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## Arizona Nuclear Power Project

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

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ANPP-31633-TDS/TRB  
January 4, 1985

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: Response to Notice of Violation (50-528/84-47-01)  
File: 85-019-026; D.4.33.2

Reference: (1) Letter from D. F. Kirsch to E. E. Van Brunt, Jr., dated  
December 5, 1984

Dear Sir:

This letter refers to the inspection conducted by Messrs. W. J. Wagner, R. C. Sorenson, G. Kellund, P. P. Narbut and D. Hollenbach on October 15 - November 2, 1984. Our response to the Notice of Violation is enclosed as Attachment A.

Very truly yours,

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

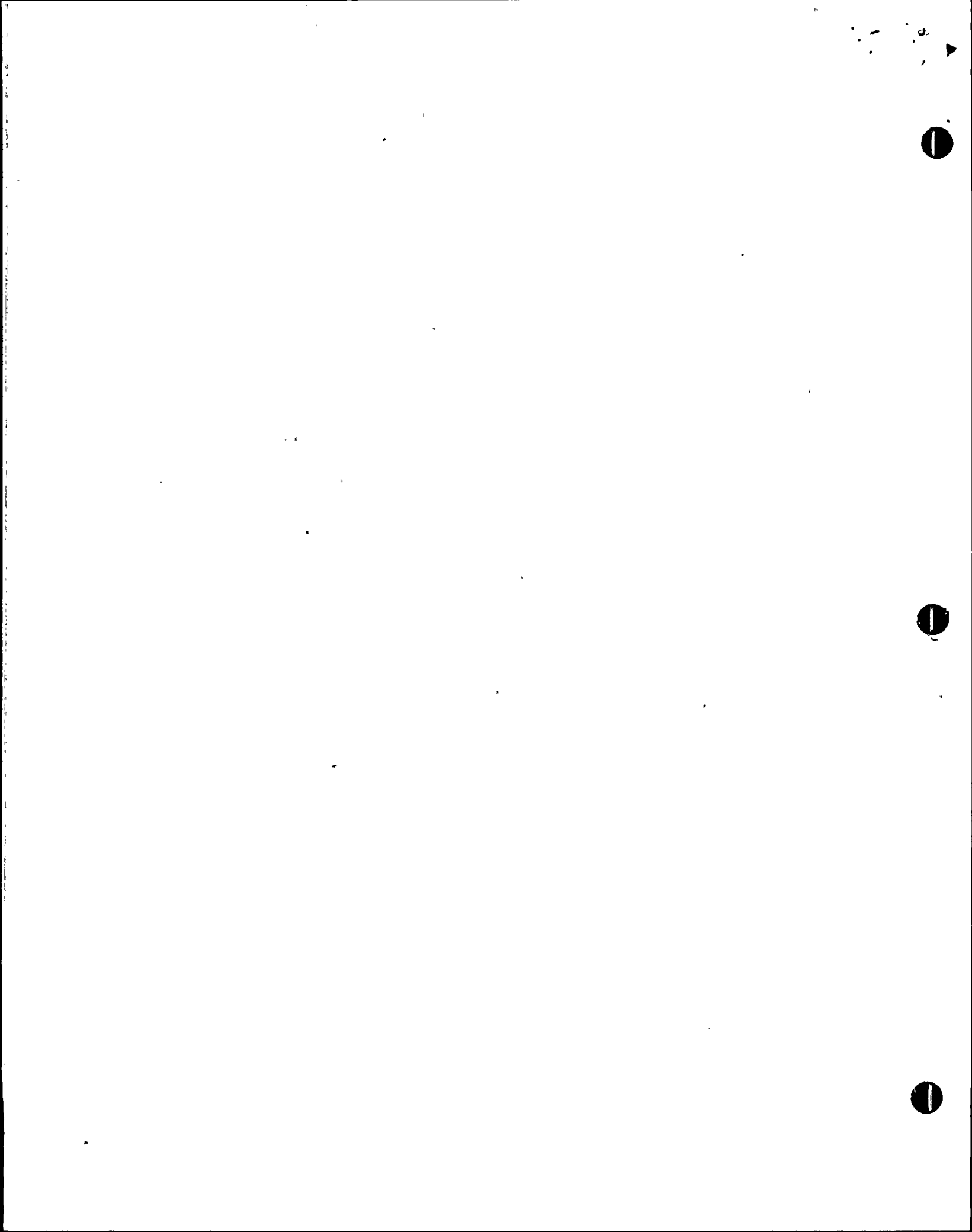
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Attachment

cc: See Page Two

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ATTACHMENT A

NOTICE OF VIOLATION

As a result of the inspection on October 15 - November 2, 1984, 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, Instructions, Procedures, and Drawings, states in part "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings."

Bechtel Pipe Support Assembly Drawing No. 13-AF-005-H-007, Revision 2, dated July 26, 1984, details the pipe support beam attachment welded to the lower beam flange on its north and south sides.

