

|   |   |                     |
|---|---|---------------------|
| <b>WEP</b><br>Closure<br>Statement<br>-----<br>Evaluation<br>Report | <u>EMPLOYEE CONCERN GROUP CLOSURE</u>                                     | Page <u>1 of 3</u>  |
|   | POOR QUALITY OF WELDS ON A HANGER<br>INSTALLED IN UNIT 1 SOUTH VALVE ROOM | Date <u>1/09/87</u> |
|   | EC-SP-16  | Revision <u>0</u>   |
|   | WEP Group <u>033</u>  |                     |

Approved \_\_\_\_\_

Date 1/9/87

Reviewed \_\_\_\_\_

A. E. Bradford 1/8/87

Prepared \_\_\_\_\_

[Signature]

Address the following items in the space remaining on this page and on additional pages as needed (see Standard Practice WEP 3.1.10 for specific instructions).

- |   |                |
|---|----------------|
| 1. Employee Concern(s)/Quality Indicator(s) | 5. Findings    |
| 2. Characterization of Issue                | 6. Conclusions |
| 3. Summary                                  | 7. References  |
| 4. Evaluation Methodology                   |                |

1. Employee Concern(s)/Quality Indicator(s) (Reference 7.1)

Employee Concern IN-85-085-001  
 Employee Concern IN-85-085-002

2. Characterization of Issue

Both Employee Concerns reference a problem in which a pipe support (hanger) located at 1H and 11H, Elevation 754 feet 10 inches in the Auxiliary Building South Valve Room, has poor quality welds. The Tennessee Valley Authority (TVA) General Construction Specification G29M (Reference 7.2) states that, "All welds and adjacent base material where applicable shall be free of cracks, overlap, and undercut in excess of...., lack of fusion, incomplete penetration (when full penetration is required), slag, visible porosity, weld spatter, and arc strikes." The American National Standards Institute/American Welding Society (ANSI/AWS) D1.1-84, Structural Welding Code--Steel, Subsection 3.6, "Weld Profiles", describes what is acceptable and/or unacceptable in a weld profile (Reference 7.3).

3. Summary

There are no pipe supports (hangers) located in the area identified by Employee Concerns IN-85-085-001 and IN-85-085-002. It was determined by DOE/WEP walkdown that there are two Protective Devices, PD 07-15 and PD 07-16, located in the general area described by the Employee Concerns. It is believed that one of these PDs was mistakenly identified by the Concerned Individual (CI) as a pipe support (hanger). A DOE/WEP Review of all available documentation shows that all rework and/or repairs were completed as required on Protective

|   |   |                     |
|---|---|---------------------|
| <b>WEP</b><br>Closure<br>Statement<br>-----<br>Evaluation<br>Report | <u>EMPLOYEE CONCERN GROUP CLOSURE</u>                                     | Page <u>2 of 3</u>  |
|   | POOR QUALITY OF WELDS ON A HANGER<br>INSTALLED IN UNIT 1 SOUTH VALVE ROOM | Date <u>1/09/87</u> |
|   | EC-SP-16  | Revision <u>0</u>   |
|   | WEP Group <u>033</u>  |                     |

Devices (PDs) 07-15 and 07-16. Both of these Protective Devices were released from a nonconforming status on July 7, 1982 per NCR 3001R2.

#### 4. Evaluation Methodology

During a Department of Energy Weld Evaluation Project (DOE/WEP) preliminary engineering analysis, it was determined that a walkdown and drawing review would have to be done in order to locate a pipe support at 1H and 11H, Elevation 754 feet 10 inches in the Auxiliary Building South Valve Room. The DOE/WEP Assessment Plan 033 (Reference 7.4) required a one hundred percent (100%) visual examination of the subject welds.

#### 5. Findings

The DOE/WEP performed an extensive investigation which included a walkdown and drawing review. The concerned individual specifically referenced a hanger on a beam W33 x 200 located at 1H and 11H on the vertical welds at Elevation 754 feet 10 inches. A walkdown of the area revealed Protective Devices (PDs) 07-15 and 07-16 but not pipe supports (hangers) (References 7.5). Both Employee Concerns pertain to the same subject of poor quality welds on pipe supports (hangers) located in the Auxiliary Building South Valve Room.

It is the belief of DOE/WEP that the pipe support (hanger) referred to by the CI is one of the two PDs observed in the walkdown. The PDs are not considered by the TVA Office of Engineering to be pipe supports (hangers). Employee Concern IN-85-085-001 states that poor quality weld was observed on a hanger installed two weeks prior to hot functional testing on WBNP Unit 1. A DOE/WEP investigation of reactor system coolant heatup and hot functional testing documentation identified WBNP Unit 1 Test Data Package Transmittals W1.1 and W1.2. Testing included the steam generator system and the reactor coolant system. All heatup and hot functional testing was performed during the time period between May 13, 1983 and August 19, 1983. The PDs 07-15 and 07-16 were installed prior to January 1981. According to the CI, poor quality welds were made on a hanger installed two weeks prior to hot functional testing. The information on the Employee Concern is inconsistent with the information found by DOE/WEP.

The PDs 07-15 and 07-16, along with many others (See NCR 3001 R1), were initially accepted and later found to be unacceptable by TVA. These PDs were repaired, reworked, and released from nonconforming status on July 7, 1982 as documented by Nonconforming Condition Report (NCR) 3001R2 (Reference 7.6).

|   |  |   |
|---|--|---|
| <p><b>WEP</b></p> <p>Closure<br/>Statement</p> <hr/> <p>Evaluation<br/>Report</p> | <p><u>EMPLOYEE CONCERN GROUP CLOSURE</u></p> <p>POOR QUALITY OF WELDS ON A HANGER<br/>INSTALLED IN UNIT 1 SOUTH VALVE ROOM</p> <p>EC-SP-16</p> | <p>Page <u>3 of 3</u></p> <p>Date <u>1/09/87</u></p> <p>Revision <u>0</u></p> <p>WEP Group <u>033</u></p> |
|---|--|---|

6. Conclusions

It is concluded by DOE/WEP that the hanger (support) referenced by the CI was a Protective Device (PD), either PD 07-15 or 07-16. A DOE/WEP review of PD weld reinspection documentation was confined to WBNP Unit 1 Safety-Related PDs contained within the Reactor Building, North Valve Room, and South Valve Room. It was determined that all of the subject safety-related PDs, including PDs 07-15 and 07-16, were repaired and/or reworked as necessary. Inspection records are available for each of the reinspected PDs in the TVA permanent records storage (document control vault).

DOE/WEP considers this group closed.

7. References

- 7.1 Original Employee Concerns as listed in Section 1.
- 7.2 TVA General Construction Specification G29M, Process Specification 3.M.5.1 (R6), Part B, Section B.1.1.
- 7.3 American National Standards Institute/American Welding Society (ANSI/AWS) D1.1-84, Structural Welding Code--Steel, Subsection 3.6.
- 7.4 DOE/WEP Assessment Plan 033, June 13, 1986.
- 7.5 EG&G Idaho Notegram to A. E. Bradford from R. J. Roberts, July 9, 1986.
- 7.6 Nonconforming Condition Report (NCR) 3001 Rev. 2.

1704A