



**Consumers
Power
Company**

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June 8, 1984

Mr J G Keppler, Administrator
US Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

MIDLAND ENERGY CENTER GWO 7020
MIDLAND DOCKET NOS 50-329, 50-330
MIDLAND PROJECT RESPONSE TO NRC REGION III
LETTER DATED MARCH 7, 1984
File: 0485.15, 0.4.2 Serial: CSC-7783

REFERENCES: 1) RLSpessard letter to JWCook, dated March 7, 1984
2) JWCook letter to JGKeppler, Serial CSC-7566, dated
April 10, 1984

This letter with its attachments provides our response to Reference 1, which was a notice of nine violations and two unresolved items resulting from the NRCs special investigation of HVAC activities at Midland. Attachment 1 addresses the nine violations and one unresolved item that is of the same subject as one of the violations. Attachment 2 addresses the unresolved item that is not related to any of the violations.

James W. Cook

JWC/JGB/WFH/klp

CC: DSHood, NRR Project Manager, Washington
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CONSUMERS POWER COMPANY'S RESPONSE TO
US NUCLEAR REGULATORY COMMISSION, REGION III
INSPECTION REPORT NO. 50-329/83-08 (DE) & 50-330/83-08 (DE)

Appendix (Notice of Violation) to Inspection Report No's. 50-329/83-08 (DE) and 50-330/83-08 (DE) provides items of Noncompliance to 10 CFR 50. The NRC statements and our responses are given below:

(1) NRC STATEMENT

10 CFR 50.55(e)(1) states in part, that, "If the permit is for construction of a nuclear power plant, the holder of the permit shall notify the Commission of each deficiency found in design and construction, which, were it to have remained uncorrected, could have affected adversely the safety of operations of the nuclear power plant at any time throughout the expected lifetime of the plant..."

Contrary to the above, Consumers Power Company did not report the identified Zack material certification record deficiencies in accordance with 10 CFR 50.55(e). The NRC has concluded that sufficient information existed at the time the deficiencies were identified to clearly establish that they did constitute a reportable significant construction deficiency.

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

Related unresolved item from the report, Section I, Paragraph c:

One aspect of this effort encompassed the review of Zack, Bechtel and Consumers Power procedures which govern the identification and evaluation of conditions to determine their significance with regard to the reporting requirements of 10 CFR 50.55(e). Both historical procedures and those in effect today were reviewed to verify their compliance with reporting requirement guidelines. The review indicated that the older procedures were not entirely comprehensive. This very likely contributed to Consumers Power's failure to report the documentation deficiencies in accordance with 10 CFR 50.55(e).

There have been major revisions to the original program and those changes are reflected in today's procedures. A review of the program which is presently in place to assure reporting of significant construction deficiencies identified three salient concerns. Specifically, the inspector is concerned if the program, as structured, will meet the intent of 10 CFR 50.55(e) with regard to (1) prompt (timely) notification, (2) effective and complete evaluation of the condition by qualified individuals and (3) functionally defined interfaces between Consumers Power, Bechtel and their contractors. Pending further review, these matters are considered unresolved. (329/83-08-03; 330/83-08-03). The licensee's assessment of this unresolved item will be requested to be included in their written response to noncompliance item 329/83-08-02; 330/83-08-02.

CONSUMERS POWER COMPANY RESPONSE

In accordance with this Notice of Violation, an explanation of corrective action is as follows:

1. Corrective Action Taken and the Results Achieved:

Consumers Power Company has reviewed and accepted the actions taken by The Zack Company in conjunction with the material certification record deficiencies by (a) reviewing all material certifications used on this Site and (b) auditing the corrective actions taken under Zack's Corrective Action Request (CAR-014).

Consumers Power Company's policy has been to report to the NRC those conditions which have been evaluated and identified as a safety concern or a potential safety concern. We believe that our reporting system has been in compliance with regulations. However, it is recognized, as a matter of judgement, that the NRC in Region III considered several items (such as CAR-014) as reportable or potentially reportable which CP Co did not. The type of items that have the most potential to fall into this category are those for which extensive analysis and effort is required to make a proper determination. In addition, we lacked visibility with regard to ongoing safety evaluations being conducted by Bechtel and B&W. Therefore, we have restructured our program for 50.55(e) reporting and revised our policy as follows:

Potential safety concerns will be tracked with an evaluation via the Consumers Power Company Safety Concern and Reportability Evaluation (SCRE) process, Babcock and Wilcox Preliminary Safety Concern (PSC) or the newly implemented Bechtel Safety Concern Evaluation Report (SCER) process. At the end of ten days, after the issuance of a SCRE or a SCER or after specific notification of a Midland related PSC, a review will be completed and a decision will be made on reportability as follows:

1. Not reportable.
2. Not expected to be reportable, as justified by a Reportability Review Board - Not reported to the NRC.
3. Reportable or potentially reportable. Reported to the NRC.

The review board consists of senior personnel from the following organizations:

Design Assurance Division (DAD) - MPQAD - Chairman
CP Co Engineering - Member
CP Co Licensing - Member
Bechtel Project Engineering - Representative for
Bechtel items only.
B&W Project Engineering - Representative for B&W items only.

Documentation for the review will be maintained in the CP Co files on safety concern evaluations. The review board will periodically review ongoing evaluations to ensure that the nonreportable status remains valid. If at any time during an evaluation or investigation, facts develop which support a "reportable" determination, the individual company's procedural/contractual obligations require processing within the time limits prescribed by law. The program enhancement of a review board provides additional assurance that decisions are made in a timely manner and evaluation conclusions are documented appropriately.