Contrary to the above on October 27, 1984, in Unit 1, the beam attachment was observed to be welded to the lower beam flange on the east and west sides.

This is a Severity Level IV Violation.

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Response to Notice of Violation

I. Corrective Steps Taken and Results Achieved:

The condition identified in the above violation for pipe support 1-AF-005-H-007 was reported on Nonconformance Report (NCR) SM-5204 and Deficiency Evaluation Report (DER) 84-97 as a result of the NRC finding. The deficient condition was the same as was reported on DER 84-38 for 2-AF-005-H-007 in Unit 2. The deficient hanger in Unit 2, documented on DER 84-38, was originally found to be safety significant and therefore reportable based on preliminary analysis. Subsequently, a more indepth analysis was performed. The result, documented in engineering calculation 13-MC-AF-502R, shows that once the capacity of the support has been exceeded, the piping will adequately transfer the loading to the adjacent pipe supports. Both pipe stress levels and the adjacent pipe support loadings are maintained within their allowable limits. Based upon this conclusion, the condition was re-evaluated as not reportable since, if left uncorrected, it would not be a significant safety hazard. However, NCR SM-5204 was dispositioned to add additional weld on the north and south sides of the beam attachment. The work has been completed.

As part of the corrective action identified in the response to the NRC Enforcement Letter and Notice of Violations dated December 12, 1983, (Violations II.B.3 and II.B.4), Bechtel Construction initiated a comprehensive reinspection program established under WPP/QCI 543.0. This reinspection program included 2,199 pipe supports and pipe racks in Unit 1. During this walkdown, approximately 40 deficiencies related to the welding or orientation of rear mounting brackets were reported. The "as-built" calculations indicated that the installed conditions of the above deficiencies were sufficient to carry their respective design loads. It should be noted that the discrepant hanger 1-AF-005-H-007, was not inspected for welding during this inspection.

To provide a similar reinspection program for Units 2 and 3, Bechtel Construction has initiated WPP/QCI 555.0, PCN 1, and WPP/QCI 556.0, PCN 1. This reinspection program will include 1,209 pipe supports per Unit, and will specifically verify weld location, size, and length.

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At this time, approximately one-third (1/3) of the 1,209 supports for Unit 2 have been reinspected. Five hundred nine (509) discrepancies have been reported on NCR PX-8725. A review of the items was made to extract problems reported for a general category of weld location. Forty (40) cases were found with twenty (20) having been dispositioned. Further, the twenty (20) dispositioned items showed eleven (11) cases where the welds for a rear bracket had been made on the sides adjacent to the prescribed locations. All of the cases described above have been dispositioned "use-as-is" based upon engineering calculation.

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Based on the above, it is concluded that no additional inspections, other than those being performed under SCIP's 555.0 and 556.0, will be required unless a problem that could effect safety is discovered. The extensive reinspection program in Unit 1 was adequate to determine the types, severity, and frequency of deficiencies to be expected, and based upon the evaluated acceptance rate, further reinspections are not warranted. In Units 2 and 3, if any safety-significant conditions are identified as a result of the walkdowns, they will be reported and dispositioned in accordance with approved project procedures and the need for additional walkdowns will be reassessed.

The root cause of the deficiency is evaluated to have resulted from (a) the craftsman did not install the pipe support per design drawings and (b) the field engineer and the quality control inspector approved the incorrect installation.

