical Cable Pulling - Unit 3

The inspector observed the pulling of ten 600 volt control cables from the Unit No. 3 Auxiliary Building, to the Control Building Safety Equipment Status System Cabinet. The cable pull was observed by the inspector to ascertain compliance with Specification Nos. 13-EM-300 and 301, and WPP/QC1 No. 254.0 requirements. The inspector noted the cable card was properly filled out and quality control inspectors were present throughout the cable pulling process.

No violations of NRC requirements were identified.

11. Review of Quality Records - Unit 2

a. Structural Concrete

1) Areas Examined:

The inspector examined the quality records associated with 25 concrete placements for the Unit No. 2 containment building exterior walls and dome. This inspection included review of completed construction inspection plans (CIP's) for preplacement, placement and post placement of concrete to determine if the records reflected work accomplishment consistent with specifications and procedures. The inspector also examined material test records including daily aggregate test reports and certified mill test reports for cement supplied during the period in which the concrete was placed. Compression test results and the records of the analysis of

the standard deviation were reviewed to assure that the test coefficient of variation for the particular concrete mix used in these placements was within the code requirements. Additionally the audit records of Engineering Testing Laboratory, the organization that performed this testing, were reviewed.

2) Applicable Specifications and Procedures:

The following is a listing of specifications and Work Plan Procedures/Quality Control Procedures (WPP/QCI) governing the placement of concrete that were reviewed during the course of this inspection:

- ° 13 CM 101 - "Specification for Furnishing and Delivering Concrete."
- ° 13 CM 191 - "Specification for Testing of Concrete Materials."
- ° 13 CM 365 - "Installation Specification for Forming, lacing, Finishing and Curing Concrete."
- ° WPP/QCI 52.0 - "Concrete Preplacement"
- ° WPP/QCI 53.0 - "Concrete Placement"
- ° WPP/QCI 54.0 - "Concrete Post placement"

No violations of NRC requirements were identified.

b. Containment Structural Steel

1) Areas Examined:

The inspector examined the quality records associated with the installation of the Unit 2 containment cylindrical and dome liner plate. This inspection included review of completed construction inspection plans for the 1/4" SA-285 Grade A cylindrical and dome liner plate and the 1/2" SA-516 liner penetration plate. Material certifications for 21 of the 168 containment cylindrical liner plates and 5 of the 17 penetration plates were examined.

2) Applicable Specifications and Procedures:

The following is a listing of specifications and procedures governing the installation of containment cylindrical and dome liner plate which were reviewed during the course of this inspection.

- ° 13 CM 370 - "Containment Building Liner Plate System Installation Specification."

- ° WPP/QCI 61.0 - "Containment Cylindrical Liner Plate Installation."
- ° WPP/QCI 61.2 - "Containment Liner Plate Installation (Dome)."

3) Findings:

The inspector determined that the licensee had not prepared a summary sheet of inspections performed on the containment cylindrical liner plate, or inspections performed on containment liner penetration plates. The licensee was, however, able to produce supporting documentation which indicated that all required inspections had been performed. The licensee committed to prepare the summaries as required.

The inspector will review the completed summaries as a part of a future inspection (Follow up Item No. 50-529/85-01-04).

No violations of NRC requirements were identified.

12. Review of Quality Records - Unit 2:

Reactor Vessel Installation

The inspector reviewed the pertinent records related to the Unit No. 2 Reactor Vessel handling, protection, installation and inspection activities. The inspector assured that quality records indicated that the Reactor Vessel was installed in accordance with specially prepared construction inspection plans, that access was controlled to the reactor vessel, the required cleanliness was maintained and protective devices were installed at all vessel opening.

No violations of NRC requirements were identified.

13. Inspection Tour of Site:

Weekly, the inspector and licensee representatives toured the site to observe general housekeeping conditions, care and preservation of equipment, handling of components, tagging and identification of material.

No violations of NRC requirements were identified.

14. Management Meeting:

On February 1, 1985, the inspectors met with the licensee and Bechtel representatives identified in Paragraph No. 1. The scope of the inspection, the observations, and the findings of the inspectors were discussed. The licensee acknowledged the concerns, and the apparent violation of NRC requirements as identified in paragraph No. 8 of this report.