Bechtel Technical Specification M-151-A(Q) has been revised to require the subcontractor (The Zack Company) to notify Bechtel Project Engineering via Corrective Action Request (CAR) when they become aware of a significant safety concern. Zack's construction activities at Midland, in terms of "reportability", are covered by MPQAD Procedures.

The highlights of the improvement to the 50.55(e) reporting system are as noted:

- Enhanced Evaluation Process
- Implemented Bechtel SCER System (Feb 27, 1984)
- Established time limits for reportability
- Established Advisory Board
- Defined interface between Consumers Power Company, Bechtel, and The Zack Company.

It should also be noted that the NRC in Region III is on distribution for Consumers Safety Concern Reportability Evaluation (SCRE) forms. This provides the NRC the opportunity to question specifics if the description of an item causes them any concern.

2. Corrective Action to be Taken to Avoid Further Noncompliance:

- a. Review Past Bechtel Safety Evaluations: CP Co had not been fully cognizant of Bechtel's past safety evaluations which were determined (by Bechtel) to have had no safety concern implications, (i.e., No in-line function or notification requirements). To provide a CP Co overview, the following actions were taken:

Open Evaluations (25)

Reviewed to determine if any should be reported. None were identified.

Closed Evaluations (48)

Reviewed by DAD-MPQAD with an acceptable preliminary finding, subject to CP Co Engineering review. CP Co Engineering has reviewed and accepted 45. The balance is to be completed by June 15, 1984 pending receipt of some outstanding information.

- b. The Zack Company's procedure on "reportability" to be modified to specifically identify whom they shall contact within Bechtel.
3. Full Compliance will be Achieved as Follows:

Full compliance will be achieved upon completion of 2b above, expected by mid June 1984.

(2) NRC STATEMENT

10 CFR 50, Appendix B, Criterion X requires that a program for inspection shall be established and that examination or measurements be performed for each work activity where necessary to assure quality. Further, Criterion V of Appendix B requires quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

Bechtel HVAC Specification No 7220M-151A(Q), Revision 15, commits to AWS D1.1-1979, which requires in Section 6 ("Inspection") that the inspector shall examine the work to make certain that it meets the requirements of Section 3. Section 3.3 stipulates maximum fit-up tolerances of 3/16 of an inch for fillet welds and partial penetration welds, and the leg of the fillet weld is to be increased by the amount of the separation for gaps 1/16 of an inch or greater, or the contractor shall demonstrate that the required effective throat has been obtained.

Contrary to the above, the inspection program established to assure conformance with the specification governing HVAC activities did not include provisions or requirements for assuring fit-up conformance to AWS D1.1-1979, Section 3.3 for structural welding.

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

CONSUMERS POWER COMPANY RESPONSE

In accordance with this Notice of Violation, an explanation of corrective action is as follows:

1. Corrective Action Taken and the Results Achieved:

a. Interim Program

An interim program has been established that will provide for 100% inspection of weld joint gaps. This program was established for joints welded to AWS D1.1-79. There are three (3) parts to the "fit-up" inspection program.

Part 1 - Hold Point

For HVAC weld joints in which the gap will become inaccessible for final weld inspection, a hold point has been established by procedure. The fabricator issues a request for inspection upon reaching each hold point. The inspector verifies the "Preparation of Base Metal and Assembly" is acceptable and documents the inspection results on a Project Inspection Plan and Report (PIPR). This PIPR will be used for information to complete the final weld inspection detailed in Part 3.

Part 2 - MPQAD HVACA Surveillance

A surveillance system has been established to monitor the welders while work is in progress. The surveillance, proceduralized by a PIPR, is required on each welder at a maximum interval of 90 days. Preparation of base metal and assembly of weld joints will be verified during this surveillance.

Part 3 - Final Weld Inspection

Final inspection of structural welds, those made to AWS D1.1-79, require verification of joint gaps. This verification is done by actual inspection during the final inspection for gaps which are accessible, or by review of previous inspection records for inaccessible joint gaps.

b. Past Welding

In process assembly verification per Section 3.3 of AWS D1.1-79 was being done on a limited basis. It has been determined that "fit-up" of the structural welds for the HVAC system meets the requirements of Section 3.3 of AWS D1.1-79. This determination was made by reviewing fabrication methods, training records, Nonconformance Reports (NCRs) and checking gaps of weld samples taken from acceptable hangers. The training records and NCRs revealed that the inspectors were aware of, and inspected for acceptable weld size based on the gaps. The samples examined show that the welds and gaps meet the code requirements. A brief description of the determination follows:

1. The majority of the welded joints made on the HVAC system are simple lap type joints. The joints are held together with clamps prior to welding, therefore, zero (0) gap is achieved. The sheet metal workers on the HVAC system are craftsmen and they strive to fabricate acceptable hardware within the guidelines provided.
2. Inspector training records were reviewed from the period that The Zack Company first had the inspection program to the present. Inspectors that worked for The Zack Company used training questions for study aids to certify both Level I and Level II. One such question was, "What is the AWS D1.1 acceptance criteria for the following weld conditions: Fillet Weld Gap?" In addition, a Zack Company Quality Assurance Training Report dated 10/17/80 shows that training was given on AWS D1.1 criteria for fillet weld gap and craters.

Many of The Zack Company inspectors became MPQAD inspectors in June of 1981. These inspectors, as well as new inspectors, were given additional training in weld acceptance by the immediate HVACA Inspection Section Head. The training was based on the AWS Certification Manual for Welding Inspectors. Page 76 of Chapter 6 discussed root openings and proper fit-up for fillet welds. A required reading list which includes AWS D1.1-79 is also a part of each inspector's initial training.