II. Corrective Steps Taken to Avoid Recurrence:

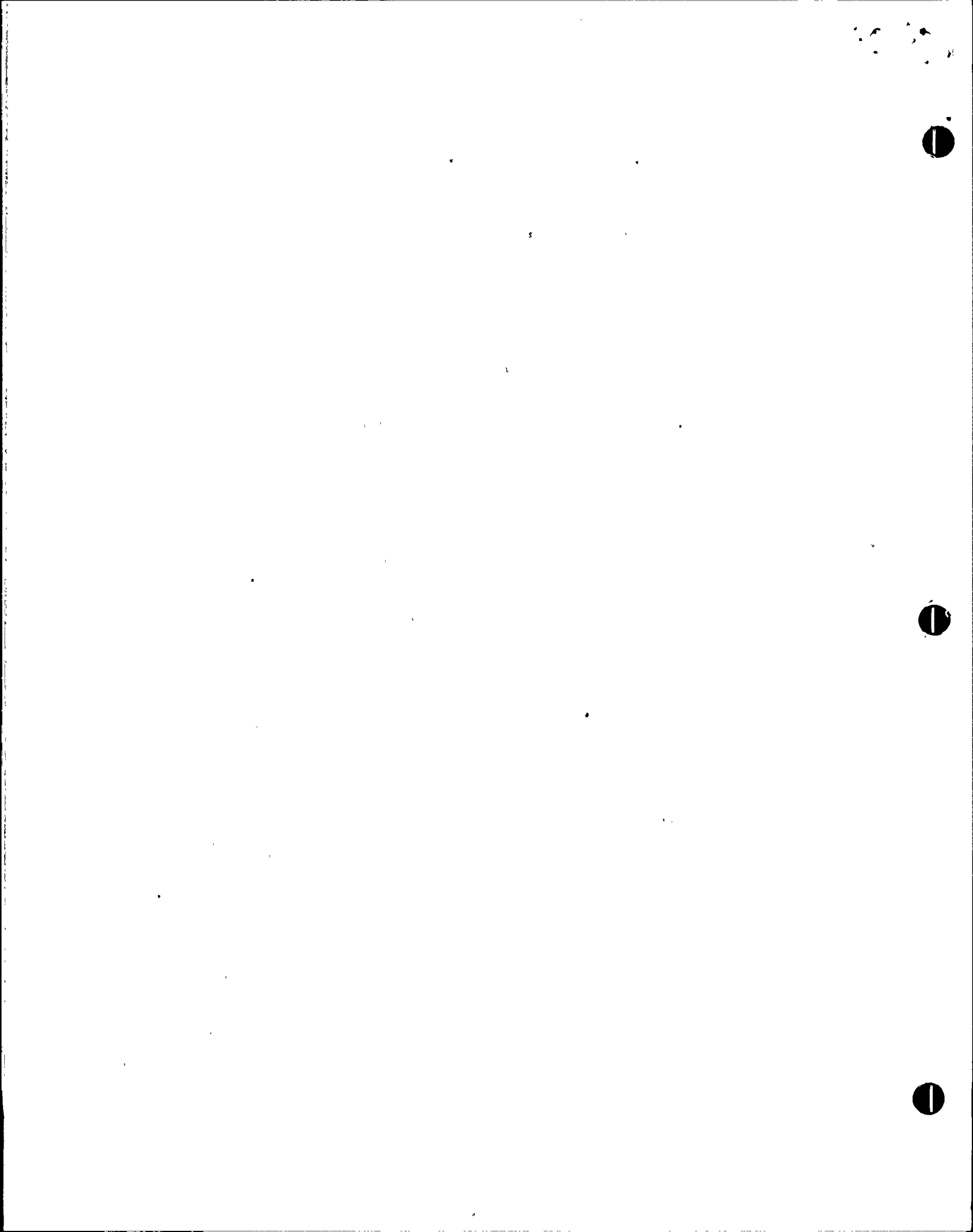
- A. To improve inspection standards in Units 1, 2, and 3, the following training sessions including specialized training by Bechtel's Material and Quality Services (M&QS) on inspection techniques have been conducted with QC and Field Engineering personnel:
1. October 20, 1983 - Instruction of Pipe Support and Welding QCE's by Bechtel M&QS on proper use of fillet weld gauges and on visual weld inspection criteria.
  2. October 27, 1983 - Instruction of Pipe Support and Welding QCE's and Welding FE's by Bechtel M&QS weld gauge for skewed fillet welds.





Attachment A (Continued)  
Page Four

3. December 7, 1983 - Reinstruction of Pipe Support and Welding QCE's by PFQE on weld reinspection acceptance criteria.
  4. December 14, 1983 - Reinstruction of Pipe Support and Welding QCE's by Lead Welding QCE on pipe support accept/reject criteria.
- B. To preclude recurrence of identified conditions and improve and direct the Quality Assurance activity relative to the installation and QC acceptance of pipe supports and other key construction activities, the following Quality Assurance program improvements have been implemented:
1. A Corrective Action Reverification Program has been established by Bechtel Jobsite QA. The purpose of this program is to reverify the effectiveness of previous corrective actions taken for selected quality problems which:
    - a. Were serious enough to have been reported to the NRC (DER's);
    - b. Have a history of recurrence (trends/audit/surveillance CAR's);
    - c. May be generic (Bechtel Power Division's CIDS computer program
  2. The Field QA Surveillance Program has been upgraded to include a selective sampling of QC accepted installations on a monthly basis to continually assess effectiveness of the inspection program in vital areas of pipe supports.
- C. As an additional measure to the earlier inspection training, which was conducted as Corrective Action for the CAT Inspection discrepancies, QC has performed the following additional training sessions:
1. November 2, 1984 - the session objective was to familiarize QCE's with the concerns raised by the NRC regarding the disposition of DER 84-38.
  2. December 20, 1984 - the session objective was to assure QCE's were aware of the conditions identified in DER 84-38 and NCR PC-8290 and to re-affirm the importance of attention to design drawing requirements.



Attachment A (Continued)  
Page Five

III. Date When Full Compliance was Achieved:

Full compliance was achieved with the reworking of pipe support 1-AF-005-H-007 and closure of NCR SM-5204 on November 13, 1984.

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PDR ADOCK 05000528  
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