INSPECTOR'S REPORT
Office of Inspection and Enforcement

REVIEWER
HERNANDEZ, G.H.
MILLER, L.F.

INSPECTOR: **HERNANDEZ, G.H.**
BALL, S.B.

LICENSEE/VENDOR ARIZONA PUBLIC SERVICE	TRANSACTION TYPE	DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (11 digits)	REPORT NO.	REPORT SEC.	MO.	YR.
	<input checked="" type="checkbox"/> - INSERT	05000528	B501	A		
	<input type="checkbox"/> - MODIFY	05000529	B501	B		
	<input type="checkbox"/> - DELETE	05000530	B501	C		
	<input type="checkbox"/> - REPLACE			D		

PERIOD OF INVESTIGATION/INSPECTION	INSPECTION PERFORMED BY	ORGANIZATION CODE OF REGION/HQ CONDUCTING ACTIVITY (See NRC 0530 Manual Appendix - Weekly Workload Reporting "00" codes)
FROM: MO. DAY YR. TO: MO. DAY YR.	<input checked="" type="checkbox"/> - REGIONAL OFFICE STAFF <input type="checkbox"/> - RESIDENT INSPECTOR <input type="checkbox"/> - PERFORMANCE APPRAISAL TEAM	REGIONAL DIVISION BRANCH
12 01 84 01 31 85		5 B

REGIONAL ACTION (Check one box only)	TYPE OF ACTIVITY CONDUCTED (Check one box only)			
<input type="checkbox"/> - NRC FORM 881 <input checked="" type="checkbox"/> - REGIONAL OFFICE LETTER	<input checked="" type="checkbox"/> - SAFETY <input type="checkbox"/> - INCIDENT <input type="checkbox"/> - ENFORCEMENT <input type="checkbox"/> - MGMT. AUDIT	<input type="checkbox"/> - MGMT. VISIT <input type="checkbox"/> - SPECIAL <input type="checkbox"/> - VENDOR <input type="checkbox"/> - MAT. ACCT.	<input type="checkbox"/> - PLANT SEC. <input type="checkbox"/> - INVENT. VER. <input type="checkbox"/> - SHIPMENT/EXPORT <input type="checkbox"/> - IMPORT	<input type="checkbox"/> - INQUIRY <input type="checkbox"/> - INVESTIGATION

INSPECTION/INVESTIGATION FINDINGS (Check one box only)	TOTAL NUMBER OF VIOLATIONS AND DEVIATIONS	ENFORCEMENT CONFERENCE HELD	REPORT CONTAINS 2,780 INFORMATION	LETTER OR REPORT TRANSMITTAL DATE
A B C D <input checked="" type="checkbox"/> X <input checked="" type="checkbox"/> X <input type="checkbox"/> <input type="checkbox"/>	A B C D 0 1 0 1 0 0	A B C D <input type="checkbox"/>	A B C D <input type="checkbox"/>	MO. DAY YR. MO. DAY YR. 01 31 85

MODULE INFORMATION														MODULE INFORMATION													
MODULE NUMBER RSP.										MODULE REQ. FOLLOWUP				MODULE NUMBER RSP.										MODULE REQ. FOLLOWUP			
TYPE	NUMBER	PHASE	MANUAL	CHAPTER	PROCEDURE	NUMBER	LEVEL	PRIORITY	DIRECT INSPECTION EFFORT IN STAFF HOURS EXPENDED THIS INSPECTION	PERCENTAGE COMPLETED TO DATE	STATUS	PHASE	MANUAL	CHAPTER	PROCEDURE	NUMBER	LEVEL	PRIORITY	DIRECT INSPECTION EFFORT IN STAFF HOURS EXPENDED THIS INSPECTION	PERCENTAGE COMPLETED TO DATE	STATUS	PHASE	MANUAL	CHAPTER	PROCEDURE	NUMBER	LEVEL
	530703	B						2																			
	347055	B						I	50	100	C																
	251064	B						I	15	40																	
	592700	B						I	110		T																
	348053	B						I	40	75																	
	292706	B							160		T																
	592701	B						I	120		T																
	350065	B						I	120	100	C																
	592702	B							110																		

3

Contrary to 10 CFE 60, Appendix B requirements welding on safety-related Control Room Essential-Air Handling Units installed in Unit Nos. 1 and 2, did not comply with code and drawing requirements.