3. A review of the NCR log shows that from 7/17/79 to 5/18/84, 18 NCRs were generated due to incorrect fit-up or insufficient weld size based on joint gaps. These NCRs, written by ten different inspectors, were all written during final inspections of the weld joints. The fabricating organization and the inspection groups are both involved in closing NCRs, therefore, both groups become aware of any problems associated with fit-up. Correcting the nonconforming condition provides visibility to both the fabricator and inspector of what is an acceptable condition.
4. For the resolution of an unrelated problem, 90 samples were taken from the HVAC system. (Information on the samples is available in MPQAD File 2.15.5.) The gaps were measured on all 90 samples and were found to be 1/16" or less. Of the 90 samples, 30 were welded to AWS D1.1. All of the measured gaps from these weld samples were 0", or no gap. In the case of fillet welds, many welds are oversize because of the allowance for over welding in the Bechtel Technical Specification M-151A(Q). The samples are representative of the welding done by The Zack Company on the HVAC system. No fit-up problem is shown to exist.

Based on the above, it is concluded that there is no hardware impact associated with this violation. This statement is true because the simplicity of the design provided good "fit-up", the craftsmen involved provided good workmanship and the inspectors inspected the weld joints for "fit-up", evidenced by NCRs. Disposition of the NCRs precluded a generic "fit-up" problem and gap measurements of weld samples provided documented evidence that no problem existed.

2. Corrective Action to be Taken to Avoid Further Noncompliance:

The intent of Sections 6.5.4 and 6.5.5 of AWS D1.1 is that the Inspector shall, at suitable intervals, observe joint preparation, assembly practices as well as the technique and performance of each welder, welding operator, and tacker to make certain that the applicable requirements are met. Visual inspection of all attributes of the final weld is required for every weld.

For the present time, CP Co is inspecting, on a 100% basis, weld joint gaps. CP Co believes that 100% inspection of weld joint gaps by QC personnel is not required by the AWS Code. In order to assure the weld is of the proper size, the gap must be known. An acceptable program will be devised to provide joint gap measurements, as required for final weld inspection. This gap measurement will be by other than QC personnel with verification by QC personnel on a suitable interval basis. In addition QC will inspect, on a suitable interval basis, such things as joint prep, assembly practices, techniques and performance of each welder. CP Co plans to meet in the very near future to present this program to the NRC and then modify the 100% QC inspection requirements in favor of a surveillance concept.

3. Full Compliance will be Achieved as Follows:

Full compliance has been achieved.

(3) NRC STATEMENT

10 CFR 50, Appendix B, Criterion XVIII requires that a comprehensive system of planned and periodic audits shall be carried out to verify compliance with all aspects of the quality assurance program and to determine the effectiveness of the program.

The Consumers Power Quality Assurance Program commits to ANSI N45.2.12, Draft 4, Revision 1, which requires in Section 3.3.3 the identification of those responsible for the audit system, including a delineation of their authority and responsibilities. Section 3.5.2 requires that the applicable elements of the quality assurance program shall be audited at least annually. Sections 4.5.2 thru 4.5.2.4 require that followup action be performed by the audit team leader or management to obtain the written response to the audit report, evaluate the adequacy of the response, assure that corrective action is identified and scheduled for each adverse finding, and confirm that corrective action is accomplished as scheduled. Section 3.3.7 requires that an effective audit system shall be established and include a provision for verification of effective corrective action on a timely basis.

MPQAD Procedure F-1M ("Audits"), Revision 5, May 31, 1983, Paragraph 5.3.3 requires completed audit checklists to identify objective evidence reviewed.

Contrary to the above, the following examples of noncompliance were identified:

- a. The authority and responsibilities of the Section Head-Site Audits was not delineated in writing.
- b. Four audits of Zack site activities were conducted in 1982. The elements of weld rod control and calibration were not audited.
- c. Four audit findings, identified in audit M01-605-02, issued in November, 1982 of Zack site activities were still open. There was no objective evidence that Zack's proposed corrective action had been evaluated by an audit team leader or management.
- d. The proposed Zack corrective action for four audit findings was rejected by Consumers Power Company. The audits findings were identified as M01-603-3-3, M01-603-3-5, M01-603-3-8 and M01-603-3-9 and were issued in May, 1983. There was no established dates for a commitment by Zack to re-respond or a scheduled completion date for the corrective action.
- e. Three audit findings (M01-601-2-3, M01-603-3-7 and M01-601-3-1) were closed without identifying the objective evidence reviewed to evaluate the effectiveness of the corrective action.

- f. Several sections of audit checklists M01-601-3 and M01-603-3 did not identify the objective evidence evaluated during the audit. No audit checklist could be found for audit M01-604-3 which was conducted in August, 1983.

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

CONSUMERS POWER COMPANY RESPONSE

In accordance with this Notice of Violation, an explanation of corrective action is as follows:

1. Corrective Action Taken and the Results Achieved:

Each of the following paragraphs correspond alphabetically to the paragraphs in the NRC statement.

