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April 22, 1985

REGION V

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: Palo Verde Nuclear Generating Station (PVNGS)
Units 1, 2, and 3
Docket Nos. STN 50-528(License No. NPF-34)/529/530
Notice of Violation 50-528/50-529/85-01-02
File: 85-019-026; D.4.33.2

Reference: NRC Inspection Report 50-528,529,530/85-01.
Letter from D. F. Kirsch to E. E. Van Brunt, Jr. dated March 22, 1985.

Dear Sir:

This letter refers to the inspection conducted by Messrs. G. H. Hernandez and J. R. Ball on December 1, 1984 - January 31, 1985. Based on the results of the inspection, one Notice of Violation concerning welding deficiencies in safety-related air handling units was issued to ANPP as described in the reference letter. Our response to this Notice of Violation is provided as Attachment A.

Very truly yours,

E. E. Van Brunt, Jr.
Executive Vice President
Project Director

EEVB/TJB/mb
Attachment

cc: A. C. Gehr (all w/attachment)
E. A. Licitra
R. P. Zimmerman

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ATTACHMENT A

NRC NOTICE OF VIOLATION
50-528/50-529/85-01-02

"10CFR50, 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 on 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. 2M-HFA-F04 (Unit No. 2) were not fully welded in some areas. The plate-to-plate welds on 2M-HFA-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 2, on or before October 3, 1979."

NOTE: The TWC inspection records showed that the welding line item acceptance dates for the above deficient work were March 3, 1979, for Unit 1 and September 20, 1979, for Unit 2.

ATTACHMENT A
(Continued)

I. CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

In response to the condition identified in the violation, The Waldinger Corporation (TWC) conducted a weld-mapping/inspection of all six (6) Air Handling Units (AHU's), two (2) per unit. As a result of these inspections, the following actions were/will be taken:

- Unit 1: EER No. 84-HJ-010 and SDDR No. 3954 were written to document the welding deficiencies on AHU's 1M-HJA-F04 and 1M-HJB-F04. The EER and SDDR were dispositioned "use-as-is". The disposition is supported by Engineering Calculation 13-CC-ZJ-086.
- Unit 2: The deficiencies on the AHU's for Unit 2, 2M-HJA-F04 and 2M-HJB-F04, were documented on SDDR 3989. The repair will be accomplished under SWA No. 15368.
- Unit 3: The deficiencies on the AHU's for Unit 3, 3M-HJA-F04 and 3M-HJB-F04, were documented on TWC NCR's 1140F/III and 1141F/III and will be reworked per their dispositions.

Because the original welding on the AHU's was previously accepted by TWC QC inspectors, Bechtel QC will perform a sample reinspection of the weld-mapping and associated repair/rework, conducted by TWC, on a surveillance basis for Units 2 and 3 AHU's.

An investigation into the cause of the deficiency identified by the NRC was conducted. As a result of previous deficiencies identified by ANPP and the NRC, TWC and/or Bechtel had conducted a reverification of work performed by TWC. It was determined that the reverification activities performed on TWC work prior to April, 1984 did not address the work performed on the AHUs, because it is of a type not normally included within the scope of TWC responsibilities. To provide assurance that no other items of this nature exist, the following actions will be taken:

- A. A review of TWC work scope will be conducted as follows:
- ° TWC will identify various categories of welding and other safety related work (Q and R) performed.
 - ° TWC will perform a sample reinspection of the work in Units 2 and 3 which fall outside the scope of work which has already been reverified. The sample plan will be concurred with by Bechtel Engineering and the ANPP.
 - ° The reinspections conducted by TWC will be verified by Bechtel QC based upon a sample plan provided by Bechtel Engineering and concurred with by the ANPP.

ATTACHMENT A
(Continued)

- ° Deficiencies identified during the reinspection will be documented in accordance with the Project nonconformance system, appropriately dispositioned, and corrected as required.
 - ° Based upon the results of the above actions, Bechtel Engineering will evaluate the need for additional inspections in Units 1, 2, and 3.
- B. Bechtel will ensure that an evaluation of other inspections performed by the inspectors involved in the cited deficiency is conducted. Based upon the evaluation, necessary corrective action will be taken.

II. CORRECTIVE STEPS TAKEN TO PREVENT RECURRENCE

In response to previous deficiencies identified with other Waldinger Corporation (TWC) work, the following corrective actions were taken to improve the awareness of TWC personnel of the importance of following project criteria:

A. Training was conducted which included:

- ° Weld procedures
- ° Inspection criteria/techniques
- ° Acceptance criteria
- ° Quality control in construction
- ° TWC work procedures

The Inspectors, Quality Assurance personnel, and Supervisors have received retraining in such subjects as:

- ° Inspection tooling (M&TE)
- ° New and revised inspection criteria
- ° Specific specification changes directed at the welding program
- ° AWS requirements for welds per drawing symbols
- ° TWC inspection/QC procedures
- ° New and revised inspection checklists

ATTACHMENT A
(Continued)

In addition to the above outlined training, TWC has put more emphasis on their inspectors being AWS certified.

- B. TWC has also implemented the project's weekly "Quality Talks" program for jobsite personnel to further emphasize their commitment to achieving a quality product through knowledge of and adherence to specifications and drawings.
- C. Bechtel has made improvements in the Quality Control (QC) surveillance program for TWC work, such as requiring a Bechtel QC inspection each day "Q" listed work is accomplished. The inspection results are documented on surveillance reports.
- D. Bechtel Quality Assurance (QA) has expanded their audit teams to include appropriate discipline expertise to assist in hardware as well as programmatic reviews during scheduled audits. Additionally, QA has increased their surveillance frequency of TWC and has placed more emphasis on hardware assessment.

The above actions have been successful, based on Bechtel QC surveillances, in improving the overall quality of TWC work. The deficient work, which resulted in the cited deficiency, was completed prior to the implementation of these actions and was therefore not part of work performed under the program described above. Therefore, it has been concluded that the corrective actions described above have been sufficient to avoid further deficiencies.

III. DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

- Unit 1: The EER and SDDR were dispositioned "use-as-is" completing the action for 1M-HJA-F04 and 1M-HJB-F04.
- Unit 2: The repair for 2M-HJA-F04 and 2M-HJB-F04 will be accomplished under SWA 15368 and is expected to be completed by May 1, 1985.
- Unit 3: The rework on 3M-HJA-F04 and 3M-HJB-F04 will be accomplished per the dispositions of TWC NCRs 1140F/III and 1141F/III and is scheduled to be completed during August, 1985.

The overall engineering evaluations are expected to be completed by Bechtel Engineering by September 30, 1985.