Arizona Nuclear Power Project

P.O. BOX 52034 • PHOENIX, ARIZONA 85072-2034

March 8, 1985
ANPP-32094-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: Interim Report - DER 85-4
A 50.55(e) Potentially Reportable Deficiency Relating To
Type 'A' Fire Damper Installation
File: 85-019-026; D.4.33.2

Reference: Telephone Conversation between L. Miller and T. Bradish on
February 11, 1985

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 April 1, 1985, at which time a complete report will be submitted.

Very truly yours,

EE Van Brunt *JSK*
E. E. Van Brunt, Jr.
Executive Vice President
Project Director

EEVB/TRB/nj

Attachment

cc: See Page Two

8503260094 (4PP)
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4PP

(4)
2
IE-27

Mr. D. F. Kirsch
DER 85-4
Page Two

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

D. B. Karner
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D. B. Fasnacht
A. C. Rogers
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D. R. Hawkinson
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D. N. St. r
J. D. Houc en
J. E. Kirbh

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

INTERIM REPORT - DER 85-4
POTENTIAL REPORTABLE DEFICIENCY
ARIZONA PUBLIC SERVICE COMPANY (APS)
PVNGS UNIT 2, 3

I. Potential Problem

Compliance of the Type "A" fire damper installation with the UL requiremetns is indeterminate due to conflict between the installation instructions provided by the manufacturer (Ruskin) and the installation procedures used by the subcontractor (Waldinger Corporation). Ruskin installation instructions require 1-inch welds on 6- to 8-inch centers on both sides of the dampers; Waldinger installed the dampers with the 1/2-inch weld on 12-inch centers on one side only.

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

The complete evaluation and final report are forecast to be completed by April 1, 1985.

MORNING REPORT - REGION V
DATE: FEBRUARY 12, 1985

ITEM OR EVENT

REGIONAL ACTION

INFORMATION ONLY

FACILITY

NOTIFICATION

SOUTHERN CALIFORNIA TELEPHONE CALL
EDISON COMPANY TO LICENSEE
SONGS #3
DN 50-362

THE LICENSEE REPORTED THAT THE GEO ENGINEERING 73
CURIE IR-192 SEALED SOURCE WAS RECOVERED WITHOUT
INCIDENT ON FEBRUARY 8, 1985 (SEE DAILY REPORT OF
FEBRUARY 8, 1985, FOR INITIAL DETAILS). NO EXPOSURES
IN EXCESS OF ANY LIMITS WERE RECEIVED. THE SOURCE WAS
RETURNED TO THE RADIOGRAPHIC CAMERA AND REMOVED FROM
THE SITE BY GEO ENGINEERING.

ARIZONA PUBLIC TELEPHONE CALL FROM
SERVICE COMPANY LICENSEE ON 02/11/85
PVNGS #1,2,3
DN 50-528
50-529
50-530

THE LICENSEE CONTACTED REGION V REGARDING A POTENTIAL
CONSTRUCTION DEFICIENCY REPORT. THE LICENSEE REPORTED
THAT THE COMPLIANCE OF TYPE A FIRE DAMPERS WITH
UNDERWRITER LABORATORY REQUIREMENTS WAS INDETERMINATE
DUE TO INSTALLATION OF THE DAMPERS BY THE SUBCONTRACTOR
(WALDINGER) DIFFERENT THAN THE VENDOR'S (RUSKIN)
SPECIFICATIONS. RUSKIN INSTALLATION INSTRUCTIONS
REQUIRED 1" WELDS ON 4-8" CENTERS ON BOTH SIDES OF THE
DAMPERS, BUT THE DAMPERS WERE INSTALLED WITH 1/2" WELDS
ON 12" CENTERS ON ONE SIDE ONLY. A PART 21 EVALUATION
AND LER APPLICABILITY ARE UNDER REVIEW FOR UNIT 1, AND
A 50.55(E) EVALUATION IS BEING CONDUCTED ON UNITS 2 AND 3.

RESIDENT INSPECTOR
FOLLOWUP PER MC 2512,
2515.

85-04
DER