- a. MPQAD Procedure A-1M, Paragraph 5.13, Revision 8, effective 11/18/83, now delineates the authority and responsibilities of the Branch Head - Audit Branch.
- b. Weld rod control and calibration of The Zack Company, Midland Energy Center, was covered by Audit MSA-83-36 dated 12/12-16/83 and Audit MSA-84-12 dated 4/16-30/84.
- c. The following audit findings were closed as indicated below:

<u>AUDIT FINDING #</u>	<u>DATE CLOSED</u>
M01-605-2-01F	1/12/84
M01-605-2-02F	1/12/84
M01-605-2-03F	1/12/84
M01-605-2-04F	1/14/84

- d. The following audit findings were closed as indicated below:

<u>AUDIT FINDING #</u>	<u>DATE CLOSED</u>
M01-603-3-03F	2/17/84
M01-603-3-05F	2/23/84
M01-603-3-08F	2/23/84
M01-603-3-09F	3/12/84

- e. The Site Audit Branch has reviewed the audit file and identified the objective evidence used to evaluate and verify the effectiveness of the corrective action. This information is on file and available for review.
- f. Checklists for Audits M01-601-3 and M01-603-3 identify some objective evidence reviewed by documenting the general category of documents and the quantity of documents reviewed within the category. The checklists, in some cases, do not identify the actual records reviewed by number, such as a specific purchase

order number. The shortcoming in utilizing this method of documentation is that the steps taken by the auditor cannot be retraced. The results of the audits, however, are considered valid since the records were reviewed by qualified audit personnel. Any noted discrepancies were identified by writing an audit finding.

The checklist for Audit M01-604-3 has been reconstructed utilizing a draft copy of the checklist which was kept by the auditor. This checklist is now contained in the Audit Report package which is on file with MPQAD.

2. Corrective Action to be Taken to Avoid Further Noncompliance:

Each of the following paragraphs correspond alphabetically to the paragraphs in the NRC statement.

- a. The inclusion of the stated requirements in MPQAD Procedure A-1M, Revision 8, Paragraph 5.13 should preclude recurrence.
- b. Since the inception of the Site Audit Branch, in June of 1983, a more complete audit schedule has been enacted. Concerted efforts are being expended by the Site Audit Branch to ensure all areas are being audited.
- c. All audit findings are now being tracked by personnel of the Site Audit Branch who are made aware of audit finding responses by a system for tracking Audit Finding Reports (AFRs). This system is proceduralized and will preclude recurrence.
- d. All audit corrective actions are now being tracked by personnel of the Site Audit Branch who are made aware of overdue responses to corrective actions and AFRs. Our present system of tracking AFRs, Corrective Action Responses, Response Evaluations and overdue responses is proceduralized which will preclude recurrence.
- e. Training will be provided to responsible personnel and will preclude recurrence.
- f. Corrective action to preclude recurrence is being provided by performing training with specific emphasis placed on the recording of the actual records reviewed.

3. Full Compliance will be Achieved as Follows:

Each of the following paragraphs correspond alphabetically to the paragraphs in the NRC statement.

- a. Full compliance was achieved upon effectivity of MPQAD Procedure A-1M, Revision 8, which is dated 11-18-83.
- b. Full compliance was achieved on 12/16/83 with the completion of Audit MSA-83-36.
- c. Full compliance was achieved on 1/14/84 with the closure of Audit Finding M01-605-2-04F.

- d. Full compliance was achieved on 3/12/84 with the closure of Audit Finding M01-603-3-09F.
- e. Full compliance will be achieved upon completion of training by June 29, 1984.
- f. Full compliance will be achieved upon completion of training by June 29, 1984.

(4) NRC STATEMENT

10 CFR 50, Appendix B, Criterion II requires that the program shall provide for training of personnel performing activities affecting quality as necessary to assure that suitable proficiency is achieved and maintained.

Quality Assurance Program Manual for the Midland Nuclear Plant, CPC-1-A, Revision 13, Policy Number 3, Section 3.4, requires formal training programs for personnel to assure that Q-listed operations and activities are performed correctly.

Contrary to the above, there was no training program established to ensure that HVAC quality control inspectors were trained in changes to HVAC Specification No. 7220-M-151A(Q), Revision 15, when these changes affected the acceptance criteria or inspection requirements.

This is a Severity Level V violation (Supplement II).

CONSUMERS POWER COMPANY RESPONSE

In accordance with this Notice of Violation, an explanation of corrective action is as follows:

1. Corrective Action Taken and the Results Achieved:

To achieve and maintain suitable proficiency, HVACA Inspectors are directed during all phases of training (including, but not limited to, initial training, memo training, generic lesson plans, specific training and supplemental training which are described in MPQAD Procedures B-2M-1 and B-3M-1) that, prior to performing an inspection, acceptance criteria must be obtained from the latest controlled copies of specifications and references. This programmatic approach provides the method of determining the applicable criteria and precludes the need for inspection training to individual criteria changes.

There is no hardware impact associated with this violation because inspectors are trained to use the latest criteria and to ask questions if they do not understand the criteria.

The MPQAD Procedures provide a comprehensive method to comply with the requirements stated above, therefore, this is not considered a violation of 10 CFR 50, Appendix B, Criterion II. No further action is required.

2. Corrective Action to be Taken to Avoid Further Noncompliance:

No further action is required.

3. Full Compliance will be Achieved as Follows:

Full compliance has been achieved.

(5) NRC STATEMENT

10 CFR 50, Appendix B, Criterion II requires that the program shall provide for indoctrination and training of personnel performing activities affecting quality as necessary to assure that suitable proficiency is achieved and maintained, and that the program shall take into account the need for special skills to attain the required quality.

The Consumers Power Quality Assurance Program commits to ANSI N45.2.6-1978. Paragraph 2.2 of ANSI N45.2.6 states that "The capabilities of a candidate for certification shall be initially determined by a suitable evaluation of the candidates education, experience, training, test results, or capability demonstration." Paragraph 2.5 states in part that, "Personnel requiring these characteristics shall have them verified by examination at intervals not to exceed one year." Paragraph 2.4 states in part that, "The qualification of personnel shall be certified in writing in an appropriate form including ... basis used for certification, including records of education, experience, and training."

Contrary to the above, the following examples of noncompliance were identified:

- a. The certifications of two MPQAD inspectors were not supported by the documentation of previous experience and there was no comparable or equivalent experience assessment.
- b. Three inspectors had annual eye examinations that were overdue.
- c. MPQAD QA/QC inspectors certified to specific HVAC Project Inspection Plan Reports on form QA37-0, Attachment E, Revision 2, November 13, 1981, did not have a documented basis for certification.

This is a Severity Level V violation (Supplement II).

CONSUMERS POWER COMPANY RESPONSE

In accordance with this Notice of Violation, an explanation of corrective action is as follows:

1. Corrective Action Taken and the Results Achieved:

Each of the following paragraphs correspond alphabetically to the paragraphs in the NRC statement.

- a. The two individuals in question now have documented evidence in their personnel files which further demonstrates that the

individuals always had comparable or equivalent competence as required by ANSI N45.2.6-1978, Section 2.2.

- b. The three individuals who had overdue annual eye examinations did not perform inspections during the time lapse. Therefore, there was no impact on inspections. Two of these individuals were on sick leave and the other individual had been transferred to a non-inspection job function. *OK*
- c. The basis for certification as required by ANSI N45.2.6-1978, Section 2.4 now appears on Form QA13-2 which references Form QA37-0 (Certification to Inspection Plans) and has been inserted into all inspector files. *OK need to see it*

Based on the above, there is no hardware impact associated with this violation.

2. Corrective Action to be Taken to Avoid Further Noncompliance:

MPQAD Procedure B-3M-1 has been revised to require positive notification and follow up on eye exams prior to their expiration. To assist in tracking this task, all inspection personnel eye exam records are being entered into a computer base.

3. Full Compliance will be Achieved as Follows:

Full compliance has been achieved.

(6) NRC STATEMENT

10 CFR 50, Appendix B, Criterion V requires that 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 Procedure No. PEP 4.46.1, Revision 2, states in paragraph 8.2 that, "The incorporation of design documents into a drawing revision must be completed when... five DCN's have been issued against the drawing."

Contrary to the above, on September 22, 1983, the following examples of noncompliance were identified:

- a. Drawing C-884 had six design change notices attached
- b. Drawing C-890, Revision 19, had seven design change notices attached
- c. Drawing M-2, Revision 13, had six design change notices attached

This is a Severity Level V violation (Supplement II).

CONSUMERS POWER COMPANY RESPONSE

In accordance with this Notice of Violation, an explanation of corrective action is as follows:

1. Corrective Action Taken and the Results Achieved:

Each of the following paragraphs correspond alphabetically to the paragraphs in the NRC statement.

- a. Drawing C884 was recently examined on May 30, 1984 for compliance to Procedure PEP 4.46.1 Rev 4. This drawing is currently at Revision 30 and has three outstanding design changes. This is in compliance with the procedure. OK
- b. Drawing C890 was recently examined on May 30, 1984 for compliance to Procedure PEP 4.46.1 Rev 4. This drawing is currently at Revision 23 and has one outstanding design change. This is in compliance with the procedure. OK
- c. The attachments to Drawing M-2, Rev 13 are Interim Design Change Notices (IDCNs) and are not within the requirements of PEP 4.46.1 Rev 2. Specifically, PEP 4.46.1 Rev 2, Scope, states in part: "The incorporation of Interim Drawing Change Notices (IDCNs) into a drawing is not within the scope of this procedure... ." Procedure PEP 4.47.1, Rev 3, dated May 27, 1983 in affect at the time, states (Section 3) in part: "...the design intent of IDCNs can be shown on the applicable design drawing but the IDCN cannot be incorporated into the applicable design drawing until after the work in the field has been accomplished." Section 5.1.2 states in part: "all IDCNs...must be indicated on the base drawing... but not incorporated within 90 days of date of issue or whenever five IDCNs are outstanding (not indicated or incorporated)." This requirement is also in the current revision of PEP 4.47.1, Rev 4, dated March 2, 1984.

Design Document Register dated April 10, 1984, Page 1, shows Drawing M-2, Rev 13, with six IDCNs (22711 - 22716) as issued with the Design Change Packages, but not incorporated into the base drawing.

This is in compliance with applicable procedures, including PEP 4.47.1, Revision 4, dated March 2, 1984. OK

2. Corrective Action to be Taken to Avoid Further Noncompliance:

Procedure PEP 4.46.1, Revision 4, issued April 30, 1984 is more stringent than Revision 2. Specifically, Section 8.2.1 requires incorporation to be as follows:

- a. Forty-five calendar days from the approval of the first FCR or DCN. ✓
- b. Forty-five calendar days from Document Control Center receipt of the first outstanding approved FCN. ✓
- c. Thirty calendar days from receipt/approval of the fifth outstanding change document. ✓

Project Administrative Services in Ann Arbor provides, to Project Engineering, weekly data as to documents which are approaching the limit on design change attachments. This information is used by Project Engineering to work off those documents which are approaching the limit in an expeditious manner. Also, a single register is now being used by Project Engineering and Field Engineering.

MPQAD has initiated a Document Control Assurance Group chartered with the responsibility of assuring that Field Document Control correctly implements their procedures thus giving additional confidence that the current design drawings are available for use by construction and inspection. In addition this group is monitoring, on a continual basis, the incorporation of outstanding design documents into the parent drawing to assure that it is being done within procedural requirement.

3. Full Compliance will be Achieved as Follows:

Full compliance has been achieved.

(7) NRC STATEMENT

10 CFR 50, Appendix B, Criterion XVI requires that conditions adverse to quality, such as failures, deficiencies, deviations, and nonconformances are promptly identified and corrected.

Quality Assurance Program Manual for the Midland Nuclear Plant, CPC-1-A, Revision 13, Policy 16, Section 3.1, requires that corrective action be initiated to correct conditions adverse to quality.

Contrary to the above, appropriate corrective action was not taken in the case of 42 HVAC shop travelers which documented that welding was performed by unqualified welders. Specifically, the corrective action did not address the acceptability of welds performed during the period when the welders were not properly qualified in accordance with AWS.

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

CONSUMERS POWER COMPANY RESPONSE

In accordance with this Notice of Violation, an explanation of corrective action is as follows:

1. Corrective Action Taken and the Results Achieved:

Consumers Power Company has issued 45 NCRs for 45 duct pieces still in use on Site, (reference NCR H-00419-ZZ, H-00421-ZZ thru H-00456-ZZ, H-00458-ZZ thru H-00465-ZZ). There is no generic hardware impact with this violation and the specific hardware impact on the 45 items are being tracked through our nonconformance system.

2. Corrective Action to be Taken to Avoid Further Noncompliance:

Under our welding program, all welders are qualified prior to being allowed to weld in the field. Currently, all HVAC welding is done on Site. Zack's Chicago Plant has not done any welding since December 1982 and none is planned for the future.

3. Full Compliance will be Achieved as Follows:

Each of the nonconforming items will have a disposition approved by Bechtel Project Engineering and Consumers Power Site Engineering prior to being accepted by MPQAD. When work associated with the disposition has been completed MPQAD will close the NCRs. Final hardware impact will be known after the completion of this step, anticipated by July 1984.

(8) NRC STATEMENT

10 CFR 50, Appendix B, Criterion V requires that 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 Specification No. 7220-G-23, Revision 9, "General Requirements for Supplier Quality Assurance Programs for the Midland Plant Units 1 and 2 for Consumers Power Company", states in Section 3.4 that, "Any departure from the requirements of the procuring documents or Bechtel approved supplier technical documents which the supplier intends to incorporate in the completed item or service provided must be documented on an SDDR form."

Zack Procedure for Nonconformance Reports (PQCP-8, Revision 8) states in Section 6.1 that, "Non-conformance reports are generated to identify and control conditions in which workmanship, quality of material, documentation, or procedural activities are unacceptable or indeterminant." Zack procedure for Trend Analysis (PQCP-20, Revision 0) requires in Section 7 that audit findings be placed in one of five problem categories and analyzed for trends.

Contrary to the above:

- a. Neither a Nonconformance Report nor an SDDR was written by Zack with regard to identification of fourteen unqualified AWS welders for forty-two shop travelers.
- b. Zack Company did not place corporate audit findings in one of the five problem categories and therefore did not analyze audit findings for trends.

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

CONSUMERS POWER COMPANY RESPONSE

In accordance with this Notice of Violation, an explanation of corrective action is as follows:

1. Corrective Action Taken and the Results Achieved:

Each of the following paragraphs correspond alphabetically to the paragraphs in the NRC statement.

- a. Forty-five NCRs were issued by MPQAD on April 19, 1984 to identify and control the use of 45 duct segments ("Q") pertaining to the active travelers still in use from the list identified on ION 83-08-19a.

The NCRs issued are listed on Enclosure 1 to our response. Discrepancies between the original list (Attachment 3 to SCRE 56) and the list provided with the violation are identified in the "Notes" section on Enclosure 1. Note that when "P" travelers are used, some involved more than one duct segment. Also note that some of the travelers, on the list provided with the violation have already been voided and the duct removed from use.

- b. The Zack Company has begun to trend audit findings as of March 1984 in accordance with Zack Procedure MB-PQCP-16.1, Rev 1.

2. Corrective Action to be Taken to Avoid Further Noncompliance:

Each of the following paragraphs correspond alphabetically to the paragraphs in the NRC statement.

- a. In the future, if Zack (Chicago) discovers a quality concern on an item that has been shipped to the Site, they will inform Bechtel Project Engineering via a Zack Corrective Action Request. Also see response to Violation (7).
- b. The implementation of the new trending procedure will preclude recurrence.

3. Full Compliance will be Achieved as Follows:

Each of the following paragraphs correspond alphabetically to the paragraphs in the NRC statement.

- a. Refer to response to Violation (7).
- b. Full compliance was achieved in March 1984.

(9) NRC STATEMENT

10 CFR 50, Appendix B, Criterion V, requires that activities affecting quality shall be prescribed by documented instructions, procedures or drawings.

Bechtel HVAC Specification No. 7220M-151A(Q), Revision 15, commits to ANSI N45.2.13, Draft 3, Revision 3. ANSI N45.2.13 states in Section 8 that, "The purchaser and supplier shall establish and document measures for the identification, control, and disposition of items that do not meet procurement document requirements" and "These measures shall contain provision for the following:... b. Submittal of nonconformance notice to Purchaser by Supplier as directed by the Purchaser. These submittals shall include Supplier recommended disposition (i.e. "use-as-is" or "repair") and technical justification."

Contrary to the above, on March 22, 1983, Bechtel issued a letter to Zack Company to discontinue the processing of Supplier Deviation Disposition Requests (SDDR) relative to Material Requisitions deviations. In lieu of an SDDR, Zack was instructed to issue a Field Change Request (FCR) or Field Change Notice (FCN) for Bechtel approval. The FCR/FCN process was a design control measure and not a measure for controlling and dispositioning nonconformance. Therefore, there was no approved procedure, instruction, or document which delineated the methods for Zack to submit nonconformances for disposition to Bechtel.

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

CONSUMERS POWER COMPANY RESPONSE

In accordance with this Notice of Violation, an explanation of corrective action is as follows:

1. Corrective Action Taken and the Results Achieved:

CP Co held meetings with Bechtel Project Engineering and the subcontractor (Zack) to establish and document the measures required in Section 8 of ANSI N45.2.13. It was determined that Zack-Chicago will generate an NCR to identify an item or material that does not comply with specified requirements. The NCR will be sent to Bechtel Project Engineering, with a copy to Bechtel (Site) Subcontracts, for Engineering Disposition of "use-as-is" or "repair". If Zack desires to deviate from engineering requirements before there is a hardware impact, they will submit a Request For Information (RFI) on the established FCR form and submit the FCR to subcontracts who will issue it to Bechtel Project Engineering. Engineering will provide a disposition and return it to subcontracts and Zack for appropriate action.

The changes to establish and document identification, control and disposition of items that do not meet procurement requirements, have been addressed in a revision to Bechtel Technical Specification M-151-A(Q) Rev 20. The NCR and RFI replaces the previously approved SDDR.

2. Corrective Action to be Taken to Avoid Further Noncompliance:

No further action is required.

3. Full Compliance will be Achieved as Follows:

Full compliance has been achieved.

GENERIC EVALUATION OF HARDWARE IMPACT

In accordance with your written request, violations (2), (4), (5) and (7) have been evaluated for hardware impact and no generic hardware impact exists. A brief recap of the justification is as follows:

Violation (2) (Fitup):

- Inspectors had received limited training on fitup.
- NCRs had been generated for improper fitup resulting in a heightened awareness by the craft personnel of fitup requirements.
- Thirty samples cut from production items (welded to AWS D1.1) all had zero gaps.

Violation (4) (Training on Specific Changes):

- Inspectors have been and are trained to use the current criteria and to ask questions if they don't understand the criteria.

Violation (5) (Eye Exam, Basis of Certification):

- None of the inspectors involved did any inspections during the time their eye exams had expired.
- The inspectors files have been updated using a form that has the basis of certification.
- The inspectors noted as having insufficient supporting documentation now have this properly documented showing that they always had the required qualification.

Violation (7) (Unqualified Welders):

- There is no generic hardware impact.
- The specific hardware impact is being tracked through the nonconformance system via the 45 individual NCRs.

In summary, taken singularly or collectively these four violations have no generic impact on completed hardware.

In addition, CP Co has reviewed the hardware impact of all nine violations and concludes that hardware is acceptable on a generic basis.

TRAVELER LIST OF WELDERS WITH INDETERMINANT QUALIFICATIONS AND DUCT AFFECTED

NOTE: This list was derived from the original list - Attachment 3 to SCRE 56.

NOTES	TRAVELER	V-DRAWING	PIECE NO	NCR NUMBER	COMMENTS
1	F4941	V 7 sh 2	12	H-00447-ZZ	Welder 39
	P2597	V 10	7A	N/A	Welder 5 was qualified
	P2597	V 10	10A	H-00445-ZZ	Welder 39
	P2597	V 10	11A	N/A	Welder 5 was qualified
	P2597	V 10	11B	H-00446-ZZ	Welder 39
	P2597	V 10	12A	N/A	Voided by F9651 Piece 12B
	F5818	V 10	8A	H-00443-ZZ	Welder 39
	F5817	V 10	8B	H-00444-ZZ	Welder 39
	F7526	V 22 sh 1	26	N/A	Voided
	F6444	V 22 sh 1A	16	H-00419-ZZ	Welder 39
	F6443	V 22 sh 1A	17	H-00421-ZZ	Welder 39
	P1093	V 22 sh 1A	24	H-00425-ZZ	Welder 43
	P1114	V 22 sh 1A	28	H-00423-ZZ	Welder 48
	F6454	V 22 sh 1A	35	H-00424-ZZ	Welder 48
	F6456	V 22 sh 1A	37	H-00426-ZZ	Welder 54
	P1149	V 22 sh 1A	112	H-00422-ZZ	Welder 39
	F6485	V 22 sh 1A	113	H-00427-ZZ	Welder 39
	F5847	V 22 sh 2	23	H-00459-ZZ	Welder 6
	F5837	V 22 sh 2	24	H-00464-ZZ	Welder 39
	F5846	V 22 sh 2	25	H-00465-ZZ	Welder 6
	F4275	V 22 sh 2A	29	N/A	Voided
2	F18224	V 22 sh 2A	30	H-00428-ZZ	Welder 39
2	F18225	V 22 sh 2A	30.1	H-00429-ZZ	Welder 39
2	F18226	V 22 sh 2A	30.2	H-00430-ZZ	Welder 39
2 & 3	F18227	V 22 sh 2A	30.3	H-00431-ZZ	Welder 39
2 & 3	F30462	V 22 sh 2A	30.32	H-00432-ZZ	Welder 39
2	F18228	V 22 sh 2A	30.4	H-00433-ZZ	Welder 39
2	F18229	V 22 sh 2A	30.5	H-00434-ZZ	Welder 39
	P2464	V 22 sh 2A	31	H-00435-ZZ	Welder 39
	F4284	V 22 sh 2A	42	H-00437-ZZ	Welder 39
	F4279	V 22 sh 2A	46	H-00436-ZZ	Welder 39
	F4397	V 22 sh 2B	10	H-00440-ZZ	Welder 39
	F4398	V 22 sh 2B	11	H-00441-ZZ	Welder 39
	F4399	V 22 sh 2B	12	H-00442-ZZ	Welder 39
	F4404	V 22 sh 2B	21	H-00438-ZZ	Welder 39
	F4408	V 22 sh 2B	26	H-00439-ZZ	Welder 39
	F4446	V 22F	4	N/A	Voided
	P1491	V 26 sh 2	16	N/A	Welder 12 was qualified
	P1491	V 26 sh 2	17	N/A	Welder 23 was qualified
	P1491	V 26 sh 2	19	N/A	Voided
	P1491	V 26 sh 2	20	N/A	Voided
	F10268	V 26 sh 2	23	N/A	Voided
	F4276	V 26 sh 2B	29A	N/A	Voided by F21006 Piece 29B
	F4269	V 26 sh 2B	39	N/A	Voided
	P1201	V 27 sh 3	191	H-00461-ZZ	Welder 54

NOTES	TRAVELER	V-DRAWING	PIECE NO	NCR NUMBER	COMMENTS
	P1201	V 27 sh 3	192	H-00460-ZZ	Welder 54
	F2462	V 29 sh 2B	38	N/A	Non-Safety Related
	P1306	V 34 sh 1	2	H-00458-ZZ	Welder 54
	P1306	V 34 sh 1	3	H-00462-ZZ	Welder 54
	P1306	V 34 sh 1	4	H-00463-ZZ	Welder 54
	F11176	V 83	29	H-00450-ZZ	Welder 6
	F10484	V 83	29A	H-00448-ZZ	Welder 54
4	F10485	V 83	31A	H-00453-ZZ	Welder 54
	F11186	V 83	42	H-00451-ZZ	Welder 48
5	F11196	V 83	55	H-00452-ZZ	Welder 48
	F11202	V 83	64	H-00455-ZZ	Welder 39
	F11206	V 83	69	H-00454-ZZ	Welder 39
6	F10492	V 83	70A	H-00456-ZZ	Welder 59
	F11209	V 83	72	N/A	Voided by F10477 Piece 91
	F11210	V 83	73	H-00449-ZZ	Welder 39

NOTES

- 1 Traveler P2597 was erroneously listed as P2579 on Attachment 3 to SCRE 56 - refer to page 11 of Attachment 1 to SCRE 56.
- 2 Traveler P2464 piece 30 was renumbered to these travelers.
- 3 Traveler F18227 piece 30.3 had a weld sample removed from it (used for SCRE 75) and resulted in a new piece number 30.32, which still contained some welding done by welder 39.
- 4 Traveler 10485 was erroneously listed as 10458 on Attachment 3 to SCRE 56 - refer to page 23 of Attachment 1 to SCRE 56.
- 5 Traveler 11196 was erroneously listed as 1196 in NRC Report No 50-329/83-08; 50-330/83-08; ION 19a
- 6 Welder 59 was erroneously listed as welder 54 on Attachment 3 to SCRE 56.
- 7 The following travelers were not listed on ION 19a but were listed on Attachment 3 to SCRE 56; all are voided

F6654
F4425
F4271
F4424
F9379
F9378
F5827
F4448

The following item, although not a violation, required a written response.

NRC STATEMENT (See Section III, paragraph d of the report:)

There was no system delineated in writing to ensure that retroactive design changes for all disciplines, including HVAC, were reviewed to (1) identify their impact on items already installed and (2) verify hardware compliance to present design standards. Further inspection revealed that a Management Corrective Action Request/Report (TWT-1) was initiated during this inspection as a result of an on-going investigation by the licensee. Pending licensee evaluation and appropriate corrective action for previously installed material, this will remain an unresolved item and be examined further during a future inspection (329/83-08-10; 330/83-08-10). The licensee's generic assessment of this unresolved item will be requested to be included in their written response.

CONSUMERS POWER COMPANY RESPONSE

In accordance with your request, an explanation of our generic assessment is as follows:

1. Action Taken and the Results Achieved:

As stated in the URI CP Co initiated MCAR/R-TWT-1 on 9/23/83. On 5/18/84 this condition was declared potentially reportable by CP Co and reported to R Gardner of Region III. On 2/10/84 The Zack Company issued FP-22 to address both past and future retroactivity concerns for HVAC.

Bechtel will provide a list of HVAC retroactive changes which required retrofitting. This list will be required for closure of MCAR/R-TWT-1.

2. Action to be Taken to Address the Generic Retroactivity Issue:

In response to MCAR/R-TWT-1 CP Co is considering the following:

The Engineering procedures listed in 3a below will be revised to state that changes to standard details shall be retroactive and applicable to existing and future construction unless otherwise specified. Anticipated completion by June 15, 1984.

Project Engineering will identify the effectivity of non-retroactive changes and will reference the original detail and the new detail (for standard details).

When non-retroactive changes are made, the previous requirements shall be preserved on the current revision of the document in such a manner that the previous requirements remain in effect and applicable to items built in accordance with those requirements (for standard details).

Revise Bechtel Technical Specification M-151-A(Q) to be consistent with the procedures listed in 3a below.

Bechtel will indicate on drawings and specifications (where appropriate) when retrofit is required for standard details.

3. All Action Will Be Completed as Follows:

- a. The following Bechtel procedures will be revised as indicated above:

MED 4.46.0 PEP 4.46.1 FIG 3.200

MED 4.47.0 PEP 4.47.2

MED 4.49.0 PEP 4.49.1

MED 4.49.1 PEP 4.49.0

- b. Engineering "Q" drawings and specifications will be updated for proper callout of retroactivity, non-retroactivity and retrofit requirements. Anticipated completion November 30, 1984.
- c. Construction and inspection will verify that the hardware and the inspection records reflect the engineering requirements.